

EnergyCenter[®]

PLUS Module: Load Management

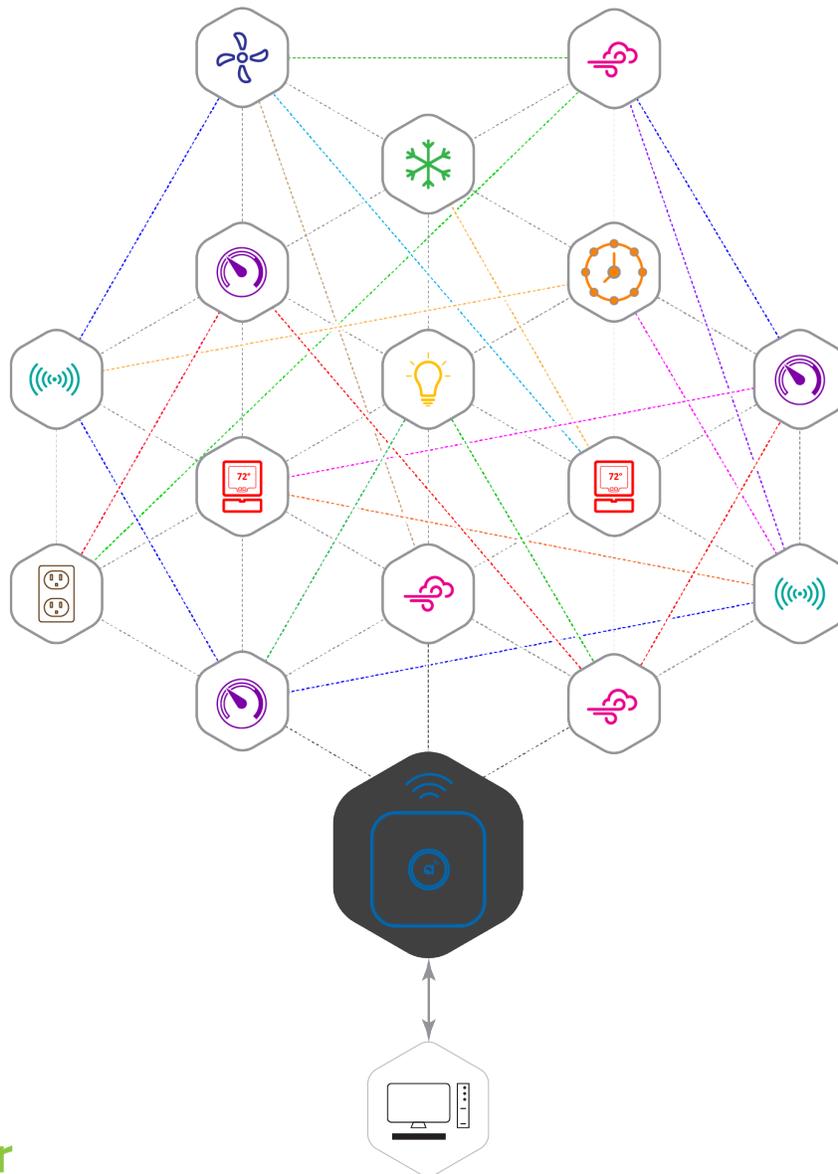


Table of Contents

1. Load Management Overview	3
1.1. Navigating through the Software (Site map)	3
1.2. Configuring the Application	4
2. Changing Load Controller and Relay Settings	5
3. Checking Load Controller and Relay Status	7
3.1. Viewing System Dashboard Data	7
3.2. Viewing Summary Data for all Load Controller Relays	8
3.3. Viewing Run Time Chart for Selected Load Controller Relays	10
3.4. Finding Detailed Data for Individual Relays	11
3.5. Checking Detailed Status Data for a Relay	12
3.6. Viewing Relay Transition Data Charts	14
3.7. Using Relay Event Logs	15
4. Configuring Occupancy Sensors	16
4.1. Understanding Occupancy Sensors	16
4.2. Associating Occupancy Sensors with Relays	17
5. Creating and Assigning a Schedule	18
6. Troubleshooting	19
6.1. Load Controllers are not Reporting Data	19
6.1.1. Load Controller is in Error or Warning State	19
6.1.2. Rediscover the Load Controller	19
6.2. Dashboard does not Appear	20
6.3. Events are not Occurring as Scheduled	21
6.4. Event Log Contains Data Outside the Selected Date Range	21
6.5. Error Message when Selecting a Date Range	21
6.6. Contacting Customer Support	21
7. Glossary	22
8. Index	23

List of Tables

Table 1: Site Map for Entering Controller Data or Selecting Options	3
Table 2: Site Map for Viewing Load Computer Data	3
Table 3: System Setup	4
Table 4: Changing Load Controller and Relay Settings	6
Table 5: Loads Tab: Summary Data for Load Controllers and Relays	9
Table 6: Detailed Data Tabs for Load Controller Relays	11
Table 7: Current Status of Load Controller Relays	13
Table 8: Occupancy Sensor Installation Effects on Relay Settings	16
Table 9: Event Configuration Settings for Load Controller Relays	18
Table 10: Load Controller Error and Warning Troubleshooting	19
Table 11: Glossary	22

1. Load Management Overview

The load management software module can be used to control the energy consumption of devices wired to an Autani load controller.

- Multiple load controllers can be wirelessly networked throughout a building or multiple buildings.
- Each load controller can be used to manage the energy consumption of devices that are connected to up to six relays.
- Run time information can be viewed for one or more load controllers.

The common relays on the Autani load controller are labelled R1-R6. The common terminal is connected to NO when the relay is activated and to NC if the relay is inactive. The states are indicated as On and Off, respectively.

For information on features and procedures that are the same in all software components, refer to the User Guide module entitled 'Tasks Common to All Applications (Zigbee)'.

NOTE: Energy consumption of devices wired to an Autani load controller is not included in the system-wide totals of energy-related data.

1.1. Navigating through the Software (Site map)

The following two tables provide site maps of the load controller management module. The options on the left navigation bar appear in the tables as the column headings. The column lists are the load controller-related tabs that appear when an option is selected.

Table 1: Site Map for Entering Controller Data or Selecting Options

Devices	Automation	Settings
<ul style="list-style-type: none"> ▪ Loads 	<ul style="list-style-type: none"> ▪ Loads ▪ 24/7 Schedules ▪ Calendar ▪ Advanced 	<ul style="list-style-type: none"> ▪ Customer Information ▪ Contractor ▪ System ▪ Data Maintenance ▪ Energy ▪ Security ▪ Device Setup

Table 2: Site Map for Viewing Load Computer Data

Groups	Energy	Alerts	Reports	Help
<ul style="list-style-type: none"> ▪ Groups list ▪ System views 	Not applicable	<ul style="list-style-type: none"> ▪ Recent ▪ Alerts ▪ Alert Setup 	<ul style="list-style-type: none"> ▪ Devices: Device Inventory ▪ Devices: Detailed Device Inventory 	<ul style="list-style-type: none"> ▪ User Guide modules: <ul style="list-style-type: none"> □ Tasks Common to All Applications (Zigbee). □ PLUS Module: <ul style="list-style-type: none"> ○ Load Management ▪ About

1.2. Configuring the Application

To utilize all the features available for load controllers, complete the steps summarized in the table below.

NOTE: Installation and configuration tasks are typically performed by the contractor that installs the system.

