

Cross-WAC Input Sharing with WaveLinx CORE

Overview

The WaveLinx System version 16.1 and higher allows for Cross-WAC Input Sharing when WaveLinx Area Controllers within the same building are connected through a WaveLinx CORE. The WaveLinx CORE will facilitate the initial setup of the Cross-WAC Input Sharing. The WaveLinx Area Controllers will then communicate directly with each other to share the input commands (peer-to-peer) with the aid of an assigned WAC coordinator.

- **Cross-WAC Input Sharing:** Sending an input command from one WaveLinx Area Controller to any number of WaveLinx Area Controllers (max. 100 WACs) that are part of the same building in the WaveLinx CORE.

Inputs that can be shared with other WaveLinx Area Controllers include:

Wallstation Buttons

WaveLinx wallstation buttons can be shared.



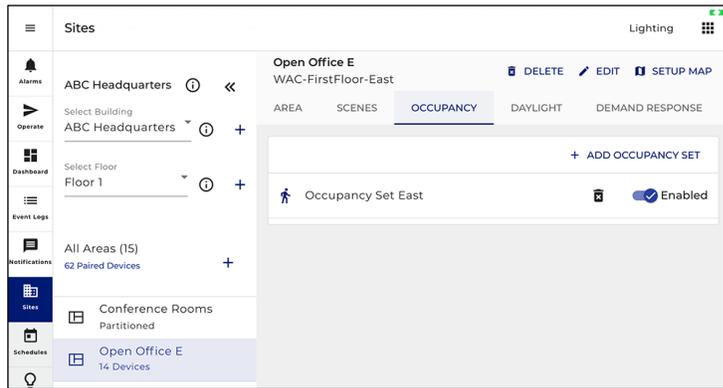
Contact Closure Inputs

Inputs connected to a WaveLinx contact closure device can be shared.



Occupancy Sets

Occupancy Sets can be associated with other occupancy sets in different WaveLinx Area Controllers to allow for Cross-WAC sharing of occupied/unoccupied signals from the sensor group.



Cross-WAC Input Sharing Considerations

- Cross-WAC Input Sharing requires the use of a WaveLinx CORE.
- Inputs can only be shared between WACs that are part of the same WaveLinx CORE building. WaveLinx Wired spaces are excluded.
- Cross-WAC data sharing is limited to 100 WACs.
- Partitioned area wallstations and contact closure inputs must be local to the partitioned area's WAC and cannot be shared. Wallstation and contact closure inputs outside of a partitioned area will not allow control of a partitioned area.
- Wallstation buttons or other inputs issuing Hold/Release Occupied, Wall Status Toggle, and Network Action commands are excluded from Cross-WAC Input Sharing.
- Touchscreen control cannot span Cross-WAC.

Implementing Cross-WAC Input Sharing

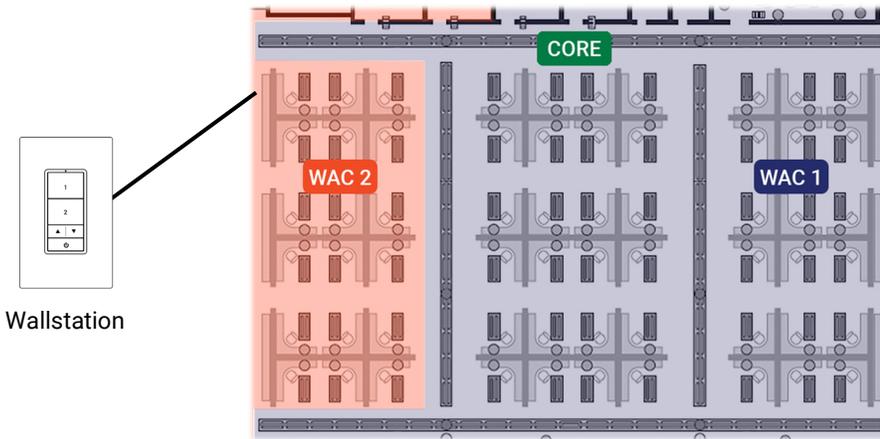
Cross-WAC Input Sharing allows larger facilities to have cohesive control strategies for bigger spaces that may have devices connected to more than one WaveLinx Area Controller. It also allows for an input in one WaveLinx Area Controller to control areas in different WaveLinx Area Controllers (Cross-WAC multi-area control).

