

# Hunter Douglas PowerView® Hub API for Home Automation Integration

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# Overview

This document describes the latest PowerView® Hub REST API allowing developers to interact with Hunter Douglas shades with PowerView Motorization.

PowerView Motorization consists of a PowerView Hub plus a collection of motorized shades and other accessories, including remotes, repeaters, secondary hubs, and scene controllers. Shade resources are the central concept in the PowerView API eco-system. Hubs communicate with Shades over a radio interface while the REST API is terminated over an HTTP based interface. Shades are typically organized into Rooms and then controlled either through individual controls or through Scenes. A Scene is a set of one or more Shades located in a single Room that are set to customized positions. So, when a Scene is activated, the Shades in that Scene will move to the positions described in the Scene. Since Scenes may only affect Shades within a single room, there is a Multi-Room Scene resource referenced as a Scene Collection in the API. Scene Collections are simply a set of Scenes that can be activated as one.

In general, most API resources have a number of additional attributes like order, color, icon, etc that are generally used by the PowerView iOS and Android applications to control their display in the application. Resources also tend to contain semi-permanent state information, such as current shade position, firmware revision, etc, that can be periodically queried and updated.

Since Shades are the central resource in the PowerView eco-system, it is useful to understand a few key state relationships between Hubs and Shades. Hubs maintain transient shade state such as position and battery level. Any API call that returns the shade position and/or the battery level is delivering the *last Hub saved value* of these attributes. In general, shades are moved via API calls to Shades, Scenes, and Scene Collections. Since the Hub is always involved in these motion events, it tracks the final shade position and saves it; however, shades can be moved without the Hub's knowledge. An individual can manually move a shade simply by pressing the motion button on the side of the shade. In addition, shades can be moved using a PowerView Motorization handheld remote control device. In both of these cases, the Hub is not told of the shade's new position. Consequently, to ensure an accurate Hub view of shade position, an application may choose to call the `GET /shades/{id}` API with the *refresh* query string set to *true*. This forces the Hub to query that shade for its current position and save it. Similarly, the battery level is transient and is only updated automatically by the Hub once a week. If an application wants to synchronize the battery level state sooner, then the application may choose to call the `GET /shades/{id}` API with the *updateBatteryLevel* query string set to *true*.

Each individual resource has a separate heading exposing its APIs. Each API call is shown as `{OPERATION} /resource[?QUERYSTRING]`. So, to retrieve a particular shade and refresh its position, the API call is documented as:

```
GET /shades/{id}?refresh=true
```

with an optional query string parameter of *refresh*. Since refresh is a boolean, its value can be either *true* or *false*.

Given that the PowerView Hub REST API scheme is *HTTP* and the base path is */api*, the full URL of

the `GET /shades/{id}` with `refresh` API call would be:

```
GET http://{HubIPAddress}/api/shades/{id}?refresh=true
```

So, given a Hub IP Address of `10.0.0.7` and a known shade id of `2312`, typing into a browser's address bar:

```
http://10.0.0.7/api/shades/2312?refresh=true
```

and pressing Enter, will cause the `GET /shades/{id}` API call to be made.

In general, multiple query string options **may not** be used together in a single API call. So, to update the Hub's current view of a shade's position *and* battery level requires two individual API calls.

Most of the service calls described here can be used with both a Generation 1 and Generation 2 PowerView Hub. Any API calls that are only supported by a Generation 2 Hub are identified.

## Version information

*Version* : 2.0.0

## URI scheme

*BasePath* : /api

*Schemes* : HTTP

## Tags

- Firmware Version
- Rooms
- Scene Collections (Multi-Room Scenes)
- Scenes
- Shades
- User Data

## Consumes

- `application/json`

## Produces

- `application/json`

# Resources

## Firmware Version

### Get firmware version information

```
GET /fwversion
```

#### Responses

HTTP Code	Description	Schema
200	Firmware version returned.	<a href="#">HubFirmware</a>
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

#### Example HTTP request

##### Request path

```
/fwversion
```

#### Example HTTP response

##### Response 200

```

{
  "firmware" : {
    "mainProcessor" : {
      "build" : 395,
      "name" : "PV Hub2.0",
      "revision" : 2,
      "subRevision" : 0
    },
    "radio" : {
      "build" : 1307,
      "revision" : 2,
      "subRevision" : 0
    }
  }
}

```

## Rooms

### Get all rooms

GET /rooms

#### Description

- Gets a list of all room ids and the corresponding room data.
- The room data is returned in the same order as the room ids.
- If no rooms exist, then empty arrays for room ids and room data are returned.

