Igor® Gateway Software API (5.7.0)

Developer Guide

Contents

5.7.0 Release Notes

The Jan. 31, 2021, *Igor 5.7.0 Release Notes.pdf* is available from the Technical Services Support Solutions knowledge base portal, Igor Gateway Software category, Release Notes (5.0.0-5.7.0):
https://support.igor-tech.com/support/solutions/articles/5000842880

Introduction

This documentation is intended for developers and customers who will be integrating with the Igor Gateway platform. It provides a general overview of the Igor Gateway software Application Programming Interface (API) primary categories, their general function, and the methods (requests and responses) available in each.

Requirements

The following are required before you begin:

- An *Igor Gateway Connectivity Package (S-1-C) License*
  If you need to obtain a Connectivity Package license, please contact Igor Technical Services:
  Email: support@igor-tech.com
  Phone: 515-661-4412 | 1-877-588-2650
  Hours: Our phone line is staffed Monday—Friday, 7 A.M to 5 P.M. except U.S. holidays
- A valid JSON Web Token (JWT) for authentication
- An Application Key

Good to Know

- Access the interactive **Gateway Software API** at /admin/developers/api-docs
- If you are a developer creating a Microsoft .NET Framework 4.6.1+ or .NET Core 2.0 application, you can access the Igor Gateway API SDK here:
  https://bitbucket.org/igordev/igor-gateway-api-c-sdk
- Install using NuGet Package Manager (PM)>
  Install-Package Igor.Gateway.Api.Sdk -Version 11.1.1
- Igor uses conventional Hypertext Transfer Protocol (HTTP) Status Codes to indicate the success or failure of an API request. General HTTP response codes for an executed operation are described in "Appendix B," page 306.
- **CROSS-REFERENCES:**
  o For a navigation overview of the interactive Gateway Software API, see "Appendix A," page 304.
  o For more information about the Igor Gateway Software Administration Application, see the latest version of the *ID-0320 Igor Gateway Software Advanced User Guide*.

API Authentication

All requests made to the Igor Gateway Software API are required to provide a valid JSON Web Token (JWT) for authentication. The Igor Gateway Software uses these tokens to validate requests from approved applications. This helps prevent possible rogue applications that may exist on the lighting network from performing malicious actions against your Igor Gateway Software, including things such as replay attacks and unsigned requests.

To generate a valid token, you must create a new Application Key.

Reminder: API access is part of the *ID-3130 Igor Gateway Software Connectivity Package (S-1-C)*. If you do not see this option, verify that you have purchased a license for the Connectivity Package. If you need to obtain a connectivity license, please contact Igor Technical Services: support@igor-tech.com.

Creating a New Application Key

1. Open the Admin application on your local Igor Gateway Software installation.

    Access the Admin application at either one of the following URLs:

    LOCAL: http://*localhost*/admin/

    REMOTE: http://*Gateway IP Address*/admin/

2. Read and then click the **I Accept the Terms and Conditions** button at the bottom of the screen.

3. In the navigation *Menu*, click **Developers > Application Keys** (Fig. 1).

Continue >>
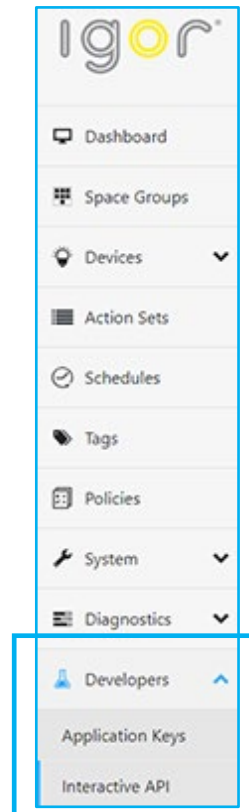
Fig. 1: Gateway Software Admin Menu

4. At the top of the **Application Keys** screen, click the **More** menu, and select **New Application Key**.
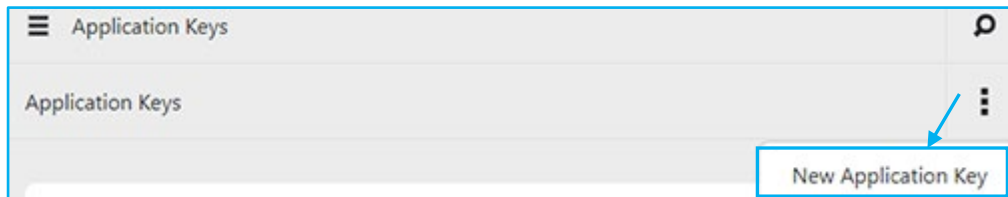
Fig. 2: Application Keys More menu

The **New Application Key** dialog box opens:
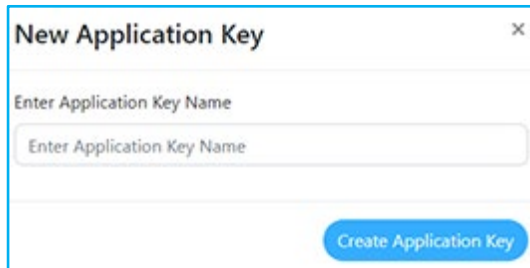
Fig. 3: New Application Key dialog box

5. Enter a name for the key, and then click the **Create Application Key** button.
   The key name and key ID will list in alpha order on the Application Keys screen. *****

*The Application Key will also be available to select from the top of the **Developers Interactive API** screen. To learn more, see the "Interactive API Overview" appendix, page 304.

JWT ID Claims

Important: The "jti" (JWT ID) claim provides a unique identifier for the JWT. The value must not be re-used within 60 minutes or an error message will be generated. Try using a tool like Wireshark to verify that you are not re-sending the same message or, if randomly generating the "jti", you are not getting a collision with a duplicate being generated within that 60 minute window. See "JWT Payload" below.

If you are calling from multiple clients, it is important to ensure uniqueness across all clients.

Review the specification here: https://tools.ietf.org/html/rfc7519#section-4.1.7

Understanding JSON Web Tokens

JSON Web Tokens (JWT – pronounced "jot") are used to secure the Igor Gateway Software API by only allowing requests that are signed with a valid Application Key. They are made up of three different parts:

1. Header,

2. Payload, and

3. Signature.

JWT Header

The header must contain the *token type* (`"typ"`) and *signature algorithm* (`"alg"`). The Igor Gateway Software API only accepts JWT token types and HS256 signature algorithms.

Example header:

```
{
"typ": "JWT",
"alg": "HS256"
}
```

JWT Payload

The payload must contain the *Issued At time* (`"iat"`) and a *JWT ID* (`"jti"`). The Issued At time is the time the request was issued. The JWT ID must be a unique ID value used to identify each individual request. Tokens with an out-of-date Issued At time or a previously used JWT ID will be rejected.

Example payload:

```
{
"iat": 1495474408,
"jti": 64400
}
```

JWT Signature

The signature is generated from signing the header and payload with your Application Key.

Before signing, the header and payload are Base64 encoded and then concatenated together with a `"."` (period) between each part. They are then signed using the HMAC-SHA256 algorithm with an Application Key to create the signature.

Generating Your First JWT

In this section, you will generate your first JWT using examples from the previous section, "**Error! Reference source not found.**."

1. Using the header example, generate a Base64 value of the JSON part. It should result in the following value:

   ```
   eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9
   ```

2. Next, generate the Base64 value of the payload example. It should result in the following value:

   ```
   eyJpYXQiOjE0OTU0NzQ0MDgsImp0aSI6NjQ0MDB9
   ```

3. Once you have the Base64 encoded values of the header and payload, concatenate them using a period as a delimiter which should give you the following:
   Note: Your value should be a single line with no "new line" characters.

   ```
   eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.
   eyJpYXQiOjE0OTU0NzQ0MDgsImp0aSI6NjQ0MDB9
   ```

4. After you've created the header/payload concatenated string, sign it using HMAC-SHA256 and your Application Key, then Base64 encode the resulting value. It should produce the following result:

   ```
   CtOoQXif6_wm79SgO-qjtxxWAtdtb7NDQx-qrqGT4C4
   ```

5. With the signature now created and encoded, append that value to the already existing header and payload value. This should result in your completed JWT that looks like the following:
   Note: your value should be a single line with no "new line" characters.

   ```
   eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.
   eyJpYXQiOjE0OTU0NzQ0MDgsImp0aSI6NjQ0MDB9.
   CtOoQXif6_wm79SgO-qjtxxWAtdtb7NDQx-qrqGT4C4
   ```

You can now use this token for a single HTTP request to the Igor Gateway Software API by providing it via the HTTP Authorization header, as shown in the following example:
Note: Your value should be a single line with no "new line" characters.

```
Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.
eyJpYXQiOjE0OTU0NzQ0MDgsImp0aSI6NjQ0MDB9.
CtOoQXif6_wm79SgO-qjtxxWAtdtb7NDQx-qrqGT4C4
```

Example C#

```csharp
using System;
using System.Collections.Generic;
using System.IdentityModel.Tokens.Jwt;
using System.Security.Claims;
using System.Text;
using Microsoft.IdentityModel.Tokens;

public class JwtTokenGenerator
{
    public string GenerateToken(string applicationKey)
    {
        var securityDescriptor = CreateDescriptor(applicationKey);
        var handler = new JwtSecurityTokenHandler();
        return handler.CreateEncodedJwt(securityDescriptor);
    }

    private static SecurityTokenDescriptor CreateDescriptor(string applicationKey)
    {
        return new SecurityTokenDescriptor
        {
            Subject = CreateClaimsIdentity(),
            IssuedAt = DateTime.UtcNow,
            Expires = DateTime.UtcNow.AddMinutes(30),
            NotBefore = DateTime.UtcNow.AddMinutes(-2),
            SigningCredentials = CreateSigningCredentials(applicationKey)
        };
    }

    private static SigningCredentials CreateSigningCredentials(string applicationKey)
    {
        var keyBytes = Encoding.UTF8.GetBytes(applicationKey);
        return new SigningCredentials(new SymmetricSecurityKey(keyBytes), "HS256");
    }

    private static ClaimsIdentity CreateClaimsIdentity()
    {
        var claims = new List<Claim>
        {
            new Claim("jti", GenerateTokenId())
        };
        return new ClaimsIdentity(claims);
    }

    private static string GenerateTokenId()
    {
        var buffer = Guid.NewGuid().ToByteArray();
        return BitConverter.ToInt64(buffer, 0).ToString();
    }
}
```

API Operations Index

Requests for the following operations are defined in the balance of this guide.

• Actions	• Motion Sensors
• Action Sets	• Network Nodes
• Actuators	• Policies
• Application Keys	• Relays
• Connectors – NEW--**5.7.0**	• Schedules
• Dashboards	• Sensors
• Data	• Settings
• Device Nodes	• Space Groups
• Devices	• Spaces
• Diagnostics	• Space Types
• Dry Contacts	• Tags
• Event Action Sets	• Temperature Sensors
• Health	• Wall Controls
• Licensing	• WebHooks
• Lights	• Zones
• Light Sensors	

Reference Structure

URL

Requests start with the base URL for the host that processes Data API requests, followed by the distinctive elements of each request.

Important: To make the request, *you must include the complete URL*.

> **Example Request:** GET /actionsets/{actionSetId}/actions
>
> **Complete URL:** http://{ip address}/api/actionsets/{actionSetId}/actions

Methods

A given request may have four (4) types of methods associated with it:

Method	Description
GET	Retrieves information
PUT	Updates existing information
POST	Creates new information
DELETE	Removes existing information

Response Format

All response formats are JSON.

Actions

Actions are defined processes than can be grouped within action sets and then executed. For example, "Turn off Space 1."

> GET /actionsets/{actionSetId}/actions
> POST /actionsets/{actionSetId}actions
> GET /actionsets/{actionSetId}/actions/{actionId}
> PUT /actionsets/{actionSetId}/actions/{actionId}
> DELETE /Actionsets/{actionSetId}/actions/{actionId}
> POST /actionsets/{actionSetId}/actions/{actionId}/execute
> GET /actionsets/{actionSetId}/actions/{actionId}/events

<< Select another API Operation

GET /actionsets/{actionSetId}/actions

Gets a list of actions contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be retrieved

Request

http://{ip address}/api/actionsets/{actionSetId}/actions

Response

Message: 200 (OK)

Example Values:

```
{
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "type": "SetLighting",
      "order": 0,
      "delay": 0,
      "postDelay": 0,
      "name": "string",
      "parameters": {}
    }
  ]
}
```

POST /actionsets/{actionSetId}/actions

Creates an action contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set

Body Parameters

Name	Data Type	Required/ Optional	Description
type	string	Required	Value of action type to be created: Cancel, CommandActuators, Decrement, Increment, PauseAutomation, ResumeAutomation, SetLighting (Default), or ToggleLightingState
useAssignedSpace	boolean	Optional	Value: true or false
curveType	string	Optional	Values: None (no curve = no Duration), Linear (Default), Square Law, or Dali
behavior	string	Optional	Values: ConstantDuration (Default), Variable, or ConstantRate
state	string	Optional	Value: On or Off
level	integer	Optional	Level to which the light should be dimmed Value: 0-10000
duration	integer	Optional	Amount of time it takes in milliseconds (ms) to transition to a new state Example: Off to On. Value: 0-24 hours. Default duration: 2000 ms
cct	integer	Optional	Correlated Color Temperature (CCT) command to the light in degrees Kelvin (K). Range: 2700—6500 **Note:** The CCT value should be within the range of the space(s) or light(s) being controlled.
spaceIds	integer	Optional	IDs for the assigned spaces
spaceGroupIds	integer	Optional	IDs for the assigned space groups
lightIds	integer	Optional	IDs for the assigned lights
relayIds	integer	Optional	IDs for the assigned relays
delay	integer	Optional	Delay in milliseconds (ms) *before* this action will execute Example: 2000 ms (2 seconds/light). Min: 0
postDelay	integer	Optional	Delay in milliseconds (ms) *after* this Action is executed
order	integer	Optional	Order in which the action will execute

Request

http://{ip address}/api/actionsets/{actionSetId}/actions

Continue to "Example Body Values" >>

Example Body Values:

```
{
  "type": "SetLighting",
  "parameters": {
    "useAssignedSpace": true,
    "curveType": "None",
    "behavior": "ConstantDuration",
    "state": "Off",
    "level": 0,
    "duration": 0,
    "cct": 0,
    "spaceIds": [
      0
    ],
    "spaceGroupIds": [
      0
    ],
    "lightIds": [
      0
    ],
    "relayIds": [
      0
    ]
  },
  "delay": 0,
  "postDelay": 0,
  "order": 0
}
```

Response

Message: 201 (Created)

GET /actionsets/{actionSetId}/actions/{actionId}

Gets an action contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set
actionId	integer	Required	ID of the action to be retrieved

Request

http://{ip address}/api/actionsets/{actionSetId}/actions/{actionId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "type": "SetLighting",
  "order": 0,
  "delay": 0,
  "postDelay": 0,
  "name": "string",
  "parameters": {}
}
```

PUT /actionsets/{actionSetId}/actions/{actionId}

Updates an action.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set
actionId	integer	Required	ID of the action to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
type	string	Required	Value of action type to be created: Cancel, CommandActuators, Decrement, Increment, PauseAutomation, ResumeAutomation, SetLighting (Default), or ToggleLightingState
useAssignedSpace	boolean	Optional	Value: true or false
curveType	string	Optional	Values: None (no curve = no Duration), Linear (Default), Square Law, or Dali
behavior	string	Optional	Values: ConstantDuration (Default), Variable, or ConstantRate
state	string	Optional	Value: On or Off
level	integer	Optional	Level to which the light should be dimmed. Value: 1-10000
duration	integer	Optional	Amount of time it takes in milliseconds (ms) to transition to a new state Example: Off to On. Value: 0-24 hours. Default duration: 2000 ms
cct	integer	Optional	Correlated Color Temperature (CCT) command to the light in degrees Kelvin (K). Range: 2700—6500 **Note:** The CCT value should be within the range of the space(s) or light(s) being controlled.
spaceIds	integer	Optional	ID for the assigned spaces
spaceGroupIds	integer	Optional	IDs for the assigned space groups
lightIds	integer	Optional	ID for the assigned lights
relayIds	integer	Optional	ID for the assigned relays
delay	integer	Optional	Delay in milliseconds (ms) *before* this action will execute Example: 2000 ms (2 seconds/light). Min: 0
postDelay	integer	Optional	Delay in milliseconds (ms*) after* this Action is executed
order	integer	Optional	Order in which the action will execute

Continue > >

Request

http://{ip address}/api/actionsets/{actionSetId}/actions/{actionId}

Example Body Values:
```
{
  "type": "SetLighting",
  "parameters": {
    "useAssignedSpace": true,
    "curveType": "None",
    "behavior": "ConstantDuration",
    "state": "Off",
    "level": 0,
    "duration": 0,
    "cct": 0,
    "spaceIds": [
      0
    ],
    "spaceGroupIds": [
      0
    ],
    "lightIds": [
      0
    ]
  },
  "delay": 0,
  "postDelay": 0,
  "order": 0
}
```

Response

Message: 204 (No Content)

DELETE /actionsets/{actionSetId}/actions/{actionId}

Deletes an action contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set
actionId	integer	Required	ID of the action to be deleted

Request

http://{ip address}/api/actionsets/{actionSetId}/actions/{actionId}

Response

Message: 204 (No Content)

POST /actionsets/{actionSetId}/actions/{actionId}/execute

Executes an action contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set
actionId	integer	Required	ID of the action to be executed

Request

http://{ip address}/api/actionsets/{actionSetId}/actions/{actionId}/execute

Response

Message: 204 (No Content)

GET /actionsets/{actionSetId}/actions/{actionId}/events

Gets a list of action events contained within an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set
actionId	integer	Required	ID of the action

Request

http://{ip address}/api/actionsets/{actionSetId}/actions/{actionId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2018-02-07T15:55:59.920Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

[<< Select another API Operation](#)

Action Sets

Action sets are used to define lighting control actions that are to take place in one space or a group of spaces simultaneously. These are examples of possible action sets:

- Turn on all corridor and open office lighting
- Turn off all non-emergency lighting
- Turn on the lights in all the conference rooms
- Dim the lights to 80% in the 2nd floor spaces

GET /actionsets/search	DELETE /actionsets/{actionSetId}
GET /actionsets	POST /actionsets/{actionSetId}/execute
POST / actionsets	POST / actionsets/{actionSetId}/cancel
GET /actionsets/{actionSetId}	GET /actionsets/{actionSetId}/events
PUT /actionsets/{actionSetId}	

<< Select another API Operation

GET /actionsets/search

Searches all action sets in the system.

Request

http://{ip address}/api/actionsets/search

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount"" 0,
  "page": 0,
  "pageSize": 0,
  "pageCount:: 0,
  "hasNextPage": true
  "hasPreviousPage": true
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "executeNumberOfTimes": 0,
      "executeType": "NumberOfTimes",
      "actionConcurrencyType": "Sequential",
      "status": "Stopped"
      "numberOfActions": 0
    }
  ]
}
```

GET /actionsets

Gets a list of action sets in the system.

Request

http://{ip address}/api/actionsets

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "isSystem": true
      "executeNumberOfTimes": 0,
      "executeType": "NumberOfTimes",
      "actionConcurrencyType": "Sequential",
      "status": "Stopped"
    }
  ]
}
```

POST /actionsets

Creates an action set.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the action set to be created
executeNumberOfTimes	integer	Optional	Number of times the action set's action should execute in the space. Only available if the Execute Type is "Number of Times." Default: 1
executeType	string	Optional	When the action set's action should occur. Values: NumberofTimes (Default) or UntilCancelled
actionConcurencyType	string	Optional	How the action set's action should initiate: Sequential (Default) or Parallel

Request

http://{ip address}/api/actionsets

Example Body Value:

```
{
   "name": "string"
   "executeNumberOfTimes": 0,
   "executeType": "NumberOfTimes",
   "actionConcurrencyType": "Sequential",
}
```

Response

Message: 201 (Created)

GET /actionsets/{actionSetId}

Gets an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be retrieved

Request

http://{ip address}/api/actionsets/{actionSetId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "isSystem": true
  "executeNumberOfTimes": 0,
  "executeType": "NumberOfTimes",
  "actionConcurrencyType": "Sequential",
  "status": "Stopped"
}
```

PUT /actionsets/{actionSetId}

Updates an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the action set
executeNumberOfTimes	integer	Optional	Number of times the action set's action should execute in the space. Only available if the Execute Type is "Number of Times." Default: 1
executeType	integer	Optional	When the action set's action should occur. Values: NumberofTimes (Default) or UntilCancelled
actionConcurrencyType	String	Optional	How the action set's action should initiate: Sequential (Default) or Parallel

Request

http://{ip address}/api/actionsets/actionSetId

Example Body Value:

```
{
  "name": "string"
  "executeNumberOfTimes": 0,
  "executeType":"NumberOfTimes",
  "actionConcurrencyType": "Sequential"
}
```

Response

Message: 204 (No Content)

DELETE /actionsets/{actionSetId}

Deletes an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be deleted

Request

http://{ip address}/api/actionsets/{actionSetId}

Response

Message: 204 (No Content)

POST /actionsets/actionSetId/execute

Executes an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be executed

Request

http://{ip address}/api/actionsets/{actionSetId}/execute

Response

Message: 202 (Accepted)

POST /actionsets/{actionSetId}/cancel

Cancels an action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set to be canceled

Body Parameters

Name	Data Type	Required/ Optional	Description
cancelType	string	Required	Option for canceling the action set execution. Values: Immediate, EndOfCurrentIteration

Request

http://{ip address}/api/actionsets/{actionSetId}/cancel

Example Body Value:
```
{
   "cancelType": "Immediate"
}
```

Response

Message: 200 (OK)

GET /actionsets/{actionSetId}/events

Gets a list of action set events.