The following sections describe how to achieve Cross-WAC Input Sharing between WaveLinx Area Controllers using the WaveLinx CORE Lighting App.

- Programming Wallstation Buttons for Cross-WAC Sharing
- Programming Contact Closure Inputs for Cross-WAC Sharing
- Associating Occupancy Sets for Cross-WAC Control

Programming Wallstation Buttons for Cross-WAC Sharing

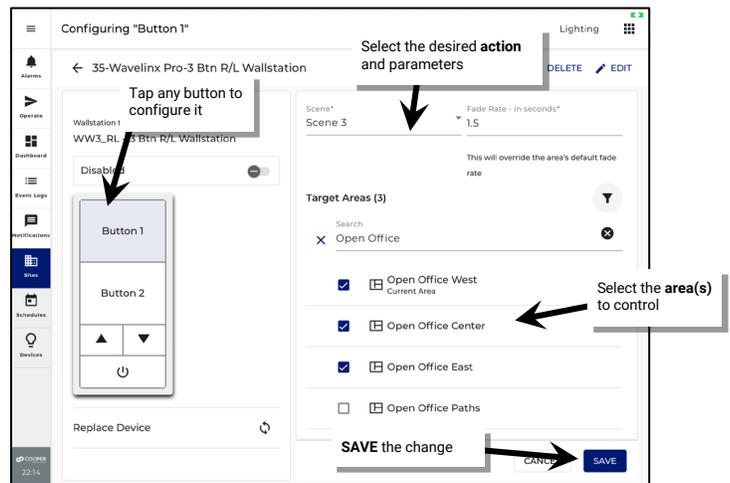
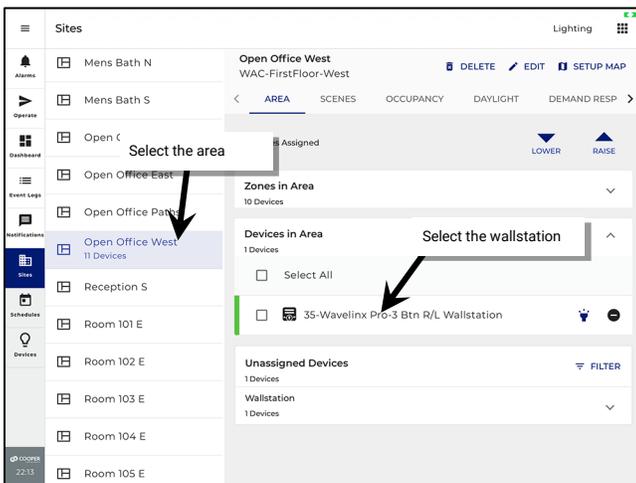
In this example, a wallstation connected to WAC 2 needs to operate all the lighting in the open office areas to allow for centralized light level adjustment



Use the following steps to configure the wallstation button:

1. Open the WaveLinx CORE Lighting App and in **Sites**, select the **building** and **floor**.
2. Locate wallstation in its current area and select the device. Select the button to modify and define the button action.
3. In the **target area** section, all areas in the building will be listed. Locate and select the **target area(s)** that the button should command. Tap **SAVE**.

Tip: Use the provided **search** icon or **filter** icon to simplify the selection of the target areas.

