

# ZUM-HUB4

# 4-Series<sup>™</sup> Control Processor for Zūm<sup>®</sup> Lighting Control System

Product Manual Crestron Electronics, Inc.

#### **Original Instructions**

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

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# Overview

The Crestron® <u>ZUM-HUB4</u> enables centralized management for Zūm® commercial lighting systems of up to 1,000 rooms with an Ethernet switch (sold separately) across Zūm wired, Zūm wireless, and external spaces. The device provides a web-based user interface for control. A built-in time clock enables room lighting and occupancy and vacancy sensing automation. The ZUM-HUB4 can also be integrated with other Crestron lighting systems and control systems.

The ZUM-HUB4 is featured in three kits.

• <u>ZUML-HUB4-GW</u>: 4-Series<sup>™</sup> Control Processor for Zūm<sup>®</sup> Lighting Control System with Wireless Gateway and Power Supply

Contains:

- ZUM-HUB4 and <u>PW-2420RU</u> power pack
- ZUMNET-GATEWAY: Zūm® Net Wireless Gateway for Zūm Light Control System
- <u>PW-2407WU</u>: Wall Mount Power Pack, 24VDC, 0.75A, 2.1 mm, Universal For use with the ZUMNET-GATEWAY
- <u>ZUML-HUB4-PAK</u>: Zūm<sup>®</sup> Lighting Control Processor Panel, Basic

Contains:

- ZUM-HUB4 and <u>PW-2420RU</u> power pack
- CEN-SW-POE-5: 5-Port PoE Switch
- GLEX-FT-24-HC: Feed-Through Enclosure, 24 Circuits, Hinged Cover
- <u>ZUML-HUB4-CN-PAK</u>: Zūm<sup>®</sup> Lighting Control Processor Panel, Expanded

Contains:

- ZUM-HUB4 and <u>PW-2420RU</u> power pack
- ° <u>DIN-AP4</u>: 4-Series<sup>™</sup> DIN Rail Control System
- DIN-EN-6X18: Enclosure for DIN Rail Devices, 6 DIN Rails, 18 M Wide
- CEN-SW-POE-5 (x2): 5-Port PoE Switch
- DIN-HUB (x2): DIN Rail Cresnet Distribution Hub
- <u>DIN-PWS60</u> (x2): DIN Rail 60 Watt Cresnet<sup>®</sup> Power Supply For use with the DIN-HUB
- Features
- Physical Description

# Features

- Centralized management for Zūm® commercial lighting systems
- Provides web-based user interface for easy configuration, control, scheduling, and monitoring
- Time clock for room lighting automation and sensing behavior
- Daisy-chain up to 20 Zūm Net load controllers (sold separately) via their built-in Zūm Net ports for room-to-room communication
- Use with an Ethernet switch (sold separately) to support multiple Zūm Net daisy-chains up to 1,000 rooms
- Daisy-chain up to 32 Zūm Link devices (sold separately) via their built-in Zūm Link ports for in-room communication
- BACnet<sup>™</sup> communication supports control for up to 9,000 BACnet objects
- Dedicated Control Subnet
- Gigabit Ethernet networking
- Enterprise-grade security
- Enables integration with other Crestron lighting systems, control systems, touch screens, shading, HVAC, and more
- Single-space rack-mountable
- Universal 100-240V external power supply

### Zūm Net Wired Technology

Zūm Net wired technology offers room-to-room communication. Control a room with one Zūm Net device (<u>ZUMNET-JBOX-DALI</u>, <u>ZUMNET-JBOX-16A-LV</u>, sold separately), and daisy-chain up to 20 Zūm Net devices with <u>CBL-CAT5E-ZUMNET-P</u> cable. For centralized management of a Zūm Wired System, connect the chain directly to a ZUM-HUB4 or multiple chains to an Ethernet switch (sold separately) to support up to 1,000 rooms.

### Web-Based Management

The web browser user interface can manage, monitor, and schedule all of the available rooms on the network. Use a laptop computer (not included) to configure devices to work with the ZUM-HUB4. Active lighting scenes, daylight levels, occupancy detection, and scheduled time clock events are displayed. Errors are shown to facilitate troubleshooting.

### **Time Clock**

A built-in time clock enables automated lighting control based on the time of day. Assign a Room Category (such as Office or Hallway) for consistent control and programming across multiple rooms. The clock allows Day Pattern arrangement for each Room Category, with up to 24 Room States scheduled over a 24 hour period. Different Day Patterns can be defined and assigned to the calendar, which is pre-populated with typical day patterns and a selection of U.S. holidays.

## BACnet<sup>™</sup> Communications Protocol

Communicate with a Building Management System (BMS) to provide control of fire/life safety, lighting, and other building automation systems. The ZUM-HUB4 supports up to 9,000 BACnet objects.

### **Crestron XiO Cloud® Service Integration**

Use Crestron XiO Cloud functionality for remote commissioning and monitoring of a ZUM-HUB4 control system.

## Zūm Wireless Integration

Integration with existing Zūm Wireless installations is achieved with a <u>ZUMNET-GATEWAY</u> (not supplied), which connects to the ZUM-HUB4 via Ethernet.

## Zūm System Integration with Other Crestron Control Systems

In addition to managing rooms equipped with Zūm lighting control, the ZUM-HUB4 enables integration with other Crestron systems over an Ethernet connection. Two methods of integration are available:

- **External Rooms**: A virtual room using legacy or conventional Crestron lighting control can be added to the Zūm network to be monitored, controlled and scheduled.
- **Mirrored Rooms**: An external Crestron system controls and monitors a room equipped with a Zūm system. Mirrored rooms allow for room control with a Crestron touch screen or handheld remote, as well as integration with shading, climate control, AV, and other equipment.

# **Physical Description**



#### **Connectors and Card Slots**

| MEMORY           | (1) SD memory card slot;<br>Accepts one 32 GB SD or SDHC card to enable logging and for troubleshooting<br>purposes   |
|------------------|---|
| USB              | (1) USB Type A connector, female;<br>USB 2.0 host port (not used)   |
| LAN              | (1) 8-pin RJ-45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port;<br>Connects to the customer's LAN   |
| CONTROL SUBNET   | (1) 8-pin RJ-45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port;<br>Provides a dedicated local network for Zūm Net wireless gateways                 |
| NET              | (1) 4-pin 3.5 mm detachable terminal block;<br>Not used   |
| 24VDC 2.0A       | <ul> <li>(1) 2.1 x 5.5 mm DC power connector;</li> <li>24VDC power input;</li> <li><u>PW-2420RU</u> power pack included;</li> <li>Passes through to NET port</li> </ul> |
| G                | (1) 6-32 screw;<br>Chassis ground lug   |
| COMPUTER (front) | (1) USB Type B connector, female;<br>USB 2.0 device port for configuration via computer console (cable included)  |

#### **Controls and Indicators**

| PWR                      | (1) Green LED;<br>Indicates operating power supplied from the included power pack  |
|--------------------------|--|
| NET                      | (1) Amber LED;<br>Not used   |
| MSG                      | (1) Red LED;<br>Indicates that the ZUM-HUB4 has generated an error message   |
| HW-R                     | (1) Recessed pushbutton for hardware reset   |
| SW-R                     | (1) Recessed pushbutton for software reset   |
| LAN (rear)               | (2) Bi-color green/amber LEDs;<br>Left LED indicates Ethernet link status and connection speed;<br>Right LED indicates Ethernet activity |
| CONTROL SUBNET<br>(rear) | (2) Bi-color green/amber LEDs;<br>Left LED indicates Ethernet link status and connection speed;<br>Right LED indicates Ethernet activity |

# Specifications

ZUM-HUB4 specifications for device support and time clock, communications, connectors and card slots, controls and indicators, power, environmental, dimensions, weight, and compliance certifications.

- Product Specifications
- Dimension Drawings

# **Product Specifications**

#### Device Support and Time Clock

| Rooms                                | 1,000 maximum;  |  |
|--------------------------------------|---|--|
|                                      | Zūm wired, Zūm wireless, and external   |  |
| External Rooms and<br>Mirrored Rooms | Yaries by control system based on hardware capabilities and program complexity of the external processor  |  |
| Communications                       |   |  |
| Ethernet                             | 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half<br>duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH,<br>SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE<br>802.1X, SNMP, IPv4 or IPv6, Active Directory® authentication, IIS v.6.0 web<br>server |  |
| Control Subnet                       | 10/100/1000 Mbps Ethernet, auto-switching, auto-negotiating, auto-discovery,<br>full/half duplex, DHCP server, DNS Server, port forwarding, isolation mode  |  |
| USB                                  | Supports computer console via front panel USB 2.0 device port   |  |
| Connectors and Card                  | Slots   |  |
| MEMORY                               | (1) SD memory card slot;<br>Accepts one 32 GB SD or SDHC card to enable logging and for troubleshooting<br>purposes   |  |
| USB                                  | (1) USB Type A connector, female;<br>USB 2.0 host port;<br>For firmware upgrades  |  |
| LAN                                  | (1) 8-pin RJ-45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port;<br>Connects to the customer's LAN   |  |
| CONTROL SUBNET                       | (1) 8-pin RJ-45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port;<br>Provides a dedicated local network for Zūm Net wireless gateways and wired<br>rooms  |  |

| NET                 | (1) 4-pin 3.5 mm detachable terminal block;  |
|---------------------|--|
| (24 Y Z G)          | Connects to a <u>GLS-SIM</u> which facilitate Demand Response when connected to a non-system sensor, such as a <u>GLS-ODT-C-NS</u> ;<br>Not used for power |
| 24VDC 2.0A          | (1) 2.1 x 5.5 mm DC power connector;<br>24VDC power input;<br><u>PW-2420RU</u> power pack included   |
| G                   | (1) 6-32 screw;<br>Chassis ground lug  |
| COMPUTER<br>(front) | (1) USB Type B connector, female;<br>USB 2.0 device port for configuration via computer console (cable included)   |

#### Controls & Indicators

| PWR                      | (1) Green LED;<br>Indicates operating power supplied from the included power pack  |
|--------------------------|--|
| NET                      | (1) Amber LED;<br>Not used   |
| MSG                      | (1) Red LED;<br>Indicates that the ZUM-HUB4 has generated an error message   |
| HW-R                     | (1) Recessed pushbutton for hardware reset   |
| SW-R                     | (1) Recessed pushbutton for software reset   |
| LAN (rear)               | (2) Bi-color green/amber LEDs;<br>Left LED indicates Ethernet link status and connection speed;<br>Right LED indicates Ethernet activity |
| CONTROL SUBNET<br>(rear) | (2) Bi-color green/amber LEDs;<br>Left LED indicates Ethernet link status and connection speed;<br>Right LED indicates Ethernet activity |
| Power                    |  |
| Power Pack (included)    | Input: 100–240VAC, 50/60 Hz;<br>Output: 2.5A @ 24VDC<br>Model: <u>PW-2420RU</u>  |
| Power Consumption        | 15 W   |
| Environmental            |  |
| Temperature              | 41° to 113°F (5° to 45°C)  |
| Humidity                 | 10% to 90% RH (noncondensing)  |
| Heat Dissipation         | 50 BTU/hr  |
| Enclosure                |  |
| Chassis                  | Metal, black finish  |
| Faceplate                | Extruded metal, black finish, polycarbonate label overlay  |
| Mounting                 | Freestanding or 1 RU 19-inch rack-mountable;<br>Adhesive feet and rack ears included   |

#### Dimensions

| Height | 1.70 in. (43 mm) without feet                            |
|--------|--|
| Width  | 17.28 in. (439 mm);<br>19.00 in. (482 mm) with rack ears |
| Depth  | 6.47 in. (165 mm)  |

#### Weight

3.1 lb (1.42 kg)

#### Compliance

#### Regulatory Model: M201903003

UL® Listed for US & Canada, IC, CE, FCC Part 15 Class B digital device, UL 916, CEC Title 24, ASHRAE 90.1, IECC

#### NOTES:

- SIMPL+<sup>®</sup> software modules are provided for use in commissioning a Crestron control system to work with the ZUM-HUB4. The software modules run within the control system program and provide virtual connections for all the necessary intersystem control signals. A separate dedicated module is required for each external and mirrored room. Control systems are limited in the number of modules supported, ranging from 0 to 1000 depending on the model. For further assistance, please contact Crestron Commercial Lighting Support via email at <u>clclighting@crestron.com</u> or by calling 855-644-7643.
- Other Crestron control systems must be commissioned to provide the control logic required to communicate and operate as part of the Zūm network. Once integrated, each external room effectively becomes a part of the Zūm ecosystem.

# **Dimension Drawings**



# Installation

Mount the ZUM-HUB4 and connect it to the network. The ZUM-HUB4 can be mounted into a rack or placed onto a flat surface.

# Mount to a Rack

The ZUM-HUB4 occupies 1U of rack space.

To install the included rack ears:

- 1. Use a #1 or #2 Phillips screwdriver to remove the three screws from each side of the front of the device as shown in the following illustration.
- 2. Use the screwdriver and the screws removed in the previous step to attach the included rack ears to the device.
- 3. Mount the device into the rack using four mounting screws (not included).



# Place onto a Flat Surface

When placing the device onto a flat surface or stacking it with other equipment, attach the included rubber feet near the corners on the underside of the device.

# **Make Connections**

The ZUM-HUB4 has a dedicated Control Subnet that is used for communication between the control system and Crestron Ethernet devices. This subnet allows for dedicated communication between the control system and Crestron Ethernet devices without interferences from other

network traffic on the LAN.

Make the connections, and note the following:

- Use Crestron power supplies for Crestron equipment.
- The included cable(s) cannot be extended.
- Apply power after all connections have been made.

#### NOTES:

- Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).
- The ZUM-HUB4 can be powered with the (included) 24VDC power pack.
- Do not connect the CONTROL SUBNET port to the LAN. The CONTROL SUBNET port must be connected only to Crestron Ethernet devices.

For details on using the Control Subnet, refer to the <u>4-Series<sup>™</sup> Control Systems Reference Guide</u> (Doc. 8559).