Table 3: System Setup

Task	Description	See
Complete hardware setup tasks	<ul style="list-style-type: none"> ▪ Wire devices to an Autani load controller ▪ Install occupancy sensors 	Installation instructions that came with the: <ul style="list-style-type: none"> ▪ Autani load controller ▪ Occupancy sensors, if applicable
Access the Autani Manager appliance	<ul style="list-style-type: none"> ▪ Initial steps for setting up the network using one of the following options: <ul style="list-style-type: none"> □ Remote access over the internet (preferred option) □ Local network access ▪ Establishing a static IP Address after the first connection 	See included documentation with Autani Manager.
Complete application commissioning tasks	Tasks needed to setup and commission the system, regardless of device-type, including: <ul style="list-style-type: none"> ▪ Entering customer and contractor information ▪ Creating user accounts ▪ Adding load controllers ▪ Creating custom schedules with events ▪ Creating e-mail alert notifications 	User Guide module entitled 'Tasks Common to All Applications (Zigbee)'. in the Help section of EnergyCenter® software.
Define settings	<ul style="list-style-type: none"> ▪ Select load controller settings ▪ Select relay settings 	<i>Changing Load Controller and Relay Settings</i>
Sensors	Select sensors to provide input to the load controllers relays	<i>Associating Occupancy Sensors with Relays</i>

2. Changing Load Controller and Relay Settings

1. On the left navigation bar, click **Devices**, and click the **Loads** tab.
2. Click one of the following:
 - o The load controller name link that corresponds to the relay listed in the Description column
 - o Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - o The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.

The screenshot shows the main interface with the left navigation bar containing 'Devices', 'Groups', 'Automation', 'Energy', 'Alerts', 'Analysis', 'Settings', 'Help', and 'Log Off'. The top navigation bar has tabs for 'Dashboard', 'Lights', 'Sensors', 'Loads', and 'Extenders'. The 'Loads' tab is active, showing a table with columns 'Status', 'Location', 'Load', and 'Description'. Two rows are visible, both with 'Active' status and 'Default' location. The 'Load' column contains links like 'Load Controller - AU152710350'. A 'Details' button is visible at the bottom of the table.

Status	Location	Load	Description
Active	Default	Load Controller - AU152710350	Loadad Control-
Active	Default	Load Controller - AU152710350	Loadad Control-

3. Update the settings listed in the table below as needed. Click **Save** or **Apply**.

The screenshot shows the 'Load: Default (Load Controller - AU152710350 - Load Control-R1)' dialog box. The 'General' tab is active, showing fields for 'Name', 'Description', and 'Location'. The 'Load' section has a 'Change State' dropdown menu with options: 'No Change', 'On', 'Off', 'Smart On/Off', and 'Vacancy'. The 'Off delay' is set to 5 minutes, controlled by sensor(s). The 'Current Status' section shows: Last Reported: 2018-11-28 07:02 AM, Recent Alert: None, Schedule: Empty, Current State: On, Event: Not Found, Load Mode: Smart On/Off, Communication: Active, Off Delay: Controlled by sensor(s), Load: Normal. Buttons for 'Save', 'Cancel', and 'Apply' are at the bottom.

Field	Value
Name	Load Controller - AU152710350
Description	Load Control-R1
Location	Default
Change State	On
Off delay	5 minute(s) *** Controlled by sensor(s)
Last Reported	2018-11-28 07:02 AM
Recent Alert	None
Schedule	Empty
Current State	On
Event	Not Found
Load Mode	Smart On/Off
Communication	Active
Off Delay	Controlled by sensor(s)
Load	Normal

Table 4: Changing Load Controller and Relay Settings

Setting	Used To	Options
Name	Specify the name of the Autani load controller NOTE: The name of the load controller is the same for all devices wired to it.	<ul style="list-style-type: none"> ▪ Defaults to device type and serial number, e.g. Load Controller - AU111400054 ▪ User-defined name ▪ Alphanumeric characters
Description	Identify one of the six relays on the load controller	<ul style="list-style-type: none"> ▪ Default: Load Controller-Rn where “n” is the number of the relay ▪ User can change ▪ Alphanumeric characters
Location	Name of the location group to which the relay belongs	<ul style="list-style-type: none"> ▪ Assigned to the “Default” location group when a load controller is first added to the network ▪ User can change each relay independently ▪ Alphanumeric characters
Change State	Change relay behaviour	<ul style="list-style-type: none"> ▪ No Change ▪ On = Normally Open (NO) ▪ Off = Normally Closed (NC) ▪ If associated with a light the following options also appear: <ul style="list-style-type: none"> □ Lights Off □ Smart On/Off □ Vacancy
Off Delay (Available if Lights Off, Smart On/Off or Vacancy Mode is selected)	Define the delay interval to be used before opening or closing the relay when a space becomes unoccupied	<ul style="list-style-type: none"> ▪ 1-1440 minutes (24 hours) ▪ Default is one minute

3. Checking Load Controller and Relay Status

3.1. Viewing System Dashboard Data

Click **Devices** on the left navigation bar to view system summary information for the last 24 hours. If the Dashboard tab does not appear, see *Rediscover the Load Controller*

1. On the left navigation bar, click **Settings**.
2. Click the **Device Setup** tab.
3. Click the **View Network** button.

Site Contractor System Data Maintenance Energy Security **Device Setup**

Network: S4SEDHX | Channel: 25 | Status: Network Up | Security: Enabled | Trust Center: No | Allow Join: No | Devices

Welcome to the Device Setup Assistant

This page allows you to configure your appliance and connect devices to its wireless network. Please choose an option below to get started:

Easy Setup

- Add Device(s)
- Wireless Routes
- Network Status
- Replace Device
- Wireless Settings
- Network Settings
- Remove Device
- Identify Device(s)
- Name Device(s)
- View Wireless Network**
- Wireless Bindings
- System Restore
- Advanced Commissioning
- Device Configuration

4. Click the row of the load controller to be rediscovered.
5. Click the **Rediscover** button.

Site Contractor System Data Maintenance Energy Security **Device Setup**

Network: S4SEDHX | Channel: 25 | Status: Network Up | Security: Enabled | Trust Center: No | Allow Join: No | Devices

Network Listing

The following table lists all of the devices currently on your network. [Show/Hide Columns](#)

Transceiver Tag	Type	Model	Serial Number	Last Discovered
Unknown	HA Light	LG WM	00:0D:6F:00:0D:DF:6F:A7	2019-10-10 11:48 AM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:8B:5D:00	2019-10-10 04:16 PM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:8B:59:77	2019-10-11 11:46 AM
Unknown	Load Controller	1000133-07	AU152710350	2019-10-17 12:40 AM
Unknown	HA Light	LG WM	00:0D:6F:00:12:58:25:CA	2019-10-10 02:00 PM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:DF:51:14	2019-10-10 11:38 AM
Unknown	Thermostat	1000141-02	AU115110117	2019-09-28 12:34 AM
Unknown	HA Light	TWZT_V002D_F	00:0D:6F:00:0C:C2:52:1D	2019-10-10 11:53 AM
Unknown	LG Fixture, Occ, Lume	LG MultiSensor	00:0D:6F:00:0E:78:F0:92	2019-10-10 12:47 PM
Unknown	LG Fixture, Occ, Lume	LG MultiSensor	00:0D:6F:00:12:56:E8:BE	2019-10-10 12:47 PM

Rediscover Change Transceiver Tag Identify

- o The description in the Type column changes to “Discovering.”

- The time/date stamp in the Last Discovered column changes to “Starting discovery” in red.



- When the load controller has been rediscovered, the relay reappears, and a new date/time stamp is listed.