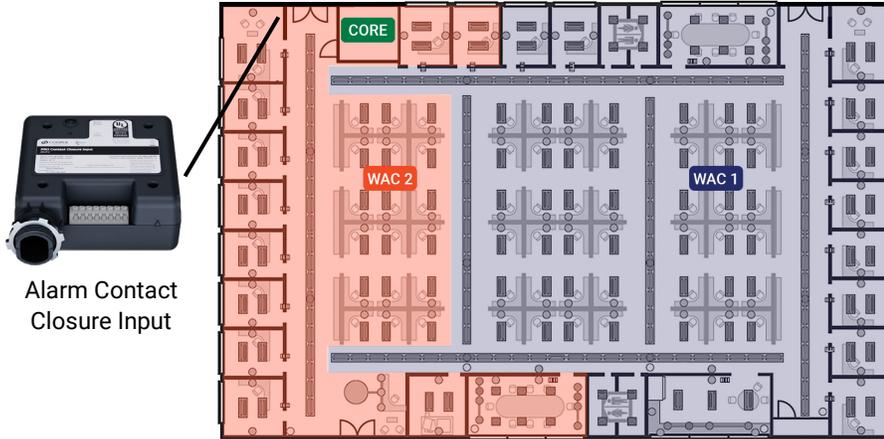


4. Once all changes are complete, make certain to **PUSH DATA TO CONTROLLERS**.

Programming Contact Closure Inputs for Cross-WAC Sharing

Contact closure inputs wired to WaveLinx contact closure devices are included in Cross-WAC Input Sharing. Like wallstations, contact closure inputs can share basic scene and zone commands with areas in other WACs. Beyond basic sharing, contact closure input devices also offer advanced commands to activate Alert Mode, After Hours Occupancy Mode, and Demand Response Mode. ¹ With Cross-WAC Input Sharing, these high priority commands can be shared to any WAC in the same CORE building.

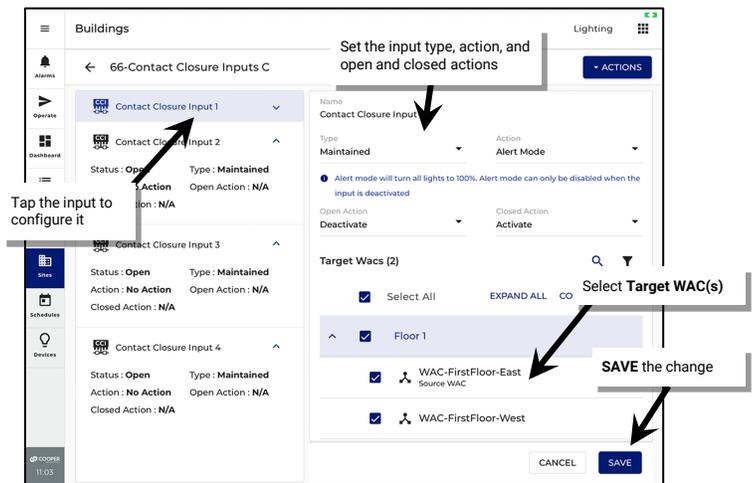
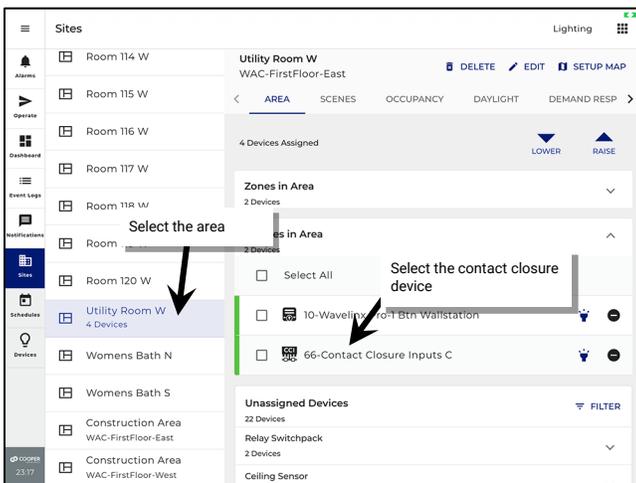
In this example, a contact closure input from the security system needs to turn lighting ON to Alert Mode if the alarm is triggered. Lighting will remain in Alert Mode until the alarm is cancelled.