#### Connections



#### Zūm Wired System Diagram



#### NOTES:

- Daisy-chain up to 20 Zūm Net devices (up to 328 ft (100 m) between Zūm Net devices) with purple <u>CBL-CAT5E-ZUMNET-P</u> RJ-45 cables (sold separately).
- System sensors communicate digitally via Zūm Link. Non-system sensors communicate via an analog connection on a Zūm Wired load controller.

# Configuration

Before using the ZUM-HUB4, ensure it is updated with the latest firmware. Refer to Version Management (on page 55).

Once all of the devices are installed in the space and using the latest firmware, use the Zūm app to modify default room behavior. Expedite commissioning by copying a room configuration and sending it to a room with identical devices. Save a room configuration template and share it via the ZUM-HUB4 or the Zūm app.

**NOTE:** The ZUMLINK-KP Bluetooth<sup>®</sup> connection is required to configure a Zūm wired space with the Zūm app.

This section provides the following information:

- Zūm App Configuration
- Log into the Web-Interface
- Web Interface Overview
- Web Interface Configuration

# Zūm App Configuration

Download the Zūm app from the <u>Google Play™</u> online store.

To use the Zūm app:

- 1. Enable Bluetooth wireless connection on your device to communicate with the Zūm space.
- 2. Launch the Zūm app and grant the permissions the app requests. The Zūm app displays a list of available spaces.
- 3. Select the desired space.
- 4. When prompted, enter the PIN. The Zūm app main screen opens.



NOTE: The default PIN is 2468. To change the PIN, refer to the Room Settings.

# Zūm App Main Screen

From the Nearby Rooms screen, tap the desired room to open the Main screen. The following section describes the actions available for each area of the Main screen.

|     | K Ba         | ack M  | lain                       |              |     |
|-----|--------------|--|----------------------------|--------------|-----|
|     | Sele         | ct to configure a room.                                  |                            |              |     |
| 0 - | ß            | Room Settings  |                            |              | >   |
| 0 - | Ø            | Configuration  |                            |              | >   |
|     | Tap<br>the o | the identify button to ider<br>commissioning of the unit | ntify the unit. Swip<br>t. | e left to ed | lit |
|     | ZUN          | MNET-JBOX-16A-LV-6                                       | 497                        | i            | >   |
|     | ZUM          | MNET-JBOX-16A-LV   | 000211                     | 5NEJ064      | 197 |
|     | ZUN          | MLINK-JBOX-20A-PLU                                       | JG-4955                    | i            | >   |
| 6 - | ZUM          | MLINK-JBOX-20A-PLU                                       | JG 000211                  | 2NEJ049      | 955 |
|     | ZUN          | MLINK-JBOX-20A-SW  | -5076                      | i            | >   |
|     | ZUN          | MLINK-JBOX-20A-SW  | 000211                     | 2NEJ050      | )76 |
|     | ZUN          | MLINK-KP-3252  |                            | i            | >   |
|     | ZUN          | MLINK-KP   | 00210                      | 9NEJ032      | 252 |

| Current Template   |     |     |
|--|-----|-----|
| Tap the button below to perform the respective action on t room template.  | he  |     |
| Open room template   | >   | - 4 |
| Save room template   | >   |     |
| Share room template  | >   |     |
| Tap the button below to perform the respective action on t<br>room configuration.                                    | he  |     |
| Save room configuration  | >   |     |
| Share room configuration   | >   |     |
| Tap the button to send current configuration to the room.  |     | - 6 |
| Send configuration to room   |     |     |
| Tap the advanced data management button to perform<br>advanced data file actions. Recommended for advanced<br>users. |     |     |
| Advanced data management   | >   |     |
| Tap the revert changes button to restore all data to previou<br>The app will exit the room.                          | IS. |     |
| Revert changes   |     | 6   |

NOTE: The numbers below correspond with the numbers in the Main screen diagram.

- 1. Room Settings: Edit the Room Name, PIN, Floor ID, Zone ID, and Network information.
- 2. Configuration: Edit the room logic to view the current state of the room.
  - Sensors: View details for the connected sensor(s) or edit the sensor name.
  - Load Controllers: Identify and view details for the connected load controller(s).
    - ZUMLINK-JBOX-16A-LV and ZUMNET-JBOX-16A-LV load controllers:
      - View Current Scene, Daylighting status, and Output Level.
      - Override: The state of the load when Override is recalled. Click the toggle to turn the load on or off during Override.
      - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
      - View Dimming Values
      - Edit the Dimming Curve Configuration or Dimmer Scenes Configuration.
    - ZUMLINK-JBOX-20A-PLUG load controller:
      - Override: The state of the load when Override is recalled. Click the toggle to turn the load on or off during Override.
      - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
    - ZUMLINK-JBOX-20A-SW load controller:
      - Closed: Click the toggle to turn the load on or off.
      - Override: The state of the load when Override is recalled. Click the toggle to turn the load on or off during Override.
      - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
      - Scenes: Allow keypad access to the scene by selecting or deselecting the checkbox. Determine the state of the load when the scene is recalled by clicking the toggle on or off.
  - Scenes: View and edit room scenes: Scene 1 Scene 16. When editing the scene, tap
    the Identify icon (i) to identify the load controller: It emits a sound and flashes the
    Link LED. The connected loads also flash.

- Keypads: Identify and view details for the connected keypad(s). Edit the keypad name and assign the button layout.
  - Adjust the Double Tap Speed: Set the amount of time between two button presses to qualify as a double tap.
  - Specify the Button Layout and click on a button to configure button actions.
     Button action options:
    - None
    - Off: Assigned load controllers turn off.
    - On: Assigned loads turn on.
    - Raise: Assigned load controllers raise.
    - Toggle: Switches load controllers between ON and OFF states
    - Lower: Assigned load controllers lower.
    - Recall Scene 1 Scene 16: Assigned load controllers recall the behavior set for the specified scene.
    - Export to Hub: Name and send information to ZUM-HUB4 for macro actions.
- Load Shedding: Set the maximum levels for load shedding.
- Load/Sensor Groups: Create groups within the room.
- Current Scene: Displays the current room scene.
- Occupancy Status: Displays occupied or vacant. If any area of the room is occupied, then the status is Occupied. When all areas of the room are vacant, the status is Vacant.
- 3. Discovered Room Devices: Identify a device and edit the commissioning settings



- Tap the Identify icon (i) to identify a device. A load controller emits a sound and the Link LED flashes. The connected loads also flash. A keypad flashes its LED.
- Tap the device to edit or review the device details: Edit Name. Review the Model, Serial Number, Status, and edit the device settings.

4. Current Template Settings: Choose Open room template, Save room template, or Share room template.

| Current Template   |   |
|--|---|
| Tap the buttons below to perform actions with the room template. |   |
| Open room template   | > |
| Save room template   | > |
| Share room template  | > |

- 5. Configuration Data:
  - Save room configuration: Save the room configuration data in the space.
  - Share room configuration: Share the room configuration data in the space.
  - Send configuration to room: Send room logic changes made in the app to the room.
  - Advanced data management: Review the Map, Logic, and Settings of the data currently loaded. Load, save or share new Map, Logic, or Settings data.

| Tap the button below to perform the respective action o room configuration.  | n the |
|--|-------|
| Save room configuration  | >     |
| Share room configuration   | >     |
| Tap the button to send current configuration to the room   | ۱.    |
| Send configuration to room   |       |
| Tap the advanced data management button to perform<br>advanced data file actions. Recommended for advanced<br>users. | ł     |
| Advanced data management   | >     |

**NOTE:** Changes made in the app are not sent to the room until they are deployed using the Send configuration to room button.

6. Revert changes: Restore all non-deployed changes made since launching the app.

| Tap the re<br>The app v | evert changes button to restore all data to previous.<br>vill exit the room. |
|-------------------------|--|
| Revert c                | hanges   |
|                         | <sup>°</sup> 2115NEJ06497-ZUMNET   |

### **Calibrate Daylighting Settings**

The photocell component of a ZUMNET-JBOX or ZUMLINK-JBOX load controller detects the amount of ambient light in the room. When a space is calibrated for Daylighting and Scene 1 is called, the photocell will detect the ambient light levels and dim the lights accordingly.

Calibrating Daylighting requires four main steps:

- 1. Assign the photocell component of a load controller to the load controller.
- 2. Send the new configuration to the space.
- 3. Adjust the light level in the space.
- 4. Calibrate Daylighting.

To calibrate the daylight settings:

- 1. Assign the photocell component to the load controller that will participate in Daylighting.
  - a. From the Main screen, click **Configuration**.



b. Click Load Controllers.

| Back Configuration |                      |   |  |  |
|--------------------|----------------------|---|--|--|
| Selec              | t item to configure. |   |  |  |
| $\odot$            | Sensors              | > |  |  |
| Ŵ                  | Load Controllers     | > |  |  |

- c. Click the desired load controller.
- d. For Photo, select a photocell from the drop-down menu.

| <b>ZUMLINK-JBOX-16A-</b>                     | LV             |  |  |  |  |
|--|----------------|--|--|--|--|
| SN: 0002133NEJ10536; FW: v1.001.00054        |                |  |  |  |  |
| Current Scene 1                              |                |  |  |  |  |
| Daylighting                                  | Inactive       |  |  |  |  |
| Output Level 68%                             |                |  |  |  |  |
| Tap below to configure the load override.    |                |  |  |  |  |
| Override (0-100%) 100                        |                |  |  |  |  |
| Select the sensors that are bound to this lo | ad controller. |  |  |  |  |
| Occupancy                                    | All 🤟          |  |  |  |  |
| Vacancy                                      | All 🤻          |  |  |  |  |
| Vicinity                                     | None 🤻         |  |  |  |  |
| Photo  | Photo None *   |  |  |  |  |

- 2. Send the configuration to the room.
  - a. Navigate back to the Main screen.
  - b. Click Send configuration to room.

| Tap the button below to perform the respective action on room configuration.   | the |
|--|-----|
| Save room configuration  | >   |
| Share room configuration   | >   |
| Tap the button to send current configuration to the room.  |     |
| Send configuration to room   |     |
| Tap the advanced data management button to perform<br>advanced data file actions. Recommended for advanced<br>users. |     |
| Advanced data management   | >   |

A confirmation window opens stating that the app will disconnect from the room. Click **OK** to continue or **Cancel** to close without sending the configuration. The Retrieving Data Map screen displays.

- 3. Recall Scene 1 and adjust load levels.
  - a. From the Main screen, click **Configuration**.



b. Click Scenes.

| < Bac        | k Configuration    |   |
|--------------|--------------------|---|
| Select       | item to configure. |   |
| $\Theta$     | Sensors            | > |
| $\mathbf{W}$ | Load Controllers   | > |
|              | Scenes             | > |

c. Select Scene 1. Daylighting is only available for Scene 1.



d. Adjust the loads in the space to the appropriate level based on the amount of natural light.

NOTE: DO NOT click Save current levels.

- 4. Calibrate Daylighting.
  - a. Navigate back to the Main screen.
  - b. Click Room Settings.

| K Back                     | Main |   |
|----------------------------|------|---|
| Select to configure a room | m.   |   |
| 🌽 Room Settings            |      | > |
| Configuration              |      | > |
|                            |      |   |

c. Click Daylight Properties.

| K Back                               | Room Settings                        |             |  |  |
|--------------------------------------|--------------------------------------|-------------|--|--|
| Tap belov<br>number                  | v to change the room name and the se | ecurity pin |  |  |
| Name                                 | 2131NEJ06972-ZUMNET-JB0              | X-16A-LV-Ro |  |  |
| PIN Nur                              | nber                                 | **** >      |  |  |
| Floor ID                             |                                      | Disabled -  |  |  |
| Zone ID                              |                                      | Disabled 👻  |  |  |
|                                      |                                      |             |  |  |
| Save se                              | ttings changes                       |             |  |  |
| You can configure your network below |                                      |             |  |  |
| Network                              | ĸ                                    | >           |  |  |
| Daylight                             | Daylight Properties                  |             |  |  |

d. Click Calibrate Daylighting.

| K Back        | Daylight Properties         |          |
|---------------|-----------------------------|----------|
| Current Dayli | ight properties of the room |          |
| Scene         |                             | 1        |
| Room Occ      | upancy                      | Occupied |
|               |                             |          |
| Calibrate d   | lavlighting                 |          |

To indicate that Daylighting has been calibrated, the lights in the space will turn full on, turn off, and then back on with the Daylighting settings. Whenever Scene 1 is recalled, the Daylighting settings are initiated.