Dashboard does not Appear in the Troubleshooting section.



The Dashboard displays the number of active load controller relays in the system. To view additional detail on all relays, click the active status link next to the number of load controllers or click the **Loads** tab.

3.2. Viewing Summary Data for all Load Controller Relays

1. On the left navigation bar, click **Devices**.
2. Click the **Loads** tab to view the information in the following table.

Status	Location	Load	Description	State	Schedule
Active	Default	Load Controller - AU152710350	Load Control-R1	Off	Em
Active	Default	Load Controller - AU152710350	Load Control-R2	Off	Empty

Daily Energy Usage of Selected Loads

Date	Energy Usage (kWh)
Mar 9	0.00
Mar 10	0.038
Mar 11	0.038
Mar 12	0.038
Mar 13	0.038
Mar 14	0.038
Mar 15	0.038
Mar 16	0.040
Mar 17	0.002
Mar 18	0.00

NOTE: The spreadsheet format can be modified to quickly view needed information.

- Rows can be sorted by clicking a column heading.
- Load controllers can be hidden or redisplayed using the Hide and Unhide buttons.
- The width of a column can be changed by dragging the lines on either side of the column heading to the desired size.
- Columns can be hidden or displayed using the picker in the right-hand corner of a heading row.

3. If the Daily Run Time of Selected Loads chart is not displayed, click the Show/Hide Run Time link in the upper right-hand corner of the screen. For more information, see *Viewing Run Time Chart for Selected Load Controller Relays*.

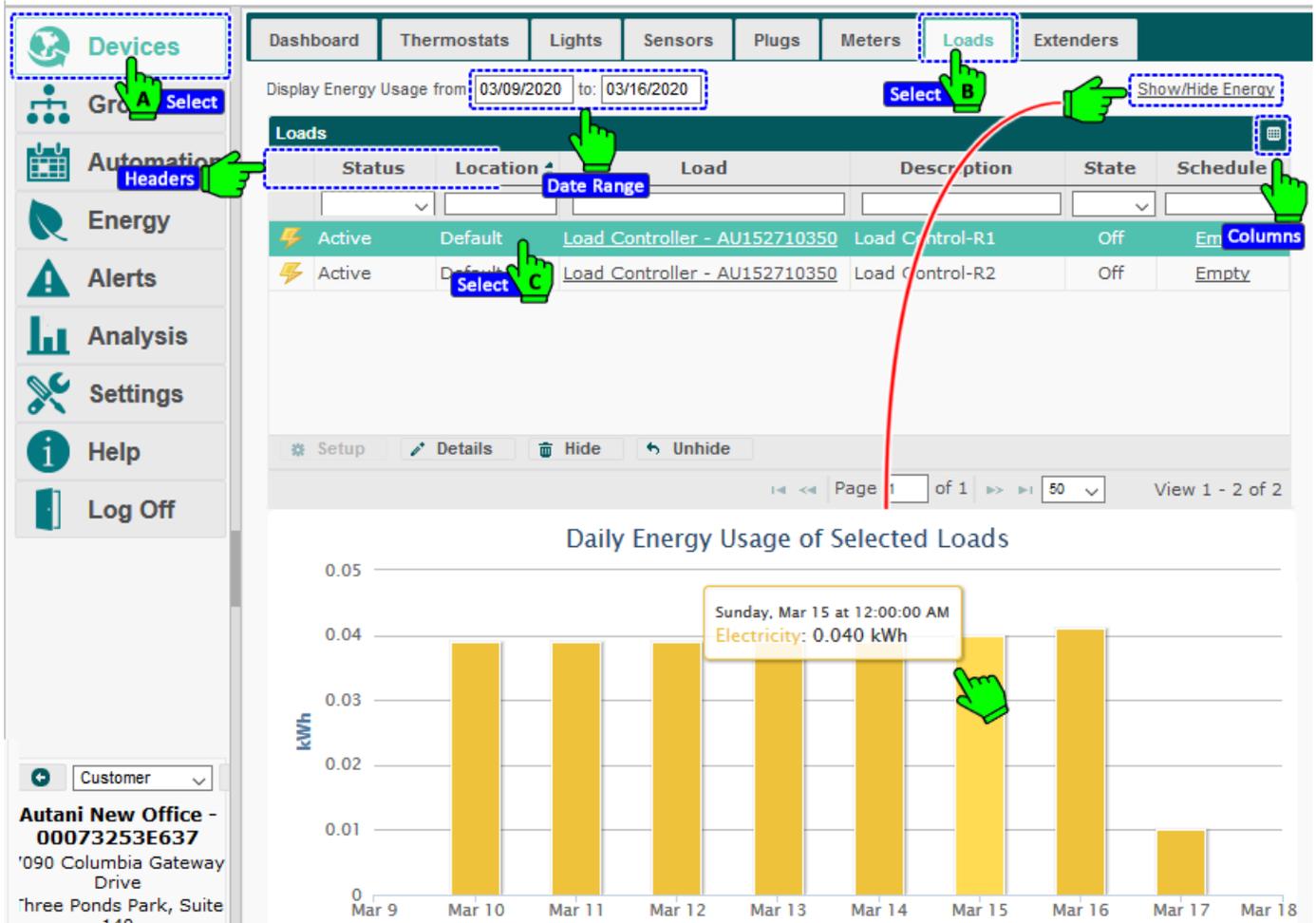
Table 5: Loads Tab: Summary Data for Load Controllers and Relays

Column	Used To	Options
Status (with icon)	Describe the communication status for each Autani load controller	<ul style="list-style-type: none"> ▪ Active: Load controller is online and reporting data. ▪ Error: The load controller is not communicating with the Autani Manager over the autaniNet network. ▪ Removed: The load controller has been removed from the autaniNet network.
Location	Identify the location group to which the relay belongs NOTE: A relay can belong to only one location group.	<ul style="list-style-type: none"> ▪ Each relay is assigned to the Default location group when a load controller is first added to the network. ▪ User can change ▪ Alphanumeric characters
Load	<ul style="list-style-type: none"> ▪ List the names of load controllers ▪ Provide link to open other tabs for load controllers ▪ Links to tabs: <ul style="list-style-type: none"> □ General □ Charts □ Event Logs □ Schedule □ Occupancy 	<ul style="list-style-type: none"> ▪ User-defined name ▪ Alphanumeric characters
Description	Name of the relay for each load controller	<ul style="list-style-type: none"> ▪ User-defined name ▪ Alphanumeric characters ▪ R1 through R6
State	Indicate status of the relay	<ul style="list-style-type: none"> ▪ On = Normally Open (NO) ▪ Off = Normally Closed (NC) ▪ Unknown
Schedule (Available if a relay schedule is enabled)	<ul style="list-style-type: none"> ▪ Display the name of the schedule associated with the relay ▪ Link to the Schedule tab to: <ul style="list-style-type: none"> □ Change the name or description of the schedule □ Enable or disable the schedule for the relay □ View or modify schedule events associated with the relay ▪ Indicate in red text if a curtailment or scheduled override is in effect 	<ul style="list-style-type: none"> ▪ Schedule: <ul style="list-style-type: none"> □ Name □ Description □ Disable ▪ Events: <ul style="list-style-type: none"> □ New □ Copy □ Edit □ Delete
Run Time (Appears if Daily Run Time Chart is displayed)	<ul style="list-style-type: none"> ▪ Display the run time for the relay by day ▪ Display data from midnight on the first day in the date range until the most recent daily report 	Hours and minutes
Display	Select relays to display in the Daily Run Time of Selected Loads chart on the bottom of the screen NOTE: If the chart does not appear, click the Show/Hide Run Time link in the upper right-hand corner of the screen.	Checkbox for each relay