Use the following steps to configure the contact input:

1. Open the WaveLinx CORE Lighting App and in **Sites**, select the **building** and **floor**.
2. Locate and select the contact closure input device in its current area. Select the input to modify and define the input type (must be maintained for Alert Mode). Define the action type and choose whether the **open** or **closed** action **activates** or **deactivates** the mode.
3. In the **target** section, all WaveLinx Area Controllers in the building will be listed. Locate and select the **target WAC(s)** that the input should command. Tap **SAVE**.

Tip: Use the provided **search** icon or **filter** icon to simplify the selection of the target WACs.



4. Once all changes are complete, make certain to **PUSH DATA TO CONTROLLERS**.

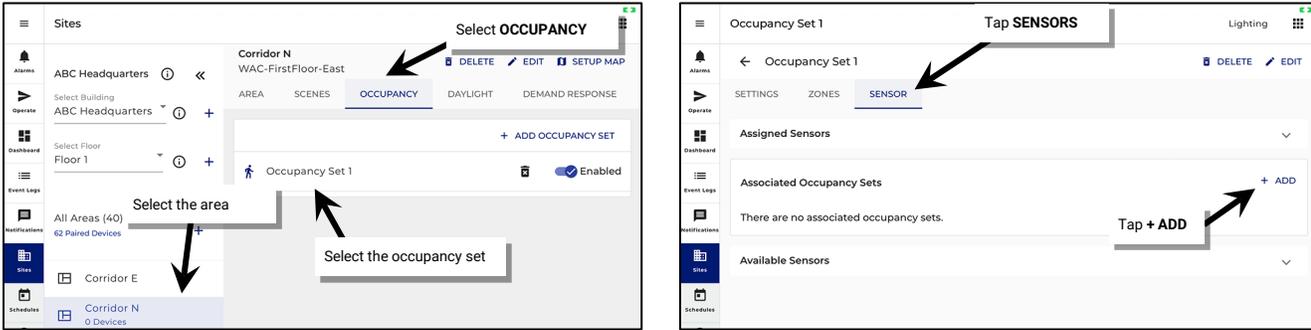
¹ Not all WaveLinx Contact Closure devices support the use of Alert Mode, After Hours Occupancy Mode, or Demand Response Mode. Please review device details to determine supported device functions.

Associating Occupancy Sets for Cross-WAC Control

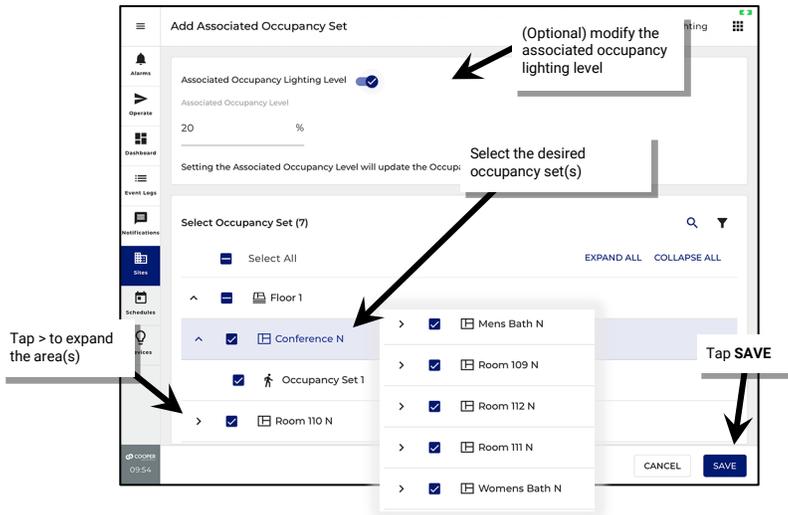
Although individual occupancy sensors cannot be shared across WaveLinx Area Controllers, Occupancy Sets can be shared through association. This allows a larger space that may have devices connected to different WaveLinx Area Controllers to be controlled as one cohesive space or allows for overlapping/cascading occupancy control across WaveLinx Area Controllers.