# Log into the Web-Interface

The ZUM-HUB4 is configured using the web interface. Connect to the device by entering the device hostname into a web browser. The hostname is comprised of "ZUM-HUB4-" followed by the entire MAC address (e.g., ZUM-HUB4-00107FCA1112). The **New User Registration** screen is displayed during the first connection. Enter the user's **Username**, **Password**, **Firstname**, **Lastname**, and **Email Address**, and then click **Submit**.

| New User Registration |        |  |  |  |  |
|-----------------------|--------|--|--|--|--|
|                       |        |  |  |  |  |
| Username              |        |  |  |  |  |
| Password              |        |  |  |  |  |
| Firstname             |        |  |  |  |  |
| Lastname              |        |  |  |  |  |
| Email Address         |        |  |  |  |  |
|                       | Submit |  |  |  |  |

# Web Interface Overview

The web interface gives users the ability to configure room behavior globally across the ZUM-HUB4, by Room Category, by Floor, and by Room.

| C<br>M<br>Ma<br>M | ategory View:<br>anage Rooms.<br>System View:<br>nage Floors and<br>devices.<br>iettings View:<br>anage settings   | G<br>– A<br>Blue<br>To<br>e | ilobal<br>dd Ro<br>etooth<br>oggle o<br>expand | controls for<br>om Categor<br>n PIN, Dema<br>collapses or<br>ds controls | the ZUM-HUB4:<br>y, All Off, All On,<br>nd Response Level |            |                   | <b>Actic</b><br>Deman<br>Mode<br>and | o <b>ns Menu</b><br>d Respo<br>, Discove<br>Reboot | J:<br>nse<br>er, | <b>Device Informati</b><br>Demand Response<br>Information, He | on and Status:<br>Status, System<br>elp, Sign Out |
|-------------------|--|-----------------------------|--|--|---|------------|-------------------|--------------------------------------|--|------------------|---|---|
| 0                 | CRESTRON & Zūm'  |                             |  |  |   |            |                   |                                      |  |                  |   | 🖮 i ? ④   |
|                   | HQ-ZUM     Conterence rooms     Cubicles - East     Cubicles - Kest     Cubicles - West     Cubicles | HQ-2                        | ZUM<br>oms                                     | ት) Schedule<br>ና   | ũ   |            |                   |                                      |  | Associate Rooms  | Select a Category   | Actions V   |
|                   | 🗞 Restrooms 2  |                             | Roo  | m \$   | Category 🗢  | Floor ID 🗢 | Host Name 🗘       | Status 🗢                             | Occ. 🗢   | Active Scene     | ♦ Next Event ♦  | Action  |
|                   | 🗞 Unassociated 💿   | Ð                           | Carr   | line's Office  | Offices   | Unassigned | ZUMNET-CA043F     | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | 0                           | Cole   | prado  | Conference Rooms  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | Ð                           | Cub  | icles - Northeast  | Cubicles - East   | Unassigned | ZUMNET-CA0453     | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | Ð                           | Dov  | vnstairs Restrooms   | Restrooms   | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | Ð                           | Hur  | dred Acres   | Conference Rooms  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | ø                           | Net  | work Team  | Labs  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 0 0   |
|                   |  | Ð                           | Ojib   | we   | Conference Rooms  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 6 🗘   |
|                   |  | ø                           | Oly  | mpus   | Conference Rooms  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | <b>0</b> 🗘  |
|                   |  | ø                           | Prot   | otyping  | Labs  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | <b>0</b> 🗘  |
|                   |  | Ð                           | Roo  | m 206  | Huddle Rooms  | Unassigned | ZUMNET-CA045E     | Online                               | ¥  | Off              | Default - Use Occupancy                                       | 0 🌣   |
|                   |  | Ð                           | Roo  | m 207  | Huddle Rooms  | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | 0 🌣   |
|                   |  | ø                           | Roo  | m 208  | Huddle Rooms  | Unassigned | ZUMNET-CA0427     | Online                               |  | Off              | Default - Use Occupancy                                       | <b>()</b> 🗘                                       |
|                   |  | ø                           | Ups  | tairs Restrooms  | Restrooms   | 1          | CEN-GWEXER-EBC84F | Online                               |  | Off              | Default - Use Occupancy                                       | <b>0</b> 🌣  |
|                   |  |                             |  |  |   |            |                   |                                      |  |                  |   |   |

Displays content based on Category, System, or Settings controls Displays content based on the Category, System, Settings, and ZUM-HUB4 controls

## Category View, System View, and Settings View

The web interface has three configuration sections: Category View to manage Rooms, System View to manage Floors and devices, and Settings View to manage settings.



#### **Category View**

The Category View lists room categories and rooms (in the **Rooms** tab) that have been discovered by the ZUM-HUB4. Room Categories are intended to be groupings of all rooms that are a similar type (for example, office or conference rooms) to provide easy monitoring and control. Rooms that have not been assigned to a Room Category are kept in the **Unassociated** category. Select the **Schedule** tab to edit default behavior for Day Patterns, Room States and Holidays.

- Manage Rooms (on page 37)
- Manage Room Categories
- Set the Bluetooth PIN (on page 30)
- Configure the Demand Response Mode and Level (on page 33)
- Schedule Room Behavior (on page 41)

#### System View

The System View lists Floors and rooms (in the **Rooms** tab) that are discovered by the ZUM-HUB4. Use the Hardware Management tab to view and edit device information, such as assigning a device to a floor.

- Manage Floors (on page 49)
- Set the Bluetooth PIN for a Floor (on page 32)
- Set the Demand Response Level for a Floor (on page 36)
- Manage Devices (on page 50)

#### **Settings View**

The Settings View manages the settings for the ZUM-HUB4, Users, External Control, and Commissioning. The Settings tab is open by default.

- Manage Settings (on page 54)
- Manage Users (on page 58)
- Manage External Controls (on page 60)
- Manage Commissioning (on page 63)

### **Global Settings and Actions for the ZUM-HUB4**

Apply settings that effect all devices discovered by the ZUM-HUB4 regardless of the room, room category, or floor the device is assigned.

ZUM-HUB4 actions:

- Configure Demand Response Mode (on page 33)
- Discover Rooms (on page 27)
- Reboot ZUM-HUB4 (on page 67)

|  | Actions    |  |  |  |  |  |
|--|------------|--|--|--|--|--|
| Contract Con | ponse Mode |  |  |  |  |  |
| Q Discover   |            |  |  |  |  |  |
| C Reboot   |            |  |  |  |  |  |
|  |            |  |  |  |  |  |

ZUM-HUB4 controls:

- Add a Room Category
- Turn On/Off All Discovered Devices (on page 29)
- Set the Bluetooth PIN for All Discovered Devices (on page 30)
- Set the Demand Response Level for All Discovered Devices (on page 34)

| ▼ 🖨 HQ-ZUM           |                         |
|----------------------|-------------------------|
| 🗞 Conference Rooms 👍 | + Add Category          |
| 🗞 Cubicles - East 1  | பு All Off              |
| 🚳 Cubicles - West 🧿  | <b>ບ</b> All On         |
| 🗞 Huddle Rooms 3     | P Bluetooth PIN         |
| 🗞 Labs 2             | 📥 Demand Response Level |

## Navigation Toggle

Click to collapse or the Category View, System View, Setting Views, and the global ZUM-HUB4 settings.

### **Device Information and Status**

View the Demand Response status, system alerts, help information, or sign out of the web interface. Refer to Review Device Information and Status (on page 66).



# Web Interface Configuration

After using the Z $\bar{u}$ m app to setup Z $\bar{u}$ m spaces and logging into web interface, configure the ZUM-HUB4:

- Discover Rooms
- Add a Room Category
- Rename a Room Category
- Turn Rooms On or Off
- Set the Bluetooth PIN
- Configure the Demand Response Mode and Level
- Manage Rooms
- Schedule Room Behavior
- Manage Floors
- Manage Devices
- Manage Settings
- Manage Users
- Manage External Controls
- Manage Commissioning

- Review Device Information and Status
- Reboot ZUM-HUB4

Related topics:

- Zūm App Configuration (on page 13)
- Log into the Web-Interface (on page 22)

### **Discover Rooms**

To discover rooms:

1. Click the Actions menu



- 2. Click **Discover**. The Discover window opens.
- 3. Select the type of rooms you want to discover.
- 4. Click **Discover** to Discover rooms or close the window.

During the discover process, a **Stop** button displays as an option to stop discovering.

| Di | Discover   |  |  |
|----|--|--|--|
|    | • The discovery process may require up to 15 minutes to complete.<br>It is recommended to discover and configure gateways before discovering Wireless Zūm Rooms. |  |  |
|    | Wired Zūm<br>Rooms   | 1 Wired Zūm Room(s) in the system. 0 last discovered     |  |
|    | External Rooms   | 500 External Room(s) in the system. 0 last discovered    |  |
|    | Gateways   | 1 Gateway(s) in the system. 0 last discovered            |  |
|    | Wireless Zūm<br>Rooms  | 10 Wireless Zūm Room(s) in the system. 0 last discovered |  |
|    |  | Q Discover   |  |

## Add a Room Category

To create a room category:

1. Click the menu beside the ZUM-HUB4.



- 2. Click Add Category.
- 3. Type the name of the Room Category.
- 4. Click with to save the Room Category or to cancel.



For more information about Room Categories, refer to Manage Room Categories.

### Rename a Room Category

Room Category names can be renamed to provide a clear description of the connected rooms. To rename the Room Category name:

1. Click the menu beside the Room Category name.



- 2. Click Rename.
- 3. Click with to save the Room Category or to cancel.

For more information about Room Categories, refer to Manage Room Categories.

### Turn Rooms On or Off

Control a room by turning on/off the all rooms, all rooms in a Room Category, all rooms on a Floor, or by choosing a lighting scene for a specific room.

This section provides the following information:

- Turn On/Off All Discovered Devices (below)
- Turn On/Off a Room Category (below)
- Turn On/Off a Floor (below)
- Turn On/Off a Room (on the next page)

#### Turn On/Off All Discovered Devices

To turn all devices on/off:

- 1. Open the Category View.
- 2. Click the menu beside the ZUM-HUB4.
- 3. Click All Off or All On.



### Turn On/Off a Room Category

To turn all devices on/off in a Room Category:

- 1. Open the Category View.
- 2. Click the menu beside the Room Category name.
- 3. Click All Off or All On.



#### Turn On/Off a Floor

To turn all devices on/off on a Floor:

- 1. Open the **System View**
- 2. Click the menu beside the Floor name.

3. Click All Off or All On.



### Turn On/Off a Room

You can turn a specific room on/off using the Control Room window, but this option provides more detailed settings. Refer to Control a Room (on page 40).

### Set the Bluetooth PIN

The Bluetooth PIN enables a mobile device with the Zūm app to connect to the Zūm Wired Keypad or the Zūm Network Bridge. The Bluetooth PIN can be set for all discovered devices, all devices in a Room Category, all devices on a Floor, or all devices in a Room.

**NOTE:** Once a Bluetooth PIN is set for a device, it remains until manually changed. For example, if a device moves to a different room or floor, the Bluetooth PIN does not automatically inherit the PIN set for the new location. The device keeps the PIN previously set.

This section provides the following information:

- Set the Bluetooth PIN for All Discovered Devices (below)
- Set the Bluetooth PIN for a Room Category (on the facing page)
- Set the Bluetooth PIN for a Room (on the facing page)
- Set the Bluetooth PIN for a Floor (on page 32)

#### Set the Bluetooth PIN for All Discovered Devices

To set the Bluetooth PIN for all devices:

- 1. Open the **Category View**.
- 2. Click the menu beside the ZUM-HUB4.
- 3. Click Bluetooth PIN.
- 4. Set the PIN (0 to 9999).



5. Click w to save or to cancel.

#### Set the Bluetooth PIN for a Room Category

To set the Bluetooth PIN for devices in a Room Category:

- 1. Open the **Category View**.
- 2. Click the menu beside the Room Category name.
- 3. Click Bluetooth PIN.
- 4. Set the PIN (0 to 9999).



5. Click with to save or to cancel.

#### Set the Bluetooth PIN for a Room

To set the Bluetooth PIN for devices in a Room:


- 1. Open the **Category View** and the **Room** tab.
- 2. Click the 🗱 to open the Control Room window.

| Control Room: Hallway         |                   | ×            |
|-------------------------------|-------------------|--------------|
| Lighting Scene<br>Plug Loads  | Room Off  V Off V | Send<br>Send |
| Occupancy Sensor<br>Disable f | or 15 iminutes    | Send         |
| Bluetooth PIN                 | 2468              | Send         |
| Demand Response               |                   | Send         |

- 3. For Bluetooth PIN, set the PIN (0 to 9999).
- 4. Click **Send** to send changes to the room, or close the Control Room window to discard unsaved changes.

# Set the Bluetooth PIN for a Floor

To set the Bluetooth PIN for devices on a floor:

- 1. Open the **System View**.
- 2. Click the menu beside the Floor name.
- 3. Click Bluetooth PIN.
- 4. Set the PIN (0 to 9999).



5. Click w to save or to cancel.

# Configure the Demand Response Mode and Level

The Demand Response Level is used in emergency situations to override the current load settings in the room. The load levels reduce when a demand response command is received from the utility company. Demand Response Mode can be manually controlled by accessing the Actions Menu. Demand Response Levels can be set for all discovered devices, all devices in a Room Category, all devices on a Floor, or all devices in a Room.

**NOTE:** Once a Demand Response Level is set for a device, it remains until manually changed. For example, if a device moves to a different room or floor, the Demand Respond Level does not automatically inherit the level set for the new location. The device keeps the level previously set.

This section provides the following information:

- Configure Demand Response Mode (below)
- Set the Demand Response Level for All Discovered Devices (on the next page)
- Set the Demand Response Level for a Room Category (on the next page)
- Set the Demand Response Level for a Room (on page 35)
- Set the Demand Response Level for a Floor (on page 36)

### **Configure Demand Response Mode**

To manually turn Demand Response Mode on or off:

1. Click the **Actions** menu.



2. Click Demand Response Mode. The Configure Demand Response Mode window opens.

| Configure Demand Response Mode |         |               |      |  |  |  |
|--------------------------------|---------|---------------|------|--|--|--|
| Demand Response Mode           |         |               |      |  |  |  |
| GLS-SIM                        | Offline |               |      |  |  |  |
|                                |         | <u>Cancel</u> | Save |  |  |  |

3. Click the toggle turn Demand Response Mode on or off.

If a GLS-SIM has been discovered by the ZUM-HUB4, the GLS-SIM status is represented as Offline or Online.

4. Click **Save** to save the settings or **Cancel** to close the window without saving.

## Set the Demand Response Level for All Discovered Devices

To set the Demand Response Level for all devices:

- 1. Open the **Category View**.
- 2. Click the menu beside the ZUM-HUB4.
- 3. Click **Demand Response** Level.



4. Set the light level (0 to 100).



5. Click w to save or sto cancel.

# Set the Demand Response Level for a Room Category

To set the Demand Response Level for devices in a Room Category:

- 1. Open the Category View.
- 2. Click the menu beside the Room Category name.
- 3. Click Demand Response Level.