3.3. Viewing Run Time Chart for Selected Load Controller Relays

To view a run time chart for selected or all load controllers:

1. On the left navigation bar, click **Devices**.
2. Click the **Loads** tab.

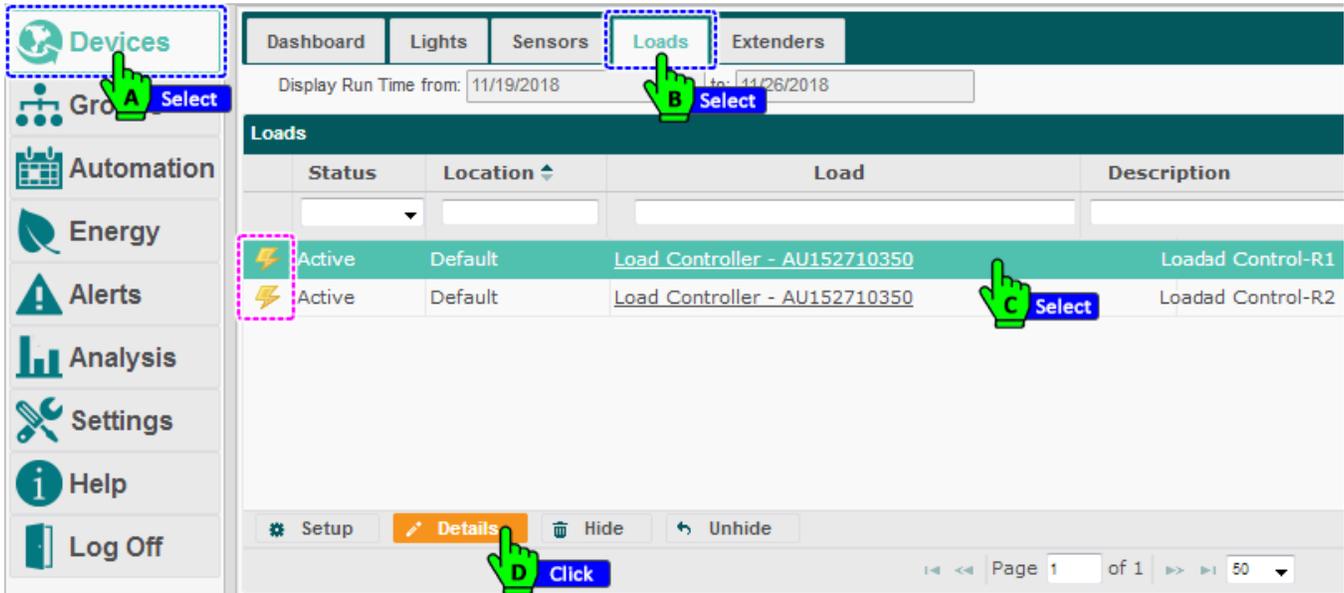


3. If the chart is not displayed, click the **Show/Hide Run Time** link in the upper right-hand corner of the screen. The default display is for the week ending with the current day.
4. To select a different date range for the chart, click the **Display Run Time from** and **to** textboxes to access the calendar.
5. Select the checkbox(es) for an individual relay, several relays, or all the load controllers in the system.
6. To view more exact information:
 - a. Mouse over the displayed data
 - b. Zoom in on a defined area of the chart by clicking and dragging the mouse to create a rectangular box. To return the view to its original size, click **Reset Zoom** in the upper right-hand corner of the chart.

3.4. Finding Detailed Data for Individual Relays

To access information related to individual relays:

1. On the left navigation bar, click **Devices**.
2. Click the **Loads** tab. For more information, see *Viewing System Dashboard Data* and *Viewing Run Time Chart for Selected Load Controller Relays*.
3. Click one of the following to view detail tabs that are described in the following table:
 - o The load controller name link that corresponds to the relay listed in the Description column
 - o Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - o The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.



4. The detail tabs that appear are described in the following table.

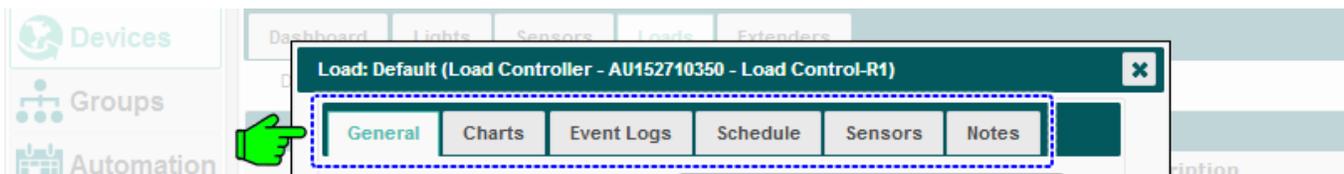
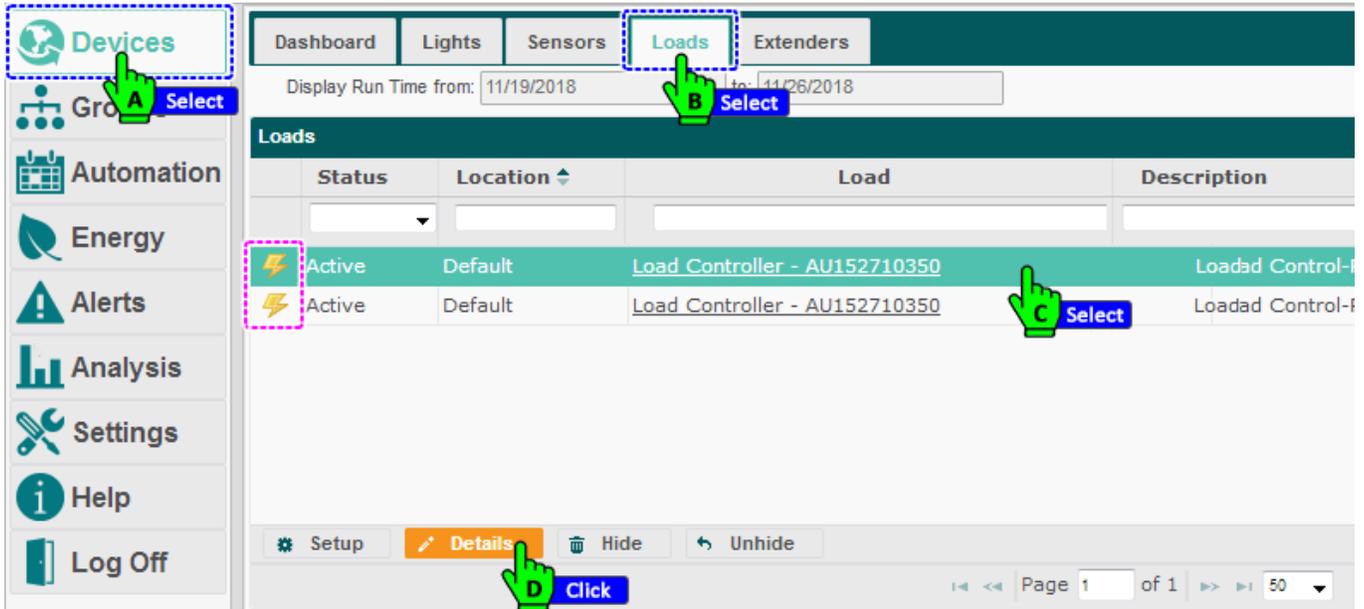


Table 6: Detailed Data Tabs for Load Controller Relays

Tab	Used To
General	<ul style="list-style-type: none"> ▪ Change general descriptive information ▪ Change the location group ▪ Change the relay state ▪ Change occupancy delay interval, if applicable ▪ View current status information
Charts	View graphical representations of relay status changes over a defined date range
Event Logs	View data on recent events
Schedule	<ul style="list-style-type: none"> ▪ View event schedule information ▪ Change general descriptive information ▪ Disable the schedule ▪ Create or modify scheduled events
Occupancy (available if occupancy-related sensors are used including motion or contact sensors)	<ul style="list-style-type: none"> ▪ Select sensors to provide input to the relay

3.5. Checking Detailed Status Data for a Relay

5. On the left navigation bar, click **Devices**.
6. Click the **Loads** tab.
7. Click one of the following:
 - The load controller name link that corresponds to the relay listed in the Description column
 - Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.