URI Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set

Request

http://{ip address}/api/actionsets/{actionSetId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-09T18:44:07.125Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

<< Select another API Operation

Actuators

Actuators are powerful tools used to provide users with maximum flexibility and customization in controlling the actions of multiple devices through the Igor Gateway Software. Within the Gateway Software Action Set/Actions, users can use actuators to select Shades and Window Shades action types. In addition, users can put additional custom commands under a user-defined name to list them in the Software UI and command them through the API. Each actuator can have multiple named Command Collections.

LEARN MORE: To review command types and parameter values for actuators and API documentation examples, see "Appendix C: About Actuators," page 307.

```
GET /actuators
POST /actuators

GET /actuators/{actuatorId}
PUT /actuators/{actuatorId}
DELETE /actuators/{actuatorId}

POST /actuators/{actuatorId}/command
POST /actuators/command

GET /actuators/{actuatorId}/events
POST /actuators/{actuatorId}/events

PUT /actuators/{actuatorId}/tags
DELETE /actuators/{actuatorId}/tags/{tagName}
```

<< Select another API Operation

GET /actuators

Gets a list of actuators.

Request

http://{ip address}/api/actuators

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "subtype": "string",
      "properties": "string",
      "systemProperties": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-06-25T17:22:02.289Z",
      "isOnline": true,
      "isOnlineChanged": "2019-06-25T17:22:02.289Z",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0,
      "commands": [
        {
          "name": "string",
          "commands": [
            {
              "commandType": "string",
              "parameters": [
                {
                  "parameterType": "string",
                  "value": {}
                }
              ]
            }
          ]
        }
      ]
    }
  ]
}
```

POST /actuators

Creates an actuator.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for the actuator to be created
subType	string	Required	Subtype of the actuator to be created
name	string	Required	Name of the actuator
Commands: name	string	Optional	Name of the commands collection
Commands: commandType	string	Optional	For command type and parameter value descriptions and examples, see "Appendix C: About Actuators," page 307.
Commands: parameters	string	Optional	
properties	string	Optional	External system's device properties **Note:** Device properties are required to be a valid JSON object.
networkNodeId	integer	Optional	ID of the actuator's Network Node
deviceNodeId	Integer	Optional	ID of the actuator's Device Node
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
Protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application

Request

http://{ip address}/api/actuators

Example Body Value:

```
{
  "externalId": "string",
  "subType": "string",
  "commands": [
    {
      "name": "string",
      "commands": [
        {
          "commandType": "string",
          "parameters": [
            {}
          ]
        }
```

```
        }
      ]
    }
  ],
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /actuators/{actuatorId}

Gets an actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator to be retrieved

Request

http://{ip address}/api/actuators/{actuatorId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "subType": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-06-25T17:26:38.790Z",
  "isOnline": true,
  "isOnlineChanged": "2019-06-25T17:26:38.790Z",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0,
  "commands": [
```

```
    {
      "name": "string",
      "commands": [
        {
          "commandType": "string",
          "parameters": [
            {
              "parameterType": "string",
              "value": {}
            }
          ]
        }
      ]
    }
}
```

PUT /actuators/{actuatorId}

Updates an actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the actuator
Commands: name	string	Optional	Name of the commands collection
Commands: commandType	string	Optional	For command type and parameter value descriptions and examples, see "Appendix C: About Actuators," page 307.
Commands: parameters	string	Optional	
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/actuators/{actuatorId}

Example Body Value:

```
{
  "commands": [
    {
      "name": "string",
      "commands": [
        {
          "commandType": "string",
          "parameters": [
            {}
          ]
        }
      ]
    }
  ],
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
  "protocol": "string"
}
```

Response

Message: 204 (No Content)

DELETE /actuators/{actuatorId}

Deletes a specified actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator to be deleted

Request

http://{ip address}/api/actuators/{actuatorId}

Response

Message: 204 (No Content)

POST /actuators/{actuatorId}/command

Sends commands to a specific actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator to receive the commands

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the actuator to be updated
commandType	string	Required	For command type and parameter value descriptions and examples, see "Appendix C: About Actuators," page 307.
parameters	array	Required	

Request

http://{ip address}/api/actuators/{actuatorId}/command

Example Body Values:

```
{
.."name": "string",
  "type": "Command",
  "parameters": {}
}
```

Response

Message: 204 (No Content)

POST /actuators/command

Sends commands to multiple actuators.

Body Parameters

ID and command data for each actuator.

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID of the actuator
name	string	Required	Name of the command
type	string	Required	For command type and parameter value descriptions and examples, see "Appendix C: About Actuators," page 307.
parameters	string	Required	

Request

http://{ip address}/api/actuators/command

Example Body Values:

```
{
  "list": [
    {
      "id": 0,
      "commands": [
        {
          "name": "string",
          "type": "Command",
          "parameters": {}
        }
      ]
    }
  ]
}
```

Response

Message: 204 (No Content)

GET /actuators/{actuatorId}/events

Gets a list of actuator events.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator

Request

http://{ip address}/api/actuators/{actuatorId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-06-25T17:42:22.674Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /actuators/{actuatorId}/events

Creats an actuator event.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator

Body Parameters

Command data for the actuator event.

Name	Data Type	Required/ Optional	Description
commandCollection	string	Required	Name of the command collection event
commandType	string	Required	For command type and parameter value descriptions and examples, see "Appendix C: About Actuators," page 307.
data	string	Required	

Request

http://{ip address}/api/actuators/{actuatorId}/events

Example Body Values:

```
{
  "commandCollection": "string",
  "commandType": "string",
  "data": "string"
}
```

Response

Message: 201 (Created)

PUT /actuators/{actuatorId}/tags

Adds a tag to a specified actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/actuators/{actuatorId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /actuators/{actuatorId}/tags/{tagName}

Removes a tag from an actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
actuatorId	integer	Required	ID of the actuator
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/actuators/{actuatorId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Application Keys

Application keys are used to gain access to the Igor Gateway Software Admin application.

GET /applicationkeys
POST /applicationkeys
GET /applicationkeys/{applicationKeyId}
PUT /applicationkeys/{applicationKeyId}
DELETE /applicationkeys{applicationKeyId}

[<< Select another API Operation](#)

GET /applicationkeys

Gets a list of all application keys.

Request

http://{ip address}/api/applicationkeys

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "key": "string"
    }
  ]
}
```

POST /applicationkeys

Creates an application key.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the application key to be created

Request

http://{ip address}/api/applicationkeys

Example Body Value:

```
{
   "name": "string"
}
```

Response

Message: 201 (Created)

GET /applicationkeys/{applicationKeyId}

Gets an application key.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key to be retrieved

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}

Response

Message: 200 (OK)

Example Values:

```
{
   "id": 0,
   "name": "string",
   "key": "string"
}
```

PUT /applicationkeys/{applicationKeyId}

Updates an application key.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the application key to be updated

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}

Example Body Value:

```
{
  "name": "string"
}
```

Response

Message: 204 (No Content)

DELETE /applicationkeys/{applicationKeyId}

Deletes an application key.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key to be deleted

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}

Response

Message: 204 (No Content)

<< Select another API Operation

Connectors

Connectors are templates for a function. The Igor Gateway contains connectors for MQTT, which bridges the gap between the API and the Igor Gateway. The MQTT connectors allow connection to an external MQTT broker and subcribes or publishes data based on the MQTT messaging protocol.

> GET /connectors/mqtt/clients
>
> POST /connectors/mqtt/clients
>
> GET /connectors/mqtt/clients
>
> PUT /connectors/mqtt/clients/{mqttClientId}
>
> DELETE /connectors/mqtt/clients/{mqttClientId}
>
> GET /connectors/mqtt/clients/supported-events
>
> POST /connectors/mqtt/clients/{mqttClientId}/test
>
> DELETE /connectors/mqtt/clients/{mqttClientId}/credentials

[<< Select another API Operation](#)

GET /connectors/mqtt/clients

Searches all MQTT clients in the system.

Body Parameters

Name	Data Type	Required/ Optional	Description
page	integer	Optional	The results page
pageSize	integer	Optional	The results page size
term	string	Optional	The search term
applicationKeysIds	string	Optional	The application key IDs to include
sortDir	string	Optional	The sort direction
sortBy	string	Optional	The sort order

Request

http://{ip address}/api/connectors/mqtt/clients}

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
```

```
    "totalCount": 0,
    "list": [
{
        "id": 0,
        "applicationKeyId": 0,
        "name": "string",
        "isEnabled": true,
        "isPublishEnabled": true,
        "isSubscribeEnabled": true,
        "version": "v31",
        "protocol": "Tcp",
        "host": "string",
        "port": 0,
        "webSocketPath": "string",
        "clientId": "string",
        "topicPrefix": "string",
        "hasStoredCredentials": true,
        "username": "string",
        "password": "string",
        "maxPendingMessages": 0,
        "qos": "AtMostOnce",
        "cleanSession": true,
        "communicationTimeout": 0,
        "reconnectDelay": 0,
        "keepAliveInterval": 0,
        "willTopic": "string",
        "willPayload": "string",
        "willQos": "AtMostOnce",
        "isWillRetained": true,
        "clientType": "Standard",
        "domainEvents": [
          "string"
        ]
    }
  ]
}
```

POST /connectors/mqtt/clients

Creates an MQTT client.

Request

http://{ip address}/api/connectors/mqtt/clients

Example Body Value:

```
{
  "applicationKeyId": 0,
  "name": "string",
  "isEnabled": true,
  "isPublishEnabled": true,
  "isSubscribeEnabled": true,
  "version": "v31",
  "protocol": "Tcp",
  "host": "string",
  "port": 0,
  "webSocketPath": "string",
  "clientId": "string",
  "topicPrefix": "string",
  "hasStoredCredentials": true,
  "username": "string",
  "password": "string",
  "maxPendingMessages": 0,
  "qos": "AtMostOnce",
  "cleanSession": true,
  "communicationTimeout": 0,
  "reconnectDelay": 0,
  "keepAliveInterval": 0,
  "willTopic": "string",
  "willPayload": "string",
  "willQos": "AtMostOnce",
  "isWillRetained": true,
  "clientType": "Standard",
  "domainEvents": [
    "string"
  ]
}
```

Response

Message: 201 (Created)

GET /connectors/mqtt/clients/{mqttClientId}

Gets an MQTT client.

URI Parameters

Name	Data Type	Required/ Optional	Description
mqttClientId	integer	Required	ID of the MQTT client

Request

http://{ip address}/api/connectors/mqtt/clients/{mqttClientId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "applicationKeyId":
0,
  "name": "string",
  "isEnabled": true,
  "isPublishEnabled":
true,
  "isSubscribeEnabled":
true,
  "version": "v31",
  "protocol": "Tcp",
  "host": "string",
  "port": 0,
  "webSocketPath":
"string",
  "clientId": "string",
  "topicPrefix":
"string",

"hasStoredCredentials":
true,
  "username": "string",
  "password": "string",
  "maxPendingMessages":
0,
  "qos": "AtMostOnce",
  "cleanSession": true,

"communicationTimeout":
0,
  "reconnectDelay": 0,
```

```
  "keepAliveInterval":
0,
  "willTopic":
"string",
  "willPayload":
"string",
  "willQos":
"AtMostOnce",
  "isWillRetained":
true,
  "clientType":
"Standard",
  "domainEvents": [
    "string"
  ]
}
```

PUT /connectors/mqtt/clients/{mqttClientId}

Updates an MQTT client.

Body Parameters

Name	Data Type	Required/ Optional	Description
mqttClientId	integer	Required	ID of the MQTT client to be updated

Request

http://{ip address}/api/connectors/mqtt/clients/{mqttClientId}

Example Body Value:

```
{
  "name": "string",
  "isEnabled": true,
  "isPublishEnabled": true,
  "isSubscribeEnabled": true,
  "version": "v31",
  "protocol": "Tcp",
  "host": "string",
  "port": 0,
  "webSocketPath": "string",
  "clientId": "string",
  "topicPrefix": "string",
  "hasStoredCredentials": true,
  "username": "string",
  "password": "string",
  "maxPendingMessages": 0,
  "qos": "AtMostOnce",
  "cleanSession": true,
  "communicationTimeout": 0,
```

```
  "reconnectDelay": 0,
  "keepAliveInterval": 0,
  "willTopic": "string",
  "willPayload": "string",
  "willQos": "AtMostOnce",
  "isWillRetained": true,
  "clientType": "Standard",
  "domainEvents": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /connectors/mqtt/clients/{mqttClientId}

Deletes an MQTT client.

URI Parameters

Name	Data Type	Required/ Optional	Description
mqttClientId	integer	Required	ID of the MQTT client to be deleted

Request

http://{ip address}/api/connectors/mqtt/clients/{mqttClientId}

Response

Message: 204 (No Content)

GET /connectors/mqtt/clients/supported-events

Gets a list of supported MQTT client events.

Request

http://{ip address}/api/connectors/mqtt/clients/supported-events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    "string"
  ]
}
```

POST /connectors/mqtt/clients/{mqttClientId}/test

Tests an MQTT client.

URI Parameters

Name	Data Type	Required/ Optional	Description
mqttClientId	Integer	Required	ID of the MQTT client to be tested

Request

http://{ip address}/api/connectors/mqtt/clients/{mqttClientId}/test

Response

Message: 204 (No Content)

DELETE /connectors/mqtt/clients/{mqttClientId}/credentials

Deletes MQTT client credentials.

URI Parameters

Name	Data Type	Required/ Optional	Description
mqttClientId	integer	Required	ID of the MQTT client for which credentials are to be deleted

Request

http://{ip address}/api/connectors/mqtt/clients/{mqttClientId}/credentials

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Dashboards

Dashboard endpoints are used for providing data sets that contain summary online/offline information about devices within the system.

> GET /dashboards/devicestatusbydevicetype
>
> GET /dashboards/devicestatusbynetworkswitch
>
> GET /dashboards/devicestatusbyspace
>
> GET /dashboards/deviceactivitybyhour

[<< Select another API Operation](#)

GET /dashboards/devicestatusbydevicetype

Gets device status by device type.

Request

http://{ip address}/api/ dashboards/devicestatusbydevicetype

Response

Message: 200 (OK)

Example Response Values:

```
{
  "list": [
    {
      "deviceType": "string",
      "deviceTypeSingular": "string",
      "onlineCount": 0,
      "offlineCount": 0,
      "total": 0
    }
  ]
}
```

GET /dashboards/devicestatusbynetworkswitch

Gets device status by network switch.

Request

http://{ip address}/api/dashboards/devicestatusbynetworkswitch

Response

Message: 200 (OK)

Example Response Values:

```
{
  "list": [
    {
      "networkSwitchName": "string",
      "networkSwitchIpAddress": "string",
      "onlineCount": 0,
      "offlineCount": 0,
      "total": 0
    }
  ]
}
```

GET /dashboards/devicestatusbyspace

Gets device status by space.

Request

http://{ip address}/api/dashboards/devicestatusbyspace

Response

Message: 200 (OK)

Example Response Values:

```
{
  "list": [
    {
      "spaceId": 0,
      "spaceName": "string",
      "onlineCount": 0,
      "offlineCount": 0,
      "total": 0
    }
  ]
}
```

GET /dashboards/deviceactivitybyhour

Gets device activity by hour.

Request

http://{ip address}/api/dashboards/deviceactivitybyhour

Response

Message: 200 (OK)

Example Response Values:

```
{
  "list": [
    {
      "dateTime": "2019-06-28T19:38:08.559Z",
      "count": 0
    }
  ]
}
```

[<< Select another API Operation](#)

Data

Data receivers allow you to redirect passthrough data for compatible actuators and sensors to another destination. You may configure Data Receivers in the Gateway Software Admin application via the **Developers > Application Keys** *Menu*.

```
GET /data/receivers
POST /data/receivers
GET /data/receivers/{dataReceiverId}
PUT /data/receivers/{dataReceiverId}
DELETE /Data/receivers/{dataReceiverId}
POST /data/events/import/{eventType}
```

[<< Select another API Operation](#)

GET /data/receivers

Searches all data receivers in the system.

Request

http://{ip address}/api/data/receivers

Response

Message: 200 (OK)

Example Response Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "address": "string",
      "isEnabled": true,
      "deviceType": "Light",
      "deviceSubtype": "string",
      "deviceId": 0,
      "dataType": "Passthrough",
      "protocol": "Udp",
      "applicationKeyId": 0
    }
  ]
}
```

Query Input Parameters

Name	Data Type	Description
page	integer	Results page
pageSize	integer	Results page size
term	string	Search term
applicationKeyIds	string	Application key IDs to include
sortDir	string	Sort directions
sortBy	string	Sort order

POST /data/receivers

Creates a data receiver.

Body Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyID	integer	Required	Application Key ID of the data receiver to be created
dataType	enum	Required	Supported datatype: Passthrough
protocol	enum	Required	Supported protocol: Udp
address	string	Required	The address to where the data will be sent. Format: {ipAddress}:{port} Example: 192.168.1.20:5100
deviceType	string	Required	Name of supported device type: Actuator
deviceSubtype	string	*	Name of supported deviced subtype: Ivani or IvaniBluetoothDevice
deviceID	integer	*	ID of the device
isEnabled	string	Required	True or False

*Important: Either a deviceSubtype OR a deviceID is required. Passing both is NOT allowed.

Request

http://{ip address}/api/data/receivers

Example Body Values:

```
{
  "applicationKeyId": 0,
  "dataType": "string",
  "protocol": "string",
  "address": "string",
  "deviceType": "string",
  "deviceSubtype": "string",
  "deviceId": 0,
  "isEnabled": true
}
```

Response

Message: 201 (Created)

GET /data/receivers/{dataReceiverId}

Gets a specific data receiver.

URI Parameters

Name	Data Type	Required/ Optional	Description
dataReceiverId	integer	Required	ID of the data receiver to be retrieved

Request

http://{ip address}/api/data/receivers/{dataReceiverId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "applicationKeyId": 0,
  "address": "string",
  "deviceType": "string",
  "deviceSubtype": "string",
  "deviceId": 0,
  "dataType": "string",
  "protocol": "string",
  "isEnabled": true
}
```

PUT /data/receivers/{dataReceiverId}

Updates a specific data receiver.

URI Parameters

Name	Data Type	Required/ Optional	Description
dataReceiverId	integer	Required	ID of the data receiver to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
address	string	Required	Updated address for the data receiver
deviceType	string	Required	Name of supported device type: Actuator
deviceSubtype	string	*	Name of supported deviced subtype: Ivani or IvaniBluetoothDevice
deviceID	integer	*	ID of the device
isEnabled	string	Required	True or False

*Important: Either a deviceSubtype OR a deviceID is required. Passing both is NOT allowed.

Request

http://{ip address}/api/data/receivers/{dataReceiverId}

Example Body Values:

```
{
  "address": "string",
  "deviceType": "string",
  "deviceSubtype": "string",
  "deviceId": 0,
  "isEnabled": true
}
```

Response

Message: 204 (No Content)

DELETE /data/receivers/{dataReceiverId}

Deletes a specific data receiver from the system.

URI Parameters

Name	Data Type	Required/ Optional	Description
dataReceiverId	integer	Required	ID of the data receiver to be deleted

Request

http://{ip address}/api/data/receivers/{dataReceiverId}

Response

Message: 204 (No Content)

POST /data/events/import/{eventType}

Imports an event to the system.

URI Parameter

Name	Data Type	Required/ Optional	Description
eventType	string	Required	The event type

Body Parameter

Name	Data Type	Required/ Optional	Description
eventFile	string	Required	Name of the folder to which the Event Type file will save

Request

http://{ip address}/api/data/events/import/{eventType}

Response

Message: 201 (Created)

[<< Select another API Operation](#)

Device Nodes

Device nodes are used when associating devices connected to a downstream node within an Igor Daisy-Chain.

GET /devicenodes	DELETE /devicenodes/deleteall
POST /devicenodes	GET /devicenodes/{deviceNodeId}/networknode
GET /devicenodes/{deviceNodeId}	POST /devicenodes/{deviceNodeId}/bringonline
PUT /devicenodes/{deviceNodeId}	POST /devicenodes/{deviceNodeId}/takeoffline
DELETE /devicenodes/{deviceNodeId}	
GET /devicenodes/{deviceNodeId}/devices	GET /devicenodes/{deviceNodeId}/events

<< Select another API Operation

GET /devicenodes

Gets a list of all device nodes in the system.