#### Responses

HTTP Code	Description	Schema
200	Rooms returned.	<a href="#">RoomsResponse</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

#### Example HTTP request



## Request path

```
/rooms
```

## Example HTTP response

### Response 200

```
{
  "roomData" : [ {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "type" : 0
  } ],
  "roomIds" : [ 7 ]
}
```

## Get a room

```
GET /rooms/{id}
```

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

### Responses

HTTP Code	Description	Schema
200	Room returned.	<a href="#">RoomObject</a>
400	Bad client request.	No Content
404	Resource not found.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content

HTTP Code	Description	Schema
500	Internal server error.	No Content

### Example HTTP request

#### Request path

```
/rooms/7
```

### Example HTTP response

#### Response 200

```
{
  "room" : {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "type" : 0
  }
}
```

## Scene Collections (Multi-Room Scenes)

### Get all scene collections

```
GET /scenecollections
```

#### Description

- Gets a list of all scene collection ids and the corresponding scene collection data.
- The scene collection data is returned in the same order as the scene collection ids.
- If no scene collections exist, then empty arrays for scene collection ids and scene collection data are returned.

#### Responses

HTTP Code	Description	Schema
200	Scene collections returned.	<a href="#">SceneCollectionsResponse</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/scenecollections
```

## Example HTTP response

### Response 200

```
{
  "sceneCollectionData" : [ {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1
  } ],
  "sceneCollectionIds" : [ 7 ]
}
```

## Get a scene collection

```
GET /scenecollections/{id}
```

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

## Responses

HTTP Code	Description	Schema
200	Scene collection returned.	<a href="#">SceneCollectionObject</a>
400	Bad client request.	No Content
404	Resource not found.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

### Example HTTP request

#### Request path

```
/scenecollections/7
```

### Example HTTP response

#### Response 200

```
{
  "sceneCollection" : {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1
  }
}
```

### Activate a scene collection

```
GET /scenecollections?sceneCollectionId={id}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

## Responses

HTTP Code	Description	Schema
200	Activated scene ids returned.	<a href="#">ActivatedScenes</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/scencollections?sceneCollectionId=7
```

## Example HTTP response

### Response 200

```
{
  "sceneIds" : [ 7 ]
}
```

# Scenes

## Get all scenes

```
GET /scenes
```

### Description

- Gets a list of all scene ids and the corresponding scene data.
- The scene data is returned in the same order as the scene ids.

- If no scenes exist, then empty arrays for scene ids and scene data are returned.

## Responses

HTTP Code	Description	Schema
200	Scenes returned.	<a href="#">ScenesResponse</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/scenes
```

## Example HTTP response

### Response 200

```
{
  "sceneData" : [ {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "roomId" : 1385
  } ],
  "sceneIds" : [ 7 ]
}
```

## Get a scene

```
GET /scenes/{id}
```

## Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

## Responses

HTTP Code	Description	Schema
200	Scene returned.	<a href="#">SceneObject</a>
400	Bad client request.	No Content
404	Resource not found.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/scenes/7
```

## Example HTTP response

### Response 200

```
{
  "scene" : {
    "colorId" : 18,
    "iconId" : 24,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "roomId" : 1385
  }
}
```

## Activate a scene

```
GET /scenes?sceneId={id}
```

## Description

- Activates a scene.
- Moves all scene contained shades to their pre-programmed position.
- Changes all scene contained repeater colors to their pre-programmed values.
- Returns the ids of all affected shades.

## Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

## Responses

HTTP Code	Description	Schema
200	Scene activated.	<a href="#">ActivatedShades</a>
400	Bad client request.	No Content
404	Resource not found.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/scenes?sceneId=7
```

## Example HTTP response

### Response 200



```
{
  "shadeIds" : [ 7 ]
}
```

## Shades

### Get all shades

GET /shades

#### Description

- Gets a list of all shade ids and the corresponding shade data.
- The shade data is returned in the same order as the shade ids.
- The results may be filtered by the group and room id query parameters.
- If no shades exist, then empty arrays for shade ids and shade data are returned.