8. The detail screen appears with the **General** tab selected by default, the lower section details the **Current Status** of the Load.

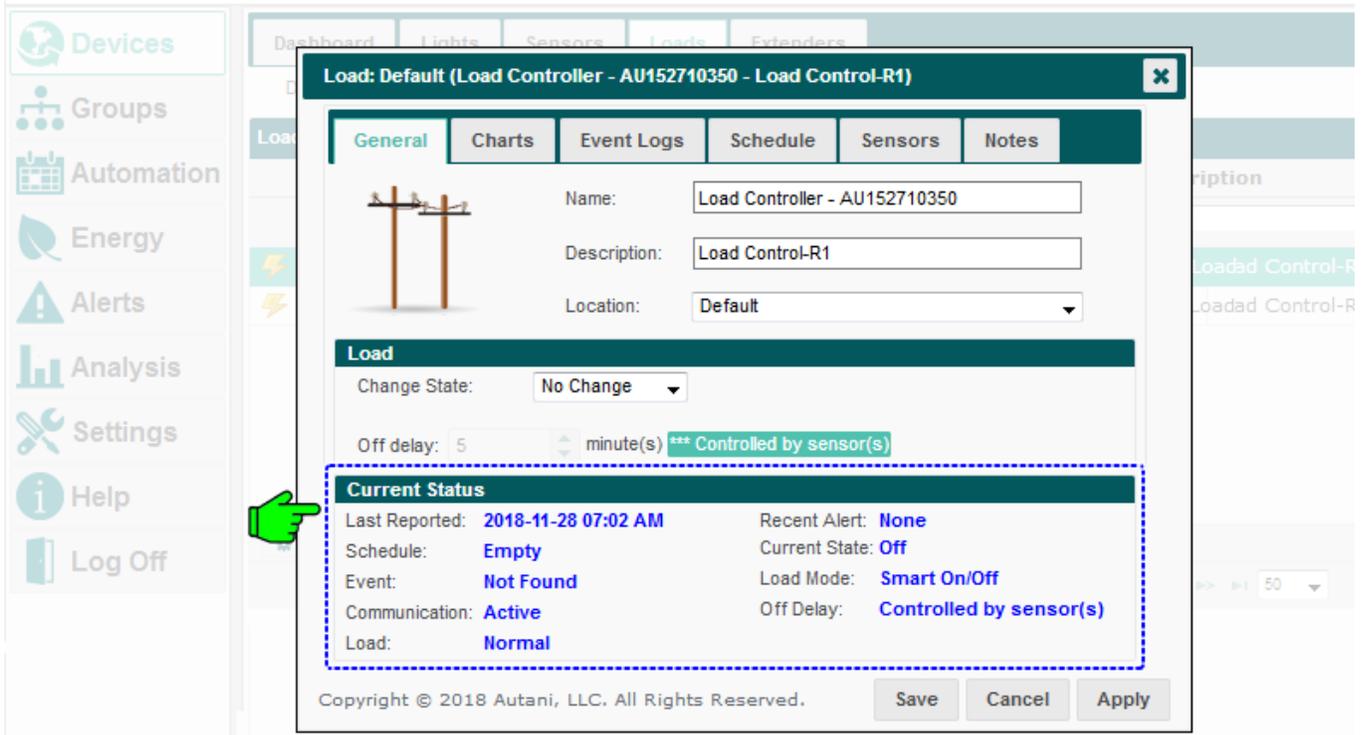


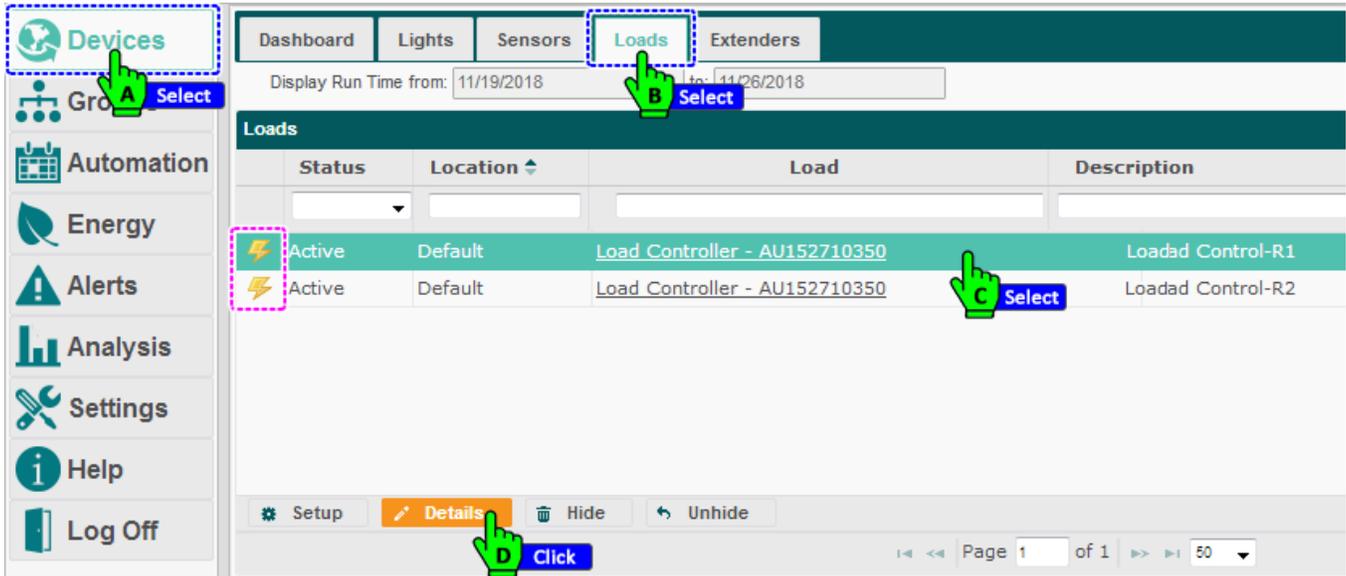
Table 7: Current Status of Load Controller Relays