Request

http://{ip address}/api/devicenodes

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-09T20:13:43.234Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-09T20:13:43.234Z",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "upstreamDeviceNodeId": 0,
      "downstreamDeviceNodeId": 0
    }
  ]
}
```

POST /devicenodes

Creates a device node.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for the Device Node to be created
networkNodeId	integer	Optional	ID of the Device Node's Network Node
upstreamDeviceNodeId	integer	Optional	ID of the device's upstream Device Node
name	string	Optional	Name of the device node to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/devicenodes

Example Body Values:

```
{
  "externalId": "string",
  "networkNodeId": 0,
  "upstreamDeviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /devicenodes/{deviceNodeId}

Gets a device node.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node to be retrieved

Request

http://{ip address}/api/devicenodes/{deviceNodeId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-09T20:18:38.224Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-09T20:18:38.224Z",
 "properties": "string",
  "systemProperties": "string",
  "networkNodeId": 0,
  "upstreamDeviceNodeId": 0,
  "downstreamDeviceNodeId": 0
}
```

PUT /devicenodes/{deviceNodeId}

Updates a device node.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the Device Node to be updated
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/devicenodes/{deviceNodeId}

Example Body Values:

```
{
  "name": "string",
  "properties": "string",
  "protocol": "string"
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /devicenodes/{deviceNodeId}

Deletes a device node.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node to be deleted

Request

http://{ip address}/api/devicenodes/{deviceNodeId}

Response

Message: 204 (No content)

POST /devicenodes/{deviceNodeId}/bringonline

Notifies the system that a device node has come online.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/bringonline

Response

Message: 204 (No Content)

GET /devicenodes/{deviceNodeId}/devices

Gets all devices attached to a device node.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node to be retrieved

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/devices

Response

Message: 200 (OK)

Example values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-09T20:25:59.616Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-09T20:25:59.616Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

DELETE /devicenodes/deleteall

> ⚠️ **WARNING!**
> **This operation deletes ALL device nodes AND associated devices from the system.**

Request

http://{ip address}/api/devicenodes/deleteall

Response

Message: 204 (No Content)

GET /devicenodes/{deviceNodeId}/networknode

Gets the network node associated with the device node.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/networknode

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-09T20:32:16.581Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-09T20:32:16.581Z"
  "isEmergency": true,
  "emergencyTimeout": 0,
  "emergencyLightLevel": 0,
  "properties": "string"
  "systemProperties": "string"
}
```

POST /devicenodes/{deviceNodeId}/bringonline

Notifies the system that a device node has come online.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/bringonline

Response

Message: 204 (No Content)

POST /devicenodes/{deviceNodeId}/takeoffline

Notifies the system that a device node has gone offline.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/takeoffline

Response

Message: 204 (No Content)

GET /devicenodes/{deviceNodeId}/events

Gets a list of all device node events.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceNodeId	integer	Required	ID of the device node

Request

http://{ip address}/api/devicenodes/{deviceNodeId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-09-24T18:35:11.710Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

[<< Select another API Operation](#)

Devices

Devices are logical representations of physical devices connected to the network that are registered with the Igor Gateway Software.

```
GET /devices/all
GET /devices/search
GET /devices/unassigned
POST /devices/discover
DELETE /devices/deleteall


PUT /devices/{deviceType}/{deviceId}
DELETE /devices/{deviceType}/{deviceId}


GET /devices/{deviceType}/deviceId/space
GET /devices/{deviceType}/{deviceId}/networknode
POST /devices/{deviceType}/{deviceId}/bringonline
POST /devices/{deviceType}/{deviceId}/takeoffline
POST /devices/{deviceType}/{deviceId}/quarantine
DELETE /devices/{deviceType}/{deviceId}/quarantine


GET /devices/devicetypes
```

[<< Select another API Operation](#)

GET /devices/all

Gets a list of all devices.

URI Parameters

Request

http://{ip address}/api/ devices/all

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2018-07-25T19:02:13.147Z",
      "isOnline": true,
      "isOnlineChanged": "2018-07-25T19:02:13.147Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

GET /devices/search

Searches all devices in the system.

Request

http://{ip address}/api/devices/search

Response

Message: 200 (OK)

Example Values:

```
{
    "filteredCount": 0,
    "page": 0,
    "pageSize": 0,
    "pageCount": 0,
    "hasNextPage": true,
    "hasPreviousPage": true,
    "totalCount": 0,
    "list": [
        {
            "id": 0,
            "name": "string",
            "type": "string",
            "protocol": "string",
            "externalId": "string",
            "discoveredDate": " 2018-06-19T20:48:04.917Z",
            "isOnline": true,
            "nodeId": 0,
            "deviceNodeId": 0,
            "spaceId": 0,
            "spaceName": "string",
            "networkSwitchName": "string",
            "networkSwitchIpAddress": "string",
            "networkSwitchPortId": "string",
            "networkSwitchPortDescription": "string",
            "isEmergency": true,
            "isLight": true,
            "isRelay": true,
            "lightType": "string"
            "properties":"string"}
            "systemProperties":"string"]
}
```

Continue to "Query Input Parameters" descriptions >>

Query Input Parameters

Name	DataType	Description
page	integer	Results page
pageSize	integer	Results page size
term	string	Search term
types	string	Devices types
isOnline	boolean	Device status value: true or false
spaceIds	string	Space IDs to include
networkSwitchNames	string	Network switch names to include
networkSwitchIpAddresses	string	Network switch IP addresses
onlyDevicesWithLldp	boolean	Only includes devices with LLDP. Value: true or false
sortDir	string	Sort direction
sortBy	string	Sort order
minDiscoveredDate	date-time	Minimum discovered date
maxDiscoveredDate	date-time	Maximum discovered date

GET /devices/unassigned

Gets a list of all devices that are not assigned to a space.

Request

http://{ip address}/api/devices/unassigned

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2018-07-25T19:02:13.147Z",
      "isOnline": true,
      "isOnlineChanged": "2018-07-25T19:02:13.147Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string"
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

POST /devices/discover

Discovers all devices on the network.

URI Parameters

Request

http://{ip address}/api/devices/discover

Response

Message: 204 (No Content)

DELETE /devices/deleteall

⚠️ **WARNING!**
This operation deletes ALL devices in the system.

Request

http://{ip address}/api/devices/deleteall

Response

Message: 204 (No Content)

PUT /devices/{deviceType}/{deviceId}

Renames a device.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be renamed. Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device to be renamed

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	New name for the device.

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}

Example Body Value:

```
{
   "name": "string"
}
```

Response

Message: 204 (No Content)

DELETE /devices/{deviceType}/{deviceId}

Deletes a specified device

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be deleted. Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device to be renamed

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}

Response

Message: 204 (No Content)

GET /devices/{deviceType}/{deviceId}/space

Gets the space that contains the device.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}/space

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "mode": "string",
  "areZonesDisabled": true,
  "state": "string",
  "level": 0,
  "cct": 0,
  "hasTunableLights": true,
  "minimumCCT": 0,
  "maximumCCT": 0,
  "controlType": 0,
  "resumeType": "Undefined",
  "resumeDate": "2019-05-09T21:20:00.347Z"
}
```

GET /devices/{deviceType}/{deviceId}/networknode

Gets the network node associated with the device.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device

Request

http://{ip address}/api/devices/{deviceType}/{deviceId}/networknode

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-09T21:25:42.789Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-09T21:25:42.789Z",
  "isEmergency": true,
  "emergencyTimeout": 0,
  "emergencyLightLevel": 0,
  "properties": "string",
  "systemProperties": "string"
}
```

POST /devices/{deviceType}/{deviceId}/bringonline

Notifies the system that a device has come online.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be brought online. Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device to be brought online

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}/bringonline

Response

Message: 204 (No Content)

POST devices/{deviceType}/{deviceId}/takeoffline

Notifies the system that a device has gone offline.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be taken offline Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator
deviceId	integer	Required	ID of the device to be taken offline

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}/takeoffline

Response

Message: 204 (No Content)

POST /devices/{deviceType}/{deviceId}/quarantine

Adds a device to quarantine.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be quarantined Values: Light, MotionSensor, LightSensor, TemperatureSensor, Relay, WallControl, DryContact, Actuator, Sensor
deviceId	integer	Required	ID of the device to be quarantined

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}/quarantine

Response

Message: 204 (No Content)

DELETE /devices/{deviceType}/{deviceId}/quarantine

Removes a device from quarantine.

URI Parameters

Name	Data Type	Required/ Optional	Description
deviceType	string	Required	Type of device to be removed from quarantine. Values: Light, MotionSensor, LightSensor, TemperatureSensor, Relay, WallControl, DryContact, Actuator, Sensor
deviceId	integer	Required	ID of the device to be removed from quarantine.

Request

http://{ip address}/api/ devices/{deviceType}/{deviceId}/quarantine

Response

Message: 204 (No Content)

GET /devices/devicetypes

Gets a count of all device types in the system.

Request

http://{ip address}/api/ devices/devicetypes

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "deviceType": "string",
      "count": 0,
      "subtypes": [
        {
          "deviceSubtype": "string",
          "count": 0
        }
      ]
    }
  ]
}
```

<< Select another API Operation

Diagnostics

GET /diagnostics/version
GET /diagnostics/warnings

GET /diagnostics/version

Gets the Gateway Software version.

Request

http://{ip address}/diagnostics/version

Response

Message: 200 (OK)
Example Values:
```
{
   "version": "string"
}
```

GET /diagnostics/warnings

Gets the Gateway warnings.

Request

http://{ip address}/diagnostics/warnings

Response

Message: 200 (OK)
Example Values:
```
{
   "totalCount": 0,
   "list": [
      {
         "message": "string"
      }
   ]
}
```

Dry Contacts

Manage individual or all dry contacts in the system. Types of dry contacts include DryContact (generic) BedSensor, WaterDetectionSensor, DoorSensor, and FlowSwitch.

```
GET /drycontacts
POST /drycontacts
GET /drycontacts/{dryContactId}
PUT /drycontacts/{dryContactId}
DELETE /drycontacts/{dryContactId}

GET /drycontacts/{dryContactId}/events
POST /drycontacts/{dryContactId}/events

PUT /drycontacts/{dryContactId}/tags
DELETE /drycontacts/{dryContactId}/tags/{tagName}
```

[<< Select another API Operation](#)

GET /drycontacts

Gets a list of all dry contacts.

Request

http://{ip address}/api/drycontacts

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "dryContactType": "string",
      "properties": "string",
      "systemProperties": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-10T15:08:26.539Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-10T15:08:26.539Z",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0,
      "state": "string"
    }
  ]
}
```

POST /drycontacts

Creates a dry contact.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	ID of external system's device
dryContactType	string	Required	Type of dry contact to be created: Values: DryContact (Generic), BedSensor, WaterDetectionSensor, DoorSensor, FlowSwitch
networkNodeId	integer	Optional	ID of the dry contact's Network Node
deviceNodeId	integer	Optional	ID of the dry contact's Device Node
name	string	Optional	Name of the dry contact
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/drycontacts

Example Body Values:

```
{
  "externalId": "string",
  "dryContactType": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /drycontacts/{dryContactId}

Gets a specific dry contact.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact device to be retrieved

Request

http://{ip address}/api/ drycontacts/{dryContactId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "dryContactType": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-10T15:13:38.906Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-10T15:13:38.906Z",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0,
  "state": "string"
}
```

PUT /drycontacts/{dryContactId}

Updates a specific dry contact.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the dry contact
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/drycontact/{dryContactId}

Example Body Values:

```
{
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /drycontacts/{dryContactId}

Deletes a specific dry contact.

URI Parameter

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact to be deleted

Request

http://{ip address}/api/drycontacts/{dryContactId}

Response

Message: 204 (No Content)

GET /drycontacts/{dryContactId}/events

Gets a list of events for a specific dry contact.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact

Request

http://{ip address}/api/drycontacts/{dryContactId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-10T15:16:23.963Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /drycontacts/{dryContactId}/events

Creates a dry contact device event.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact

Body Parameters

Name	Data Type	Required/ Optional	Description
eventType	string	Required	Type of event to be created. Value: Opened or Closed

Request

http://{ip address}/api/drycontacts/{dryContactId}/events

Example Body Value:

```
{
   "eventType":  "Opened"
}
```

Response

Message: 204 (No Content)

PUT /drycontacts/{dryContactId}/tags

Adds a tag to a specified actuator.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/drycontacts/{dryContactId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /drycontacts/{dryContactId}/tags/{tagName}

Removes a tag from a dry contact.

URI Parameters

Name	Data Type	Required/ Optional	Description
dryContactId	integer	Required	ID of the dry contact
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/drycontacts/{dryContactId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Event Action Sets

Action Sets can be executed when certain events are raised.

Important: Only Dry Contacts are currently supported for Event Action Sets.

```
GET /eventactionsets
POST /eventactionsets
GET /eventactionsets/{entityType}/{entityId}
GET /eventactionsets/{eventActionSetId}
PUT /eventactionsets/{eventActionSetId}
DELETE /eventactionsets/{eventActionSetId}
```

[<< Select another API Operation](#)

GET /eventactionsets

Gets a list of all event action sets in the system.

Request

http://{ip address}/api/eventactionsets

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "entityId": 0,
      "actionSetId:0,
      "entityType": "string",
      "eventType": "string"
    }
  ]
}
```

POST /eventactionsets

Creates an event action set.

Body Parameters

Name	Data Type	Required/ Optional	Description
entityId	integer	Required	ID of the device
entityType	string	Required	Type of entity for which the event action set is to be created. Current Type supported: DryContact
eventType	string	Required	Type of event values: Opened or Closed
actionSetId	integer	Required	ID of the action set

Request

http://{ip address}/api/eventactionsets

Example Body Values:

```
{
    "entityId": 1,
    "entityType": "string",
    "eventType": "string",
    "actionSetId": 0
}
```

Response

Message: 201 (Created)

[<< Select another Event Action Sets Operation](#)

GET /eventactionsets/{entityType}/{entityId}

Gets a list of event action sets associated with the entity.

URI Parameters

Name	Data Type	Required/ Optional	Description
entityType	string	Required	Type of entity for the event action set. Current Type supported: DryContact
entityID	integer	Required	ID of the entity to be retrieved

Request

http://{ip address}/api/eventactionsets/{entityType}/{entityId}

Response

Message: 200 (OK)
Example Values:

```
{
   "list": [
      {
         "actionSetName": "string",
         "id": 0,
         "entityId": 0,
         "actionSetId": 0,
         "entityType": "string",
         "eventType": "string"
      }
   ]
}
```

[<< Select another Event Action Sets Operation](#)

GET /eventactionsets/{eventActionSetId}

Gets a specific event action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
eventActionSetId	integer	Required	ID of the event action set to be retrieved

Request

http://{ip address}/api/eventactionsets/{eventActionSetId}

Response

Message: 200 (OK)
Example Values:

```
{
   "id": 0,
   "entityId": 0,
   "actionSetId": 0,
   "entityType": "string",
   "eventType": "string"
}
```

[<< Select another Event Action Sets Operation](#)

PUT /eventactionsets/{eventActionSetId}

Updates an event action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
eventActionSetId	integer	Required	ID of the event action set to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
actionSetId	integer	Required	ID of the action set

Request

http://{ip address}/api/eventactionsets/{eventActionSetId}

Body Example Value:

```
{
   "actionSetId": 0
}
```

Response:

Message: 204 (No content)

DELETE /eventactionsets/{eventActionSetId}

Deletes a specific event action set.

URI Parameters

Name	Data Type	Required/ Optional	Description
eventActionSetId	integer	Required	ID of the event action set to be removed

Request

http://{ip address}/api/eventactionsets/{eventActionSetId}

Response

Message: 204 (No Content)

<< Select another API Operation

Health

Safe endpoint for checking the availability of the Igor Gateway Software.

GET /health/ping

Enables checking if the lighting server is available.

Request

http://{ip address}/api/health/ping

Response

Message: 200 (OK)
Example Value:
{ }

<< Select another API Operation

Licensing

POST /licensing/refresh

Forces the Gateway to pull down an updated license from the Igor Cloud Platform.

Request

http://{ip address}/api/licensing/refresh

Response

Message: 204 (No Content)

<< Select another API Operation

Lights

Manage the state of lights in a building.

Note: To adjust the emergency lighting level on an emergency node chain, see the "Network Nodes"section, page 125.

GET /lights
POST /lights
GET /lights/{lightId}
PUT /lights/{lightId}
DELETE /lights/{lightId}

POST /lights/{lightId}/turnon
POST /lights/{lightId}/turnoff
POST /lights/{lightId}/lighting
POST/lights/lighting
GET /lights/{lightId}/events

PUT /lights/{lightId}/tags
DELETE /lights/{lightId}/tags/{tagName}

<< Select another API Operation

GET /lights

Gets a list of all lights in the system.

Request

http://{ip address}/api/lights

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-10T19:03:00.485Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-10T19:03:00.485Z",
      "state": "Off",
      "level": 0,
      "minLevel": 0,
      "maxLevel": 0,
      "isEmergency": true,
      "emergencyTimeout": 0,
      "emergencyLightLevel": 0,
      "lightType": "string",
      "minimumCCT": 0,
      "maximumCCT": 0,
      "cct": 0,
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

POST /lights

Creates a light.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for this light
lightType	string	Required	Type of light value**:** Individual, Tunable, or RGB
minLevel	integer	Required	The minimum allowed light level **Range:** 0-10000 **Note:** The light range corresponds to the 0-100% dimming range.
maxLevel	integer	Required	The maximum allowed light level Range: 0-10000 **Note:** The light level range corresponds to the 0-100% dimming range.
networkNodeId	integer	Optional	ID of the Device Node's Network Node
deviceNodeId	integer	Optional	ID of the device's Device Node
name	string	Optional	Name of the light to be created
minimumCCT	integer	Optional	Minimum Correlated Color Temperature (CCT) Kelvin value of the light. **Range:** 1000—7000 (Minimum CCT must be less than or equal to maximum CCT.)
maximumCCT	integer	Optional	Maximum Correlated Color Temperature Kelvin value of the light. **Range:** 1000—7000
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/lights

Continue to "Example Body Values" >>

Example Body Values:

```
{
  "externalId": "string",
  "lightType": "string",
  "minimumCCT": 0,
  "maximumCCT": 0,
  "minLevel": 0,
  "maxLevel": 0,
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /lights/{lightId}

Gets a light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be retrieved

Request

http://{ip address}/api/lights/{lightId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-10T20:19:55.767Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-10T20:19:55.767Z",
  "state": "Off",
  "level": 0,
  "minLevel": 0,
  "maxLevel": 0,
  "isEmergency": true,
  "emergencyTimeout": 0,
  "emergencyLightLevel": 0,
  "lightType": "string",
  "minimumCCT": 0,
  "maximumCCT": 0,
  "cct": 0,
  "properties": "string",
  "systemProperties": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

PUT /lights/{lightId}

Updates a light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
minLevel	integer	Required	Minimum allowed light level **Range:** 0-10000 **Note:** The light level range corresponds to the 0-100% dimming range.
maxLevel	integer	Required	Maximum allowed light level **Range:** 0-10000 **Note:** The light level range corresponds to the 0-100% dimming range.
name	string	Required	Name of the light containing the new values
minimum CCT	integer	Optional	Minimum Correlated Color Temperature (CCT) Kelvin value of the light. **Range:** 1000—7000 (Minimum CCT must be less than or equal to maximum CCT.)
maximumCCT	integer	Optional	Maximum Correlated Color Temperature Kelvin value of the light. **Range:** 1000—7000
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/lights/{lightId}

Continue to "Example Body Values" >>

Example Body Values:

```
{
  "minLevel": 0,
  "maxLevel": 0,
  "minimumCCT": 0,
  "maximumCCT": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /lights/{lightId}

Deletes a specific light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be deleted

Request

http://{ip address}/api/lights/{lightId}

Response

Message: 204 (No Content)

POST /lights/{lightId}/turnon

Turns on a light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be turned on

Request

http://{ip address}/api/lights/{lightId}/turnon

Response

Message: 204 (No Content)

POST /lights/{lightId}/turnoff

Turns off a light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be turned off

Request

http://{ip address}/api/lights/{lightId}/turnoff

Response

Message: 204 (No Content)

POST /lights/{lightId}/lighting

Dims a light to a specified level.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light to be dimmed

Body Parameters

Lighting (required)- the new lighting settings for the light

Name	Data Type	Required/ Optional	Description
level	integer	Optional	Level to which the light should be dimmed. Value: 0-10000
cct	integer	Optional	Correlated color temperature of the lighting Range: 1000—7000 **Note:** The CCT value should be within the range of the space(s) or light(s) being controlled.
behavior	string	Optional	Values: ConstantDuration, Variable, ConstantRate
curveType	string	Optional	Values: None (no curve = no Duration), Linear (Default), Square Law, or Dali
duration	integer	Optional	Amount of time it takes in milliseconds (ms) to transition to a new state Example: Off to On. Value: 0-24 hours. Default duration: 2000 ms
state	string	Optional	Control state value: On or Off

Request

http://{ip address}/api/lights/{lightId}/lighting

Example Body Values:

```
{
  "level": 0,
  "cct": 0,
  "behavior": "ConstantDuration",
  "curveType": "None",
  "duration": 0,
  "state": "Off"
}
```

Response

Message: 204 (No Content)

POST /lights/lighting

Sets lighting on multiple lights using the ID and lighting settings (Required) for each light.

Body Parameters

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID of the light
level	integer	Optional	Level to which the light should be dimmed. Value: 0-10000
cct	integer	Optional	Correlated color temperature of the lighting Range: 1000—7000 **Note:** The CCT value should be within the range of the space(s) or light(s) being controlled.
behavior	string	Optional	Values: ConstantDuration, Variable, ConstantRate
curveType	string	Optional	Values: None (no curve = no Duration), Linear (Default), Square Law, or Dali
duration	integer	Optional	Amount of time it takes in milliseconds (ms) to transition to a new state Example: Off to On. Value: 0-24 hours. Default duration: 2000 ms
state	string	Optional	Control state value: On or Off

Request

http://{ip address}/api/lights/lighting

Example Body Values:

```
{
  "list": [
    {
      "id": 0,
      "level": 0,
      "cct": 0,
      "behavior": "ConstantDuration",
      "curveType": "None",
      "duration": 0,
      "state": "Off"
    }
  ]
}
```

Response

Message: 204 (No Content)

GET /lights/{lightId}/events

Gets a list of light events.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light

Request

http://{ip address}/api/lights/{lightId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-10T20:32:06.792Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

PUT /lights/{lightId}/tags

Adds a tag to a light

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/lights/{lightId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /lights/{lightId}/tags/{tagName}

Removes a tag from a light.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightId	integer	Required	ID of the light
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api//lights/{lightId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Light Sensors

Manage individual or all light sensors in a building.