#### Parameters

Type	Name	Description	Schema
Query	<b>groupId</b> <i>optional</i>	Filter results to only include those shades in the specified group.	integer
Query	<b>roomId</b> <i>optional</i>	Filter results to only include those shades in the specified room.	integer

#### Responses

HTTP Code	Description	Schema
200	Shades returned.	<a href="#">ShadesResponse</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/shades
```

### Request query

```
{  
  "groupId" : 37952,  
  "roomId" : 1385  
}
```

## Example HTTP response

### Response 200

```
{  
  "shadeData" : [ {  
    "batteryStatus" : 3,  
    "batteryStrength" : 78,  
    "firmware" : {  
      "build" : 564,  
      "revision" : 2,  
      "subRevision" : 0,  
      "index" : 25  
    },  
    "groupId" : 37952,  
    "id" : 7,  
    "name" : "TmFtZQ==",  
    "order" : 1,  
    "positions" : {  
      "posKind1" : 1,  
      "posKind2" : 1,  
      "position1" : 59050,  
      "position2" : 59050  
    },  
    "roomId" : 1385,  
    "secondaryName" : "VG9wIFJhaWwgU2hhZGUgTmFtZQ==",  
    "type" : 18  
  } ],  
  "shadeIds" : [ 7 ]  
}
```

## Update shade positions for a group

PUT /shades

## Description

- Updates the position for each shade in a group.

## Parameters

Type	Name	Description	Schema
Query	<b>groupId</b> <i>required</i>	Unique id of the associated group.	integer

## Body parameter

Name : body

Flags : required

Name	Description	Schema
<b>shade</b> <i>required</i>	<b>Example :</b> <a href="#">ShadeUpdate</a>	<a href="#">ShadeUpdate</a>

## Responses

HTTP Code	Description	Schema
200	Shades moved.	<a href="#">ActivatedShades</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

/shades

### Request query

```
{
  "groupId" : 37952
}
```

### Request body

```
{
  "shade" : {
    "motion" : "jog",
    "positions" : {
      "posKind1" : 1,
      "posKind2" : 1,
      "position1" : 59050,
      "position2" : 59050
    }
  }
}
```

### Example HTTP response

#### Response 200

```
{
  "shadeIds" : [ 7 ]
}
```

## Get a shade

```
GET /shades/{id}
```

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer
Query	<b>refresh</b> <i>optional</i>	Request position status update from shade.	boolean
Query	<b>requestFirmw areRev</b> <i>optional</i>	Request firmware revision status update from shade.	boolean

Type	Name	Description	Schema
Query	<b>updateBatteryLevel</b> <i>optional</i>	Request battery level status update from shade.	boolean

## Responses

HTTP Code	Description	Schema
200	Shade returned.	<a href="#">ShadeRequestObject</a>
400	Bad client request.	No Content
404	Resource not found.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/shades/7
```

### Request query

```
{
  "refresh" : true,
  "requestFirmwareRev" : true,
  "updateBatteryLevel" : true
}
```

## Example HTTP response

### Response 200

```

{
  "shade" : {
    "batteryStatus" : 3,
    "batteryStrength" : 78,
    "firmware" : {
      "build" : 564,
      "revision" : 2,
      "subRevision" : 0,
      "index" : 25
    },
    "groupId" : 37952,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "positions" : {
      "posKind1" : 1,
      "posKind2" : 1,
      "position1" : 59050,
      "position2" : 59050
    },
    "roomId" : 1385,
    "secondaryName" : "VG9wIFJhaWwgU2hhZGUgTmFtZQ==",
    "type" : 18,
    "timedOut" : true
  }
}

```

## Update a shade

```
PUT /shades/{id}
```

### Description

- Updates an already-existing shade.
- The object returned from the server contains the full representation of the updated shade (all fields, not just the updated ones)
- Only positions or motion may be updated.
- To jog a shade, send a body that only has a motion operation in it.

### Parameters

Type	Name	Description	Schema
Path	<b>id</b> <i>required</i>	Unique id of the resource.	integer

## Body parameter

Name : body

Flags : required

Name	Description	Schema
<b>shade</b> <i>required</i>	<b>Example</b> : <a href="#">ShadeUpdate</a>	<a href="#">ShadeUpdate</a>

## Responses

HTTP Code	Description	Schema
<b>200</b>	Shade updated.	<a href="#">ShadeObject</a>
<b>400</b>	Bad client request.	No Content
<b>404</b>	Resource not found.	No Content
<b>423</b>	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
<b>500</b>	Internal server error.	No Content

## Example HTTP request

### Request path

```
/shades/7
```

### Request body

```
{
  "shade" : {
    "motion" : "jog",
    "positions" : {
      "posKind1" : 1,
      "posKind2" : 1,
      "position1" : 59050,
      "position2" : 59050
    }
  }
}
```