Setting	Used To	Options
Last Reported	Display time/date stamp of the last communication between the load controller and the Autani Manager	In the following format: yyyy-mm-dd hh:mm AM/PM
Schedule	Identify schedule currently applied to the relay, if applicable	<ul style="list-style-type: none"> ▪ Default ▪ User-defined schedule names ▪ Alphanumeric characters
Event	Identify schedule event currently applied to the relay	<ul style="list-style-type: none"> ▪ Default ▪ User-defined schedule events ▪ Alphanumeric characters ▪ Not Applicable: Schedule is disabled or no schedule has been applied to the relay.
Communication	Indicate the communication status of the load controller	<ul style="list-style-type: none"> ▪ Active: Load controller is online and reporting data. ▪ Error: Load controller is not communicating with the Autani Manager over the autaniNet network. ▪ Removed: The load controller was removed from the autaniNet network.
Load	Identify the status of the relay	<ul style="list-style-type: none"> ▪ Normal ▪ Warning: Specific error status message ▪ Error: Device timeout ▪ Unknown
Recent Alert	Display the condition that triggered a warning or error NOTE: To clear an alert, click Alerts on the left navigation bar and then delete it.	<ul style="list-style-type: none"> ▪ None ▪ Error: The load controller is not communicating with the Autani Manager over the autaniNet network. ▪ Warning: Specific error or warning status message
Current State	Indicate status of the relay NOTES: <ul style="list-style-type: none"> ▪ Normally Open (NO) circuit is completed when relay is energized. ▪ Normally Closed (NC) circuit is completed when relay is de-energized. 	<ul style="list-style-type: none"> ▪ On = Normally Open (NO) ▪ Off = Normally Closed (NC) ▪ Unknown
Load Mode	Indicate the mode or state currently associated with the relay	<ul style="list-style-type: none"> ▪ No Change ▪ On ▪ Off ▪ If associated with a light the following options also appear: <ul style="list-style-type: none"> □ Lights Off □ Smart On/Off □ Vacancy
Off Delay (available when Lights Off, Smart On/Off or Vacancy Mode is selected)	Define the delay interval to be used before opening or closing the relay when a space becomes unoccupied	<ul style="list-style-type: none"> ▪ 1-1440 minutes (24 hours) ▪ Not Applicable ▪ Default is one minute

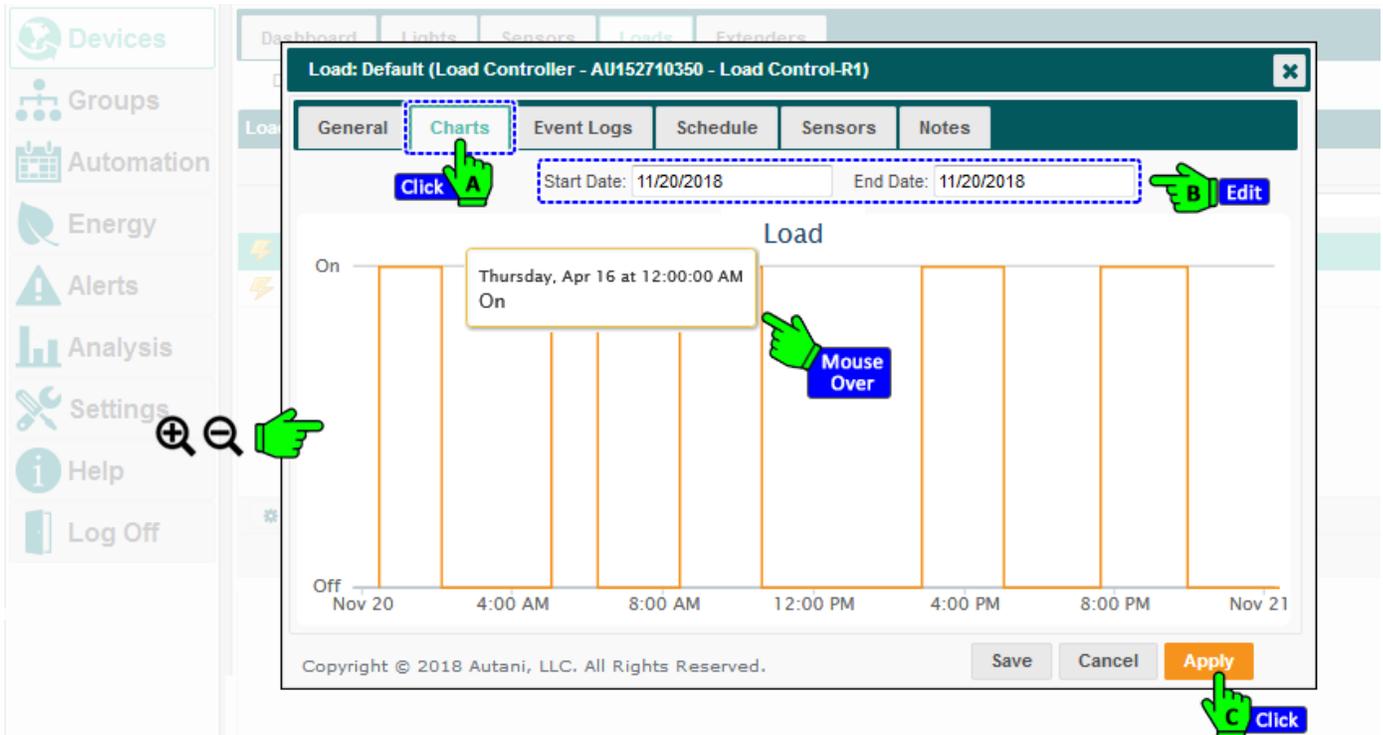
3.6. Viewing Relay Transition Data Charts

To view transition data for a specific relay:

1. On the left navigation bar, click **Devices**, and then click the **Loads** tab.
2. Click one of the following:
 - The load controller name link that corresponds to the relay listed in the Description column
 - Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.



3. Click the **Charts** tab. The default display is for the current date.



4. To select a date range for the chart, click the **Start Date** and **End Date** textboxes to access the calendar.
5. To view more exact information:
 - Mouse over the displayed data
 - Zoom in on a defined area of the chart by clicking and dragging the mouse to create a rectangular box. To return the view to its original size, click **Reset Zoom** in the upper right-hand corner of the chart.

3.7. Using Relay Event Logs

Event logs are created to record all important events related to a relay. The tabular data view can be used to understand:

- Usage patterns and determine ways to fine tune the system
- Why and when a problem occurred and how to fix it

To view an event log:

1. On the left navigation bar, click **Devices**, and then click the **Loads** tab.
2. Click one of the following:
 - The load controller name link that corresponds to the relay listed in the Description column
 - Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.

Dashboard | Lights | Sensors | **Loads** | Extenders

Display Run Time from: 11/19/2018 to 11/26/2018

Status	Location	Load	Description
⚡ Active	Default	Load Controller - AU152710350	Loadad Control-R1
⚡ Active	Default	Load Controller - AU152710350	Loadad Control-R2

Setup | **Details** | Hide | Unhide

Page 1 of 1 | 50

3. Click the **Event Logs** tab. The default display is for the current date.

Load: Default (Load Controller - AU152710350 - Load Control-R1)

General | **Event Logs** | Schedule | Sensors | Notes

Start Date: 11/20/2018 | End Date: 11/20/2018

Start Time	Duration	Description
2018-11-21 06:59:34 AM	00:16:24	Off
2018-11-21 06:36:55 AM	00:22:38	On
2018-11-20 07:37:47 PM	10:59:08	Off
2018-11-20 07:02:50 PM	00:34:57	On
2018-11-20 06:57:56 PM	00:04:54	Off
2018-11-20 05:42:53 PM	01:15:02	On
2018-11-20 05:25:54 PM	00:16:58	Off

Page 1 of 1 | View 1 - 2 of 2

Save | Cancel | Apply

4. To select a date range, click in the **Start Date** and **End Date** textboxes to access the calendar.
- NOTE:** Event logs include events that began before the date range if the event continued during selected date range.
5. To display hidden columns, click the picker, and select the checkbox(es) for the column(s) to be displayed. Click **OK**.