To associate occupancy sets across WaveLinx Area Controllers:

1. Open the WaveLinx CORE Lighting App and in **Sites**, select the **building** and **floor**.
2. Open the area that has the desired occupancy set. As a rule, start by modifying the occupancy set that needs to receive signals from the other occupancy set. Tap the **SENSOR** tab. Tap **+ ADD** in the **Associated Occupancy Sets** section.



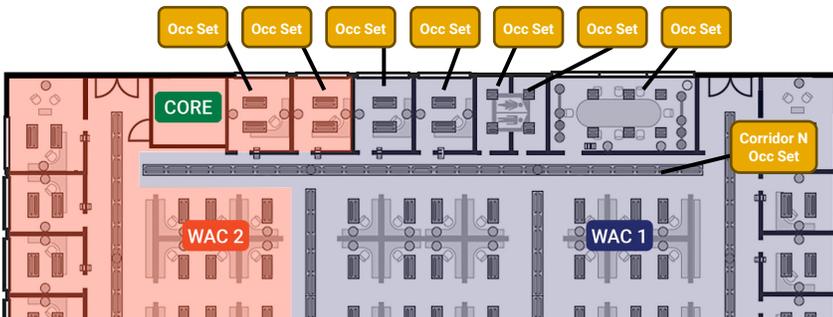
3. Tap **>** to expand the area(s) and show the occupancy sets. Select the occupancy set(s) that should pass commands to this one. Modify the **Associated Occupancy Lighting Level** settings as needed and then tap **SAVE**.



Tip: Use the provided **search**  icon or **filter**  icon to simplify the selection of the target WACs.

4. Once all changes are complete, make certain to **PUSH DATA TO CONTROLLERS**.

For example, in the floorplan below, individual offices and other spaces along the back wall exit into the north corridor. If any of these spaces are occupied, the north corridor should remain ON at a reduced light level. The north corridor lighting should go full ON with motion activity in the north corridor. The north corridor should turn OFF if there is no motion activity in the corridor or the associated spaces. As the areas are created in different WACs, the occupancy set association will require Cross-WAC control.