## Example HTTP response

### Response 200

```
{
  "shade" : {
    "batteryStatus" : 3,
    "batteryStrength" : 78,
    "firmware" : {
      "build" : 564,
      "revision" : 2,
      "subRevision" : 0,
      "index" : 25
    },
    "groupId" : 37952,
    "id" : 7,
    "name" : "TmFtZQ==",
    "order" : 1,
    "positions" : {
      "posKind1" : 1,
      "posKind2" : 1,
      "position1" : 59050,
      "position2" : 59050
    },
    "roomId" : 1385,
    "secondaryName" : "VG9wIFJhaWwgU2hhZGUgTmFtZQ==",
    "type" : 18
  }
}
```

## User Data

### Get user data

GET /userdata

#### Parameters

Type	Name	Description	Schema
Query	<b>includeCounts</b> <i>optional</i>	Should counts of database objects, rooms, shades, scenes, etc, be included in the returned user data (This is an expensive operation that should not normally be used).	boolean



## Responses

HTTP Code	Description	Schema
200	User data returned.	<a href="#">UserDataObject</a>
400	Bad client request.	No Content
423	Hub is temporarily busy for maintenance (Always returns UserData).	No Content
500	Internal server error.	No Content

## Example HTTP request

### Request path

```
/userdata
```

### Request query

```
{  
  "includeCounts" : true  
}
```

## Example HTTP response

### Response 200

```
{  
  "userData" : {  
    "autoBackup" : true,  
    "color" : {  
      "blue" : 155,  
      "brightness" : 50,  
      "green" : 107,  
      "red" : 12  
    },  
    "dns" : "192.168.1.254",  
    "editingEnabled" : true,  
    "enableScheduledEvents" : true,  
    "firmware" : {  
      "firmware" : {  
        "mainProcessor" : {  
          "build" : 395,  
          "name" : "PV Hub2.0",  
        }  
      }  
    }  
  }  
}
```

```

    "revision" : 2,
    "subRevision" : 0
  },
  "radio" : {
    "build" : 1307,
    "revision" : 2,
    "subRevision" : 0
  }
},
"gateway" : "192.168.1.1",
"hubName" : "SHViYnk=",
"ip" : "192.168.1.100",
"localTimeDataSet" : true,
"macAddress" : "00:26:74:af:fd:ae",
"mask" : "255.255.255.0",
"remoteConnectEnabled" : true,
"rfID" : "0x695D",
"rfIDInt" : 26973,
"rfStatus" : 1,
"serialNumber" : "927FD402C11CE424",
"setupComplete" : true,
"ssid" : "cisco789",
"staticIp" : false,
"times" : {
  "currentOffset" : -21600,
  "latitude" : 39.92394425904774,
  "localSunriseInMinutes" : 379,
  "localSunsetInMinutes" : 1187,
  "longitude" : -105.1006371575785,
  "timezone" : "America/Denver"
}
}
}

```

## Definitions

### ActivatedScenes

Name	Description	Schema
<b>sceneIds</b> <i>required</i>	List of activated scenes. <b>Example</b> : [ "UniqueId" ]	< UniqueId > array

### ActivatedShades

Name	Description	Schema
<b>shadeIds</b> <i>required</i>	List of affected shades. <b>Example</b> : [ "UniqueId" ]	< UniqueId > array

## AutoBackup

When true, backups will be sent periodically to the Hunter Douglas server. Otherwise, no automatic backups will occur.

Type : boolean

## BatteryStatus

0 = No Status Available, 1 = Low, 2 = Medium, 3 = High, 4 = Plugged In

Type : enum (0, 1, 2, 3, 4)

## BatteryStrength

The current strength of the battery.

Type : integer

## Color

Specifies the color of the LEDs.

Name	Description	Schema
<b>blue</b> <i>required</i>	The intensity of the blue portion of the LED. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 155	integer
<b>brightness</b> <i>required</i>	The brightness of the LED. Range of 0 to 100%. <b>Minimum value</b> : 0 <b>Maximum value</b> : 100 <b>Example</b> : 50	integer
<b>green</b> <i>required</i>	The intensity of the green portion of the LED. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 107	integer

Name	Description	Schema
<b>red</b> <i>required</i>	The intensity of the red portion of the LED. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 12	integer

## ColorId

Id of the resource display color.

*Type* : integer (int32)

## DeviceType

Device type (0 = shade, 1 = repeater). If this field is missing, the scene member is assumed to be a shade.

*Type* : enum (0, 1)

## Dns

The DNS server IP address used by the hub.

*Type* : string

## EditingEnabled

Indicates whether or not the UI should "lock" editing (that is, only allow Scene activation and Shade movement within Rooms).

*Type* : boolean

## EnableScheduledEvents

When true, scheduled events should work as expected; when false, scheduled events should not execute. Note that setting this field to true/false should not impact the "enabled" setting on individual ScheduledEvents. It is a top-level override.