4. Configuring Occupancy Sensors

4.1. Understanding Occupancy Sensors

Occupancy sensors detect movement which the application uses to determine if a space is occupied. Sensors can be used in tandem with relays on Autani load controllers to eliminate unnecessary energy consumption.

For example, settings can be used to:

- Turn OFF devices when a space becomes vacant and remains that way for a user defined period of time.
- Turn devices back on when someone returns, and their movement is detected.

Schedules can be used to define relay settings for occupied and unoccupied spaces. Options for controlling relays depend on how sensors are installed. For more information, see the table below.

Table 8: Occupancy Sensor Installation Effects on Relay Settings

Sensor Installation Status	Occupancy-Related Settings
No sensor installed	Not available
<ul style="list-style-type: none">▪ Integrated into application▪ Not assigned to a load controller relay	Not available
<ul style="list-style-type: none">▪ Integrated into application module▪ Assigned to a load controller relay	<ul style="list-style-type: none">▪ Occupancy can be set remotely using a schedule.▪ Use of occupancy differs by mode:<ul style="list-style-type: none">□ On: Occupancy sensor data is not used to control load controller relays.□ Off: Occupancy sensor data is not used to energize load controller relays.□ Smart On/Off: Occupancy sensor data is used to energize or de-energize load controller relays.□ Vacancy: Occupancy sensor data is only used to de-energize load controller relays.□ Users can specify unoccupied-related delay intervals to control how quickly device behaviour changes.

4.2. Associating Occupancy Sensors with Relays

To assign occupancy sensors to a load controller relay:

1. On the left navigation bar, click **Devices**.
2. Click the **Loads** tab.
3. Click one of the following:
 - The load controller name link that corresponds to the relay listed in the Description column
 - Double-click the row of the load controller that corresponds to the relay listed in the Description column
 - The row of the load controller that corresponds to the relay listed in the Description column, and then click the **Details** button.

Dashboard | Lights | Sensors | **Loads** | Extenders

Display Run Time from: 11/19/2018 to: 11/26/2018

Loads

Status	Location	Load	Description
Active	Default	Load Controller - AU152710350	Loadad Control-R1
Active	Default	Load Controller - AU152710350	Loadad Control-R2

Setup | **Details** | Hide | Unhide

Page 1 of 1 | 50

4. Click the **Occupancy** tab.
5. Select the checkbox(es) next to the sensor(s) that are to be considered in occupancy decisions for the relay.

NOTE: To disassociate a sensor from a relay, deselect the checkbox associated with the sensor.

Load: Default (Load Controller - AU152710350 - Load Control-R1)

General | Charts | Event Logs | Schedule | **Sensors** | Notes

Select the sensors that provide inputs to control this device

Sensors

Location	Sensor	Description	Type
<input type="checkbox"/>	Default	Occupancy Sensing	EnOcean Occupancy Se... Autani
<input checked="" type="checkbox"/>	Default	Wireless Relay Controller - AU164220686	Occupancy Sensing-1 Autani
<input checked="" type="checkbox"/>	Default	Wireless Relay Controller - AU164220686	Occupancy Sensing-2 Auto
<input type="checkbox"/>	Default	Wireless Relay Controller - AU164220686	Occupancy Sensing-5 fo... Auto
<input type="checkbox"/>	Default	Wireless Relay Controller - AU164220686	Occupancy Sensing-6 fo... Autani
<input type="checkbox"/>	Conference Room	Occupancy Sensing - 019FF914	EnOcean Occupancy Sensor Autani
<input type="checkbox"/>	Default	Wireless Relay Controller - AU164220687	Occupancy Sensing-1 Autani
<input type="checkbox"/>	Default	Wireless Relay Controller - AU164220687	Occupancy Sensing-2 Autani

Save | Cancel | **Apply**

Copyright © 2018 Autani, LLC. All Rights Reserved.

6. Click **Save** or **Apply**.

5. Creating and Assigning a Schedule

The application can be used to change load controller relay settings based on scheduled events.

The steps below are required to create a schedule template and use it to assign a schedule to one or more load controller relays.

1. Create a schedule template by modifying a copy of the default template or another existing template.
2. Create or modify template events as described in the table below.
3. Assign a schedule template to one or more load controller relays or a group of relays.

For detailed step-by-step instructions on creating groups, schedules, overrides, or curtailments and curtailment stages, refer to the User Guide module entitled 'Tasks Common to All Applications (Zigbee)' in the Help section of EnergyCenter® software.

Table 9: Event Configuration Settings for Load Controller Relays

Setting	Used To	Options
Name	Enter a name for the event	<ul style="list-style-type: none"> ▪ User-defined ▪ Alphanumeric characters
Change State	Enter a relay behaviour mode NOTE: Each option is described when selected.	<ul style="list-style-type: none"> ▪ On ▪ Off <p>If a sensor is being used, the following options also appear:</p> <ul style="list-style-type: none"> ▪ Smart On/Off ▪ Vacancy
Off Delay (available if occupancy- related sensors are used, including motion or contact sensors)	Define a delay interval before de-energizing relays when: <ul style="list-style-type: none"> ▪ Off is selected ▪ Smart On/Off or Vacancy is selected when a sensor is being used 	<ul style="list-style-type: none"> ▪ 1 - 1440 minutes (24 hours) ▪ Default: One minute delay <p>If a sensor is being used, the following options also appear:</p> <ul style="list-style-type: none"> ▪ Smart On/Off ▪ Vacancy
Effective Days	Select the days of the week the event is to apply	<ul style="list-style-type: none"> ▪ Days of the week ▪ Weekday ▪ Weekend ▪ All
Effective Time	Define when settings should take effect NOTE: Scheduled event settings remain in effect until another event begins.	<ul style="list-style-type: none"> ▪ The hour and minute ▪ AM or PM

6. Troubleshooting

6.1. Load Controllers are not Reporting Data

6.1.1. Load Controller is in Error or Warning State

During initial setup, devices are in an error state until the mesh network is established. If the status does not change momentarily to Active, click **Alerts** on the left navigation bar to check the alert log.

Table 10: Load Controller Error and Warning Troubleshooting

Issue	Cause	Potential Solution
Device Timeout Error	Excessive distance between devices or thick walls	<ul style="list-style-type: none">Move load controllers closer together.Install an extender.
Error	Load controller is not communicating with the Autani Manager over the autaniNet network	<ul style="list-style-type: none">Check power status of Autani Manager.Check wiring of the load controller and device/relay connections.
Warning	Specific condition listed	Dependent on warning condition listed

6.1.2. Rediscover the Load Controller

7. On the left navigation bar, click **Settings**.
8. Click the **Device Setup** tab.
9. Click the **View Network** button.

The screenshot shows the Autani Manager web interface. On the left is a navigation sidebar with icons and labels for Devices, Groups, Automation, Energy, Alerts, Analysis, Settings (highlighted with a dashed blue box and a green hand cursor), Help (with a blue 'Select' button), and Log Off. The main content area has a top navigation bar with tabs for Site, Contractor, System, Data Maintenance, Energy, Security, and Device Setup (highlighted with a dashed blue box and a green hand cursor). Below the tabs, network status is displayed: Network: S4SEDHX | Channel: 25 | Status: Network Up | Security: Enabled | True (with a blue 'Select' button) | Allow Join: No | Device. The main content area is titled 'Welcome to the Device Setup Assistant' and contains a grid of buttons for configuration options: Easy Setup, Add Device(s), Wireless Routes, Network Status, Replace Device, Wireless Settings, Network Settings, Remove Device, Identify Device(s), Name Device(s), View Wireless Network (highlighted with a dashed blue box and a green hand cursor), Wireless Bindings, System Restore, Advanced Commissioning, and Device Configuration.