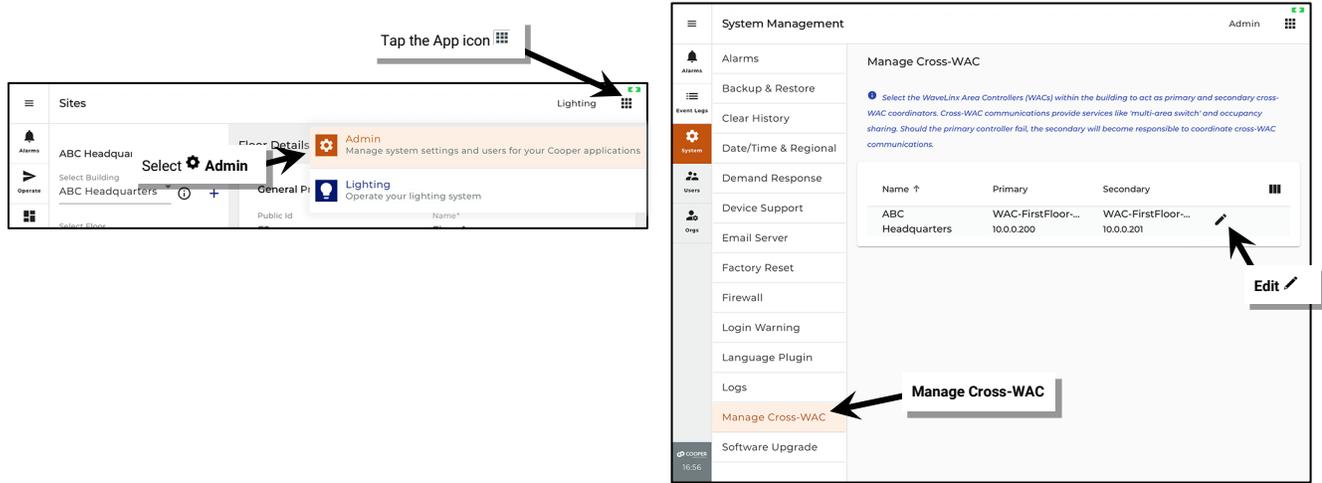


Setting Coordinators for Cross-WAC Input Sharing

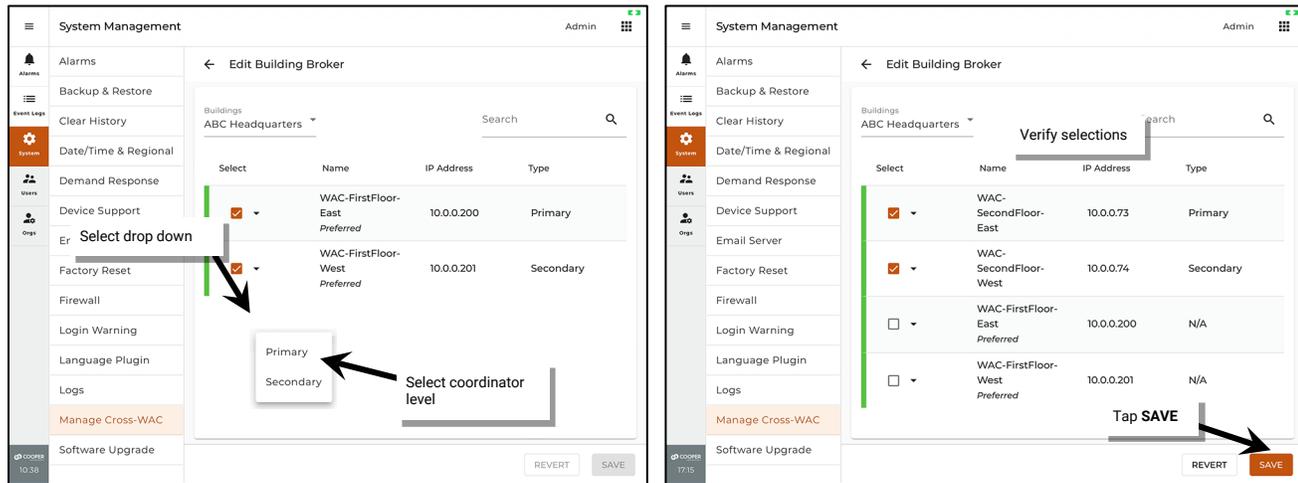
In the WaveLinX CORE System, when wallstation buttons, contact inputs, or occupancy sets are programmed for Cross-WAC Input Sharing, the CORE will automatically select one of the WaveLinX Area Controller's within the building to function as the primary coordinator to manage the Cross-WAC communications for the building. A backup secondary coordinator WAC will also be assigned. If the primary coordinator WAC fails/goes offline, the secondary coordinator WAC will take over management of the shared input communications. After the WaveLinX CORE facilitates the initial setup, the WaveLinX Area Controllers will communicate directly with each other to share the input commands (peer-to-peer) with the aid of the assigned WAC coordinator.

It is possible to change the selection of primary and secondary coordinator WACs from the automatic (*preferred*) selection. To change WAC coordinator selections:

1. Login to the WaveLinX CORE. In the top right of the Lighting App, click on the **App icon** and then select **Admin** to open the Admin App.
2. Select **System** and select **Manage Cross-WAC**. The assigned primary and secondary coordinators will be displayed for the building. To change the selected coordinator(s), select **edit** .



3. Locate the WAC that should be assigned as the primary coordinator. Next to the checkbox, use the **drop down arrow** and select the **Primary**. Repeat this process to assign a different WAC as the **secondary**. Tap **SAVE**.



Note: The originally assigned WACs will be deselected and replaced with the selected devices.