4. Set the light level (0 to 100).



5. Click water to save or to cancel.

# Set the Demand Response Level for a Room

To set the Demand Response Level for devices in a Room:

| Ş   | CRESTRON & Zûm   | lîl |    |       |                  |   |                  |            |                   |          |        |                      |                         |   | i        | ? 🚯 |
|-----|--|-----|----|-------|------------------|---|------------------|------------|-------------------|----------|--------|----------------------|-------------------------|---|----------|-----|
|     | <ul> <li>✓ ⊡ HQ-ZUM</li> <li>∞ Conference Rooms ④</li> <li>∞ Cubicles - East ①</li> <li>∞ Cubicles - West ②</li> </ul> |     | нс | }-ZUł | м                |   |                  |            | -                 |          |        |                      |                         | l | Action   | s v |
| 100 | 🗞 Huddle Rooms 3   |     |    | Rooms | 曽 Schedul        | 1 |                  |            |                   |          |        |                      |                         |   |          |     |
| ¢\$ | & Labs 2   |     | 0  | Globa | al Filter        |   | Û                |            |                   |          |        | Associate Rooms Sele | ct a Category           |   |          | ~   |
|     | & Restrooms 2  |     |    |       | Room 🗢           |   | Category 🗢       | Floor ID 🗢 | Host Name 🗢       | Status 🗢 | Occ. 🗢 | Active Scene 🗢       | Next Event 🗢            |   | Action   |     |
|     | S Unassociated 0   |     | 0  |       | Caroline's Offic |   | Offices          | Unassigned | ZUMNET-CA043F     | Online   |        | Off                  | Default - Use Occupancy |   | <b>1</b> |     |
|     |  |     | Θ  |       | Colorado         |   | Conference Rooms | 1          | CEN-GWEXER-EBC84F | Online   |        | Off                  | Default - Use Occupancy |   | 0 Ø      |     |

- 1. Open the **Category View** and the **Room** tab.
- 2. Click the 🌄 to open the Control Room window.

| Control Room: Hallway                           | ×            |
|---|--------------|
| Lighting SceneRoom OffPlug LoadsOff             | Send<br>Send |
| Occupancy Sensor Occupancy Sensor Isable for 15 | Send         |
| Bluetooth PIN 2468                              | Send         |
| Demand Response                                 | Send         |

- 3. For Demand Response, set the level (0 to 100).
- 4. Click **Send** to send changes to the room, or close the Control Room window to discard unsaved changes.

# Set the Demand Response Level for a Floor

To set the Demand Response Level for devices on a Floor:

- 1. Open the **System View**.
- 2. Click the menu beside the Floor name.
- 3. Click **Demand Response** Level.



4. Set the light level (0 to 100).



5. Click water to save or save to cancel.

# Manage Rooms

The **Rooms** tabs lists the Rooms discovered by the ZUM-HUB4 or the rooms assigned to a selected Room Category. Use the **Rooms** tab search for a room, delete rooms, reassign room categories, edit a room name, view room details, or control a room. Access the Rooms tab through either the Category View or the System View tabs.



Rooms must be discovered by the ZUM-HUB4 before performing any procedure in this section. Refer to Discover Rooms (on page 27).

| Man<br>rooi | nag<br>oms | e          |                      | Find<br>rooms | Delete<br>selected roor | ms         | Add Roor<br>Room Cat |          |              | om to<br>tegory        |                         |                        |  |  |  |  |  |
|-------------|------------|------------|----------------------|---------------|-------------------------|------------|----------------------|----------|--------------|------------------------|-------------------------|------------------------|--|--|--|--|--|
|             | ✔ Ro       | oms        | ∰ Schedule           |               |                         |            |                      |          |              |                        |                         |                        |  |  |  |  |  |
|             | Q          | Global     | Filter               | Û             |                         |            |                      |          | Ч            | Associate Rooms Select | t a Category            | ~                      |  |  |  |  |  |
|             |            |            | Room 🗢               |               | Category ¢              | Floor ID 🗢 | Host Name 🗢          | Status 🗢 | Occ. ¢       | Active Scene 🗢         | Next Event 🗢            | Action                 |  |  |  |  |  |
|             | ø          |            | Caroline's Office    |               | Offices                 | Unassigned | ZUMNET-CA043F        | Online   |              | Off                    | Default - Use Occupancy | <b>0</b>               |  |  |  |  |  |
|             | ø          |            | Colorado             |               | Conference Rooms        | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | 6 🗘                    |  |  |  |  |  |
|             | Θ          |            | Cubicles - Northeast |               | Cubicles - East         | Unassigned | ZUMNET-CA0453        | Online   |              | Off                    | Default - Use Occupancy | <b>6</b>               |  |  |  |  |  |
|             | Θ          |            | Downstairs Restrooms |               | Restrooms               | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>()</b>              |  |  |  |  |  |
|             | Θ          |            | Hundred Acres        |               | Conference Rooms        | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>6</b> 🗘             |  |  |  |  |  |
|             | ø          |            | Network Team         |               | Labs                    | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | 0 ¢                    |  |  |  |  |  |
|             | Θ          |            | Ojibwe               |               | Conference Rooms        | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>()</b>              |  |  |  |  |  |
|             | Ø          |            | Olympus              |               | Conference Rooms        | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>0</b>               |  |  |  |  |  |
|             | Ø          |            | Prototyping          |               | Labs                    | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>0</b> 🗘             |  |  |  |  |  |
|             | ø          |            | Room 206             |               | Huddle Rooms            | Unassigned | ZUMNET-CA045E        | Online   | <del>x</del> | Off                    | Default - Use Occupancy | <b>0</b> 🗘             |  |  |  |  |  |
|             | ø          |            | Room 207             |               | Huddle Rooms            | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | <b>0</b> Ø             |  |  |  |  |  |
|             | 0          |            | Room 208             |               | Huddle Rooms            | Unassigned | ZUMNET-CA0427        | Online   |              | Off                    | Default - Use Occupancy | <b>0</b> Ø             |  |  |  |  |  |
| 10          | Ø          |            | Upstairs Restrooms   |               | Restrooms               | 1          | CEN-GWEXER-EBC84F    | Online   |              | Off                    | Default - Use Occupancy | 6                      |  |  |  |  |  |
|             |            | T          |                      |               |                         |            |                      |          |              |                        |                         |                        |  |  |  |  |  |
| ınd S<br>m  | Sele<br>c  | ect<br>r m | one room<br>nultiple |               |                         |            |                      |          |              |                        | View room<br>details    | Configur<br>room conti |  |  |  |  |  |

# **Review Rooms**

The Room list displays room information including built-in components.

| Expand |   | Room \$                   | Category \$   | Floor ID \$       | Host Name | Sta<br>0425 On  | tus 🗢  | Occ. 🗢        | Active Scene \$ | Next Ever   | nt \$         | Action | View room |
|--------|---|---------------------------|---------------|-------------------|-----------|-----------------|--------|---------------|-----------------|-------------|---------------|--------|-----------|
| room   |   | Caroline's Office         | Omoes         | Unassigned        | ZUMINETIC | 1043P 011       | me     |               | OII             | Derault - C | ose Occupancy | • •    | details   |
|        |   | Name 🗢                    | M             | lodel             |           | Serial Number 🗢 | Firmwa | are Version 🗢 |                 | Status 🗢    | Details 🗢     |        |           |
|        |   | ZUMNET-JBOX-16A-LV-6847-2 | ZU            | UMNET-JBOX-16A-LV |           | 123456847-2     | 1.001  | 00038         |                 | Online      |               |        |           |
|        |   | ZUMNET-JBOX-16A-LV-6847-3 | ZU            | UMNET-JBOX-16A-LV |           | 123456847-3     | 1.001  | 00038         |                 | Online      |               |        |           |
|        |   | ZUMNET-JBOX-16A-LV-6847-1 | ZU            | UMNET-JBOX-16A-LV |           | 123456847-1     | 1.001  | 00038         |                 | Online      |               |        |           |
|        |   |                           |               |                   |           |                 |        |               |                 |             |               |        |           |
|        | 0 | Colorado                  | Conference Ro | ooms 1            | CEN-GWEX  | ER-EBC84F On    | ine    |               | Off             | Default - U | Use Occupancy | 0 0    |           |

- Room: Displays the room name
- Category: Displays the Room Category
- Floor ID: Displays the Floor ID. The Floor ID can be set in the Hardware Management tab of the Systems View. A Floor ID cannot be assigned to an External Room.
- Host Name: Displays the Host Name of room's main device.
- Status: Displays the room status Online of Offline.

- Occ: Identifies a room with an Occupancy Sensor. The Occupancy sensor symbols ( $\stackrel{>}{\ref{eq:sensor}}$ ) displays when occupancy is detected.
- Active Scene: Displays the current Scene.
- Next Event: Displays the upcoming event.
- Information (1): Displays room details.
  - Hostname: Displays the Hostname.
  - ° Room Type: Wired, Wireless, or External room
  - ID: Displays the IP ID for a Wired room, the RF ID for a Wireless room, and the Module ID for an External room
  - $^\circ$   $\,$  Mirror Module: Indicates whether the room is associated with a Mirror Room  $\,$
  - ° Occupancy Sensor State: Displays if the Occupancy Sensor is Enabled or Disabled
  - Plug Load State: Displays if the Plug Load is ON or OFF
  - ° Last Scene Changed: Displays the date and time of the last Scene change.
  - Last Online Status Changed: Displays the date and time of the last Online Status change
  - Last Occupancy Status Changed: Displays the date and time of the last Occupancy Status change

| Room Details: Caroline's Office | ×                 |
|---------------------------------|-------------------|
| Hostname                        | ZUMNET-CA043F     |
| Room Type                       | Wired Züm Room    |
| ID                              | 106               |
| Mirror Module                   | Inactive          |
| Occupancy Sensor State          | Enable            |
| Plug Load State                 | ON                |
| Last Scene Changed              | Unknown           |
| Last Online Status Changed      | 8/2/2021 02:40 PM |
| Last Occupancy Status Changed   | Unknown           |
|                                 |                   |

Click 💽 to expand the room to display information regarding the components. The Name, Model, Serial Number, Firmware Version, and Status of the devices are defined.

| ۲ | Room 208                   | Huddle Rooms | Unassigned        | ZUMNET-CA0427 | Online          | Off                | Default - Use Occupancy @ 04:00 PM |
|---|----------------------------|--------------|-------------------|---------------|-----------------|--------------------|------------------------------------|
|   |                            |              |                   |               |                 |                    |                                    |
|   | Name Φ                     | Mod          | el                |               | Serial Number 🕈 | Firmware Version 🗢 | Status 🌣 Details 🗢                 |
|   | ZUMLINK-JBOX-16A-LV-D5ED-3 | ZUN          | LINK-JBOX-16A-LV  |               | TSID33F4D5ED-3  | 1.001.00038        | Online                             |
|   | ZUMLINK-JBOX-16A-LV-D5EG-3 | ZUN          | LINK-JBOX-16A-LV  |               | TSID33E6D5EG-3  | 1.001.00038        | Online                             |
|   | ZUMLINK-JBOX-16A-LV-D5ED-2 | ZUN          | ILINK-JBOX-16A-LV |               | TSID33F4D5ED-2  | 1.001.00038        | Online                             |
|   | ZUMLINK-JBOX-16A-LV-D5ED-1 | ZUN          | ILINK-JBOX-16A-LV |               | TSID33F4D5ED-1  | 1.001.00038        | Online                             |
|   | ZUMLINK-JBOX-16A-LV-D5EG-1 | ZUN          | LINK-JBOX-16A-LV  |               | TSID33E6D5EG-1  | 1.001.00038        | Online                             |
|   | ZUMLINK-JBOX-16A-LV-D5EG-2 | ZUN          | LINK-JBOX-16A-LV  |               | TSID33E6D5EG-2  | 1.001.00038        | Online                             |
|   | ZUMNET-JBOX-16A-LV-SDEE-3  | ZUN          | INET-JBOX-16A-LV  |               | TSID3C5E5DEE-3  | 1.001.00038        | Online                             |
|   | ZUMNET-JBOX-16A-LV-SDEE-2  | ZUN          | INET-JBOX-16A-LV  |               | TSID3C5E5DEE-2  | 1.001.00038        | Online                             |
|   | ZUMNET-JBOX-16A-LV-5DEE-1  | ZUN          | INET-JBOX-16A-LV  |               | TSID3C5E5DEE-1  | 1.001.00038        | Online                             |
|   |                            |              |                   |               |                 |                    |                                    |

# Find a Room on the ZUM-HUB4

For a ZUM-HUB4 that has a large number of rooms, use the search feature to find a room name. To search for a room:

- 1. Click on the ZUM-HUB4 or on a Room Category.
- 2. Type in the Global Filter search bar. The filter populates results matching content in any of the table fields (Room, Category, Floor ID, Host Name, Status, Occ., Active Scene, or Next Event).

|                 | Find rooms |  |            |  |  |  |  |
|-----------------|------------|--|------------|--|--|--|--|
|                 |            |  |            |  |  |  |  |
| ✓ Rooms         | 🛗 Schedule |  |            |  |  |  |  |
| <b>Q</b> Global | Filter     |  | Û          |  |  |  |  |
|                 | Room 🗢     |  | Category 🗢 |  |  |  |  |

3. Click the desired room name.

# Add a Room to a Room Category

To move a room to a different Room Category:

- 1. Click on the ZUM-HUB4 or on a Room Category.
- 2. Select the desired room or rooms.
- 3. Click the Associate Rooms menu.
- 4. Select the desired Room Category.

|            | Γ | ✓ Rooms | / Rooms 🗎 Schedule   |                            |            |                   |          |       |                 |                   |  |  |
|------------|---|---------|----------------------|----------------------------|------------|-------------------|----------|-------|-----------------|-------------------|--|--|
|            |   | Q Globa | al Filter            | Û                          |            |                   |          |       | Associate Rooms | Select a Category |  |  |
| elect all  |   |         | Room 🖨               | Category \$                | Floor ID 🖨 | Host Name 🖨       | Status 🖨 | Orc ‡ | Active Scene    | Conference Rooms  |  |  |
| rooms      |   | 0       | Caroline's Office    | Offices                    | Unassigned | ZUMNET-CA043F     | Online   |       | Off             | Cubicles - East   |  |  |
| lect one   |   | 0       | Colorado             | Conference Ro              | oms 1      | CEN-GWEXER-EBC84F | Online   |       | Off             | Huddle Rooms      |  |  |
| multiple 🗌 |   | 0       | Cubicles - Northeast | Cubicles - East            | Unassigned | ZUMNET-CA0453     | Online   |       | Off             | Labs              |  |  |
| rooms      |   | 0       | Downstairs Restrooms | Restrooms<br>Conference Ro | 1          | CEN-GWEXER-EBC84F | Online   |       | Off             | Offices           |  |  |
| _          |   | -       | THE REPORT OF        | Contelence No              |            | CER ONENER-EDCOM  |          |       | -               | Restrooms         |  |  |

5. A confirmation dialog opens. Click **Yes** to add the room(s) the Room Category or **No** to cancel.

## Delete a Room

To delete a room:

- 1. Click on the ZUM-HUB4 or on a Room Category.
- 2. Select the desired room or rooms.
- 3. Click 💼 to delete the room.

| Roc | oms         | mage Schedule |                  |
|-----|-------------|---------------|------------------|
| Q G | Global Filt | er 🛍          | ]                |
|     |             | Room 🗢        | Category 🗢       |
| Ø   | ~           | Colorado      | Conference Rooms |
| Ø   |             | Hundred Acres | Conference Rooms |
| Ø   |             | Ojibwe        | Conference Rooms |

4. A confirmation dialog opens. Click **Yes** to add the room(s) the Room Category or **No** to cancel.

## Control a Room

Open the Control Room window to select a Lighting Scene, change the state of Plug Loads, enable or disable the occupancy sensor, set the Bluetooth PIN, or set the Demand Response level for a specific room.