10. Click the row of the load controller to be rediscovered.
11. Click the **Rediscover** button.

Site Contractor System Data Maintenance Energy Security **Device Setup**

Network: S4SEDHX | Channel: 25 | Status: Network Up | Security: Enabled | Trust Center: No | Allow Join: No | Devices

Network Listing

The following table lists all of the devices currently on your network. [Show/Hide Columns](#)

Transceiver Tag	Type	Model	Serial Number	Last Discovered
Unknown	HA Light	LG WM	00:0D:6F:00:0D:DF:6F:A7	2019-10-10 11:48 AM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:8B:5D:00	2019-10-10 04:16 PM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:8B:59:77	2019-10-11 11:46 AM
Unknown	Load Controller	1000133-07	AU152710350	2019-10-17 12:40 AM
Unknown	HA Light	LG WM	00:0D:6F:00:12:58:25:CA	2019-10-10 02:00 PM
Unknown	HA Light	LG WM	00:0D:6F:00:0D:DF:51:14	2019-10-10 11:38 AM
Unknown	Thermostat	1000141-02	AU115110117	2019-09-28 12:34 AM
Unknown	HA Light	TWZT_V002D_F	00:0D:6F:00:0C:C2:52:1D	2019-10-10 11:53 AM
Unknown	LG Fixture, Occ, Lume	LG MultiSensor	00:0D:6F:00:0E:78:F0:92	2019-10-10 12:47 PM
Unknown	LG Fixture, Occ, Lume	LG MultiSensor	00:0D:6F:00:12:56:E8:BE	2019-10-10 12:47 PM

Rediscover Change Transceiver Tag Identify

- The description in the Type column changes to “Discovering.”
- The time/date stamp in the Last Discovered column changes to “Starting discovery” in red.

Unknown	Discovering	1000133-07	AU152710350	Starting discovery...
---------	------------------	------------	-----------------------------	-----------------------

- When the load controller has been rediscovered, the relay reappears, and a new date/time stamp is listed.

6.2. Dashboard does not Appear

To enable the dashboard:

1. On the left navigation bar, click **Settings**.
2. Click the **System** tab.
3. From the **System Device** drop-down list, select **Enabled**. And, click **Save**.

Site Contractor **System** Data Maintenance Energy Security Device Setup

Email Smart Host: **Select**

Temperature Display:

Device Dashboard: **Select**

Device Tabs:

- Fans
- Lights **Select**
- Sensors
- Plugs
- Meters
- Extenders

Refresh Rate: second(s)

Select

<<CUSTOMER_NAME>> is a special keyword that will be replaced with the "Customer Name" field.

Save **Cancel** **Select**

6.3. Events are not Occurring as Scheduled

There are several reasons why it may appear that scheduled events are not occurring as expected. They include:

- Two events cannot start at the same time on the same day.
- The load controller is in an error state indicating that it is not communicating with the Autani Manager over the autaniNet network.
- The event was superseded by a scheduled override or by a curtailment. For more information, refer to the User Guide module entitled 'Tasks Common to All Applications (Zigbee)', available on the Help section of EnergyCenter® software.
- Programmed delays may be affected if third-party motion sensors are involved that have their own delay schedules. For more information, refer to the documentation that came with the sensor.
- The load controller was added to a group after a Schedule Template was copied to each load controller in the group.
- A Schedule Template may have been changed. Schedule template changes are not automatically copied to a device.

6.4. Event Log Contains Data Outside the Selected Date Range

The software is programmed to include all data collected during a specified date range. Consequently, Event logs include events that began before the selected date range when those events continued during the date range.

6.5. Error Message when Selecting a Date Range

If the desired start date is later than the default start date, set the end date before setting the start date to avoid receiving an error message.

6.6. Contacting Customer Support

For assistance after following the steps in Troubleshooting, contact Customer Support at:

- **Autani Support**

Phone: 443.320.2233 x2

Address: 7001 Columbia Gateway Drive, Suite 210, Columbia, MD 21046 USA

Support/Commissioning Services: support@autani.com

- **Autani Sales**

Phone: 443.320.2233 x1

Sales/Quotations: sales@autani.com, quotes@autani.com

General Inquiries: information@autani.com

Hours of Operation: Monday to Friday, 9am to 5pm, Eastern Standard Time

7. Glossary

Table 11: Glossary

Term	Description
Curtailement	Used to immediately implement an Event Rule(s) to supersede a regularly scheduled Event or Override
Curtailement Stage	A trigger used to immediately implement a group of curtailments at the same time
Event	Setting or group of settings used to set the state on a single controllable point of a device at a certain time
Event Rule	Setting or group of settings used to set the state on a single controllable point of a device, or multiple points of the same type, triggered by an event defined in an override or curtailment
Override	Used to schedule one or more Event Rules to supersede a regularly scheduled Event
Schedule	Used to implement Events at a specific time, on a recurring basis, or based on conditions reported by sensors
Schedule Template	Schedule that is used as a pattern to quickly and easily apply the same setting(s) to multiple devices of the same type

8. Index

A	
Autani Customer Support	21

C	
Charts	
Relay transition data	14
Run time, selected relays	10
Customer Support	21

D	
Dashboard	
Does not appear	20
System status overview	7
Data, all relays	
Dashboard does not appear	20
Loads tab	8
System Dashboard	7
Data, individual relays	
Detailed relay tabs	11
Event logs	15
Extraneous Event log data	21
Run time charts	10
Status, detailed	12
Transition charts	14
Date ranges, error messages	21

E	
Errors	
Date range error messages	21
Troubleshooting alerts	19
Events	
Extraneous log data	21
Not occurring per schedule	21
Relay event logs	15
Schedule per relay	18

G	
Glossary	22

O	
Occupancy-related sensors	
Associating relays	17
Overview	16

R	
Rediscovering load controllers	7, 19

Relays	
Associating occupancy sensors	17
Changing settings	5
Creating and assigning schedule	18
Data on Loads tab	8
Detailed status data	12
Event logs	15
Finding data	11
Occupancy sensor overview	16
Run time charts	10
System Dashboard	7
Transition data charts	14

S	
Schedules	
Creating and assigning to relays	18
Events not occurring per schedule	21
Schedule Templates	18
Settings, changing	5
Site map	3
Software	
Configuring	4
Overview	3
Site map	3
Status, all relays	
Loads tab	8
System Dashboard	7
Status, individual relays	
Detailed data	12
Detailed relay tabs	11
Event logs	15
Run time charts	10

T	
Transition chart, individual relays	14
Troubleshooting	
Customer Support	21
Dashboard does not appear	20
Date range error message	21
Error alerts	19
Events not occurring per schedule	21
Extraneous Event log data	21
Load controllers not reporting	19
Rediscover load controller	7, 19
Warning alerts	19

W	
Warnings, Troubleshooting alerts	19



Autani LLC

7001 Columbia Gateway Drive, Suite 210, Columbia, MD 21046 USA,
(443) 320-2233 | (240) 755-0092 (fax) www.autani.com.

This document contains the Proprietary and Confidential Information of Autani, LLC. Any use of this information without the expressed written consent of Autani, LLC is prohibited. Copyright Autani, LLC, 2010-2025. All rights reserved. Please refer to www.autani.com/legal for licensing, intellectual property, and other legal notices and information.