*Type* : boolean

## Firmware

Name	Description	Schema
<b>build</b> <i>required</i>	Patch firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 65535 <b>Example</b> : 564	integer
<b>revision</b> <i>required</i>	Major firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 2	integer
<b>subRevision</b> <i>required</i>	Minor firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 0	integer

## Gateway

The gateway IP address used by the hub.

*Type* : string

## GroupId

Unique id of the associated group.

*Type* : integer

## HubFirmware

There are multiple processors in the hub (the primary processor and the Nordic chip for RF processing); the "mainProcessor" sub-key is intended to indicate that the firmware information being returned is for the main processor on the hub, not the Nordic.

Name	Description	Schema
<b>firmware</b> <i>required</i>	<b>Example</b> : { "mainProcessor" : { "build" : 395, "name" : "PV Hub2.0", "revision" : 2, "subRevision" : 0 }, "radio" : { "build" : 1307, "revision" : 2, "subRevision" : 0 } }	<a href="#">firmware</a>

**firmware**

Name	Description	Schema
<b>mainProcessor</b> <i>required</i>	Example : "object"	object
<b>radio</b> <i>required</i>	Example : Firmware	Firmware

## HubName

Base64-encoded hub name.

*Type* : string

## IconId

Id of the resource display icon.

*Type* : integer (int32)

## IpAddress

*Type* : string

## Latitude

Latitude.

*Type* : number (float)

## LocalSunriseTimeInMinutes

Number of minutes into the day that sunrise occurs (based on lat/long).

*Type* : integer

## LocalSunsetTimeInMinutes

Number of minutes into the day that sunset occurs (based on lat/long).

*Type* : integer

## Longitude

Longitude.

*Type* : number (float)

## **Mask**

The network mask used by the hub.

*Type* : string

## **Minutes**

Number of minutes.

*Type* : integer

## **Name**

Base64 encoded name.

*Type* : string (byte)

## **Offset**

Number of seconds before or after UTC.

*Type* : integer (int32)

## **Order**

Display order of the resource.

*Type* : integer (int32)

## **PositionKind**

The type of position - 0 = None, 1 = Primary Rail, 2 = Secondary Rail, 3 = Vane Tilt, 4 = Error.

*Type* : enum (0, 1, 2, 3, 4)

## **PositionValue**

The value, with 0 = closed and 65535 = open.

*Type* : integer

## **RepeaterId**

The repeater id associated to this member.

Type : integer

## RfID

The ID of the RF network on which the hub talks to shades, represented in hexadecimal. 0x1111 or 0xFFFF both mean "no network set."

Type : string

## RfIDInt

The integer value of the RF network ID on which the hub talks to shades. Values of 4369 or 65535 indicate that no network has been set.

Type : integer (int32)

## RfStatus

0 means the hub is not busy; 1 means the hub is busy (discovering shades, joining a network, etc).

Type : enum (0, 1)

## Room

Name	Description	Schema
<b>colorId</b> <i>required</i>	<b>Example :</b> <a href="#">ColorId</a>	<a href="#">ColorId</a>
<b>iconId</b> <i>required</i>	<b>Example :</b> <a href="#">IconId</a>	<a href="#">IconId</a>
<b>id</b> <i>required</i>	<b>Example :</b> <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>name</b> <i>required</i>	<b>Example :</b> <a href="#">Name</a>	<a href="#">Name</a>
<b>order</b> <i>required</i>	<b>Example :</b> <a href="#">Order</a>	<a href="#">Order</a>
<b>type</b> <i>required</i>	<b>Example :</b> <a href="#">RoomType</a>	<a href="#">RoomType</a>



## RoomId

Unique id of the associated room.

Type : integer

## RoomObject

Name	Description	Schema
<b>room</b> <i>required</i>	<b>Example :</b> <a href="#">Room</a>	<a href="#">Room</a>

## RoomType

Room type (0 Regular Room, 1 Repeater Room).