- 1. Click on the ZUM-HUB4 or on a Room Category.
- 2. For the desired room, click the 🎡 to open the Control Room options.

| Control Room: Hallway         |                | ×            |
|-------------------------------|----------------|--------------|
| Lighting Scene<br>Plug Loads  | Room Off  V    | Send<br>Send |
| Occupancy Sensor<br>Disable f | or 15 iminutes | Send         |
| Bluetooth PIN                 | 2468           | Send         |
| Demand Response               |                | Send         |

#### Lighting Scene

To select the Lighting Scene set in the Room:

- 1. Select a Lighting Scene from the drop down menu.
- 2. Click **Send** to send changes to the room, or close the Control Room to discard unsaved changes.

#### **Plug Loads**

This setting is only active for rooms with a Plug Load Controller.

- 1. Select **On** or **Off** from menu to turn the load on or off.
- 2. Click **Send** to send changes to the room, or close the Control Room to discard unsaved changes.

### Occupancy Sensor

To enable or temporarily disable occupancy sensing:

1. Click the toggle to enable or temporarily disable occupancy sensing.

When disabling occupancy sensing, set the amount of time the occupancy sensor is disabled. The sensor may be disabled for up to 1,415 minutes or appropriately 23 hours.

2. Click **Send** to send changes to the room, or close the Control Room to discard unsaved changes.

#### **Bluetooth PIN**

Set the Bluetooth PIN for Bluetooth devices in a room.

- 1. Set the PIN (0 to 9999)
- 2. Click **Send** to send changes to the room, or close the Control Room to discard unsaved changes.

Refer to Set the Bluetooth PIN (on page 30) for more information.

#### **Demand Response Level**

Set the Demand Response Level for devices in a room.

- 1. Set the level (0 to 100).
- 2. Click **Send** to send changes to the room, or close the Control Room to discard unsaved changes.

Refer to Configure the Demand Response Mode and Level (on page 33) for more information.

# Schedule Room Behavior

The Schedule tab displays and allows you to edit the device calendar, Day Patterns, Room States, Holidays, and the astronomical clock. The calendar displays a color-coded month view that identifies the Day Pattern that is assigned for each day of the month. The calendar is used to view and change which Day Pattern is set on a given day.

By default, weekdays are assigned the Workday Day Pattern and weekends are assigned the Weekend Day Pattern. Holidays that are enabled in Holidays (on page 48) are added to the calendar automatically. Refer to the Day Pattern legend to match the color with the associated Day Pattern. To assign a Day Pattern:

1. Open the Category View.



2. Click the **Schedule** tab.

3. Click the desired date in the calendar. If necessary, change the month and year using the drop-down menus, and then click the desired date.

A menu displays a list of the available Day Patterns.

4. Select the desired Day Pattern.



# Day Patterns

A Day Pattern consists of various Room States that are assigned throughout the day. Each category can be assigned a different schedule of room states in a given day pattern. To access the Day Patterns menu, click the Schedule tab and click **=** to expand the scheduling menus.



### Add Day Patterns

Click Add Day Pattern and enter the desired Day Pattern name. Click 🔽 to save the name, click 🗴 to cancel.

#### Delete Day Pattern

To delete a Day Pattern:

- 1. Click 🗯 to delete a Day Pattern. A Confirmation window opens.
- 2. Click **Yes** to delete the Day Pattern, or click **No** to keep the Day Pattern.

**NOTE:** A Default Day Pattern (such as Holidays, Weekend, and Workdays) cannot be deleted.

#### Configure Day Patterns

After adding a Day Pattern, the **Add Day Pattern** window opens. Alternatively, clicking *beside* a Day Pattern opens the **Edit Day Pattern** window. These windows display two menus: Room State Schedule and Sunrise/Sunset Schedule. The Room State Schedule opens by default.

| ld Day Pattern            |      |     |     |     |     |     |   |
|---------------------------|------|-----|-----|-----|-----|-----|---|
| Day Pattern Name: Halfday |      |     |     |     |     |     |   |
| ✓ Room State Schedule     |      |     |     |     |     |     |   |
| Default - Use Occupancy   |      |     |     |     |     |     |   |
| Room Categories           | 12am | 1am | 2am | 3am | 4am | 5am | 6 |
| Conference Rooms          |      |     |     |     |     |     |   |
| Cubicles - East           |      |     |     |     |     |     |   |
| Cubicles - West           |      |     |     |     |     |     |   |
| Huddle Rooms              |      |     |     |     |     |     |   |
| Labs                      |      |     |     |     |     |     |   |
| Offices                   |      |     |     |     |     |     |   |
| ✓ Sunrise/Sunset Schedule |      |     |     |     |     |     |   |
|                           |      |     |     |     |     |     |   |

#### Room State Schedule

Use the Room State Schedule window to modify the pattern of Room States in each Category for the selected Day Pattern.



To add a Room State to a Room Category:

- 1. Click 📋 to add a Room State. The Add Room State window opens.
- 2. Select the desired Room State from the Name drop-down menu. The default Room State selections are examples of possible Room State applications and can be edited as needed.
  - Automatic Mode
  - Default Use Occupancy
  - Energy Saving
  - Manual Control
  - Morning Turn Off
  - Morning Turn On
  - Sweep Off
- 3. Select the desired Room State start time from the Time drop-down menu: 12 AM 11:45 PM.
- 4. Click **Ok** to save the room state or **Cancel** to close the window without saving.



To edit a default or custom event block:

- Change the assigned Room State:
  - 1. Click an event block, and a dialog opens.
  - 2. Click 🕜 and choose a new Room State from the drop-down menu.
  - 3. Click **Ok** to save the changes or **Cancel** to close the window without saving.
- Change the assigned time:

Click and drag the event block to the desired time within the time table.

| ✓ Room State Schedule   |      |     |
|-------------------------|------|-----|
| Default - Use Occupancy |      |     |
| Room Categories         | 12am | 1am |
| Conference Rooms        | 🖻 🗌  | ▶   |
| Cubicles - East         |      |     |

Click and drag the event block to the desired time along the time table.

#### Sunrise/Sunset Schedule

The ZUM-HUB4 determines sunrise and sunset based on the location set in Location (on page 56) settings. The Sunrise/Sunset Schedule assigns a Room State to a Room Category based on the Day Pattern and the sunrise or sunset. Only one Sunrise event and one Sunset event can be set for a Room Category per day. To assign Room States based on the sunrise or sunset:

- 1. Expand the Sunrise/Sunset Schedule menu.
- 2. Locate the Room Category.
- 3. Adjust the settings in the Sunrise events column and/or the Sunset events column.
  - ENABLE: Click the ENABLE toggle to allow sunrise or sunset to trigger an event.
  - **ROOM STATE:** Select the a Room State from the drop-down menu.
  - OFFSET (MIN): If necessary, set an offset duration in minutes. The offset can be positive so the Room State occurs after sunrise or sunset or negative so that the Room State occurs before sunrise or sunset.



# **Room States**

A Room State is both a set of events as well as a set of behaviors for a Room Category. It identifies the lighting scene that is recalled, the functionality of the occupancy sensor and the plug load controllers. To access the Room States menu, click the **Schedule** tab and click  $\equiv$  to expand the scheduling menus.



## Configure a Room State

Click Add Room State to add a new Room state or 🕜 to edit an existing Room State. The Room State Settings window opens. To configure a Room State in the Room State Settings window:

- 1. Enter or edit the name of the desired Room State in the Room State Name filed.
- 2. Configure the Properties:
  - Scene: Select Scene 1 16, None, or Room Off.
  - **Occupancy:** Select **Enabled** to allow occupancy sensing, **Disabled** to turn occupancy sensing off, or **Unaffected** to use the setting of the previous event.
  - **Plug Loads:** Select **On** to turn on the Plug loads, **Off** to turn off the Plug Loads, or **Unaffected** to use the setting of the previous event.
- 3. Click **Cancel** to close the window without saving, or **Add** to add the Room State.

| Room State Settings |         |        | ×     |
|---------------------|---------|--------|-------|
| Room State Name     |         |        |       |
| Properties          |         |        |       |
| Scene               | Scene 1 | ~      |       |
| Occupancy           | Enabled | ~      |       |
| Plug Loads          | On      | ~      |       |
|                     |         | Cancel | + Add |
|                     |         |        |       |

#### Delete a Room State

To delete a Room State:

- 1. Click 🇯 to delete a Room State. A confirmation window opens.
- 2. Click **Yes** to delete the Room State, or click **No** to keep the Day Pattern.

**NOTE:** A Default Room State (such as Automatic Mode and Default - Use Occupancy) cannot be deleted.

# Holidays

The Holidays menu allows you to create a new holiday and to edit the holiday properties. Holidays that are enabled are automatically added to the calendar in the **Schedule** tab. To access the Holidays menu, click the **Schedule** tab and click **=** to expand the scheduling menus.

| Exp   | and               |
|---|-------------------|
| scheduli  | ng menus          |
| 6   |                   |
|   |                   |
| Day Patterns  |                   |
| Halfday 🕜 🏛   |                   |
| Holidays 🕜 📋  |                   |
| Summer Fridays  |                   |
| Weekend 🕼 🗊   |                   |
| Workdays  |                   |
| + Add Day Pattern   |                   |
| Deven Chates  | 1                 |
| Automatic Mode  |                   |
| 🕮 Default - Use Occupan 🔽 📋   |                   |
| 🕮 Energy Saving 🕜 💼   |                   |
| 🖾 Evening 🚺 🛍   |                   |
| 🖾 Manual Control 🚺 💼  |                   |
| + Add Room State  |                   |
| Holidays  | 🕇 — Holidays menu |
| A Eastar 2021   |                   |
| Caster 2021     Caster 2021     Caster 2021     Caster 2021     Caster 2021 |                   |
| Mindependence Day 20  |                   |
| Appreciation Day  |                   |
| 🗂 Labor Day 2021 🕜 💼  |                   |
| + Add Holiday   |                   |
|   |                   |

### Add Holidays

Click **Add Holiday** and type the desired Holiday name. Click 🔽 to save the name, click 💌 to cancel.

### Delete a Holiday

To delete a Holiday:

- 1. Click 🗯 to delete a Holiday. A confirmation window opens.
- 2. Click **Yes** to delete the Holiday, or click **No** to keep the Holiday.

**NOTE:** A default Holiday cannot be deleted.

### **Configure Holidays**

After adding a Holiday, the **Holiday Settings** window opens. Alternatively, clicking **2** beside a Holiday opens the **Edit Holiday Settings** window. These windows display the Holiday settings. To configure Holidays in the **Holiday Settings** window:

- 1. Enter or edit the name of the desired Holiday in the **Holiday** field.
- 2. Configure the Properties:
  - Day Pattern: By default, the Holiday Day Pattern is selected
  - **Enabled:** By default, the Enabled toggle is on. Turn the toggle off to prevent the holiday from appearing in the calendar on the **Schedule** tab. When the toggle is off, the default Day Pattern is applied instead.
  - **Observed:** Select a date to observe the holiday.
- 3. Click **Add** to add the Holiday or **Cancel** to close the window.

| Holiday Settings |          |          | ×   |
|------------------|----------|----------|-----|
| Holiday          |          |          |     |
| Properties       |          |          |     |
| Day Pattern      | Holidays | $\sim$   |     |
| Enabled          |          |          |     |
| Observed         | 08/03    |          |     |
|                  |          | Cancel + | Add |
|                  |          |          |     |
|                  |          |          |     |

# **Manage Floors**

Rooms must be discovered by the ZUM-HUB4 before performing any procedure in this section. Refer to Discover Rooms (on page 27). Access Floors in the System View. To manage a Floor, refer to the following information:

- Turn On/Off a Floor (on page 29)
- Set the Bluetooth PIN for a Floor (on page 32)
- Set the Demand Response Level for a Floor (on page 36)
- Manage Rooms (on page 37)
- Manage Devices (on the next page)

| System<br>View | Mana<br>floo                        | age N<br>rs | /ar<br>roo | nage<br>oms  |            | Manage<br>devices   | Find<br>rooms | Delete<br>selected roo | ms  |          |                   | Add R<br>Room ( | oom to<br>Categor | у                     |                         |            |
|----------------|-------------------------------------|-------------|------------|--------------|------------|---------------------|---------------|------------------------|-----|----------|-------------------|-----------------|-------------------|-----------------------|-------------------------|------------|
|                | HQ-ZUM<br>1 🤊<br>Unassigned Floor 4 |             | ŀ          | HQ-ZI        | JM         |                     |               |                        |     |          |                   |                 |                   |                       |                         | Actions V  |
|                |                                     |             | Г          | 🗸 Roon       | 15         | 🖴 Hardware Manaj    | gement        |                        |     |          |                   |                 |                   |                       |                         |            |
| ¢\$            |                                     |             | [          | <b>Q</b> Glo | bal Filt   | ter                 |               |                        |     |          |                   |                 | A                 | ssociate Rooms Select | t a Category            | ~          |
|                |                                     |             |            |              | Rc         | ¢ moc               |               | Category 🗢             | Flo | or ID 🗢  | Host Name 🗢       | Status 🗢        | Occ. 🗢            | Active Scene 🗢        | Next Event 🗢            | Action     |
|                |                                     |             |            | Ð            | <u>C</u> ; | aroline's Office    |               | Offices                | Un  | assigned | ZUMNET-CA043F     | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | 0            | <u>o</u>   | olorado             |               | Conference Rooms       | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | 0            | <u>o</u>   | ubicles - Northeast |               | Cubicles - East        | Un  | assigned | ZUMNET-CA0453     | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | D          | ownstairs Restrooms |               | Restrooms              | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | н          | undred Acres        |               | Conference Rooms       | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | N          | etwork Team         |               | Labs                   | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | <u>o</u>   | jibwe               |               | Conference Rooms       | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | <u>o</u>   | lympus              |               | Conference Rooms       | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | P          | rototyping          |               | Labs                   | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Ð            | R          | pom 206             |               | Huddle Rooms           | Un  | assigned | ZUMNET-CA045E     | Online          | ¥                 | Off                   | Default - Use Occupancy | 0 0        |
|                |                                     |             |            | Θ            | R          | pom 207             |               | Huddle Rooms           | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | 0 🗘        |
|                |                                     |             |            | Θ            | R          | pom 208             |               | Huddle Rooms           | Un  | assigned | ZUMNET-CA0427     | Online          |                   | Off                   | Default - Use Occupancy | 0 🌣        |
|                |                                     |             |            | 0            | <u> </u>   | pstairs Restrooms   |               | Restrooms              | 1   |          | CEN-GWEXER-EBC84F | Online          |                   | Off                   | Default - Use Occupancy | <b>6</b> ¢ |

# **Manage Devices**

In the System View, manage devices in the Hardware Management tab. Devices are divided into two categories: **Wired** and **Wireless**. Expand the Wireless menu to view and edit wireless devices. Expand the Wired menu to view and edit wired devices.