```
GET /lightsensors
POST /lightsensors
GET /lightsensors/{lightSensorId}
PUT /lightsensors/{lightSensorId}
DELETE /lightsensors/{lightSensorId}

GET /lightsensors/{lightSensorId}/events
POST /lightsensors/{lightSensorId}/events

PUT /lightsensors/{lightSensorId}/tags
DELETE /lightsensors/{lightSensorId}/tags/{tagName}
```

<< Select another API Operation

GET /lightsensors

Gets a list of all light sensors.

Request

http://{ip address}/api/lightsensors

Response

Message: 200 (OK)

Example Values:

```
{
    "list": [
        {
            "id": 0,
            "name": "string",
            "protocol": "string",
            "externalId": "string",
            "discoveredDate": "2019-05-10T20:38:06.366Z",
            "isOnline": true,
            "isOnlineChanged": "2019-05-10T20:38:06.366Z",
            "minSensorLevel": 0,
            "maxSensorLevel": 0,
            "minIlluminance": 0,
            "maxIlluminance": 0,
            "sensorLevel": 0,
            "illuminance": 0,
            "properties": "string",
            "systemProperties": "string",
            "networkNodeId": 0,
            "deviceNodeId": 0,
            "spaceId": 0
        }
    ]
}
```

POST /lightsensors

Creates a light sensor.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalid	string	Required	The external system's ID for this light sensor
minSensorLevel	integer	Required	Minimum sensor level reported by the light sensor
maxSensorLevel	integer	Required	Maximum sensor level reported by the light sensor
minIlluminance	integer	Required	Minimum illuminance is minimum light intensity (fc) corresponding to the minimum sensor level
maxIlluminance	integer	Required	Maximum illuminance is maximum light intensity (fc) corresponding to the maximum sensor level
networkNodeId	integer	Optional	ID of the Device Node's Network Node
deviceNodeId	integer	Optional	ID of the device's Device Node
name	string	Optional	Name of the light sensor to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/lightsensors

Example Body Values:

```
{
  "externalId": "string",
  "minSensorLevel": 0,
  "maxSensorLevel": 0,
  "minIlluminance": 0,
  "maxIlluminance": 0,
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /lightsensors/{lightSensorId}

Gets a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor to be retrieved

Request

http://{ip address}/api/lightsensors/{lightSensorId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-10T20:44:46.326Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-10T20:44:46.326Z",
  "minSensorLevel": 0,
  "maxSensorLevel": 0,
  "minIlluminance": 0,
  "maxIlluminance": 0,
  "sensorLevel": 0,
  "illuminance": 0,
  "properties": "string"
  "systemProperties": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0
}
```

PUT /lightsensors/{lightSensorId}

Updates a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
minSensorLevel	integer	Required	Minimum sensor level reported by the light sensor
maxSensorLevel	integer	Required	Maximum sensor level reported by the light sensor
minIlluminance	integer	Required	Minimum illuminance is minimum light intensity (fc) corresponding to the minimum sensor level
maxIlluminance	integer	Required	Maximum illuminance is maximum light intensity (fc) corresponding to the maximum sensor level
name	string	Required	Name of the light sensor to be updated
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/lightsensors/{lightSensorId}

Example Body Values:

```
{
  "minSensorLevel": 0,
  "maxSensorLevel": 0,
  "minIlluminance": 0,
  "maxIlluminance": 0,
  "name": "string",
  "properties": "string"
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /lightsensors/{lightSensorId}

Deletes a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor to be deleted

Request

http://{ip address}/api/lightsensors/{lightSensorId}

Response

Message: 204 (No Content)

GET /lightsensors/{lightSensorId}/events

Gets a list of light sensor events.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor

Request

http://{ip address}/api/lightsensors/{lightSensorId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-10T20:49:02.431Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /lightsensors/{lightSensorId}/events

Creates a light sensor event.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
sensorLevel	integer	Required	Level of the event being created in foot-candles (fc).

Request

http://{ip address}/api/lightsensors/{lightSensorId}/events

Example Body Value:

```
{
    "sensorLevel": 0
}
```

Response

Message: 204 (No Content)

PUT /lightsensors/{lightSensorId}/tags

Adds a tag to a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/lightsensors/{lightSensorId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /lightsensors/{lightSensorId}/tags/{tagName}

Removes a tag from a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
lightSensorId	integer	Required	ID of the light sensor
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api//lightsensors/{lightSensorId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Motion Sensors

Manage individual or all motion sensors in the system.

```
GET /motionsensors
POST /motionsensors

GET /motionsensors/{motionSensorId}
PUT /motionsensors/{motionSensorId}
DELETE /motionsensors/{motionSensorId}

GET /motionsensors/{motionSensorId}/events
POST /motionsensors/{motionSensorId}/events

PUT /motionsensors/{motionSensorId}/tags
DELETE /motionsensors/{motionSensorId}/tags/{tagName}
```

[<< Select another API Operation](#)

GET /motionsensors

Gets a list of all motion sensors.

Request

http://{ip address}/api/motionsensors

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-10T20:54:59.650Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-10T20:54:59.650Z",
      "state": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

POST /motionsensors

Creates a motion sensor.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for the motion sensor to be created
networkNodeId	integer	Optional	ID of the Device Node's Network Node
deviceNodeId	integer	Optional	ID of the device's Device Node
name	string	Optional	Name of the motion sensor to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol. **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/motionsensors

Example Body Values:

```
{
  "externalId": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /motionsensors/{motionSensorId}

Gets a motion sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor to be retrieved

Request

http://{ip address}/api/motionsensors/{motionSensorId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-10T20:56:53.341Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-10T20:56:53.341Z",
  "state": "string",
  "properties": "string",
  "systemProperties": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

PUT /motionsensors/{motionSensorId}

Updates a motion sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the motion sensor containing the new values
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/motionsensors/{motionSensorId}

Example Body Values:

```
{
  "name": "string",
  "properties": "string"
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /motionsensors/{motionSensorId}

Deletes a specific motion sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor to be deleted

Request

http://{ip address}/api/motionsensors/{motionSensorId}

Response

Message: 204 (No Content)

GET /motionsensors/{motionSensorId}/events

Gets a list of motion sensor events.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor

Request

http://{ip address}/api/motionsensors/{motionSensorId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-10T21:03:24.265Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /motionsensors/{motionSensorId}/events

Creates a motion sensor event.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
state	string	Required	The motion sensor state for the event to be created. Value: Vacancy or Occupancy

Request

http://{ip address}/api/motionsensors/{motionSensorId}/events

Example Body Value:

```
{
   "state": "Vacancy"
}
```

Response

Message: 204 (No Content)

PUT /motionsensors/{motionSensorId}/tags

Adds a tag to a light sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/motionsensors/{motionSensorId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /motionsensors/{motionSensorId}/tags/{tagName}

Removes a tag from a motion sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
motionSensorId	integer	Required	ID of the motion sensor
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api//motionsensors/{motionSensorId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Network Nodes

Manage individual or all network nodes in the system.

GET /networknodes
POST /networknodes
GET /networknodes/{networkNodeId}
PUT /networknodes/{networkNodeId}
DELETE /networknodes/{networkNodeId}
DELETE /networknodes/deleteall

GET /networknodes/{networkNodeId}/devices
GET /networknodes/{networkNodeId}/devicesattached
GET /networknodes/{networkNodeId}/devicenodes

POST /networknodes/{networkNodeId}/bringonline
POST /networknodes/{networkNodeId}/takeoffline
POST /networknodes/{networkNodeId}/offlinesettings
DELETE /networknodes/{networkNodeId}/offlinesettings

PUT /networknodes/{networkNodeId}/emergencylevel
GET /networknodes/{networkNodeId}/events

<< Select another API Operation

GET /networknodes

Gets a list of all network nodes in the system.

Request

http://{ip address}/api/networknodes

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-13T15:06:59.577Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-13T15:06:59.577Z",
      "isEmergency": true,
      "emergencyTimeout": 0,
      "emergencyLightLevel": 0,
      "properties": "string",
      "systemProperties": "string"
    }
  ]
}
```

POST /networknodes

Creates a network node.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for the network node to be created
name	string	Required	Name of the network node to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/networknodes

Example Body Values:

```
{
    "externalId": "string",
    "name": "string",
    "properties": "string"
    "systemProperties": "string",
    "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /networknodes/{networkNodeId}

Gets a network node.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node to be retrieved

Request

http://{ip address}/api/networknodes/{networkNodeId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-13T15:09:51.622Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-13T15:09:51.622Z",
  "isEmergency": true,
  "emergencyTimeout": 0,
  "emergencyLightLevel": 0,
  "properties": "string",
  "systemProperties": "string"
}
```

PUT /networknodes/{networkNodeId}

Updates a network node.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the network node containing the updated values
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/networknodes/{networkNodeId}

Example Body Values:

```
{
    "name": "string",
    "properties": "string",
    "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /networknodes/{networkNodeId}

Deletes a network node and attached devices (including device nodes) from the system.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node to be deleted

Request

http://{ip address}/api/networknodes/{networkNodeId}

Response

Message: 204 (No Content)

DELETE /networknodes/deleteall

⚠️	**WARNING!** **This operation request deletes ALL network nodes from the system, including attached devices and device nodes.**

Request

http://{ip address}/api/networknodes/deleteall

Response

Message: 204 (No Content)

GET /networknodes/{networkNodeId}/devices

Gets a list of devices attached to a network node chain.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/devices

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-13T15:12:58.788Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-13T15:12:58.788Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

GET /networknodes/{networkNodeId}/devicesattached

Gets a list of devices attached to a network node.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/devicesattached

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-13T15:20:03.827Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-13T15:20:03.828Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

GET /networknodes/{networkNodeId}/devicenodes

Gets a list of device nodes attached to a network node chain.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/devicenodes

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": " 2019-06-25T18:43:53.133Z",
      "isOnline": true,
      "isOnlineChanged": " 2019-06-25T18:43:53.133Z",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "upstreamDeviceNodeId": 0,
      "downstreamDeviceNodeId": 0
    }
  ]
}
```

POST /networknodes/{networkNodeId}/bringonline

Notifies the system that a network node has come online.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/bringonline

Response

Message: 204 (No Content)

POST /networknodes/{networkNodeId}/takeoffline

Notifies the system that a network node has gone offline.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/takeoffline

Response

Message: 204 (No Content)

POST /networknodes/{networkNodeId}/offlinesettings

Configures the offline settings for a chain.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Body Parameters

Name	Data Type	Required/ Optional	Description
offlineTimeout	integer	Optional	Length of time in milliseconds (ms) the network node will wait before entering Offline Mode once Gateway communications have ceased Range: 150000-3600000
offlineLevel	integer	Optional	Lighting level the network node will assume when entering Offline Mode Range: 0-10000 *Behavior Note*: When you set the level to 0, that will cause the lights to stay at whatever level they are when the Node goes to Offline Mode.

Request

http://{ip address}/api/networknodes/{networkNodeId}/offlinesettings

Example Body Values:

```
{
    "offlineTimeout": 0,
    "offlineLevel":0
}
```

Response

Message: 204 (No Content)

DELETE /networknodes/{networkNodeId}/offlinesettings

Resets the offline settings for a chain back to defaults.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/offlinesettings

Response

Message: 204 (No Content)

PUT /networknodes/{networkNodeId}/emergencylevel

Updates the emergency lighting level for an emergency node.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Body Parameters

Name	Data Type	Required/ Optional	Description
emergencyLevel	integer	Required	Emergency lighting level for the emergency node. Default: 10000

Request

http://{ip address}/api/networknodes/{networkNodeId}/emergencylevel

Example Body Values:

```
{
    "emergencyLevel": 0
}
```

Response

Message: 204 (No Content)

GET /networknodes/{networkNodeId}/events

Gets a list of all network node events.

URI Parameters

Name	Data Type	Required/ Optional	Description
networkNodeId	integer	Required	ID of the network node

Request

http://{ip address}/api/networknodes/{networkNodeId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-09-24T18:50:04.472Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

[<< Select another API Operation](#)

Policies

Manage policies within the system.

```
GET /policies
GET /policies/{policyId}
PUT /policies/{policyId}
```

<< Select another API Operation

GET /policies

Gets all policies in the system.

Request

http://{ip address}/api/policies

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "minimumLightLevel": 0,
      "maximumLightLevel": 0,
      "occupancyTimeout": 0,
      "spaceTypeId": 0
    }
  ]
}
```

GET /policies/{policyId}

Gets a specific policy.

URI Parameters

Name	Data Type	Required/ Optional	Description
policyId	integer	Required	ID of the policy to be retrieved

Request

http://{ip address}/api/policies/{policyId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "type": "string",
  "minimumLightLevel": 0,
  "maximumLightLevel": 0,
  "occupancyTimeout": 0,
  "spaceTypeId": 0
}
```

PUT /policies/{policyId}

Updates a policy.

URI Parameters

Name	Data Type	Required/ Optional	Description
policyId	integer	Required	ID of the policy to be updated

Body Parameters

Important: If a *null* value is provided, the existing value is deleted.

Name	Data Type	Required/ Optional	Description
minimumLightLevel	integer	Optional	Minimum dimming level allowed for the space **Range:** 0-10000
maximumLightLevel	integer	Optional	Maximum dimming level allowed for the space **Range:** 0-10000
occupancyTimeout	integer	Optional	Number of minutes that must pass without motion in a space before the lights in the space will turn off

Request

http://{ip address}/api/policies/{policyId}

Example Body Values:

```
{
   "minimumLightLevel": 0,
   "maximumLightLevel": 0,
   "occupancyTimeout": 0
}
```

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Relays

Manage individual or multiple relays in the system.

GET /relays
POST /relays

GET /relays/{relayId}
PUT /relays/{relayId}
DELETE /relays/{relayId}

GET /relays/{relayId}/events
POST /relays/{relayId}/open
POST /relays/{relayId}/close
POST /relays/states

PUT /relays/{relayId}/tags
DELETE /relays/{relayId}/tags/{tagName}

<< Select another API Operation

GET /relays

Gets a list of all relays in the system.

Request

http://{ip address}/api/relays

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "properties": "string",
      "systemProperties": "string",
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-13T17:25:14.595Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-13T17:25:14.595Z",
      "state": "string",
      "isInverted": true,
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

POST /relays

Creates a relay.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's device ID
isInverted	boolean	Required	Value should this relay invert its commands. For example, turning a space "on" would open the relay. Value: true or false
networkNodeId	integer	Optional	ID of the Device Node's Network Node
deviceNodeID	integer	Optional	ID of the device's Device Node
name	string	Optional	The external system's ID for this relay.
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/relays

Example Body Values:

```
{
  "externalId": "string",
  "isInverted": true,
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /relays/{relayId}

Gets a relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay to be retrieved

Request

http://{ip address}/api/relays/{relayId}

Response

Message: 200 (OK)

Example Values:

```
{
  "properties": "string",
  "systemProperties": "string",
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-13T17:28:02.028Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-13T17:28:02.028Z",
  "state": "string",
  "isInverted": true,
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

PUT /relays/{relayId}

Updates a relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
isInverted	boolean	Required	Value should this relay invert its commands. For example, turning a space "On" would open the relay. Value: true or false
name	string	Required	Name of the relay
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/relays/{relayId}

Example Body Values:

```
{ {
  "isInverted": true,
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /relays/{relayId}

Deletes a relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay to be deleted

Request

http://{ip address}/api/relays/{relayId}

Response

Message: 204 (No Content)

GET /relays/{relayId}/events

Gets a list of relay events.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay

Request

http://{ip address}/api/relays/{relayId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-13T17:38:59.225Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /relays/{relayId}/open

Opens the relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay to be opened

Request

http://{ip address}/api/relays/{relayId}/open

Response

Message: 204 (No Content)

POST /relays/{relayId}/close

Closes the relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay to be closed

Request

http://{ip address}/api/relays/{relayId}/close

Response

Message: 204 (No Content)

POST /relays/states

Sets relay state on multiple relays.

Body Parameters

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID for each relay
state	string	Required	State value (Open or Closed) for each relay

Request

http://{ip address}/api/relays/states

Example Body Values:

```
{
  "list": [
    {
      "id": 0,
      "state": "string"
    }
  ]
}
```

Response

Message: 204 (No Content)

PUT /relays/{relayId}/tags

Adds a tag to a specified relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/relays/{relayId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /relays/{relayId}/tags/{tagName}

Removes a tag from a relay.

URI Parameters

Name	Data Type	Required/ Optional	Description
relayId	integer	Required	ID of the relay
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/relays/{relayId}/tags/{tagName}

Response

Message: 204 (No Content)

<< Select another API Operation

Schedules

Manage schedules within the system.

<div style="background-color:#FFFF99">

GET /schedules/search

GET /schedules

POST /schedules

GET /schedules/{scheduleId}

PUT /schedules/{scheduleId}

DELETE /schedules/{scheduleId}

GET /schedules/{scheduleId}/actionset

PUT /schedules/{scheduleId}/actionset

DELETE /schedules/{scheduleId}/actionset

GET /schedules/{scheduleId}/events

</div>

[<< Select another API Operation](#)

GET /schedules/search

Searches all schedules in the system.

Request

http://{ip address}/api/schedules/search

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "cronExpression": "string",
      "actionSetId": 0,
      "actionSetName": "string",
      "celestialTimeOfDay": "None",
      "celestialOffsetMinutes": 0
    }
  ]
}
```

GET /schedules

Gets a list of schedules in the system.

Request

http://{ip address}/api/schedules

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "cronExpression": "string",
      "celestialTimeOfDay": "None",
      "celestialOffsetMinutes": 0
    }
  ]
}
```

POST /schedules

Creates a schedule.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the schedule to be created
cronExpression	string	Required	Cron expression for the schedule to be created Learn about Cron expressions.
celestialTImeOfDay	string	Optional	Values: None*, Sunrise, or Sunset. *None will use time set in Cron expression.
celestialOffsetMinutes	integer	Optional	Time in minutes before or after the specified "celestialTimeOfDay" schedule is to occur. *Example:* -30 means 30 minutes before Sunrise or Sunset

Request

http://{ip address}/api/schedules

Example Body Values:

```
{
   "name": "string",
   "cronExpression": "string",
   "celestialTimeOfDay": "None",
   "celestialOffsetMinutes": 0
}
```

Response

Message: 201 (Created)

GET /schedules/{scheduleId}

Gets a specific schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule to be retrieved

Request

http://{ip address}/api/schedules/{scheduleId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "cronExpression": "string",
  "celestialTimeOfDay": "None",
  "celestialOffsetMinutes": 0
}
```

PUT /schedules/{scheduleId}

Updates a specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the schedule to be updated
cronExpression	string	Required	Cron expression to update the specified schedule [Learn about Cron expressions]().
celestialTimeOfDay	string	Optional	Values: None*, Sunrise, or Sunset. *None will use time set in Cron expression.
celestialOffsetMinutes	integer	Optional	Time in minutes before or after the specified "celestialTImeOfDay" schedule is to occur. *Example:* -30 means 30 minutes before Sunrise or Sunset.

Request

http://{ip address}/api/schedules/{scheduleId}

Example Body Values:

```
{
  "name": "string",
  "cronExpression": "string",
  "celestialTimeOfDay": "None",
  "celestialOffsetMinutes": 0
}
```

Response

Message: 204 (No Content)

DELETE /schedules/{scheduleId}

Deletes a specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule to be deleted

Request

http://{ip address}/api/schedules/{scheduleId}

Response

Message: 204 (No Content)

GET /schedules/{scheduleId}/actionset

Gets the action set assigned to the specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule

Request

http://{ip address}/api/schedules/{scheduleId}/actionset

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "isSystem": true,
  "executeNumberOfTimes": 0,
  "executeType": "NumberOfTimes",
  "actionConcurrencyType": "Sequential",
  "status": "Stopped"
}
```

PUT /schedules/{scheduleId}/actionset

Assigns the action set to the specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule

Body Parameters

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID of the action set

Request

http://{ip address}/api/schedules/{scheduleId}/actionset

Example Body Value:

```
{
    "id": 0
}
```

Response

Message: 204 (No Content)

DELETE /schedules/{scheduleId}/actionset

Removes the action set assigned to the specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule

Request

http://{ip address}/api/schedules/{scheduleId}/actionset

Response

Message: 204 (No Content)

GET /schedules/{scheduleId}/events

Gets a list of events for the specified schedule.