Type : enum (0, 1)

## RoomsResponse

Name	Description	Schema
<b>roomData</b> <i>required</i>	Room data for included rooms. <b>Example :</b> [ " <a href="#">Room</a> " ]	< <a href="#">Room</a> > array
<b>roomIds</b> <i>required</i>	Unique ids of all rooms. <b>Example :</b> [ " <a href="#">UniqueId</a> " ]	< <a href="#">UniqueId</a> > array

## Scene

Name	Description	Schema
<b>colorId</b> <i>required</i>	<b>Example :</b> <a href="#">ColorId</a>	<a href="#">ColorId</a>
<b>iconId</b> <i>required</i>	<b>Example :</b> <a href="#">IconId</a>	<a href="#">IconId</a>
<b>id</b> <i>required</i>	<b>Example :</b> <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>name</b> <i>required</i>	<b>Example :</b> <a href="#">Name</a>	<a href="#">Name</a>

Name	Description	Schema
<b>order</b> <i>required</i>	Example : <a href="#">Order</a>	<a href="#">Order</a>
<b>roomId</b> <i>required</i>	Example : <a href="#">RoomId</a>	<a href="#">RoomId</a>

## SceneCollection

Name	Description	Schema
<b>colorId</b> <i>required</i>	Example : <a href="#">ColorId</a>	<a href="#">ColorId</a>
<b>iconId</b> <i>required</i>	Example : <a href="#">IconId</a>	<a href="#">IconId</a>
<b>id</b> <i>required</i>	Example : <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>name</b> <i>required</i>	Example : <a href="#">Name</a>	<a href="#">Name</a>
<b>order</b> <i>required</i>	Example : <a href="#">Order</a>	<a href="#">Order</a>

## SceneCollectionId

The id of the Scene Collection to which this member belongs.

Type : integer

## SceneCollectionObject

Name	Description	Schema
<b>sceneCollection</b> <i>required</i>	Example : <a href="#">SceneCollection</a>	<a href="#">SceneCollection</a>

## SceneCollectionsResponse

Name	Description	Schema
<b>sceneCollectionData</b> <i>required</i>	Scene collection data for included scene collections. <b>Example</b> : [ "SceneCollection" ]	< SceneCollection > array
<b>sceneCollectionIds</b> <i>required</i>	Unique ids of all scene collections. <b>Example</b> : [ "UniqueId" ]	< UniqueId > array

## SceneObject

Name	Description	Schema
<b>scene</b> <i>required</i>	<b>Example</b> : Scene	Scene

## ScenesResponse

Name	Description	Schema
<b>sceneData</b> <i>required</i>	Scene data for included scenes. <b>Example</b> : [ "Scene" ]	< Scene > array
<b>sceneIds</b> <i>required</i>	Unique ids of all scenes. <b>Example</b> : [ "UniqueId" ]	< UniqueId > array

## SerialNumber

The unique id / serial number of the hub.

*Type* : string

## SetupComplete

Indicates whether the initial setup of a hub has been completed.

*Type* : boolean

## Shade

Name	Description	Schema
<b>batteryStatus</b> <i>required</i>	<b>Example</b> : BatteryStatus	BatteryStatus

Name	Description	Schema
<b>batteryStrength</b> <i>required</i>	<b>Example :</b> <a href="#">BatteryStrength</a>	<a href="#">BatteryStrength</a>
<b>firmware</b> <i>optional</i>	<b>Example :</b> <a href="#">ShadeFirmware</a>	<a href="#">ShadeFirmware</a>
<b>groupId</b> <i>optional</i>	<b>Example :</b> <a href="#">GroupId</a>	<a href="#">GroupId</a>
<b>id</b> <i>required</i>	<b>Example :</b> <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>name</b> <i>optional</i>	<b>Example :</b> <a href="#">Name</a>	<a href="#">Name</a>
<b>order</b> <i>optional</i>	<b>Example :</b> <a href="#">Order</a>	<a href="#">Order</a>
<b>positions</b> <i>optional</i>	<b>Example :</b> <a href="#">ShadePosition</a>	<a href="#">ShadePosition</a>
<b>roomId</b> <i>optional</i>	<b>Example :</b> <a href="#">RoomId</a>	<a href="#">RoomId</a>
<b>secondaryName</b> <i>optional</i>	<b>Example :</b> <a href="#">ShadeSecondaryName</a>	<a href="#">ShadeSecondaryName</a>
<b>type</b> <i>required</i>	<b>Example :</b> <a href="#">ShadeType</a>	<a href="#">ShadeType</a>

## ShadeData

Name	Description	Schema
<b>id</b> <i>required</i>	<b>Example :</b> <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>type</b> <i>required</i>	<b>Example :</b> <a href="#">ShadeType</a>	<a href="#">ShadeType</a>

# ShadeFirmware

*Polymorphism* : Composition

Name	Description	Schema
<b>build</b> <i>required</i>	Patch firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 65535 <b>Example</b> : 564	integer
<b>index</b> <i>required</i>	The index number. <b>Example</b> : 25	integer
<b>revision</b> <i>required</i>	Major firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 2	integer
<b>subRevision</b> <i>required</i>	Minor firmware version number. <b>Minimum value</b> : 0 <b>Maximum value</b> : 255 <b>Example</b> : 0	integer