Rooms must be discovered by the ZUM-HUB4 before performing any procedure in this section. Refer to Discover Rooms (on page 27).



# Wireless Devices

Access wireless gateways in the **Hardware Management** tab and expand the **Wireless** menu. View information about the gateway, assign Floor or Zone IDs, and identify or remove a gateway. To view, move, and delete the rooms assigned to the gateway, refer to Review Rooms Assigned to a Gateway (on the facing page).

Information about the gateway:

- Gateway Hostname: Displays the gateway's name.
- IP ID: Displays the gateway's IP ID.
- Serial Number: Displays the gateway's serial number.
- IP Address: Displays the gateway's IP address.
- Floor ID: Refer to Assign a Floor ID to a Gateway (on the facing page).
- Zone ID: Refer to Assign a Floor ID to a Gateway (on the facing page).
- Action: Refer to Identify a Gateway (on the facing page) and Remove a Gateway (on the facing page).

| Expand  | ✓ Wireless               |       |               |               |          | _       |              |  |
|---------|--------------------------|-------|---------------|---------------|----------|---------|--------------|--|
| to show | Gateway Hostname         | IP ID | Serial Number | IP Address    | Floor ID | Zone ID | Action       |  |
| rooms – | 0 CEN-GWEXER-EBCOMF      | 08    | 8EE20C88      | 192.168.0.136 | 1        | AC      | ~ <b>±</b> Q |  |
| ed to a | <u>CEN-OWEXER-EEO/AC</u> | 07    | 8EF219FF      | 192.168.0.145 | 2        | AB      | ~ #Q         |  |
| teway.  |                          |       |               |               |          |         |              |  |
| '       | > Wired                  |       |               |               |          |         |              |  |
|         |                          |       |               |               |          |         |              |  |
|         |                          |       |               |               |          |         |              |  |

### Assign a Floor ID to a Gateway

Assigning a Floor ID to a gateway helps gateways discover wireless devices with the matching Floor ID. Set a device's Floor ID in the Zūm app before discovering the devices on the ZUM-HUB4. The Floor ID drop-down menu options are numbers -40 to + 200 and Disabled. The Floor ID can be negative to indicate a floor below ground or positive to indicate a level above ground. Disabled categorizes the gateway to Unassigned Floor.



#### Assign a Zone ID to a Gateway

To designate different areas of a floor as a zone, assign a gateway a Zone ID. Assigning a Zone ID to a gateway helps gateways discover wireless devices with the matching Zone ID. Set a device's Zone ID in the Zūm app before discovering the devices on the ZUM-HUB4. The Zone ID drop-down menu options are letter groupings AA to AZ and BA to BF.

### Identify a Gateway

To identify a gateway, click  $\mathbb{Q}$ . The SETUP LED on the gateway flashes.

### Remove a Gateway

To delete a gateway, click 💼. A confirmation window opens. Click **Yes** to delete the gateway, or **No** to keep the gateway.

#### Review Rooms Assigned to a Gateway

Click 👩 next to a gateway to view its assigned rooms:

- **Netbridge:** Lists assigned rooms.
- Status: Displays Online or Offline to show the device status.
- Floor ID: Inherits the Floor ID assigned to the gateway.
- Zone ID: Inherits the Zone ID assigned to the gateway

- Action: Move a room to a different gateway or remove a room.
  - Click ≓ to move a room. The Move window opens.
    - Select the desired gateway from the drop-down menu.
    - Click Move to move the room or Cancel to close the window without moving the room.

**NOTE:** Moving a room to a gateway with different a Floor ID or Zone ID changes the room's Floor ID or Zone ID to match the new gateway.

• Click 💼 to remove a room. A confirmation window opens. Click **Yes** to delete the room or **Cancel** to close the window without deleting the room.

|  |          |         | less                |
|--|----------|---------|---------------------|
| IP ID Serial Number IP Address Floor ID Zone ID Action |          |         | Gateway Hostname    |
| 08 8EE20C88 192148.0.136 1 V AC V 🛱 Q                  |          |         | CEN-GWEXER-EBC84F   |
| Floor ID Zone ID Action                                | Floor ID | Status  | etbridge            |
| 1 AC Z Move room                                       | 1        | Online  | olorado             |
| 1 AC different g                                       | 1        | Online  | ownstairs Restrooms |
| 1 AA # 1   | 1        | Offline | undred Acres        |
| 1 AC 🛱 🖻   | 1        | Online  | etwork Team         |
| i AC 럳 💼   | 1        | Online  | ýbwe                |
| 1 AC = Remove roo                                      | 1        | Online  | lympus              |
| 1 AC 2   | 1        | Online  | rototyping          |
| 1 AC # 1   | 1        | Online  | oom 207             |
|  | 1        | Online  | pstairs Restrooms   |

## Wired Devices

Access wired Room Access Points in the **Hardware Management** tab and expand the **Wired** menu. A Room Access Point (RAP) is the main device in the room. View information about the RAP, assign Floor or Zone IDs, or remove an RAP. To view devices connected to RAP, refer to Review RAP Components (on the facing page).

- Room Access Point Hostname: Displays the main device's name.
- IP ID: Displays the main device's IP ID.
- Serial Number: Displays the main device's serial number.
- IP Address: Displays the main device's IP address.
- Floor ID: Refer to Assign a Floor ID to an RAP (on the facing page).
- Zone ID: Refer to Assign a Zone ID to an RAP (on the facing page).
- Action: Refer to Remove a RAP (on the facing page).

| List of load      |    | V Rooms 🛛 Hardware Management |       |               |               |            |          |            |      | Assign     |
|-------------------|----|-------------------------------|-------|---------------|---------------|------------|----------|------------|------|------------|
| controllers       | ٦Ľ | > Wretes<br>v Wred            |       |               |               |            |          |            |      | Floor ID   |
|                   | Ц  | Room Access Point Hostname    | IP ID | Serial Number | IP Address    | Floor ID   | Zone ID  | Ac         | tion | Zone ID    |
| Expand to show    | -  | - 0 ZUMMET-CAMAZ              | 105   | TSID3CSESDEE  | 192.168.0.137 | Disabled ~ | Disabled | × 8        |      | 5          |
| load controllers. |    | ZUNNET-CAASE     ZUNNET-CAASE | 106   | 123456847     | 192.168.0.161 | Disabled V | Disabled | × 0-       |      | Remove     |
|                   |    | 0 ZUMMITCHM3                  | 107   | 123456848     | 192.168.0.181 | Disabled V | Disabled | ~ <b>0</b> |      | controller |
|                   |    |                               |       |               |               |            |          |            |      |            |

### Assign a Floor ID to an RAP

Assigning a Floor ID to a load controller adds a floor to the Floor list. The Floor ID drop-down menu options are numbers -40 to + 200 and Disabled. The Floor ID can be negative to indicate a floor below ground or positive to indicate a level above ground. Disabled categorizes the load controller to Unassigned Floor.



#### Assign a Zone ID to an RAP

To designate different areas of a floor as a zone, assign a load controller a Zone ID. The Zone ID drop-down menu options are letter groupings AA to AZ and BA to BF.

#### Remove a RAP

To delete a load controller, click 💼. A confirmation window opens. Click **Yes** to delete the load controller, or **No** to keep the load controller.

#### **Review RAP Components**

Click 🕥 next to a load controller to view connected devices.

- Device: Displays child devices connected to the parent load controller.
- Status: Displays Online or Offline to show the child device's status.
- Cresnet ID: Displays the child device's Cresnet<sup>®</sup> control network ID.
- Serial Number: Displays the child device's serial number.
- Version: Displays the child device's current firmware version.

- **Components:** Click **D** to view the child device components. Components displays the internal functions of a load controller, such as the internal occupancy sensors, photocell, and load controller, as well as other devices connected to the device, such as a keypad.
  - Name: For internal components, the name of the component is the device name plus the suffix "-1," "-2," or "-3."
    - -1: Load Controller component: Controls the connected loads.
    - -2: Occupancy sensor component: Uses occupancy to control the connected loads.
    - -3: Photocell component: Uses ambient light to control the connected loads.
    - Change the component name by using the Zūm App.
  - ° Model: Displays the device model.
  - Serial Number: Displays the component's serial number.
  - Firmware Version: Displays the component's firmware version.
  - ° Status: Displays Online or Offline to show the component's status.

| UMNET-JBOX-16A-LV-5D          | EE                 |                 |                    |                    |  |
|-------------------------------|--------------------|-----------------|--------------------|--------------------|--|
| Name ≑                        | Model              | Serial Number 🗘 | Firmware Version 🗘 | Status 🗢 Details 🗢 |  |
| ZUMNET-JBOX-16A-LV-<br>5DEE-3 | ZUMNET-JBOX-16A-LV | TSID3C5E5DEE-3  | 1.001.00038        | Online             |  |
| ZUMNET-JBOX-16A-LV-<br>5DEE-2 | ZUMNET-JBOX-16A-LV | TSID3C5E5DEE-2  | 1.001.00038        | Online             |  |
| ZUMNET-JBOX-16A-LV-<br>5DEE-1 | ZUMNET-JBOX-16A-LV | TSID3C5E5DEE-1  | 1.001.00038        | Online             |  |

| 1 | Rooms Aradware Management  |        |            |               |                                |                         |            |
|---|----------------------------|--------|------------|---------------|--------------------------------|-------------------------|------------|
| > | Wireless                   |        |            |               |                                |                         |            |
| ~ | ' Wired                    |        |            |               |                                |                         |            |
|   |                            |        |            |               |                                |                         |            |
|   | Room Access Point Hostname |        |            |               | IP ID Serial Number IP Address | Floor ID Zone ID Action |            |
|   | C ZUMNET-CA0427            |        |            |               | 105 TSID3C5E5DEE 192.168.0.137 | Disabled V 📋            |            |
|   |                            |        |            |               |                                |                         |            |
|   | Device                     | Status | Cresnet ID | Serial Number | Version                        | Components              | Display    |
|   | ZUMNET-JBOX-16A-LV-SDEE    | Online | 3          | TSIDOCSESDEE  | 1.001.00038                    | 8                       |            |
|   | ZUMUNK-JBOX-16A-LV-D5EG    | Online | 6          | TSID33E6D5EG  | 1.001.00038                    | 8                       | components |
|   | ZUMUNK-JBOX-16A-LV-D5ED    | Online | 5          | TSID33F4D5ED  | 1.001.00038                    | 5                       |            |

# Manage Settings

Access Settings in the Settings View. The Settings tab displays and allows you to edit the firmware, system time and location, network configuration, security configuration, and Crestron services.

| Manage ZUM-HUB4 settings                               |
|--|
|  |
| O Settings House A External Controls III Commissioning |
|  |
| > Version Management                                   |
| > General  |
| > Location   |
| > Network  |
| > Security Configuration                               |
| > Services   |
| Ψ  |

Expand Settings

# Version Management

Allows you to check for firmware updates for the ZUM-HUB4 and connected devices. Firmware updates for battery powered devices may take up to 24 hours. To update firmware:

- 1. Open **Settings View**.
- 2. Click Settings.
- 3. Click Version Management.
- 4. From Update Method, select **Cloud** or **Removeable Media**.
- 5. If using removeable media, insert the device.
- 6. Check the box under Action for the devices whose firmware you want to update.
- 7. Click Update Now.