URI Parameters

Name	Data Type	Required/ Optional	Description
scheduleId	integer	Required	ID of the schedule

Request

http://{ip address}/api/schedules/{scheduleId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2018-02-07T15:56:00.385Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

[<< Select another API Operation](#)

Sensors

Sensors are devices that capture event data to be used in real-time, analyzed at a later date, or both.

```
GET /sensors
POST /sensors

GET /sensors/{sensorId}
PUT /sensors/{sensorId}
DELETE /sensors/{sensorId}

GET /sensors/{sensorId}/events
POST /sensors/{sensorId}/events

GET /sensors/{sensorId}/tags
DELETE /sensors/{sensorId}/tags/{tagName}
```

[<< Select another API Operation](#)

GET /sensors

Gets a list of all sensors.

Request

http://{ip address}/api/sensors

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "subType": "string",
      "properties": "string",
      "systemProperties": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-06-28T17:43:04.366Z",
      "isOnline": true,
      "isOnlineChanged": "2019-06-28T17:43:04.366Z",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0,
      "unitOfMeasure": "string"
    }
  ]
}
```

POST /sensors

Creates a sensor.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	External system's ID for the sensor to be created
subtype	string	Required	Subtype for the sensor to be created
name	string	Required	Name of the sensor to be created
protocol	string	Required	External system's device protocol **Note:** Use any string value that represents the protocol being used within a consuming application
unitOfMeasure	string	Optional	User-defined text value. Maximum: Five (5) characters
networkNodeId	integer	Optional	ID of the sensor's Network Node
deviceNodeId	Integer	Optional	ID of the actuator's Device Node
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/sensors

Example Body Values:

```
{
  "externalId": "string",
  "subType": "string",
  "unitOfMeasure": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /sensors/{sensorId}

Gets a specific sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor to be retrieved

Request

http://{ip address}/api/sensors/{sensorId}

Response

Message: 200 (Created)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "subtype": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-06-28T17:48:59.328Z",
  "isOnline": true,
  "isOnlineChanged": "2019-06-28T17:48:59.328Z",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0,
  "unitOfMeasure": "string"
}
```

PUT /sensors/{sensorId}

Updates a sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the sensor to be updated
unitOfMeasure	string	Optional	User-defined text value. Maximum: Five (5) characters
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/sensors/{sensorId}

Example Body Value:

```
{
  "unitOfMeasure": "string",
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /sensors/{sensorId}

Deletes a sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor to be deleted

Request

http://{ip address}/api/sensors/{sensorId}

Response

Message: 204 (No Content)

GET /sensors/{sensorId}/events

Gets a list of sensor events.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor

Request

http://{ip address}/api/sensors/{sensorId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-06-28T18:01:54.716Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /sensors/{sensorId}/events

Creates a sensor event.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
dataType	string	Required	Type of value passed in data: Int8 UInt8 Passthrough8 Int16 UInt16 Passthrough16 Int32 UInt32 Passthrough32
data	string	Required	Sensor data value
eventType	string	Optional	The type of event

Request

http://{ip address}/api/sensors/{sensorId}/events

Example Body Value:

```
{
  "eventType": "string",
  "dataType": "string",
  "data": "string"
}
```

Response

Message: 204 (No Content)

PUT /sensors/{sensorId}/tags

Adds a tag to a sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/sensors/{sensorId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /sensors/{sensorId}/tags/{tagName}

Removes a tag from a sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
sensorId	integer	Required	ID of the sensor
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api//sensors/{sensorId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Settings

Settings configure specific values to modify how Gateway services behave.

```
GET /settings
PUT /settings/{id}
```

[<< Select another API Operation](#)

GET /settings

Gets all settings.

Request

http://{ip address}/api/settings

Response

Message: 200 (OK)

Example Values:

```
{
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "application": "Global",
      "type": "Basic",
      "name": "string",
      "description": "string",
      "value": "string",
      "default": "string",
      "valueType": "String",
      "options": [
        "string"
      ],
      "category": "string",
      "subCategory": "string",
      "displayName": "string"
    }
  ]
}
```

PUT /settings/{id}

Updates the values of a setting.

URI Parameters

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID of the setting to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
value	string	Required	Values to be updated

Request

http://{ip address}/api/settings/{id}

Example Body Values:

```
{
  "value": "string"
}
```

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Space Groups

Space groups allow users to organize spaces into a logical tree hierarchy.

- By default, spaces do not belong to any space group but can be added to one or more groups at any time.
- Spaces can belong to as many space groups as you want; however, space groups may only have a single parent.

```
GET /spacegroups
POST /spacegroups

GET /spacegroups/{spaceGroupId}
PUT /spacegroups/{spaceGroupId}
DELETE /spacegroups/{spaceGroupId}

GET /spacegroups/{spaceGroupId}/spaces
PUT /spacegroups/{spaceGroupId}/spaces/{spaceId}
DELETE /spacegroups/{spaceGroupId}/spaces/{spaceId}

PUT /spacegroups/{spaceGroupId}/tags
DELETE /spacegroups/{spaceGroupId}/tags/{tagName}
```

[<< Select another API Operation](#)

GET /spacegroups

Searches all space groups in the system.

Request

http://{ip address}/api/spacegroups

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "parentId": 0,
      "childCount": 0,
      "childSpaceCount": 0,
      "path": "string"
    }
  ]
}
```

POST /spacegroups

Creates a space group.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the space group to be created
parentId	integer	Required	ID of the parent space group

Request

http://{ip address}/api/spacegroups

Example Body Values:

```
{
    "name": "string",
    "parentId": 0
}
```

Response

Message: 201 (Created)

GET /spacegroups/{spaceGroupId}

Gets a specified space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group to be retrieved

Request

http://{ip address}/api/spacesgroups/{spaceGroupId}

Response

Message: 200 (OK)

Example Values:

```
{
    "id": 0,
    "name": "string",
    "parentId": 0,
    "path": "string"}
}
```

PUT /spacegroups/{spaceGroupId}

Renames a specified space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	New name for the specified space group ID
parentID	integer	Optional	ID of the parent space group

Request

http://{ip address}/api/spacegroups/{spaceGroupId}

Example Body Value:

```
{ {
  "name": "string",
  "parentId": 0
}
```

Response

Message: 204 (No Content)

DELETE /spacegroups/{spaceGroupId}

Deletes a specified space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group to be deleted

Request

http://{ip address}/api/spacegroups/{spaceGroupId}

Response

Message: 204 (No Content)

GET /spacegroups/{spaceGroupId}/spaces

Gets a list of spaces in a specified space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group

Request

http://{ip address}/api/spacesgroups/{spaceGroupId}/spaces

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "mode": "string",
      "areZonesDisabled": true,
      "state": "string",
      "level": 0,
      "cct": 0,
      "hasTunableLights": true,
      "minimumCCT": 0,
      "maximumCCT": 0,
      "controlType": 0,
      "resumeType": "Undefined",
      "resumeDate": "2019-05-13T21:04:16.023Z"
    }
  ]
}
```

PUT /spacegroups/{spaceGroupId}/spaces/{spaceId}

Adds a space to a specific space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group to be updated
spaceId	integer	Required	ID of the space to be added to the specified space group

Request

http://{ip address}/api/spacegroups/{spaceGroupId}/spaces/{spaceId}

Response

Message: 204 (No Content)

DELETE /spacegroups/{SpaceGroupId}/spaces/{spaceId}

Removes a specified space from a specific space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group
spaceId	integer	Required	ID of the space to be removed from the specified space group

Request

http://{ip address}/api/spacegroups/{spaceGroupId}/spaces/{spaceId}

Response

Message: 204 (No Content)

PUT /spacegroups/{spaceGroupId}/tags

Adds a tag to a space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/spacegroups/{spaceGroupId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /spacegroups/{spaceGroupId}/tags/{tagName}

Removes a tag from a space group.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceGroupId	integer	Required	ID of the space group
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/spacegroups/{spaceGroupId}/tags/{tagName}

Response

Message: 204 (No Content)

<< Select another API Operation

Spaces

Spaces are used to represent physical rooms and zones within a building. After users create a space in the Igor Gateway Software Admin application, they can then assign devices to the space. The system automatically configures the control logic for those devices to work together. For example, wall controls will turn the lights on and off, and the occupancy sensors will automatically shut off the lights when no one is in the room.

Note: The requests in this *section control all spaces*.

```
GET /spaces
POST /spaces
GET /spaces/search

DELETE /spaces/{spaceId}
GET /spaces/{spaceId}
PUT /spaces/{spaceId}
GET /spaces/{spaceId}/spacegroups

PUT /spaces/{spaceId}/tags
DELETE /spaces/{spaceId}/tags/{tagName}
```

Additional Spaces Requests

- [Spaces—Automations](#)
- [Spaces—Devices Index](#)
- [Spaces—Lights](#)
- [Spaces—Policy](#)
- [Spaces—Zones](#)
- [Spaces—Space Type](#)

[<< Select another API Operation](#)

GET /spaces

Gets a list of spaces in the system.

Request

http://{ip address}/api/spaces

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "mode": "string",
      "areZonesDisabled": true,
      "state": "string",
      "level": 0,
      "cct": 0,
      "hasTunableLights": true,
      "minimumCCT": 0,
      "maximumCCT": 0,
      "controlType": 0,
      "resumeType": "Undefined",
      "resumeDate": "2019-05-15T17:01:13.050Z"
    }
  ]
}
```

POST /spaces

Creates a space.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the space to be created
mode	string	Required	Space mode value: Occupancy or Vacancy
spaceGroupId	integer	Optional	ID of the parent space group for this space. **Note**: if a value is not provided, it will default to 1 (root space group)
controlType	integer	Optional	How the specified space can be controlled. Values: 1 or 3 1= Space can control itself 3 = Space and space group can control the specified space

Request

http://{ip address}/api/spaces

Example Body Values:

```
{
   "spaceGroupId": 1,
   "name": "string",
   "mode": "Occupancy",
   "controlType": 1
}
```

Response

Message: 201 (Created)

GET /spaces/search

Searches all spaces in the system.

Request

http://{ip address}/api/spaces/search

Response

Message: 200 (OK)

Example Values:

```json
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "mode": "string",
      "areZonesDisabled": true,
      "state": "string",
      "level": 0,
      "cct": 0,
      "controlType": 0,
      "hasTunableLights": true,
      "minimumCCT": 0,
      "maximumCCT": 0,
      "resumeType": "Undefined",
      "resumeDate": "2019-05-15T17:11:36.130Z"
    }
  ]
}
```

GET /spaces/{spaceId}

Gets a specified space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space to be retrieved

Request

http://{ip address}/api/spaces/{spaceId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "mode": "string",
  "controlType": 1,
  "areZonesDisabled": true,
  "state": "string",
  "level": 0,
  "cct": 0,
  "hasTunableLights": true,
  "minimumKelvin": 0,
  "minimumCCT": 0,
  "resumeType": "Undefined",
  "resumeDate": "2019-05-15T17:05:47.702Z"
}
```

PUT /spaces/{spaceId}

Updates a specified space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the space for the updated values
mode	string	Required	Space mode value: Occupancy or Vacancy
controlType	integer	Optional	How the specified space can be controlled. Values: 1 or 3 1= Space can control itself 3 = Space and space group can control the specified space

Request

http://{ip address}/api/spaces/{spaceId}

Example Body Values:

```
{
   "name": "string",
   "mode": "Occupancy"
   "controlType": 1
}
```

Response

Message: 204 (No Content)

DELETE /spaces/{spaceId}

Deletes a specified space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space to be deleted

Request

http://{ip address}/api/spaces/{spaceId}

Response

Message: 204 (No Content)

GET /spaces/{spaceId}/spacegroups

Gets a list of space groups that contain the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceID}/spacegroups

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "parentId": 0,
      "path": "string"
    }
  ]
}
```

PUT /spaces/{spaceId}/tags

Adds a tag to a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/spaces/{spaceId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /spaces/{spaceId}/tags/{tagName}

Removes a tag from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api//spaces/{spaceId}/tags/{tagName}

Response

Message: 204 (No Content)

<< Spaces Index | << Select another API Operation

Spaces—Automations

Automations are built-in behaviors of the system, such as Motion Detection, Vacancy Detection, and Daylight Harvesting. These built-in automations can be paused and resumed using the operations listed below. An automation can be paused until explicitly resumed or until a time period has elapsed.

```
GET /spaces/{spaceID}/pausedautomations
POST /spaces/{spaceId}/pausedautomations
DELETE /spaces/{spaceId}/pausedautomations
```

<< Select another API Operation

GET /spaces/{spaceID}/pausedautomations

Gets the paused automations for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceID}/pausedautomations

Response

Message: 200 (OK)

Example Values:

```
{
  "resumeType": "Undefined",
  "resumeDate": "2019-04-30T14:39:55.658Z",
  "automations": [
    {
      "entityType": "string",
      "eventType": "string"
    }
  ]
}
```

POST /spaces/{spaceId}/pausedautomations

Pauses automations for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
automation	string	Required	The automation to be paused for the space. Built in automations: Motion Detection, Vacancy Detection, and Daylight Harvesting.

Request

http://{ip address}/api/spaces/{spaceId}/pausedautomations

Example Body Value:

```
{
   "resumeType": "Undefined",
   "resumeDate": "2019-04-30T14:39:55.664Z",
   "automations": [
     {
       "entityType": "string",
       "eventType": "string"
     }
   ]
}
```

Response

Message: 201 (Created)

DELETE /spaces/{spaceId}/pausedautomations

Resumes the paused automations for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/pausedautomations

Response

Message: 204 (No Content)

[<< Spaces Index] | [<< Select another API Operation]

Spaces–Devices

Use these requests to manage individual or all device types within a space.

Devices:
GET /spaces/{spaceId}/devices
PUT /spaces/{spaceId}/devices

Actuators:
GET /spaces/{spaceId}/actuators
DELETE /spaces/{spaceId}/actuators/{actuatorId}

Dry Contacts:
GET /spaces/{spaceId}/drycontacts
DELETE /spaces/{spaceId}/drycontacts/{dryContactId}

Lights:
GET /spaces/{spaceId}/lights
DELETE /spaces/{spaceId}/lights/{lightId}

Light Sensors:
GET /spaces/{spaceId}/lightsensors
DELETE /spaces/{spaceId}/lightsensors/{lightSensorId}

Motion Sensors:
GET /spaces/{spaceId}/motionsensors
DELETE /spaces/{spaceId}/motionsensors/{motionSensorId}

Temperature Sensors:
GET /spaces/{spaceId}/temperaturesensors
DELETE /spaces/{spaceId}/temperaturesensors/{temperatureSensorId}

Relays:
GET /spaces/{spaceId}/relays
DELETE /spaces/{spaceId}/relays/{relayId}

Continued "Spaces—Devices" listing >>

Wall Controls:

GET /spaces/{spaceId}/wallcontrols

DELETE spaces/{spaceId}/wallcontrols/{wallControlId}

Vacancy Timer:

GET /spaces/{spaceId}/timer

Space Events:

GET /spaces/{spaceId}/events

GET /spaces/{spaceId}/events/all

GET /spaces/{spaceId}/devices

Gets a list of devices contained in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/devices

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T15:47:03.145Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T15:47:03.145Z",
      "spaceId": 0,
      "nodeId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

PUT /spaces/{spaceId}/devices

Adds a device to a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
deviceID	integer	Required	ID of the device to be added to the space
deviceType	string	Required	Device type values: Light, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, DryContact
IncludeAttachedDevices	string	Required	Specifies whether other attached devices should also be added to the space. Values: None, AllOnNode, AllOnChain

Request

http://{ip address}/api/spaces/{spaceId}/devices

Example Body Values:

```
{
   "deviceId": 0,
   "deviceType": "Light",
   "includeAttachedDevices": "None"
}
```

Response

Message: 204 (No Content)

[<< Spaces---Devices Index](#)

GET /spaces/{spaceId}/actuators

Gets a list of actuators contained in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/actuators

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "subType": "string",
      "properties": "string",
      "systemProperties": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-15T20:25:38.357Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-15T20:25:38.357Z",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0,
      "commands": [
        {
          "name": "string",
          "commands": [
            {
              "commandType": "string",
```

Continued Example Values >>

```
            "parameters": [
              {
                "parameterType": "string",
                "value": {}
              }
            ]
          }
        ]
      }
    ]
  }
]
}
```

DELETE /spaces/{spaceId}/actuators/{actuatorId}

Removes an actuator from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
actuatorId	integer	Required	ID of the actuator to be removed

Request

http://{ip address}/api/spaces/{spaceId}/actuators/{actuatorId}

Response

Message: 204 (No Content)

GET /spaces/{spaceId}/drycontacts

Gets a list of dry contacts contained in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/drycontacts

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "dryContactType": "string",
      "properties": "string",
      "systemProperties": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:09:35.163Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:09:35.163Z",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0,
      "state": "string"
    }
  ]
}
```

<< Spaces---Devices Index

DELETE spaces/{spaceId}/drycontacts/{dryContactId}

Removes a dry contact from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
dryContactId	integer	Required	ID of the dry contact to be removed

Request

http://{ip address}/api/spaces/{spaceId}/drycontacts/{dryContactId}

Response

Message: 204 (No Content)

<< Spaces---Devices Index

GET /spaces/{spaceId}/lights

Gets a list of lights in the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/lights

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:14:15.371Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:14:15.371Z",
      "state": "Off",
      "level": 0,
      "minLevel": 0,
      "maxLevel": 0,
      "isEmergency": true,
      "emergencyTimeout": 0,
      "emergencyLightLevel": 0,
      "lightType": "string",
      "minimumCCT": 0,
      "maximumCCT": 0,
      "cct": 0,
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/lights/{lightId}

Removes a light from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
lightId	integer	Required	ID of the light to be removed

Request

http://{ip address}/api/spaces/{spaceId}/lights/{lightId}

Response

Message: 204 (No Content)

GET /spaces/{spaceId}/lightsensors

Gets a list of light sensors in the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/lightsensors

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:17:44.064Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:17:44.064Z",
      "minSensorLevel": 0,
      "maxSensorLevel": 0,
      "minIlluminance": 0,
      "maxIlluminance": 0,
      "sensorLevel": 0,
      "illuminance": 0,
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/lightsensors/{lightSensorId}

Removes a light sensor from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
lightSensorId	integer	Required	ID of the light sensor to be removed

Request

http://{ip address}/api/spaces/{spaceId}/lightsensors/{lightSensorId}

Response

Message: 204 (No Content)

<< Spaces---Devices Index

GET /spaces/{spaceId}/motionsensors

Gets a list of motion sensors in the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/motionsensors

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:21:56.007Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:21:56.007Z",
      "state": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/motionsensors/{motionSensorId}

Removes a motion sensor from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
motionSensorId	integer	Required	ID of the motion sensor to be removed

Request

http://{ip address}/api/spaces/{spaceId}/motionsensors/{motionSensorId}

Response

Message: 204 (No Content)

<< Spaces---Devices Index

GET /spaces/{spaceId}/temperaturesensors

Gets a list of temperature sensors in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/temperaturesensors

Response

Message: 200 (OK)

Example Values:

```
{{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:35:56.352Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:35:56.352Z",
      "temperature": 0,
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/temperaturesensors/ {temperatureSensorId}

Removes a temperature sensor from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
temperatureSensorId	integer	Required	ID of the temperature sensor to be removed

Request

http://{ip address}/api/spaces/{spaceId}/temperaturesensors/{temperatureSensorId}

Response

Message: 204 (No Content)

GET /spaces/{spaceId}/relays

Gets a list of relays in the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/relays

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "properties": "string",
      "systemProperties": "string",
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:41:17.124Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:41:17.124Z",
      "state": "string",
      "isInverted": true,
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/relays/{relayId}

Removes a relay from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
relayId	integer	Required	ID of the relay to be removed

Request

http://{ip address}/api/spaces/{spaceId}/relays/{relayId}

Response

Message: 204 (No Content)

GET /spaces/{spaceId}/wallcontrols

Gets a list of wall controls in the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/wallcontrols

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T16:42:24.872Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T16:42:24.873Z",
      "properties": "string",
      "systemProperties": "string",
      "buttons": [
        {
          "id": 0,
          "name": "string",
          "controlCommand": 0,
          "dimmingCommand": 0
        }
      ],
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

DELETE /spaces/{spaceId}/wallcontrols/{wallControlId}

Removes a wall control from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space
wallControlId	integer	Required	ID of the wall control to be removed

Request

http://{ip address}/api/spaces/{spaceId}/wallcontrols/{wallControlId}

Response

Message: 204 (No Content)

[<< Spaces---Devices Index](#)

GET /spaces/{spaceId}/timer

Gets the vacancy timer if one exists for the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/timer

Response

Message: 200 (OK)

Example Values:

```
{
  "spaceId": 0,
  "timeOut": 0,
  "expiresIn": 0,
  "dateTimeStarted": "2019-05-16T16:44:34.342Z",
  "dateTimeExpires": "2019-05-16T16:44:34.342Z"
```

<< Spaces---Devices Index

GET /spaces/{spaceId}/events

Gets a list of recent events for the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-16T16:48:25.782Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

GET /spaces/{spaceId}/events/all

Gets a list of all events in the last 24 hours for the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceid	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/events/all

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2018-02-07T15:56:00.438Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

Spaces—Lights

These requests control *the state of all lights* in a space. Only lights associated with a space can participate in the lighting control of the space.