# ShadeObject

Name	Description	Schema
<b>shade</b> <i>required</i>	<b>Example</b> : <a href="#">Shade</a>	<a href="#">Shade</a>

# ShadePosition

Specifies the position of the shade. Top-down shades are in the same coordinate space as bottom-up shades. Shade position values for top-down shades would be reversed for bottom-up shades. For example, since 65535 is the open value for a bottom-up shade, it is the closed value for a top-down shade. The top-down/bottom-up shade is different in that instead of the top and bottom rail operating in one coordinate space like the top-down and the bottom-up, it operates in two where the top (middle) rail closed value is 0 and the bottom (primary) rail closed position is also 0 and fully open for both is 65535.

Name	Description	Schema
<b>posKind1</b> <i>required</i>	<b>Example</b> : <a href="#">PositionKind</a>	<a href="#">PositionKind</a>

Name	Description	Schema
<b>posKind2</b> <i>optional</i>	<b>Example :</b> <a href="#">PositionKind</a>	<a href="#">PositionKind</a>
<b>position1</b> <i>required</i>	<b>Example :</b> <a href="#">PositionValue</a>	<a href="#">PositionValue</a>
<b>position2</b> <i>optional</i>	<b>Example :</b> <a href="#">PositionValue</a>	<a href="#">PositionValue</a>

## ShadeRequest

*Polymorphism* : Composition

Name	Description	Schema
<b>batteryStatus</b> <i>required</i>	<b>Example :</b> <a href="#">BatteryStatus</a>	<a href="#">BatteryStatus</a>
<b>batteryStreng th</b> <i>required</i>	<b>Example :</b> <a href="#">BatteryStrength</a>	<a href="#">BatteryStrength</a>
<b>firmware</b> <i>optional</i>	<b>Example :</b> <a href="#">ShadeFirmware</a>	<a href="#">ShadeFirmware</a>
<b>groupId</b> <i>optional</i>	<b>Example :</b> <a href="#">GroupId</a>	<a href="#">GroupId</a>
<b>id</b> <i>required</i>	<b>Example :</b> <a href="#">UniqueId</a>	<a href="#">UniqueId</a>
<b>name</b> <i>optional</i>	<b>Example :</b> <a href="#">Name</a>	<a href="#">Name</a>
<b>order</b> <i>optional</i>	<b>Example :</b> <a href="#">Order</a>	<a href="#">Order</a>
<b>positions</b> <i>optional</i>	<b>Example :</b> <a href="#">ShadePosition</a>	<a href="#">ShadePosition</a>
<b>roomId</b> <i>optional</i>	<b>Example :</b> <a href="#">RoomId</a>	<a href="#">RoomId</a>

Name	Description	Schema
<b>secondaryName</b> <i>optional</i>	<b>Example</b> : <a href="#">ShadeSecondaryName</a>	<a href="#">ShadeSecondaryName</a>
<b>timedOut</b> <i>required</i>	Did the shade not respond to the request. <b>Example</b> : <code>true</code>	boolean
<b>type</b> <i>required</i>	<b>Example</b> : <a href="#">ShadeType</a>	<a href="#">ShadeType</a>

## ShadeRequestObject

Name	Description	Schema
<b>shade</b> <i>required</i>	<b>Example</b> : <a href="#">ShadeRequest</a>	<a href="#">ShadeRequest</a>

## ShadeSecondaryName

The secondary name of the shade base64 encoded. Used by the Apple Home application as the secondary service name to control shades with blackout blinds or a top rail movement.

*Type* : string (byte)

## ShadeType

The shade type.

*Type* : integer

## ShadeUpdate

Name	Description	Schema
<b>motion</b> <i>optional</i>	The motion operation to perform on a shade. <b>Example</b> : <code>"jog"</code>	enum (jog)
<b>positions</b> <i>optional</i>	<b>Example</b> : <a href="#">ShadePosition</a>	<a href="#">ShadePosition</a>

## ShadesResponse

Name	Description	Schema
<b>shadeData</b> <i>required</i>	Shade data for included shades. <b>Example</b> : [ "Shade" ]	< Shade > array
<b>shadeIds</b> <i>required</i>	Unique ids of all shades. <b>Example</b> : [ "UniqueId" ]	< UniqueId > array

## StaticIp

True, if a static IP is assigned to the hub. False, if DHCP was used for IP address assignment

*Type* : boolean

## SunriseToday

UTC time of sunrise for the current lat/long, today.