| Settings 👹 Uzers 🛦 External Controls 🎟 Commissioning  |  |  |  |   |   |          |
|---|--|--|--|---|---|----------|
| Version Management  |  |  |  |   |   |          |
| Zim Hub Finnware Version         2.0000.00026 (Jing 17.0201)           Zim Hub Software Version         1.001.00145           Time Management         (Ø.Lich Hub Chalchel)           Lag Felder Laustein UKK         (Ø.Lich Hub Chalchel) |  |  |  |   |   |          |
|   |  |  |  |   |   |          |
| ast Checked: 08/21/2021 01:16:01 3  | IP Address/RFID  | Installed FW Ver   | Available FW Ver   | Device State  | Include Room Devices  | Action   |
| ast Checked: 08/21/2021 01:16:01 C<br>Host Name   | IP Address/RPID<br>10.35.72.57   | Installed PW Ver<br>2.002.0010   | Available FW Ver<br>2.001.0009   | Device State<br>Update Available  | Include Room Devices  | Update N |
| ast Checked: 08/21/2021 01:16:01 ©<br>Host Name<br>HQ-2UM<br>> CEN-GWEXER-EBC84F  | IP Address/RFID<br>10.35.72.57<br>192.168.0.136  | Installed FW Ver<br>2.002.0010<br>1.4469.00022   | Available PW Ver<br>2.001.0009<br>1.4469.00022   | Device State<br>Update Available<br>Up To Date  | Include Room Devices  | Action   |
| Ant Checked: 08/21/2021 01:16:01 ©<br>Host Name<br>HQ-ZUM<br>> CEN-GWDER-EDER4F<br>CEN-GWDER-EDE74C   | IP Address/RFD<br>1035.72.57<br>192.168.0.136<br>192.168.0.35  | Installed PW Ver<br>2.002.0010<br>1.4469.00022<br>1.4469.00022                               | Available FW Ver<br>2.001.0009<br>1.4469.00022<br>1.4469.00022                             | Device State<br>Update Available<br>Up To Date<br>Up To Date  | Include Room Devices  | Action   |
| Last Checkel: 08/21/2021 011601 C<br>Host Name<br>Y 1Q-2UM<br>> CDN-OWDER-EDDAF<br>CEN-OWDER-EDDAF<br>CEN-OWDER-EDDAF<br>ZUMRT-CAD427   | IPAddeex/RPD<br>1035/257<br>192.148.015<br>192.148.015<br>192.148.0137                               | Installed FW Ver<br>2.002.0010<br>1.4469.00022<br>1.4469.00022<br>1.001.00038                | Available FW Ver<br>2.001.0009<br>1.4469.00022<br>1.4469.00022<br>1.001.00029              | Device State Update Available Up To Date Up To Date Up To Date  | Include Room Devices  | Action   |
| Last Checkel 08/21/2021 01:1601 ©<br>Host Name<br>VHQ-2UM<br>> CEN-GWDERF-RECHF<br>CEN-GWDERF-RECHF<br>CEN-GWDERF-RECHF<br>2UMRET-CADIAT<br>ZUMRET-CADIAT   | IP Address/IPRD<br>1035-22.57<br>102 1480.0136<br>1971.1480.0136<br>1972.1480.0137<br>1972.1480.0137 | Installed FW Ver<br>2.002.0010<br>1.4469.00022<br>1.4469.00022<br>1.001.00038<br>1.001.00038 | Available FW Ver<br>2.001.0009<br>1.4469.00022<br>1.4469.00022<br>1.001.0029<br>1.001.0029 | Device State<br>Update Available<br>Up To Date<br>Up To Date<br>U Undate Available<br>O Undate Available  | Isclude Room Devices<br>NA<br>NA<br>NA<br>NA<br>NA<br>NA    | Action   |
| Last Overkeit 09/21/2021 01:16/01.07<br>Hoat Name<br>¥142-23.M<br>3 CDN-070208 (EICAFF<br>CDN-070508 (EICAFF<br>2.0.NR-ET-6.0627<br>2.0.NR-ET-6.0627<br>2.0.NR-ET-6.0626<br>2.0.NR-ET-6.0626  | PAddess/07D<br>10.557257<br>172148.0156<br>192148.0145<br>192148.0145<br>192148.0147<br>192148.0147  | Installed PW Ver<br>2.002.0010<br>1.4499.00022<br>1.4499.00022<br>1.001.00038<br>1.001.00038 | Available FW Ver<br>2.001.0009<br>1.4469.00022<br>1.4469.00022<br>1.001.0029<br>1.001.0029 | Device State Update Available Up To Date Update Available Update Available Update Available Update Available | Include Room Devices NA<br>NA<br>NA<br>NA<br>NA<br>NA<br>NA | Action   |

## General

Displays the date, time, and time zone. To change the date and time:

- 1. Open Settings View.
- 2. Click Settings.
- 3. Click General.
- 4. Enter new values in the fields.
- 5. Click Save Changes to save the changes or Sevent to discard changes.

**NOTE:** Changing these settings requires an immediate system reboot.

A confirmation windows opens. Click **Yes** to reboot or **No** to close the window.

| © Settings Western A External Controls III Commissioning |  |
|--|--|
| > Version Manazement                                     |  |
| ✓ General  |  |
| Date/Time  |  |
| Time Synchronization                                     |  |
| Enable Time Synchronization                              |  |
| Time Server  | pool.ntp.org                           |
|  | Synchronize How                        |
| Time Configuration                                       |  |
| Time Zone  | (UTC-06:00) Central Time (US & Canada) |
| Time(24hour format)                                      | 13.40                                  |
| System Date/Time   | 08/23/2021                             |

# Location

Displays the location (latitude and longitude). Accurate location ensures the Sunrise/Sunset Schedule displays the correct sunrise and sunset times. To change the location:

- 1. Open Settings View.
- 2. Click Settings.
- 3. Click Location.
- 4. Enter new values in the fields.
- 5. Click Sure Changes to save the changes or Creat to discard changes.

NOTE: Changing these settings requires an immediate system reboot.

A confirmation windows opens. Click **Yes** to reboot or **No** to close the window.

| ♦ Settings 🔮 Users 🛦 External Controls III Commissioning |           |
|--|-----------|
| > Version Management                                     |           |
| > General  |           |
| ✓ Location   |           |
| Location   |           |
| Modelini -   |           |
| Latitude   | 41        |
| Longitude  | -73,93333 |
|  |           |

### Network

Displays the Ethernet settings. To change the Ethernet settings:

- 1. Open Settings View.
- 2. Click Settings.
- 3. Click Network.
- 4. Enter new values in the fields. Some fields are not available if DHCP is on.
- 5. Click Save Changes to save the changes or Savert to discard changes.

**NOTE:** Changing these settings requires an immediate system reboot.

A confirmation windows opens. Click **Yes** to reboot or **No** to close the window.

| 💠 Settings 🔮 Users 👍 External Controls 🎟 Commissioning |        |
|--|--------|
| > Version Management                                   |        |
| > General  |        |
| > Location   |        |
| ✓ Network  |        |
| Ethernet   |        |
| General  |        |
| DHCP   |        |
| Host Name  | HQ-ZUM |
| IP Address   |        |
| Subnet Mask  |        |
| Default Router   |        |
| Domain   |        |
| Primary DNS  |        |
| Secondary DNS  |        |
| Web Server   |        |
| Secure Web Port  | 443    |

# Security Configuration

Allows the user to change the device service password. To edit the password:

- 1. Open Settings View.
- 2. Click Settings.
- 3. Click Security Configuration.
- 4. Click 📝 and to new values in the fields.
- 5. Click 🗈 Save Changes to save the changes or 🕤 Revent to discard changes.

A confirmation windows opens. Click **Yes** to reboot or **No** to close the window.

| Sett | ings 🔮 Ukars 📥 External Controls 🎟 Commissioning   |  |  |  |  |
|------|--|--|--|--|--|
|      |  |  |  |  |  |
| > V  | tersion Munagement   |  |  |  |  |
| > G  | eneral Control of Cont |  |  |  |  |
| > 6  | ocation  |  |  |  |  |
| > N  | letvork  |  |  |  |  |
| ~ S  | ecurity Configuration  |  |  |  |  |
|      |  |  |  |  |  |
|      | HQ.ZUM   |  |  |  |  |
|      | A Device service user account and password are regulared to enable authentification on yoar Galewayn. This step helps soccure yoar Zaim Hub environment.   |  |  |  |  |
|      | Device Service User creagedviceuser  |  |  |  |  |
|      | Device Service Reservord 22  |  |  |  |  |
|      |  |  |  |  |  |

### Services

Displays Cloud Settings. To turn Cloud Configuration Service on or off:

- 1. Open Settings View.
- 2. Click Settings.
- 3. Click **Services**. Cloud Configuration Service is on by default.
- 4. To turn off Cloud Configuration Service, click the toggle.
- 5. Click Save Changes to save the changes or Sevent to discard changes.

**NOTE:** Changing these settings requires an immediate system reboot.

A confirmation windows opens. Click **Yes** to reboot or **No** to close the window.

| Γ | Settings 🔮 Users         | d External Controls | III Commissioning             |
|---|--------------------------|---------------------|-------------------------------|
|   | a Maria Maraa            |                     |                               |
|   | > version Management     |                     |                               |
|   | > General                |                     |                               |
|   | > Location               |                     |                               |
|   | > Network                |                     |                               |
|   | > Security Configuration |                     |                               |
|   | ✓ Services               |                     |                               |
|   | Cloud Settings           |                     |                               |
|   |                          |                     | Cicui Configuration Service 🔹 |
|   |                          |                     |                               |

# Manage Users

Access Users in the Settings View. The Users tab shows a list of all users and allows you to create new users and modify or delete existing users. The username must be 3 to 15 characters and are permitted to use uppercase letters (A-Z, lowercase letters (a-z), digits (0-9), and special characters (- () + [].\_). The password must be 8 to 12 characters is required to contain at least one uppercase letters (A-Z), lowercase letters (a-z), digits (0-9), and special characters (#?!@\$%^&\*-).

| Manage Users                             |              |            |                        |                |            |
|--|--------------|------------|------------------------|----------------|------------|
| iettings 🔮 Users 👍 External Controls 🏭 C | ommissioning |            |                        |                |            |
| Users                                    |              |            |                        |                |            |
| Local Users                              |              |            |                        |                |            |
| Username                                 | Last Name    | First Name | Email                  | Group          | Action     |
| Crestron                                 | User         | Main       | crestron@crestron.com  | Administrators | 8          |
| Facilities                               | Crew         | Facilities | facilities@company.com | Administrators | C* 🖬       |
|  |              |            |                        |                | + New User |
|  |              |            |                        |                |            |

## Create a New User

To create a new User:

- 1. Open Settings View.
- 2. Click Users.
- 3. Click + New User.
- 4. Enter the user details.
- 5. Click **Save** to save the new user or **Cancel** to exit without creating a new user.

| User Detail      |                  |        | ×      |
|------------------|------------------|--------|--------|
|                  |                  |        |        |
| Username         | Username         |        |        |
| Password         | Password         |        |        |
| Confirm Password |                  |        | -      |
| First Name       | First Name       |        |        |
| Last Name        | Last Name        |        |        |
| Email            | Email            |        |        |
| Group            | Administrators 🗸 |        |        |
|                  |                  | Cancel | ✓ Save |
|                  |                  |        | li     |

# Configure an Existing User

To configure an existing User:

- 1. Open Settings View.
- 2. Click Users.
- 3. Click 📝 next to the user.
- 4. Update the user details.
- 5. Click **Save** to save the changes or **Cancel** to exit without saving the changes.

### Delete an Existing User

To delete an existing User:

- 1. Open Settings View.
- 2. Click Users.
- 3. Click 💼 next to the user.
- 4. Click **Yes** to delete the user or **No** to cancel without deleting the user.

### External Users

For External Rooms to successfully connect, create a User and select **ExternalUser** from the Group drop-down menu. The Username and Password must match the credentials used for the SIMPL+® software module.

#### NOTES:

- SIMPL+<sup>®</sup> software modules are provided for use in commissioning a Crestron control system to work with the ZUM-HUB4. The software modules run within the control system program and provide virtual connections for all the necessary intersystem control signals. A separate dedicated module is required for each external and mirrored room. Control systems are limited in the number of modules supported, ranging from 0 to 1000 depending on the model. For further assistance, please contact Crestron Commercial Lighting Support via email at <u>clclighting@crestron.com</u> or by calling 855-644-7643.
- Other Crestron control systems must be commissioned to provide the control logic required to communicate and operate as part of the Zūm network. Once integrated, each external room effectively becomes a part of the Zūm ecosystem.

# Manage External Controls

Access External Controls in the Settings View. Use the External Controls tab to manage External Room settings. External Rooms provide the ability to integrate third-party devices into a Zūm lighting control system. Refer to External Users (on the previous page) to create a User for External Rooms.

SIMPL+® software modules are provided for use in commissioning a Crestron control system to work with the ZUM-HUB4. The software modules run within the control system program and provide virtual connections for all the necessary intersystem control signals. A separate dedicated module is required for each external and mirrored room. Control systems are limited in the number of modules supported, ranging from 0 to 1000 depending on the model. For further assistance, please contact Crestron Commercial Lighting Support via email at clclighting@crestron.com or by calling 855-644-7643.

|   | Manage External Controls                                 |
|---|--|
| • | 2 Settings 🖀 Ukers 🚮 External Controls III Commissioning |
| 1 | > External Module Connections                            |
|   | > External Controls                                      |
|   | > BACnet Configuration                                   |
|   | > Room Mirroring Configuration                           |
|   | Ĩ  |

Expand External Cotrols settings

# **External Module Connections**

To allow or prevent older versions of module to be used:

- 1. Open Settings View.
- 2. Click the External Controls tab and expand the External Module Connections menu.
- 3. Click the toggle to turn Allow Legacy Module Connection on or off.

| ♦ Settings 🔮 Users 👍 External Controls III Commissioning |                                |
|--|--------------------------------|
| V External Module Connections                            |                                |
| Leases Medules   |                                |
| Legacy modules   |                                |
|  | Allow Legacy Module Connection |

# **External Controls**

Access External Controls in the Settings View. Use the **External Controls** menu to add, edit, or delete a macro.

| > External Module Connections |                 |                         |               |                                      |          |
|-------------------------------|-----------------|-------------------------|---------------|--------------------------------------|----------|
| External Controls             |                 |                         |               |                                      |          |
|                               |                 |                         |               |                                      |          |
| Export ID                     | Macro Name Φ    | Room State Φ            | Target Type © | Targets Φ                            | Actio    |
| Export ID - 10                | NewMacro10      | Default - Use Occupancy | Room          | No Targets Assigned                  | 8        |
| new Export Id 1               | Macro 1         | Energy Saving           | Room          | No Targets Assigned                  | ß        |
| new Export Id 2               | Macro 2         | Manual Control          | Category      | Offices, Conference Rooms            | 8        |
| new Export Id 3               | Macro 31        | Energy Saving           | Room          | No Targets Assigned                  | 8        |
| new Export Id 4               | new Macro 4     | Energy Saving           | Floor         | -34, -29, 155                        | 8        |
| new Export Id 5               | new Macro 5     | Energy Saving           | Hub           |                                      | <b>a</b> |
| NewExportID_084749            | NewMacro_084749 | Default - Use Occupancy | Room          | No Targets Assigned                  | 8        |
| NewExportID_204912            | NewMacro_204912 | Default - Use Occupancy | Room          | No Targets Assigned                  | 8        |
| NewExportID7                  | NewMacro7       | Energy Saving           | Category      | Offices, Conference Rooms            | <b>a</b> |
| NewExportID8                  | NewMacro8       | Sweep Off               | Room          | No Targets Assigned                  | 2        |
| NewExportID9                  | NewMacro9       | Default - Use Occupancy | Category      | Offices, Restrooms, Conference Rooms | 8        |
| NewExportID9                  | NewMacro9       | Manual Control          | Category      | Offices, Restrooms, Conference Rooms | 8        |

### Add Macro

To add a new macro:

- 1. Open **Settings View**.
- 2. Click the External Controls tab and expand the External Controls menu.
- 3. Click + Add . A new row appears.
- 4. Configure the macros settings:
  - Enter the Export ID.
  - Enter the Macro Name.
  - Select a Room State.
  - Target Type: Room Category, Room Floor, or Hub.
  - Enter Targets.
- 5. Click 💓 to save or 💥 to cancel.

| ٥ | Settings 🔮 Users 🚓 External Controls 🏭 Commission | oning           |                         |               |           |        |
|---|---|-----------------|-------------------------|---------------|-----------|--------|
|   | External Module Connections                       |                 |                         |               |           |        |
|   | <ul> <li>External Controls</li> </ul>             |                 |                         |               |           |        |
|   |   |                 |                         |               |           |        |
|   | Export ID   | Macro Name ¢    | Room State ¢            | Target Type ¢ | Targets ¢ | Action |
|   | NewExportID_104618                                | NewMacro_104618 | Default - Use Occupancy | Room ~        | 2         | × ×    |

#### **Edit Existing Macro**

To edit an existing macro:

- 1. Open Settings View.
- 2. Click the External Controls tab and expand the External Controls menu.
- 3. Click 📝.
- 4. Enter new values in the fields.
- 5. Click 💜 to save or 💥 to cancel.