POST /spaces/{spaceId}/turnon	POST /spaces/{spaceId}/lighting
POST /spaces/{spaceId}/turnoff	POST /spaces/synchronize

POST /spaces/{spaceId}/turnon

Turns on all lights in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space to be turned on

Request

http://{ip address}/api/spaces/{spaceId}/turnon

Response

Message: 204 (No Content)

POST /spaces/{spaceId}/turnoff

Turns off all lights in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space to be turned off

Request

http://{ip address}/api/spaces/{spaceId}/turnoff

Response

Message: 204 (No Content)

POST /spaces/{spaceId}/lighting

Sets the level of the lights in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
level	integer	Optional	Lighting dimming level. **Range:** 0-10000
cct	integer	Optional	Correlated Color Temperature (CCT) command to the light in degrees Kelvin. **Range:** 1000—7000 **Note:** CCT value should be within the range of the space(s) or light(s) being controlled.
behavior	string	Optional	Values: ConstantDuration, Variable, ConstantRate
curveType	string	Optional	Values: None (no curve = no Duration), Linear (Default), SquareLaw, or Dali
duration	integer	Optional	Amount of time it takes in milliseconds (ms) to transition to a new state Example: Off to On. Value: 0-24 hours. Default duration: 2000 ms
state	string	Optional	Control State Value: On or Off

Request

http://{ip address}/api/spaces/{spaceId}/lighting

Example Body Values:

```
{
  "level": 0,
  "cct": 0,
  "behavior": "ConstantDuration",
  "curveType": "None",
  "duration": 0,
  "state": "Off"
}
```

Response

Message: 204 (No Content)

POST /spaces/synchronize

Synchronizes the state of all lights with the state of their space.

Request

http://{ip address}/api/spaces/synchronize

Response

Message: 204 (No Content)

[<< Spaces Index](#) | [<< Select another API Operation](#)

Spaces—Policy

Policies are used to set minimum and maximum lighting-level limits and occupancy time-out periods for specified spaces in the building. These values can be set by space (user created, space-specific policies) and by modifying the built-in Space Type and building-wide default policy values. Space policies override Space Type and default policy values.

GET /spaces/{spaceId}/activepolicy	POST /spaces/{spaceId}/policy
GET /space/{spaceId}/policy	DELETE /spaces/{spaceId}/policy
PUT /spaces/{spaceId}/policy	

GET /spaces/{spaceId}/activepolicy

Gets a list of the active policy values for the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/activepolicy

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "name": "string",
      "value": 0,
      "policyId": 0,
      "policyType": "string",
      "policyName": "string"
    }
  ]
}
```

GET /spaces/{spaceId}/policy

Gets a policy for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/policy

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "type": "string",
  "minimumLightLevel": 0,
  "maximumLightLevel": 0,
  "occupancyTimeout": 0,
  "spaceTypeId": 0
}
```

PUT /spaces/{spaceId}/policy

Updates a policy for a space. Entering *null* for any Body Parameter will delete that value for the policy.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Important: Entering *null* for any Body Parameter will delete that value for the policy.

Name	Data Type	Required/ Optional	Description
minimumLightLevel	integer	Optional	Minimum dimming level of light allowed for the space **Range:** 0-10000
maximumLightLevel	integer	Optional	Maximum dimming level of light allowed for the space **Range:** 0-10000
occupancyTimeout	integer	Optional	Number of minutes that must pass without motion in a space before the lights in the space will turn off

Request

http://{ip address}/api/spaces/{spaceId}/policy

Example Body Values:

```
{
  "minimumLightLevel": 0,
  "maximumLightLevel": 0,
  "occupancyTimeout": 0
}
```

Response

Message: 204 (No Content)

POST /spaces/{spaceId}/policy

Creates a policy for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
minimumLightLevel	integer	Optional	Minimum dimming level of light allowed for the space **Range:** 0-10000
maximumLightLevel	integer	Optional	Maximum level of light allowed for the space **Range:** 0-10000
occupancyTimeout	integer	Optional	Number of minutes that must pass without motion in a space before the lights in the space will turn off

Request

http://{ip address}/api/spaces/{spaceId}/policy

Example Body Values:

```
{
  "minimumLightLevel": 0,
  "maximumLightLevel": 0,
  "occupancyTimeout": 0
}
```

Response

Message: 201 (Created)

DELETE /spaces/{spaceId}/policy

Deletes a policy from a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/policy

Response

Message: 204 (No Content)

<< Spaces Index | << Select another API Operation

Spaces–Zones

Zones are essentially sub-spaces designed specifically for daylight harvesting. Only lights and light sensors that belong to the space can be added to a zone within that space.

GET /spaces/{spaceId}/zones	POST /spaces/{spaceId}/zones/config/enter
POST /spaces/{spaceId}/zones	POST /spaces/{spaceId}/zones/config/save
	POST /spaces/{spaceId}/zones/config/exit

<< Select another API Operation

GET /spaces/{spaceId}/zones

Gets a list of zones contained in a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/zones

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "setpoint": 0,
      "deadband": 0,
      "bias": 0,
      "gain": 0,
      "timeDelay": 0,
      "raiseDimRate": 0,
      "lowerDimRate": 0,
      "level": 0,
      "sensorLevel": 0,
      "minSensorLevel": 0,
      "maxSensorLevel": 0
    }
  ]
}
```

POST /spaces/{spaceId}/zones

Creates a new zone within a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the zone to be created

Request

http://{ip address}/api/spaces/{spaceId}/zones

Example Body Value:

```
{
   "name": "string"
}
```

Response

Message: 201 (Created)

POST /spaces/{spaceId}/zones/config/enter

Enters the zone configuration mode for a space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/zones/config/enter

Response

Message: 204 (No Content)

POST /spaces/{spaceId}/zones/config/save

Saves the zone configuration.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/zones/config/save

Response

Message: 204 (No Content)

POST /spaces/{spaceId}/zones/config/exit

Exits the zone configuration mode for the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/zones/config/exit

Response

Message: 204 (No Content)

Spaces—Space Type

Space Types are a way to group spaces by type for simplifying policy administration.

ALSO SEE: Space Types

```
GET /spaces/{spaceId}/spacetype
PUT /spaces/{spaceId}/spacetype
```

<<-Select another API Operation

GET /spaces/{spaceId}/spacetype

Gets the type of the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Request

http://{ip address}/api/spaces/{spaceId}/spacetype

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string"
}
```

PUT /spaces/{spaceId}/spacetype

Sets the type of the space.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceId	integer	Required	ID of the space

Body Parameters

Name	Data Type	Required/ Optional	Description
id	integer	Required	ID of the space type to be set
name	string	Required	Name of the space type

Request

http://{ip address}/api/spaces/{spaceId}/spacetype

Example Body Values:

```
{
  "id": 0,
  "name": "string"
}
```

Response

Message: 204 (No Content)

<< Spaces Index | <<-Select another API Operation

Space Types

Space Types group spaces by type for simplifying policy administration.

ALSO SEE: Spaces—Space Type

```
GET /spacetypes
GET /spacetypes/{spaceTypeId}
GET /spacetypes/{spaceTypeId}/policy
```

<<-Select another API Operation

GET /spacetypes

Gets a list of space types in the system.

Request

http://{ip address}/api/spacetypes

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string"
    }
  ]
}
```

GET /spacetypes/{spaceTypeId}

Gets a specific space type.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceTypeId	integer	Required	ID of the space type to be retrieved

Request

http://{ip address}/api/spacetypes/{spaceTypeId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string"
)
```

GET /spacetypes/{spaceTypeId}/policy

Gets the policy of a specific space type.

URI Parameters

Name	Data Type	Required/ Optional	Description
spaceTypeId	integer	Required	ID of the space type

Request

http://{ip address}/api/spacetypes/{spaceTypeId}/policy

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "type": "string",
  "minimumLightLevel": 0,
  "maximumLightLevel": 0,
  "occupancyTimeout": 0,
  "spaceTypeId": 0
}
```

[<< Select another API Operation](#)

Tags

Tags allow for custom grouping of entities in the Igor Gateway Admin Software application.

GET /tags
POST /tags
GET /tags/{tagId}
PUT /tags/{tagId}
DELETE /tags/{tagId}
GET /tags/{tagId}/entities

<< Select another API Operation

Note: PUT and DELETE /tags endpoints have been added to the following sections of this guide:

1. Actuators
2. Dry Contacts
3. Lights
4. Light Sensors
5. Motion Sensors
6. Relays
7. Sensors
8. Spaces
9. Space Groups
10. Temperature Sensors
11. Wall Controls

GET /tags

Gets a list of all tags in the system.

Request

http://{ip address}/api/tags

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "numberOfEntities": 0
    }
  ]
}
```

POST /tags

Creates a tag.

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the tag to be created

Request

http://{ip address}/api/tags

Example Body Values:

```
{
   "name": "string"
}
```

Response

Message: 201 (Created)

GET /tags/{tagId}

Gets a specific tag.

URI Parameters

Name	Data Type	Required/ Optional	Description
tagId	integer	Required	ID of the tag to be retrieved

Request

http://{ip address}/api/tags/{tagId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "entityTypes": [
    "SpaceGroup"
  ]
}
```

PUT /tags/{tagId}

Updates a specific tag.

URI Parameters

Name	Data Type	Required/Optional	Description
tagId	integer	Required	ID of the tag to be updated

Body Parameters

Name	Data Type	Required/Optional	Description
name	string	Required	The updated name for the tag

Request

http://{ip address}/api/tags/{tagId}

Example Body Values:

```
{
   "name": "string
}
```

Response

Message: 204 (No Content)

DELETE / tags/{tagId}

Deletes a specific tag from the system.

URI Parameters

Name	Data Type	Required/Optional	Description
tagId	integer	Required	ID of the tag to be deleted.

Request

http://{ip address}/api/tags/{tagId}

Response

Message: 204 (No Content)

GET /tags/{tagId}/entities

Gets specific tag entities

URI Parameters

Name	Data Type	Required/ Optional	Description
tagId	integer	Required	ID the tag to be retrieved

Request

http://{ip address}/api/tags/{tagId}/entities

Response

Message: 200 (OK)

Example Values:

```
{
  "filteredCount": 0,
  "page": 0,
  "pageSize": 0,
  "pageCount": 0,
  "hasNextPage": true,
  "hasPreviousPage": true,
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "type": "SpaceGroup",
      "name": "string"
    }
  ]
}
```

<< Select another API Operation

Temperature Sensors

Temperature sensors can be assigned to spaces to provide the temperature of a space. If more than one temperature sensor is assigned to a space, the average of all sensors is provided.

```
GET /temperaturesensors
POST /temperaturesensors

GET /temperaturesensors/{temperatureSensorId}
PUT /temperaturesensors/{temperatureSensorId}
DELETE /temperaturesensors/{temperatureSensorId}

GET /temperaturesensors/{temperatureSensorId}/events
POST /temperaturesensors/{temperatureSensorId}/events

PUT /temperaturesensors/{temperatureSensorId}/tags
DELETE /temperaturesensors/{temperatureSensorId}/tags/{tagName}
```

[<< Select another API Operation](#)

GET /temperaturesensors

Gets a list of all temperature sensors in the system.

Request

http://{ip address}/api/temperaturesensors

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T17:59:20.973Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T17:59:20.973Z",
      "temperature": 0,
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

POST /temperaturesensors

Creates a temperature sensor.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalID	string	Required	The external system's ID for this temperature sensor
networkNodeId	integer	Optional	ID of the Device Node's Network Node
deviceNodeId	integer	Optional	ID of the device's Device Node
name	string	Optional	The name of the temperature sensor to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol. **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/temperaturesensors

Example Body Values:

```
{
  "externalId": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /temperaturesensors/{temperatureSensorId}

Gets a specific temperature sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor to be retrieved

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-16T18:02:07.911Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-16T18:02:07.911Z",
  "temperature": 0,
  "properties": "string",
  "systemProperties": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

PUT /temperaturesensors/{temperatureSensorId}

Updates a temperature sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the temperature sensor to contain the new values
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}

Example Body Values:

```
{
  "name": "string",
  "properties": "string"
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /temperaturesensors/{temperatureSensorId}

Deletes a specific temperature sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor to be deleted

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}

Response

Message: 204 (No Content)

GET /temperaturesensors/{temperatureSensorId}/events

Gets a list of temperature sensor events.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": " 2019-05-16T18:10:56.019Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /temperaturesensors/{temperatureSensorId}/events

Creates a temperature sensor event.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
temperature	number	Required	The temperature for the event to be created

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}/events

Example Body Value:

```
{
   "temperature": 0
}
```

Response

Message: 204 (No Content)

PUT /temperaturesensors/{temperatureSensorId}/tags

Adds a tag to a specified temperature sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/temperaturesensors/{temperatureSensorId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /temperaturesensors/{temperatureSensorId}/tags/{tagName}

Removes a tag from a temperature sensor.

URI Parameters

Name	Data Type	Required/ Optional	Description
temperatureSensorId	integer	Required	ID of the temperature sensor
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/ temperaturesensors/{temperatureSensorId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

Wall Controls

A wall control can be configured to define button actions within an action set.

Important: Wall Control support requires firmware version 5.0.0 or higher.

General:
GET /wallcontrols
POST /wallcontrols
GET /wallcontrols/{wallControlId}
PUT /wallcontrols/{wallControlId}
DELETE /wallcontrols/{wallControlId}
PUT /wallcontrols/{wallControlId}/settings

Wall Control Buttons and Gestures:
GET /wallcontrols/{wallControlId}/buttons
PUT /wallcontrols/{wallControlId}/buttons/{buttonId}

GET /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures
POST /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures

GET /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}
PUT /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}
DELETE /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}
POST /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}/reset

Events:
GET /wallcontrols/{wallControlId}/events
POST /wallcontrols/{wallControlId}/events

Tags:
PUT /wallcontrols/{wallControlId}/tags
DELETE /wallcontrols/{wallControlId}/tags /{tagName}

[<< Select another API Operation](#)

GET /wallcontrols

Gets a list of all wall controls.

URI Parameters

Request

http://{ip address}/api/wallcontrols

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-16T19:56:14.273Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-16T19:56:14.273Z",
      "properties": "string",
      "systemProperties": "string",
      "buttons": [
        {
          "id": 0,
          "name": "string",
          "controlCommand": 0,
          "dimmingCommand": 0
        }
      ],
      "networkNodeId": 0,
      "deviceNodeId": 0,
      "spaceId": 0
    }
  ]
}
```

POST /wallcontrols

Creates a wall control.

Body Parameters

Name	Data Type	Required/ Optional	Description
externalId	string	Required	ID of the wall control to be created
name	string	Required	Name of the wall control to be created
controlCommand	integer	Optional	Default On or Off value that should be sent: 1 = On; 0 = Off
dimmingCommand	integer	Optional	Default dimming level (%) value that should be sent. Value: 1-100
name	string	Optional	Button name for the wall control to be created
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.
protocol	string	Optional	External system's device protocol **Note:** If entered, use any string value that represents the protocol being used within a consuming application.

Request

http://{ip address}/api/wallcontrols

Example Body Values:

```
{
  "externalId": "string",
  "buttons": [
    {
      "name": "string",
      "controlCommand": 0,
      "dimmingCommand": 0
    }
  ],
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "name": "string",
  "properties": "string",
  "systemProperties": "string",
  "protocol": "string"
}
```

Response

Message: 201 (Created)

GET /wallcontrols/{wallControlId}

Gets a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control to be retrieved

Request

http://{ip address}/api/wallcontrols/{wallControlId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-16T20:00:55.637Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-16T20:00:55.637Z",
  "properties": "string",
  "systemProperties": "string",
  "buttons": [
    {
      "id": 0,
      "name": "string",
      "controlCommand": 0,
      "dimmingCommand": 0
    }
  ],
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

PUT /wallcontrols/{wallControlId}

Updates a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the button
name	string	Required	Name of the wall control
controlCommand	integer	Optional	Default On or Off value that should be sent: 1 = On; 0 = Off
dimmingCommand	integer	Optional	Default dimming level (%) that should be sent Value: 1-100
properties	string	Optional	External system's device properties **Note:** If entered, device properties are required to be a valid JSON object.
systemProperties	string	Optional	System properties for Igor native devices **Important:** If entered, changes will be discarded.