*Type* : string

## SunsetToday

UTC time of sunset for the current lat/long, today.

*Type* : string

## Times

Name	Description	Schema
<b>currentOffset</b> <i>required</i>	<b>Example</b> : Offset	Offset
<b>latitude</b> <i>optional</i>	<b>Example</b> : Latitude	Latitude
<b>localSunriseInMinutes</b> <i>optional</i>	<b>Example</b> : LocalSunriseTimeInMinutes	LocalSunriseTimeInMinutes
<b>localSunsetInMinutes</b> <i>optional</i>	<b>Example</b> : LocalSunsetTimeInMinutes	LocalSunsetTimeInMinutes



Name	Description	Schema
<b>longitude</b> <i>optional</i>	<b>Example :</b> <a href="#">Longitude</a>	<a href="#">Longitude</a>
<b>timezone</b> <i>required</i>	<b>Example :</b> <a href="#">Timezone</a>	<a href="#">Timezone</a>

## Timezone

Timezone name.

*Type :* string

## UTC

Current UTC time on the hub.

*Type :* string

## UniqueId

Unique resource identifier.

*Type :* integer

## UniqueIds

Unique ids of all requested resources.

*Type :* < [UniqueId](#) > array

## UserData

User data associated with this hub.

Name	Description	Schema
<b>autoBackup</b> <i>required</i>	<b>Example :</b> <a href="#">AutoBackup</a>	<a href="#">AutoBackup</a>
<b>color</b> <i>required</i>	Specifies the color of the repeater LEDs. <b>Example :</b> <a href="#">Color</a>	<a href="#">Color</a>
<b>dns</b> <i>required</i>	<b>Example :</b> <a href="#">Dns</a>	<a href="#">Dns</a>

Name	Description	Schema
<b>editingEnabled</b> <i>required</i>	<b>Example :</b> <a href="#">EditingEnabled</a>	<a href="#">EditingEnabled</a>
<b>enableScheduledEvents</b> <i>required</i>	<b>Example :</b> <a href="#">EnableScheduledEvents</a>	<a href="#">EnableScheduledEvents</a>
<b>firmware</b> <i>required</i>	<b>Example :</b> <a href="#">HubFirmware</a>	<a href="#">HubFirmware</a>
<b>gateway</b> <i>required</i>	<b>Example :</b> <a href="#">Gateway</a>	<a href="#">Gateway</a>
<b>hubName</b> <i>required</i>	<b>Example :</b> <a href="#">HubName</a>	<a href="#">HubName</a>
<b>ip</b> <i>required</i>	<b>Example :</b> <a href="#">IpAddress</a>	<a href="#">IpAddress</a>
<b>localTimeDataSet</b> <i>required</i>	Whether or not time has been set by the app or remote connect. <b>Example :</b> <code>true</code>	boolean
<b>macAddress</b> <i>required</i>	The MAC address of the hub. <b>Example :</b> <code>"00:26:74:af:fd:ae"</code>	string
<b>mask</b> <i>required</i>	<b>Example :</b> <a href="#">Mask</a>	<a href="#">Mask</a>
<b>remoteConnectEnabled</b> <i>required</i>	Whether or not the hub is currently registered with Remote Connect. <b>Example :</b> <code>true</code>	boolean
<b>rfID</b> <i>required</i>	<b>Example :</b> <a href="#">RfID</a>	<a href="#">RfID</a>
<b>rfIDInt</b> <i>required</i>	<b>Example :</b> <a href="#">RfIDInt</a>	<a href="#">RfIDInt</a>
<b>rfStatus</b> <i>required</i>	<b>Example :</b> <a href="#">RfStatus</a>	<a href="#">RfStatus</a>

Name	Description	Schema
<b>serialNumber</b> <i>required</i>	<b>Example :</b> <a href="#">SerialNumber</a>	<a href="#">SerialNumber</a>
<b>setupComplete</b> <i>required</i>	<b>Example :</b> <a href="#">SetupComplete</a>	<a href="#">SetupComplete</a>
<b>ssid</b> <i>required</i>	The service set identifier - the unique identifier for the wireless network <b>Example :</b> "cisco789"	string
<b>staticIp</b> <i>required</i>	<b>Example :</b> <a href="#">StaticIp</a>	<a href="#">StaticIp</a>
<b>times</b> <i>required</i>	<b>Example :</b> <a href="#">Times</a>	<a href="#">Times</a>

## UserDataObject

Name	Description	Schema
<b>userData</b> <i>required</i>	<b>Example :</b> <a href="#">UserData</a>	<a href="#">UserData</a>