#### **Delete Existing Macro**

To delete an existing macro:

- 1. Open Settings View.
- 2. Click the External Controls tab and expand the External Controls menu.
- 3. Click 💼. A confirmation window opens.
- 4. Click **Yes** to delete the macro or **No** to cancel.

### BACnet Configuration

The BACnet tab displays the system settings to establish a connection with the BMS (building management system). To configure BACnet service:

- 1. Open Settings View.
- 2. Click the External Controls tab and expand the BACnet Configuration menu.

3. Configure the BACnet settings:

**NOTE:** Use the search to find a specific room.

- BACnet Service: Click the toggle to turn the BACnet service on or off.
- Host ID: The ID that the ZUM-HUB4 uses when communicating with the BACnet system.
- Port Number: The port number that is used when communicating with the BACnet system.
- Export Settings: Export the BACnet settings to a CSV (comma separated value) file.
- Reserved Objects: Display objects that send signals to the ZUM-HUB4.
- BACnet Enabled Rooms: The number of rooms with BACnet.
- Property List: Allows users to select which objects are enabled for all rooms.
- Room Name: The name of the room.
- Base ID: Orders the device in the system and assigns the object IDs.
- ID Range: The range of Object IDs that the room can use.
- Object List: Displays a list of all Object IDs, Object Names, and Object Types within the selected room. A blue checkmark indicates objects that are enabled.

| 🗢 Settings 🛛 👹 U      | sers 🚓 External Controls III Commissioning   |           |            |             |  |  |  |  |  |  |
|-----------------------|--|-----------|------------|-------------|--|--|--|--|--|--|
| > External Modul      | e Connections  |           |            |             |  |  |  |  |  |  |
| > External Contro     | > External Controls  |           |            |             |  |  |  |  |  |  |
| ✓ BACnet Config       | ration   |           |            |             |  |  |  |  |  |  |
|                       | BACret Sorvice C<br>Hote ID 2 C<br>Port Number 27208 C<br>Export Settings ()<br>Reserved Objects (?<br>BACret Enabled Rooms 15 of 1000 |           |            |             |  |  |  |  |  |  |
| <b>Q</b> Global Filte |  |           |            |             |  |  |  |  |  |  |
|                       | Room Name 🗢  | Base ID 🗢 | ID Range   | Object List |  |  |  |  |  |  |
|                       | Room 206   | 1         | 2048-4095  | 2           |  |  |  |  |  |  |
|                       | Room 208   | 2         | 4096-6143  |             |  |  |  |  |  |  |
|                       | Caroline's Office  | 3         | 6144-8191  | 2           |  |  |  |  |  |  |
| <b></b>               | Cubicles - Northeast   | 4         | 8192-10239 | 2           |  |  |  |  |  |  |

# Room Mirroring Configuration

Room Mirroring allows an external processor to send or receive information from an existing Zūm room.

- 1. Open **Settings View**.
- 2. Click the External Controls tab and expand the Room Mirroring Configuration menu.
- 3. Click the toggle to turn Allow Mirroring on or off.

| ♦ Settings Md Users Laternal Controls III Commissioning |               |
|---|---------------|
| > External Module Connections                           |               |
| > External Controls                                     |               |
| > BACnet Configuration                                  |               |
| √ Room Mirroring Configuration                          |               |
|   |               |
|   |               |
| Allow Mirroring   |               |
| Controller Selection                                    |               |
|   | No Data Found |
|   |               |

# Manage Commissioning

Access Commissioning in the Settings View. Use the Commissioning tab to manage, map, and deploy, room templates. To create a new template, use the Zūm app.

| Manage Commissioning                                       |
|--|
| O Settings 🙀 Ukers 🙏 External Controls III Contrilisioning |
| Template Management     Mapping and Template Duployment    |
| Expand Commissioning settings                              |

# Template Management

Upload a new template or search, extract, edit, or delete an existing template.

| Settings      | 📽 Users 🛛 📥 External Controls | III Commissioning   |         |
|---------------|-------------------------------|---------------------|---------|
| → Template N  | Aanagement                    |                     |         |
| Q Search      |                               |                     |         |
| Template N    | iame 🗢                        | Last Update Time 🌩  | Actions |
| LR Temp BA    | D ONE                         | 05/11/2021 23-23-39 | C 🕆     |
| Offices - Apr | ril 2021 Upgrade              | 08/13/2021 08:01:06 | C ()    |
|               |                               |                     |         |

### Add a New Template

To add a new room template:

- 1. Open Settings View.
- 2. Click the **Commissioning** tab and expand the **Template Management** menu.
- 3. Click Upload. The Upload window opens.
- 4. Click **Choose** to browse for a new template.
- 5. Select the template.
- 6. Click **Upload** to add the template to the **Template Management** menu, **Cancel** to choose a different template, or **Close** to close the window without adding a new template.

| Upload |           |            |        |              |       |          |       | × |
|--------|-----------|------------|--------|--------------|-------|----------|-------|---|
|        | Browse to | select a f | le and | I then click | the U | pload bu | tton. |   |
|        | + 0       | Thoose     |        | Upload       | x     |          |       |   |
|        |           |            |        |              |       |          |       |   |
|        |           |            |        |              |       |          | Close |   |

### Edit Template Name

To edit an existing template name:

- 1. Open **Settings View**.
- 2. Click the **Commissioning** tab and expand the **Template Management** menu.
- 3. If necessary, use the **Search** bar to find a room template.
- 4. Click 📝.
- 5. Type the new name.
- 6. Click **Save** to save the new name or **Cancel** to close the window without saving a new name.

### Delete Existing Template

To delete an existing template:

- 1. Open Settings View.
- 2. Click the **Commissioning** tab and expand the **Template Management** menu.
- 3. If necessary, use the **Search** bar to find a room template.
- 4. Click 💼. A confirmation window opens.
- 5. Click **Yes** to delete the template or **Cancel** to close the window.

#### Extract Template

To extract a room template from another room:

- 1. Open **Settings View**.
- 2. Click the **Commissioning** tab and expand the **Template Management** menu.
- 3. If necessary, use the **Search** bar to find a room template.
- 4. Click **Extract**. The Extract Template window opens.
- 5. Select a room.
- 6. Click **Extract** to extract the template or **Cancel** to close the window.

## Mapping and Template Deployment

Use Mapping and Template Deployment to apply and deploy templates to rooms and to import mapping files.

| Setting | s 🔮 Users         | A External Controls | III Commissioning       |                      |                         | ,                  |                                   |
|---------|-------------------|---------------------|-------------------------|----------------------|-------------------------|--------------------|-----------------------------------|
| > Temp  | late Management   |                     |                         |                      |                         |                    |                                   |
| ✓ Mapp  | oing and Template | Deployment          |                         |                      |                         |                    |                                   |
| QS      | earch             |                     | Hide Commissioned Rooms |                      |                         | Select a template  | ApplyTemplate Import Mapping File |
|         |                   | Serial Number 🗢     | Room Status 🗢           | Room Name 🗢          | Last Applied Template 🗢 | Pending Template 🗢 | Actions                           |
|         |                   | 123456871           |                         | Cubicles - Northwest |                         |                    | C.                                |
|         |                   | TSID3C5E5DEE        |                         | Room 208             |                         |                    | ß                                 |
|         |                   | 123456847           |                         | Caroline's Office    |                         |                    | ß                                 |
|         |                   | 123456819           |                         | Room 206             |                         |                    | ₿.                                |
|         |                   | 123456848           |                         | Cubicles - Northeast |                         |                    | ß                                 |
|         |                   | 123456870           |                         | Cubicles - Southwest |                         |                    | ₿.                                |
|         |                   |                     |                         |                      |                         |                    | Clear Pending Deploy Selected     |

## Apply and Deploy Templates.

To apply and deploy a template:

- 1. Open **Settings View**.
- 2. Click the **Commissioning** tab and expand the **Mapping and Template Deployment** menu.
- 3. Select a room or multiple rooms. If necessary, use the **Search** bar to find a room.
- 4. From the **Select a template** drop-down menu, choose the desired template.
- 5. Click **Apply Template**. When the template is successfully applied, the template is now pending.
- 6. Click **Deploy Selected** to deploy the template to the rooms or **Clear Pending** to remove the template from the rooms.

#### Edit Template Assignment

To edit a template assignment:

- 1. Open Settings View.
- 2. Click the **Commissioning** tab and expand the **Mapping and Template Deployment** menu.
- 3. Click 📝 beside the desired room. If necessary, use the **Search** bar to find the room. A window opens.
- 4. From the Select Template drop-down menu, choose the desired template.

The remaining data specifies the room information, the devices and components affected, and the selected template details.

5. Click **Save** to reassign the room template or **Cancel** to close the window without saving.

| Room Nam        | e: Cubicles - Northwest      |                           |  | Last Applied Template: | Offices - April 2021 Upgrad           |  |
|-----------------|------------------------------|---------------------------|--|------------------------|---------------------------------------|--|
|                 |                              |                           | Select Template:   |                        | LR Temp ×                             |  |
| Devices         |                              |                           |  |                        |                                       |  |
| ID ¢            | Serial Number ¢              | Model Name 🌣              |  | Device Name \$         |                                       |  |
| 6               | CA03E6_03                    | ZUMUNK-KP                 |  | ZUMUNK-KP-6_03         |                                       |  |
| 4               | 123456871 ZUMNET-JBOX-16A-LV |                           | ZU   | ZUMNETJBOX-16A-LV-6871 |                                       |  |
| Components      |                              |                           |  |                        |                                       |  |
| Slot ¢ Device ¢ |                              | Component Name ©          | Componer   | Component Type 🗢       |                                       |  |
| 1               | ZUMLINK-KP-6_03              | ZUMLINK-KP-1936-1         | Keypad   |                        | ~                                     |  |
| 1               | ZUMNET-JBOX-16A-LV-6871      | ZUMNET-JBOX-16A-LV-EJB1-1 | LoadController-LV  |                        | ×                                     |  |
| 2               | ZUMNET-JBOX-16A-LV-6871      | ZUMNET-JBOX-16A-LV-EJB1-2 | OccSens  | or-JBOX                | ×                                     |  |
| 3               | ZUMNET-JBOX-16A-LV-6871      | ZUMNET-JBOX-16A-LV-EJB1-3 | PhotoSen   | sor-JBOX               | ×                                     |  |
| Template        |                              |                           |  |                        |                                       |  |
| Current temp    | plate: LR Temp               |                           |  |                        |                                       |  |
| т               | emplate Identifier ©         | Component Name ©          | Template Component Type © Component #<br>LoadController-LV ZUMNET-JBOX-16A-LV-68 |                        | Assignment<br>171.Slot1.ZUMNET-JBOX V |  |
| ZUML            | INK-JBOX-16A-LV-D5FD-1       | ZUMLINK-JB0X-Ic2          |  |                        |                                       |  |
|                 |                              |                           |  |                        |                                       |  |

#### Import Mapping File

Access Import Mapping File in the Settings View. Open the Commissioning tab and expand the **Mapping and Template Deployment** menu. If a mapping file has been created in an external file, use the **Import Mapping File** button to navigate to the mapping and import the file.

# **Review Device Information and Status**

View the Demand Response status, system alerts, help information, or sign out of the web interface.



# Demand Response Status



Demand Response is enabled.



Demand Response is disabled.

# System Information



Displays system alerts.

Help



Click to view the help file.

## Sign Out



Click to bring up the Sign Out pop-up. Click Sign Out to log out of the ZUM-HUB4.

# Reboot ZUM-HUB4

To reboot the ZUM-HUB4:

1. Click the Actions menu



2. Click **Reboot**. The Confirmation window opens.

| Confirmation                     | × | ) |  |  |  |
|----------------------------------|---|---|--|--|--|
|                                  |   | ) |  |  |  |
| Are you sure you want to reboot? |   |   |  |  |  |
|                                  |   | ) |  |  |  |
| Ves 🗙 No                         |   | ) |  |  |  |

3. Click **Yes** to Reboot or **No** to close the window without rebooting.
This page is intentionally left blank.

**Crestron Electronics, Inc.** 15 Volvo Drive, Rockleigh, NJ 07647 Tel: 888.CRESTRON Fax: 201.767.7656 www.crestron.com Product Manual – Doc. 9094B (2055411) 05/09/22 Specifications subject to change without notice.