Request

http://{ip address}/api/wallcontrols/{wallControlId}

Example Body Values:

```
{
  "buttons": [
    {
      "name": "string",
      "controlCommand": 0,
      "dimmingCommand": 0
    }
  ],
  "name": "string",
  "properties": "string",
  "systemProperties": "string"
}
```

Response

Message: 204 (No Content)

DELETE /wallcontrols/{wallControlId}

Deletes a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control to be deleted

Request

http://{ip address}/api/wallcontrols/{wallControlId}

Response

Message: 204 (No Content)

PUT /wallcontrols/{wallControlId}/settings

Updates settings for a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
buttonId	string	Required	ID of the button
controlCommand	integer	Optional	Default On or Off value that should be sent: 1 = On; 0 = Off
dimmingCommand	integer	Optional	Default dimming level (%) that should be sent: Value: 1-100

Request

http://{ip address}/api/wallcontrols/{wallControlId}/settings

Example Body Values:

```
{
  "wallControlButtonSettings": [
    {
      "buttonId": 0,
      "controlCommand": 0,
      "dimmingCommand": 0
    }
  ]
}
```

Response

Message: 204 (No Content)

[<< Wall Control Index](#)

GET /wallcontrols/{wallControlId}/buttons

Gets a list of wall control buttons.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons

Response

Message: 200 (OK)

Example Values:

```
{
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "name": "string",
      "controlCommand": 0,
      "dimmingCommand": 0
    }
  ]
}
```

PUT /wallcontrols/{wallControlId}/buttons/{buttonId}

Updates a wall control button.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlid	integer	Required	ID of the wall control associated with the button
buttonId	integer	Required	ID of the wall control button to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the button containing the new values
controlCommand	integer	Optional	Default On or Off value that should be sent: 1 = On; 0 = Off
dimmingCommand	integer	Optional	Default dimming level (%) that should be sent Value: 1-100

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons/{buttonId}

Example Body Values:

```
{
  "name": "string",
  "controlCommand": 0,
  "dimmingCommand": 0
}
```

Response

Message: 204 (No Content)

GET /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures

Gets gestures for the specified wall control button.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlid	integer	Required	ID of the wall control associated with the button
buttonId	integer	Required	ID of the wall control button to get gestures

Request

http://{ip address}/api/ wallcontrols/{wallControlId}/buttons/{buttonId}/gestures

Response

Message: 200 (OK)

Example Values:

```
{
  "totalCount": 0,
  "list": [
    {
      "id": 0,
      "wallControlId": 0,
      "buttonId": 0,
      "type": "Press",
      "actionSetId": 0
      "holdGestureCancelType": "DoNotCancel",
      "holdGestureTimeout": 0
    }
  ]
}
```

POST /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures

Creates a wall control gesture.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlid	integer	Required	ID of the wall control
buttonId	integer	Required	ID of the wall control button

Body Parameters

Name	Data Type	Required/ Optional	Description
type	string	Required	Gesture type to be created Values: Press, DoublePress, Hold
actionSetId	integer	Optional	ID of the action set associated with the wall control
holdGestureCancelType	string	Optional	Type of cancel for the Hold gesture action set Values: DoNotCancel, Immediate, Iteration, EndOfCurrentIteration
holdGestureTimeout	integer	Optional	How long to hold the button before it is automatically canceled

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons/{buttonId}/gestures

Example Body Values:

```
{
  "type": "Press",
  "actionSetId": 0
  "holdGestureCancelType": "DoNotCancel",
  "holdGestureTimeout": 0
}
```

Response

Message: 201 (Created)

GET /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/ {gestureId}

Gets a wall control gesture.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control associated with the gesture
buttonId	integer	Required	ID of the wall control button associated with the gesture
gestureId	integer	Required	ID of the wall control gesture to be retrieved

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "wallControlId": 0,
  "buttonId": 0,
  "type": "Press",
  "actionSetId": 0
  "holdGestureCancelType": "DoNotCancel",
  "holdGestureTimeout": 0
}
```

PUT /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/ {gestureId}

Updates a wall control gesture.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control associated with the gesture
buttonId	integer	Required	ID of the wall control button associated with the gesture
gestureId	integer	Required	ID of the wall control gesture to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
type	string	Required	Type of wall control gesture to be updated. Values: Press, DoublePress, Hold
actionSetId	integer	Optional	ID of the action set associated with the wall control
HoldGestureCancelType	string	Optional	Type of cancel for the Hold gesture action set Values: DoNotCancel, Immediate, EndOfCurrentIteration
holdGestureTimeout	integer	Optional	How long to hold the button before it is automatically canceled

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}

Example Body Values:

```
{
  "type": "Press",
  "actionSetId": 0
  "holdGestureCancelType": "DoNotCancel",
  "holdGestureTimeout": 0
}
```

Response

Message: 204 (No Content)

DELETE /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/ {gestureId}

Deletes a wall control gesture.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control associated with the gesture
buttonId	integer	Required	ID of the wall control button associated with the gesture
gestureId	integer	Required	ID of the wall control gesture to be removed

Request

http://{ip address}/api/wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}

Response

Message: 204 (No Content)

POST /wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/ {gestureId}/reset

Resets a wall control gesture.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control
buttonId	integer	Required	ID of the wall control button
gestureId	integer	Required	ID of the wall control gesture to be reset to discovered values

Request

http://{ip address}/api/ wallcontrols/{wallControlId}/buttons/{buttonId}/gestures/{gestureId}/reset

Response

Message: 201 (Created)

GET /wallcontrols/{wallControlId}/events

Gets a list of wall control events.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control

Request

http://{ip address}/api/wallcontrols/{wallControlId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-16T20:44:27.686Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

POST /wallcontrols/{wallControlId}/events

Creates a wall control button event.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control

Body Parameters

Name	Data Type	Required/ Optional	Description
buttonId	integer	Required	ID of the button event to be created
eventType	string	Required	Type of event Values: Down, Up, Press, DoublePress, HoldStarted, or HoldEnded

Request

http://{ip address}/api/wallcontrols/{wallControlId}/events

Example Body Values:

```
{
   "buttonId": 0,
   "eventType": "Down"
}
```

Response

Message: 204 (No Content)

PUT /wallcontrols/{wallControlId}/tags

Adds a tag to a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control

Body Parameters

Name	Data Type	Required/ Optional	Description
names	string	Required	Names of the tags to be added

Request

http://{ip address}/api/wallcontrols/{wallControlId}/tags

Example Body Values:

```
{
  "names": [
    "string"
  ]
}
```

Response

Message: 204 (No Content)

DELETE /wallcontrols/{wallControlId}/tags /{tagName}

Removes a tag from a wall control.

URI Parameters

Name	Data Type	Required/ Optional	Description
wallControlId	integer	Required	ID of the wall control
tagName	string	Required	Name of the tag to be removed

Request

http://{ip address}/api/wallcontrols/{wallControlId}/tags/{tagName}

Response

Message: 204 (No Content)

[<< Select another API Operation](#)

WebHooks

WebHooks are used to tell the Igor Gateway Software when your application should be notified as certain events occur within the system.

ALSO SEE:

- For a list of WebHook event notifications you can request, including example payloads, see "WebHook Notifications" page 278.

  - "How to Create an Application Key," page 2

  - "Application Keys" requests, page 36

GET /applicationkeys/{applicationKeyId}/webhooks
POST /applicationkeys/{applicationKeyId}/webhooks

GET /applicationkeys/{applicationKeyId}/webhooks/{webHookId}
PUT /applicationkeys/{applicationKeyId}/webhooks/{webHookId}
DELETE /applicationkeys/{applicationKeyId}/webhooks/{webHookId}

GET /webhooks/supported-events

GET /applicationkeys/{applicationKeyId}/webhooks

Gets a list of all WebHooks in the system.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}/webhooks

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "domainEvents": [
        "string"
      ],
      "callbackUrl": "string",
      "applicationKeyId": 0,
      "applicationKey": "string"
    }
  ]
}
```

POST /applicationkeys/{applicationKeyId}/webhooks

Registers a WebHook.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key

Body Parameters

Name	Data Type	Required/ Optional	Description
domainEvents	Array[string]	Required	The domain events associated with this WebHook
callbackUrl	string	Required	The callback URL for the WebHook to be registered

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}/webhooks

Example Body Values:

```
{
  "domainEvents": [
    "string"
  ],
  "callbackUrl": "string"
}
```

Response

Message: 201 (Created)

GET /applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Gets a WebHook.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key
webHookId	integer	Required	ID of the WebHook

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "domainEvents": [
    "string"
  ],
  "callbackUrl": "string",
  "applicationKeyId": 0,
  "applicationKey": "string"
}
```

PUT /applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Updates a WebHook.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key
webHookId	integer	Required	ID of the WebHook

Body Parameters

Name	Data Type	Required/ Optional	Description
domainEvents	string	Required	The domain events associated with this WebHook
callbackUrl	string	Required	The callback URL for the WebHook containing the new values

Request

http://{ip address}/api applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Example Body Values:

```
{
  "domainEvents": [
    "string"
  ],
  "callbackUrl": "string"
}
```

Response

Message: 204 (No Content)

DELETE /applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Unregisters a WebHook.

URI Parameters

Name	Data Type	Required/ Optional	Description
applicationKeyId	integer	Required	ID of the application key
webHookId	integer	Required	ID of the WebHook to be unregistered

Request

http://{ip address}/api/applicationkeys/{applicationKeyId}/webhooks/{webHookId}

Response

Message: 204 (No Content)

GET /webhooks/supported-events

Gets a list of supported WebHook events.

ALSO SEE: "WebHook Notifications," page 278.

Request

http://{ip address}/api/webhooks/supported-events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    "string"
  ]
}
```

[<< Select another API Operation](#)

Zones

Zones are created within a space in the Admin application and list any daylight harvesting lights and light sensors that have been assigned to it.

General:
GET /zones/{zoneId}
PUT /zones/{zoneId}
DELETE /zones/{zoneId}
GET /zones/{zoneId}/space

Devices:
GET /zones/{zoneId}/assignabledevices
GET /zones/{zoneId}/devices
PUT /zones/{zoneId}/devices
GET /zones/{zoneId}/lightsensor

DELETE /zones/{zoneId}/lights/{lightId}
DELETE /zones//{zoneId}/lightsensors/{lightSensorId}

Events:
GET /zones/{zoneId}/events

<< Select another API Operation

GET /zones/{zoneId}

Gets a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone to be retrieved

Request

http://{ip address}/api/zones/{zoneId}

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "setpoint": 0,
  "deadband": 0,
  "bias": 0,
  "gain": 0,
  "timeDelay": 0,
  "raiseDimRate": 0,
  "lowerDimRate": 0,
  "level": 0,
  "sensorLevel": 0,
  "minSensorLevel": 0,
  "maxSensorLevel": 0,
  "spaceId": 0
}
```

PUT /zones/{zoneId}

Updates a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone to be updated

Body Parameters

Name	Data Type	Required/ Optional	Description
name	string	Required	Name of the Zone
setpoint	number	Optional	Minimum light level (fc) the zone is to maintain by automatically adjusting the dimming level of the lights
deadband	number	Optional	Amount of change (fc) above the setpoint necessary before the zone responds
bias	integer	Optional	Light dimming level (%) needed to meet the zone's lighting level requirement (setpoint) without any external daylight into the zone
gain	number	Optional	Output sensitivity (in %/fc) of the daylighting control
timeDelay	integer	Optional	Frequency in seconds that the zone samples the light level and updates the dim level
raiseDimRate	number	Optional	Maximum rate (% of zone light/second) that the zone can increase the light level
lowerDimRate	number	Optional	Maximum rate (% of zone light/second) the zone can decrease the light level

Request

http://{ip address}/api/zones/{zoneId}

Example Body Values:

```
{
  "name": "string",
  "setpoint": 0,
  "deadband": 0,
  "bias": 0,
  "gain": 0,
  "timeDelay": 0,
  "raiseDimRate": 0,
  "lowerDimRate": 0
}
```

Response

Message: 204 (No Content)

DELETE /zones/{zoneId}

Deletes a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
ZoneId	integer	Required	ID of the zone to be deleted

Request

http://{ip address}/api/zones/{zoneId}

Response

Message: 204 (No Content)

GET /zones/{zoneId}/space

Gets the space containing a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Request

http://{ip address}/api/zones/{zoneId}/space

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "mode": "string",
  "areZonesDisabled": true,
  "state": "string",
  "level": 0,
  "cct": 0,
  "hasTunableLights": true,
  "minimumCCT": 0,
  "maximumCCT": 0,
  "controlType": 0,
  "resumeType": "Undefined",
  "resumeDate": "2019-05-21T15:51:31.756Z"
}
```

GET /zones/{zoneId}/assignabledevices

Gets a list of devices that can be added to a specific zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Request

http://{ip address}/api/zones/{zoneId}/assignabledevices

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-21T15:53:20.663Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-21T15:53:20.663Z",
      "spaceId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

GET /zones/{zoneId}/devices

Gets a list of devices contained in a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Request

http://{ip address}/api/zones/{zoneId}/devices

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "name": "string",
      "type": "string",
      "protocol": "string",
      "externalId": "string",
      "discoveredDate": "2019-05-21T15:55:11.555Z",
      "isOnline": true,
      "isOnlineChanged": "2019-05-21T15:55:11.555Z",
      "spaceId": 0,
      "spaceName": "string",
      "isEmergency": true,
      "isLight": true,
      "isRelay": true,
      "lightType": "string",
      "properties": "string",
      "systemProperties": "string",
      "networkNodeId": 0,
      "deviceNodeId": 0
    }
  ]
}
```

PUT /zones/{zoneId}/devices

Adds a device to a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Body Parameters

Name	Data Type	Required/ Optional	Description
deviceId	integer	Required	ID of the device to be added to the specified zone
deviceType	string	Required	Type of device. Values: Light (Default), Dry Contact, LightSensor, MotionSensor, TemperatureSensor, Relay, WallControl, Actuator

Request

http://{ip address}/api/zones/{zoneId}/devices

Example Body Values:

```
{
  "deviceId": 0,
  "deviceType": "Light"
}
```

Response

Message: 204 (No Content)

GET /zones/{zoneId}/lightsensor

Gets the light sensor contained in a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Request

http://{ip address}/api/zones/{zoneId}/lightsensor

Response

Message: 200 (OK)

Example Values:

```
{
  "id": 0,
  "name": "string",
  "protocol": "string",
  "externalId": "string",
  "discoveredDate": "2019-05-21T15:57:55.607Z",
  "isOnline": true,
  "isOnlineChanged": "2019-05-21T15:57:55.607Z",
  "minSensorLevel": 0,
  "maxSensorLevel": 0,
  "minIlluminance": 0,
  "maxIlluminance": 0,
  "sensorLevel": 0,
  "illuminance": 0,
  "properties": "string",
  "systemProperties": "string",
  "networkNodeId": 0,
  "deviceNodeId": 0,
  "spaceId": 0
}
```

DELETE /zones/{zoneId}/lightsensors/{lightSensorId}

Removes a light sensor from a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone
lightSensorId	integer	Required	ID of the light sensor to be removed

Request

http://{ip address}/api/zones/{zoneId}/lightsensors/{lightSensorId}

Response

Message: 204 (No Content)

DELETE /zones/{zoneId}/lights/{lightId}

Removes a light from a zone.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone
lightId	integer	Required	ID of the light to be removed

Request

http://{ip address}/api/zones/{zoneId}/lights/{lightId}

Response

Message: 204 (No Content)

GET /zones/{zoneId}/events

Gets a list of zone events.

URI Parameters

Name	Data Type	Required/ Optional	Description
zoneId	integer	Required	ID of the zone

Request

http://{ip address}/api/zones/{zoneId}/events

Response

Message: 200 (OK)

Example Values:

```
{
  "list": [
    {
      "id": 0,
      "dateTime": "2019-05-21T16:01:36.093Z",
      "type": "string",
      "entityType": "string",
      "entityId": 0,
      "value": "string"
    }
  ]
}
```

[<< Select another API Operation](#)

WebHook Notifications

In the Igor Gateway Software API Admin application, you can request that your Callback URL be notified for any (or all) of the following events. In this section, an example payload is provided for each event:

Action/Action Set:
Action Executed
Action Set Cancelled
Action Set Completed
Action Set Executed

Actuator(s):
Actuator State Changed
Actuators State Changed

Device:
Device Connectivity Changed
Device Deleted
Device Quarantine Changed
Device Space Changed

Device Node:
Device Node Connectivity Changed
Device Node Deleted

Dry Contact:
Dry Contact State Changed

Light(s):
Light Lighting Changed
Lights Lighting Changed

Light Sensor:
Light Sensor Illuminance Changed

Motion Sensor:
Motion Sensor State Changed

Node:
Node Connectivity Changed
Node Deleted

Relay(s):
Relay State Changed
Relays State Changed

Schedule:
Schedule Occurred

Sensor:
Sensor State Changed

Space:
Space Automation Paused
Space Automation Resumed
Space Created
Space Deleted
Space Lighting Changed
Space State Changed
Space Timer Started
Space Timer Stopped
Space Updated

Space Group:
Space Group Created
Space Group Deleted
Space Group Updated

Tags:
Tags Added to Objects
Tags Created
Tags Deleted
Tags Removed from Objects
Tags Renamed

Temperature Sensor:
Temperature Sensor Temperature Changed

Wall Control:
Wall Control Gestured

Zone:
Zone Level Changed

Action Executed

Example Payload

```
{
    "Id": "31ec8631b948439688dba5f0edd645a3",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Action Executed",
            "Entity": "Action",
            "EntityId": 1,
            "Value": "null"
        }
    ]
}
```

Action Set Cancelled

Example Payload

```
{
    "Id": "08512fd48512459091d95b96004c8a4e",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Action Set Cancelled",
            "Entity": "ActionSet",
            "EntityId": 3,
            "Value": "null"
        }
    ]
}
```

Action Set Completed

Example Payload

```json
{
    "Id": "0d0ea21a1a6c46808b63e0f8dedda241",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Action Set Completed",
            "Entity": "ActionSet",
            "EntityId": 3,
            "Value": "null"
        }
    ]
}
```

Action Set Executed

Example Payload

```json
{
    "Id": "d82fc9452fa54a81bb22587d0bb368b3",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Action Set Executed",
            "Entity": "ActionSet",
            "EntityId": 1,
            "Value": ""
        }
    ]
}
```

Actuator State Changed

Example Payload

```
{
    "Id": "155b571bb516419a9bd351538e8b3519",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Actuator State Changed",
            "Entity": "Actuator",
            "EntityId": 1,
            "Value": ""{\"List\":[{\"EntityId\":1,\"ExternalId\":\"A4A72E9D-56D1-47FF-89A3-369B25AABFC6\",\"CommandCollectionName\":\"Serial1\",\"CommandType\":\"Percentage\",\"Data\":\"5000\"}]}"
        }
    ]
}
```

Actuators State Changed

Example Payload

```
{
  "Id": "651fe54b9526411a95b3b8f4a56c42d6",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Actuators State Changed",
      "Value": [
        {
          "List": [
            {
              "EntityId": 4,
              "ExternalId": "00001500-0002-0000-0000-510C003F002E",
              "CommandCollectionName": "Serial1",
              "CommandType": "Percentage",
            }
          ]
        },
        {
          "List": [
            {
              "EntityId": 5,
              "ExternalId": "00001500-0002-0000-0000-510C003F002E",
              "CommandCollectionName": "Serial1",
              "CommandType": "Percentage",
              "Data": "2500"
            }
          ]
        }
      ]
    }
  ]
}
```

[<< Select another event](#)

Device Connectivity Changed

Field	Values	
"Entity"	ContactSensor	MotionSensor
	DryContact	Relay
	Light	TemperatureSensor
	LightSensor	WallControl
"Value"	Offline or Online	

Example Payload

```
{
    "Id":"885b0bfe0cd340dc8314435cc5c6d5dc",
    "Attempt":1,
    "Properties":{},
    "Notifications":[
        {
            "Action":"Device Connectivity Changed",
            "Entity":"Light",
            "EntityId":5,
            "Value":"Offline",
            "ExternalId":"00000002-0002-0000-0000-5112004f0024"
        }
    ]
}
```

Device Deleted

Example Payload

```
{
    "Id": "667f183518aa425bac1680e350ba456b",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Device Deleted",
            "Entity": "Light",
            "EntityId": 1,
            "Value": "1",
            "ExternalId": "00000601-0001-0000-0000-5112004f0024"
        }
    ]
}
```

Device Quarantine Changed

Example Quarantined Payload

```
{
    "Id": "ecaf5a37e2004d44bcc34e964d593a87",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Device Quarantine Changed",
            "Entity": "WallControl",
            "EntityId": 1,
            "Value": "{\"EntityId\":1,\"ExternalId\":\"00000A00-0001-0000-0000-
511500300034\",\"IsQuarantined\":true,\"Reason\":\"Administrative quarantine. This device
will no longer receive events.\"}"
        }
    ]
}
```

"Example Released from Quarantine Payload" >>

Example Released from Quarantine Payload

```
{
     "Id": "671fd97f549f47ff9802de8bc831f513",
     "Attempt": 1,
     "Properties": {},
     "Notifications": [
         {
             "Action": "Device Quarantine Changed",
             "Entity": "WallControl",
             "EntityId": 1,
             "Value": "{\"EntityId\":1,\"ExternalId\":\"00000A00-0001-0000-0000-
511500300034\",\"IsQuarantined\":false,\"Reason\":\"Device has been released from
quarantine.\"}"
         }
     ]
}
```

Device Node Connectivity Changed

Example Payload

```
{
     "Id": "e44eb700f55840e6bfe6e3d5ddfddccf",
     "Attempt": 1,
     "Properties": {},
     "Notifications": [
         {
             "Action": "Device Connectivity Changed",
             "Entity": "DeviceNode",
             "EntityId": 1,
             "ExternalId": "00000201-0001-0000-0000-510C003320035"
             "Value": "offline",
         }
     ]
}
```

Device Node Deleted

Example Payload

```
{
    "Id": "e4162369125b4cf9bc0fa23168cd7d23",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Device Node Deleted",
            "Entity": "DeviceNode",
            "EntityId": 1,
            "Value": "1",
            "ExternalId": "00000201-0001-0000-0000-5112004f0024"
        }
    ]
```

Dry Contact State Changed

Important: Possible values for "Value, Type" are DryContact, BedSensor, FlowSwitch, WaterDetectionSensor, or DoorSensor. Possible values for "Value, State" are Opened or Closed.

Example Payload

```
{
    "Id": "c4302f9f9eda427ba4162a73b7c2d5ef",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Dry Contact State Changed",
            "Entity": "DryContact",
            "EntityId": 1,
            "Value": "{\"Type\":\"BedSensor\",\"State\":\"Closed\"}"
        }
    ]
}
```

Light Lighting Changed

Example Payload

```
{
    "Id": "a6495492bd7e4c80b9d4ba4e2b1889f5",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Light Lighting Changed",
            "Entity": "Light",
            "EntityId": 1,
            "ExternalID": "00000000-0001-0000-0000-51150023003B",
            "Value":
"{\"Level\":10000,\"CCT\":4000,\"Behavior\":0,\"CurveType\":1,\"Duration\":2000,\"State\":
0}"
        }
    ]
}
```

[<< Select another event](#)

Lights Lighting Changed

Example Payload

```
{
        "Id": "40d97dd91475408996ce04cdc7c904a4",
        "Attempt": 1,
        "Properties": {},
        "Notifications": [
          {
            "Action":"Lights Lighting Changed",
            "Value": [
              {
                "EntityId": 1,
                "ExternalId": "00000000-0001-0000-0000-51150032003B"
                "Lighting": {
                "Level": 8200,
                "CCT": 4000,
                "Behavior": 0,
                "CurveType": 1,
                "Duration": 2000,
                "State": 0
            }
          },
          {
                "EntityId": 2,
                "ExternalId": "00000001-0001-0000-0000-51150032003B",
                "Lighting": {
                "Level": 8200,
                "CCT": 4000,
                "Behavior": 0,
                "CurveType": 1,
                "Duration": 2000,
                "State": 0
            }
          }
        ]
      }
    ]
  }
```

<< Select another event

Light Sensor Illuminance Changed

Example Payload

```
{
    "Id": "ba1c9f65eccc4e0db1c7469e9b43099e",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Light Sensor Illuminance Changed",
            "Entity": "LightSensor",
            "EntityId": 5,
            "Value": "0.09",
            "ExternalId": "9fe3ba52-4388-4aa5-8bd9-9733acdb4655"
        }
    ]
}
```

Motion Sensor State Changed

Important: Possible values for "Value" are Occupancy or Vacancy.

Example Payload

```
{
    "Id": "01c89cf547ab4ba185feba144c14755c",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Motion Sensor State Changed",
            "Entity": "MotionSensor",
            "EntityId": 3,
            "Value": "Occupancy",
            "ExternalId": "f0b1d335-2b19-48d8-81ee-9733acdb4655"
        }
    ]
}
```

Node Connectivity Changed

Important: Possible values for "Value" are Online or Offline.

Example Payload

```
{
    "Id": "ad3399e3ed694d1e9bef4ebff9a410df",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Node Connectivity Changed",
            "Entity": "Node",
            "EntityId": 1,
            "Value": "Online",
            "ExternalId": "00000100-0001-0000-0000-5112004f0024"
        }
    ]
}
```

[<< Select another event](#)

Node Deleted

Example Payload

```
{
    "Id": "816ef4fe59004159a1b2c3a839473e28",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Node Deleted",
            "Entity": "Node",
            "EntityId": 1,
            "Value": "1",
            "ExternalId": "00000100-0001-0000-0000-5112004f0024"
        }
    ]
}
```

Relay State Changed

Important: Possible values for "Value" are Closed or Open.

Example Payload

```
{
    "Id": "21dd6e09fb754ab0881c6e54c7ea6601",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Relay State Changed",
            "Entity": "Relay",
            "EntityId": 3,
            "Value": "Closed",
            "ExternalId": "00000900-0002-0000-0000-5112004f0024"
        }
    ]
}
```

[<< Select another event](#)

Relays State Changed

Important: Possible values for "Value" are Closed or Open.

Example Payload

```
{
    "Id": "5195b493752441cfa80bd9d885ee6cbe",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
      {
        "Action": "Relays State Changed",
        "Value": [
          {
            "EntityId": 4,
            "ExternalId": "399F556E-9528-475A-B4AA-C86C33DC2E70",
            "RelayState": "Closed"
          {,
          {
            "EntityId": 5,
            "ExternalId": "E6F8797C-4F74-4933-B764-A8E97D321F08",
            "RelayState": "Closed"
          {,
          {
            "EntityId": 6,
            "ExternalId": "AAE07949-B387-4B658-BBFF-393239299759",
            "RelayState": "Closed"
          {,
          {
            "EntityId": 7,
            "ExternalId": "3FD19E4A-5C19-4FE3-A6F5-67675004B3F0"
            "RelayState": "Closed"
          }
        ]
      }
    ]
}
```

[<< Select another event](#)

Schedule Occurred

Example Payload

```
{
    "Id": "bd96159015b241d793756f6993244c81",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Schedule Occurred",
            "Entity": "Schedule",
            "EntityId": 1,
            "Value": ""
        }
    ]
}
```

Sensor State Changed

Example Payload

```
{
    "Id": "b8b0f4ed2a424eee844fac859260301e",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Sensor States Changed",
            "Entity": "Sensor",
            "EntityId": 1,
            "Value":
"{\"EventType\":null,\"DataType\":\"UInt8\",\"Data\":\"40\",\"UnitOfMeasure\":\"lum\"}"
        }
    ]
}
```

Space Automation Paused

Example Payload

```
{
    "Id": "47a65c44642445ab8fa8e33e91fa12661",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Automation Paused",
            "Entity": "Space",
            "EntityId": 4,
            "Value": "4"
        }
    ]
}
```

[<< Select another event](#)

Space Automation Resumed

Example Payload

```
{
    "Id": "a56fd20a0f544c76bc2f10d83f5d9461",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Automation Resumed",
            "Entity": "Space",
            "EntityId": 4,
            "Value": "4"
        }
    ]
}
```

[<< Select another event](#)

Space Created

Example Payload

```
{
    "Id": "334f5659f3ab473186ba1f4d4c48b0cb",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Created",
            "Entity": "Space",
            "EntityId": 2,
            "Value": "2"
        }
    ]
}
```

<< Select another event

Space Deleted

Example Payload

```
{
    "Id": "7a5860d2cbf6491082cfe8ccd8e17932",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Deleted",
            "Entity": "Space",
            "EntityId": 2,
            "Value": "2"
        }
    ]
}
```

<< Select another event

Space Lighting Changed

Example Payload

```
{
    "Id": "0ec71ecdd5b143729c25f27c306f8349",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Lighting Changed",
            "Entity": "Space",
            "EntityId": 1,
            "Value":
"{\"Level\":3900,\"Kelvin\":4600,\"Behavior\":0,\"CurveType\":1,\"Duration\":2000}"
        }
    ]
}
```

Space State Changed

Important: Possible values for "Value" are On or Off.

Example Payload

```
{
    "Id": "4611f380be7144fbbdbc853b8ec1d3bc",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space State Changed",
            "Entity": "Space",
            "EntityId": 1,
            "Value": "Off"
        }
    ]
}
```

Space Timer Started

Example Payload

```
{
    "Id": "0d3743bc5db2452686d1f50f5fb4c08e",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Timer Started",
            "Entity": "Space",
            "EntityId": 1,
            "Value": "15"
        }
    ]
}
```

[<< Select another event](#)

Space Timer Stopped

Example Payload

```
{
    "Id": "9c8654a8005f4b4fa45ef7a320a55d0f",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Timer Stopped",
            "Entity": "Space",
            "EntityId": 1,
            "Value": ""
        }
    ]
}
```

[<< Select another event](#)

Space Updated

Example Payload

```
{
    "Id": "cb53a4c5f33a47beb4f0d8d328aeb39d",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Updated",
            "Entity": "Space",
            "EntityId": 1,
            "Value": "1"
        }
    ]
}
```

<< Select another event

Space Group Created

Example Payload

```
{
    "Id": "354163bd12d149c48566744f7b8fc4a4",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Group Created",
            "Entity": "SpaceGroup",
            "EntityId": 2,
            "Value": "2"
        }
    ]
}
```

<< Select another event

Space Group Deleted

Example Payload

```
{
    "Id": "85b9ab0fcc7c4307b4ba83514c05e7a1",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Group Deleted",
            "Entity": "SpaceGroup",
            "EntityId": 2,
            "Value": "2"
        }
    ]
}
```

<< Select another event

Space Group Updated

Example Payload

```
{
    "Id": "91d3d1cff9b34d2c9586fe5ea5dac5ff",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Space Group Updated",
            "Entity": "SpaceGroup",
            "EntityId": 2,
            "Value": "2"
        }
    ]
}
```

<< Select another event

Tags Added to Objects

Example Payload

```
{
  "Id": "ade728522e3b4d07a7218cc5a4fcb487",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Tags Added To Objects",
      "Value":
"{\"Tags\":[{\"EntityType\":\"Space\",\"EntityId\":1,\"Id\":2,\"Name\":\"test2\"}]}"
    }
  ]
}
```

<< Select another event

Tags Created

Example Payload

```
{
  "Id": "038ac12fecde4e2fb934d729ba20545c",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Tags Deleted",
      "Value": "{\"Tags\":[{\"Id\":1,\"Name\":\\"}]}"
    }
  ]
}
```

<< Select another event

Tags Deleted

Example Payload

```
{
  "Id": "8feaeddec6bc4476964338d8f985fb12",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
```

```
      "Action": "Tags Created",
      "Value": "{\"Tags\":[{\"Id\":1,\"Name\":\"\"}]}"
    }
  ]
}
```

<< Select another event

Tags Removed From Objects

Example Payload

```
{
  "Id": "31433c75d6514804b856356810b42a04",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Tags Removed From Objects",
      "Value":
"{\"Tags\":[{\"EntityType\":\"SpaceGroup\",\"EntityId\":1,\"Id\":1,\"Name\":\"\"}]}"
    }
  ]
}
```

<< Select another event

Tags Renamed

Example Payload

```
{
  "Id": "27f8a56f6670480f95f534b930aa4579",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Tags Renamed",
      "Value": "{\"Tags\":[{\"OriginalName\":\"test\",\"Id\":2,\"Name\":\"test2\"}]}"
    }
  ]
}
```

Temperature Sensor Temperature Changed

Example Payload

```
{
     "Id": "9a171a9ba6c64173a8677b951156ae92",
     "Attempt": 1,
     "Properties": {},
     "Notifications": [
         {
             "Action": "Temperature Sensor Temperature Changed",
             "Entity": "TemperatureSensor",
             "EntityId": 1,
             "Value": "0.05",
             "ExternalId": "cbc78166-7210-494a-ba5a-9733acdb4655"
         }
     ]
}
```

Wall Control Gestured

Example Payload

```
{
  "Id": "83efb29362624d5c9af21f35a818ac22",
  "Attempt": 1,
  "Properties": {},
  "Notifications": [
    {
      "Action": "Wall Control Gestured",
      "Entity": "WallControl",
      "EntityId": 5,
      "Value": "{\"ButtonId\":9,\"EventType\":2}"
    }
  ]
}
```

Zone Level Changed

Example Payload

```
{
    "Id": "0f386816f3154a6c97f06a8136aa4964",
    "Attempt": 1,
    "Properties": {},
    "Notifications": [
        {
            "Action": "Zone Level Changed",
            "Entity": "Zone",
            "EntityId": 1,
            "Value": "1000"
        }
    ]
}
```

Appendix A: Interactive API Overview

URL ACCESS: /admin/developers/api-docs
WITHIN THE IGOR GATEWAY SOFTWARE ADMIN APPLICATION: **Developers > Interactive API** *Menu*
Igor Gateway Software API operations are listed in alpha order from "Actions" to "Zones."
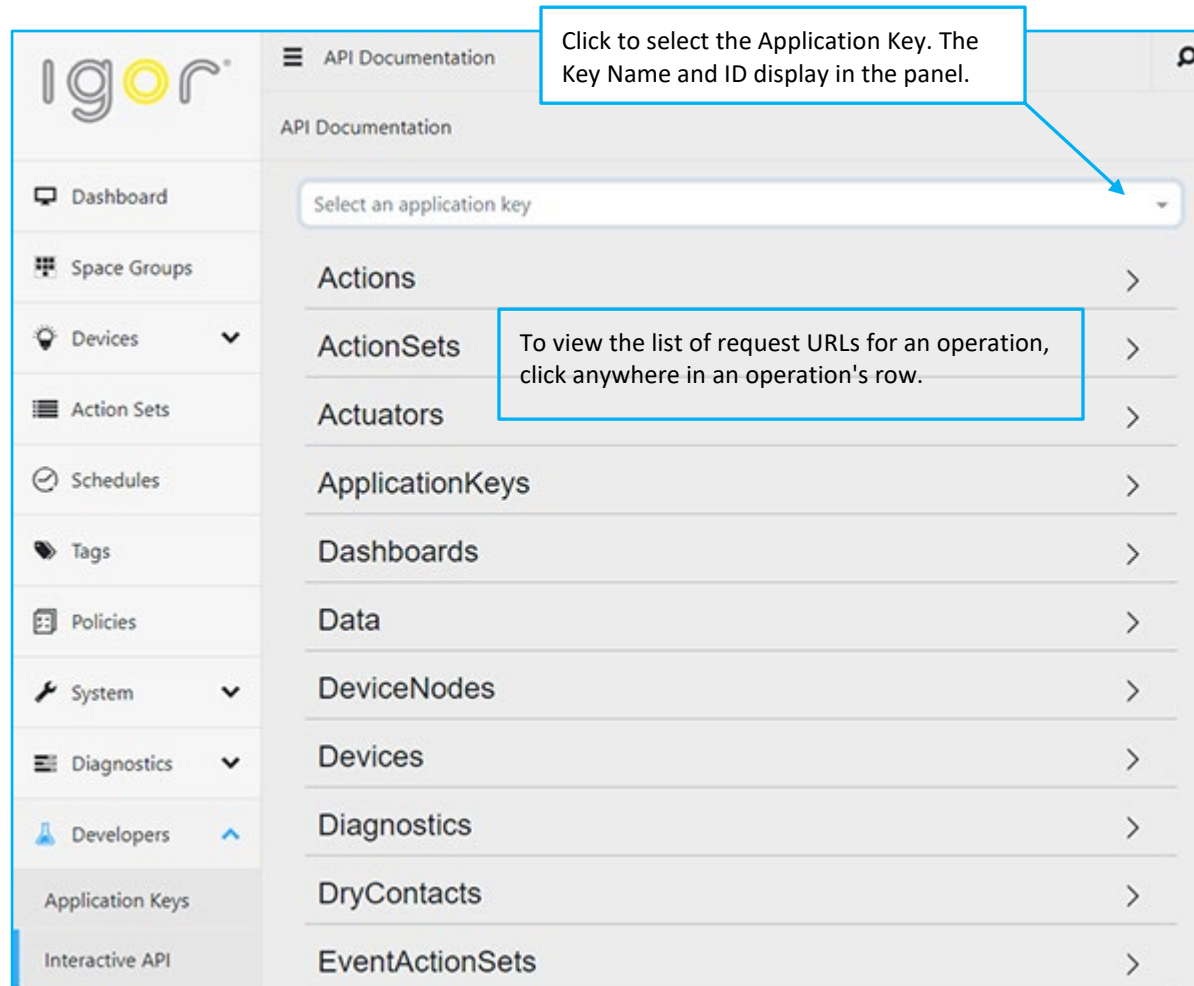
Fig. 4: Top of Igor Gateway Software Interactive API screen

Continue to "View a List of URL Requests" >>

View a List of URL Requests

When you click an operation on the API screen listing (Fig. 4, page 304), that operation opens; operations remain closed until selected.

- The drop-down display of the requests for the **Actions** operation is shown below (Fig. 5).
- To open a request URL, click the request you want to view.
- To close an open request within the operation, click the request again.
- To close multiple open requests under an operation, click the operation panel.
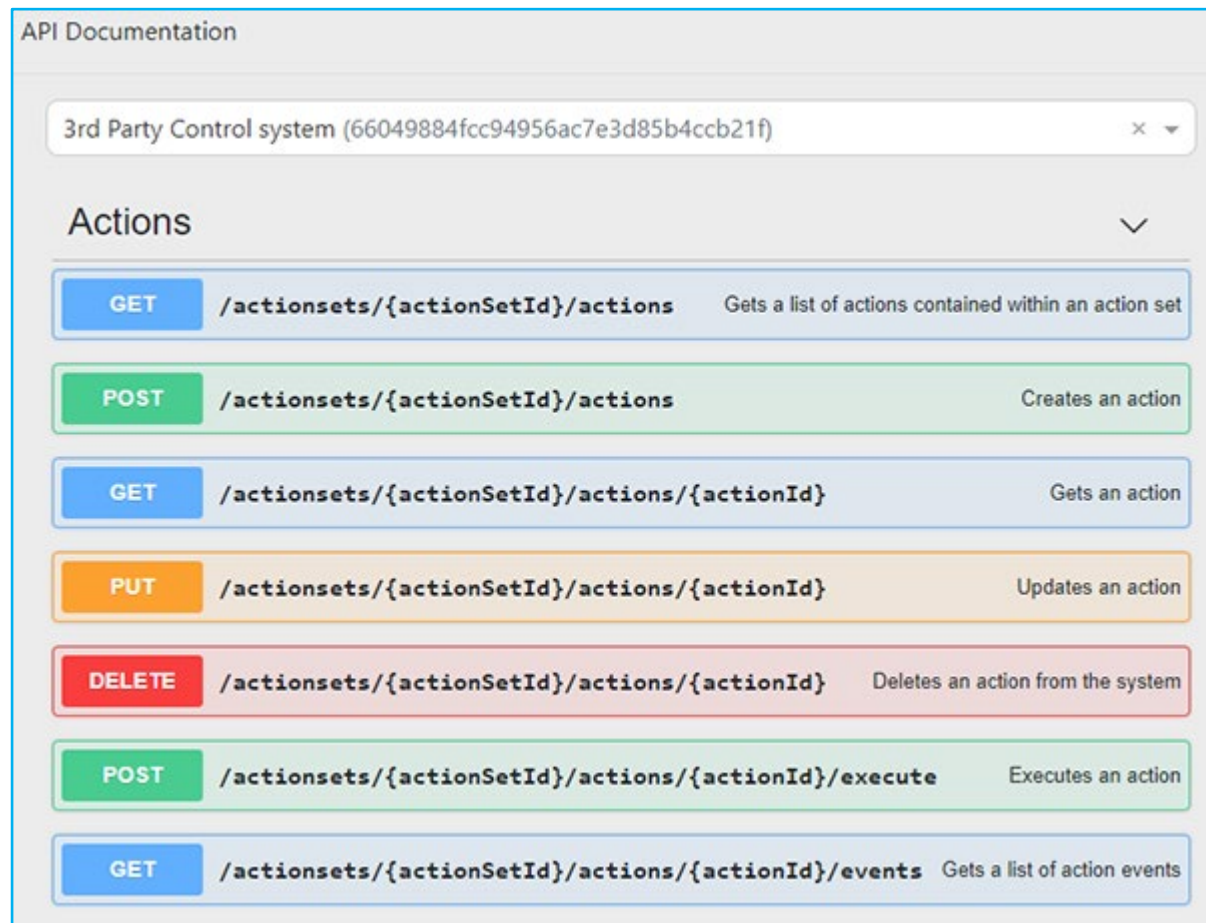

Fig. 5: API Actions Operation open list example

View Parameters

To view details for a specific request from the listing, click the request name row. A details window drops down, which includes the parameters for the request and response, example values, and a **Try it out** button. Error Code definitions appear at the bottom of the screens.

Reminder: To use the **Try it out** feature, you *must have selected an API Key* at the top of the Developers Interactive API screen.

Appendix B: HTTP Response Codes

Igor uses conventional Hypertext Transfer Protocol (HTTP) Status Codes to indicate the success or failure of an API request. The following tables summarize the general codes of an executed operation.

Note: Not all errors map clearly on to HTTP response codes within the table.

Response Type Codes

Code Range	Response Type	General Description
1xx	Informational	Request received; continuing process
2xx	Success	Request was successfully received, understood, and accepted
3xx	Redirection	Further action must be taken to complete the request
4xx	Client Error	Request contains bad syntax; it cannot be fulfilled
5xx	Server Error	Server failed to fulfill an apparently valid request. (These are rare.)

Error Codes

Error Code	Reason	Action You Can Take
400	Bad Request	Confirm the syntax of your request
401	Unauthorized	Confirm you are authorized to access the API. See "Requirements" Connectivity License requirement, page 1.
404	Not Found	Verify the object you are trying to access exists.
500	Internal Server Error	Verify everything looks good with your request and that it is formatted correctly. If the issue persists, contact Igor Support: support@igor-tech.com.

Appendix C: About Actuators

Actuators→Command Collection-→ Commands → Command Type → parameters

Actuators are based on the concept of Commands. Within each Command Collection (CC) are Commands, which contain any combination of Command Types. Command Types and their respective parameter values are defined in the below table.

Command Types and Their Parameter Values

Important: Only *Discrete* and *Range* Command Types support optional parameters.

Command Type	Parameter Values must be . . .
Binary	0 or 1
Discrete	Equal to any value that was defined at device creation in the Gateway Software *Examples:* Up, -20, 0.01, etc.
Percentage	Between or equal to 0—10,000
Range	Numeric and Min must be less than Max
Passthrough8 Passthrough16	Base 64 encoded string of bytes with a byte length less than or equal to 1,000

API Documentation Examples

Supported values for operational parameters using Discrete, Percentage, Range, and user-defined Custom Command Types are shown in the following API documentation examples.

Discrete Value Command Type:
```
{
    "name": "Serial1",
    "type": "Command",
    "parameters": {
        "commandType": "Discrete",
        "value": "Down"
    }
}
```

Continue >>

Percentage (0-10000) Command Type:

```json
{
    "name": "myDevice",
    "type": "Command",
    "parameters": {
        "commandType": "Percentage",
        "value": 1000
    }
}
```

Range (min-max) Command Type:

```json
{
    "name": "myDevice",
    "type": "Command",
    "parameters": {
        "commandType": "Range",
        "value": "100"
    }
}
```

Custom Command Type:

```json
{
    "name": "channel",
    "type": "Command",
    "parameters": {
        "commandType": "channel-control",
        "value": "up"
    }
}
```

[< < Actuators Operation](#)

END.

This document is provided for informational purposes. It is not intended to be a warranty or specification.