Navigan Recipe: Zone Commissioning

Navigan is a commissioning tool that can be used to link EnOcean sensors and switches to EnOcean controllers. A common use case may be to create zones, groups, or control regions. These are all synonyms for any number of controllers that will be linked to and controlled by identical sensors and switches.

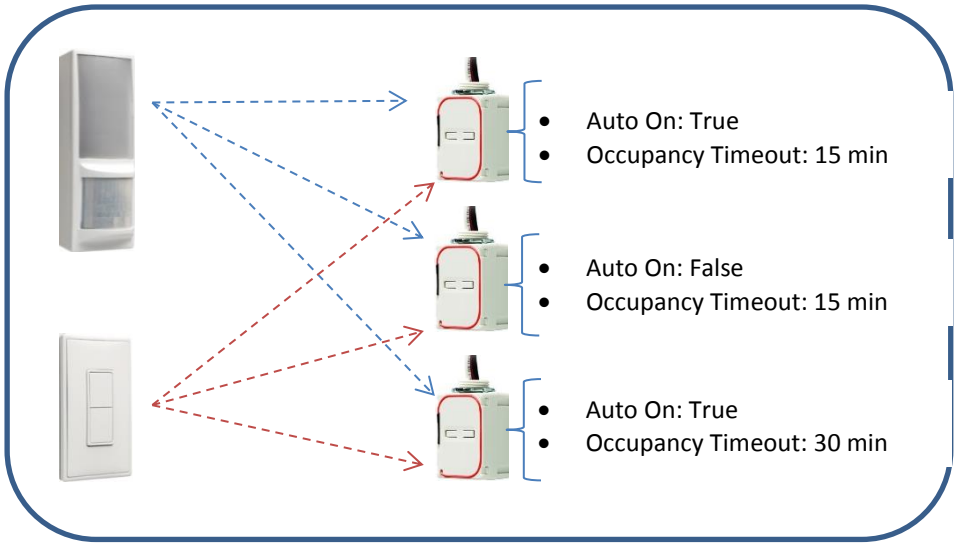
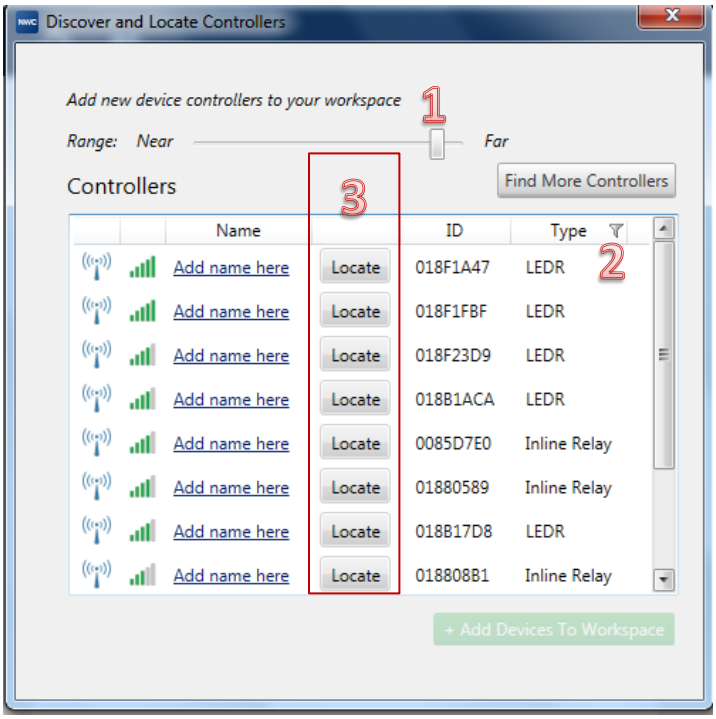


Figure 1 - Example EnOcean Zone with different parameter configurations

An EnOcean zone *must* all be linked to the same sensors and switches and must all be within wireless range of the linked sensors and switches. Controllers in the same zone do *not* need to have the same configuration parameters, e.g. two controllers can be in a zone linked to an identical occupancy sensor and switch, but have different auto on settings or occupancy timeouts. A zone does *not* need to consist of a single controller.

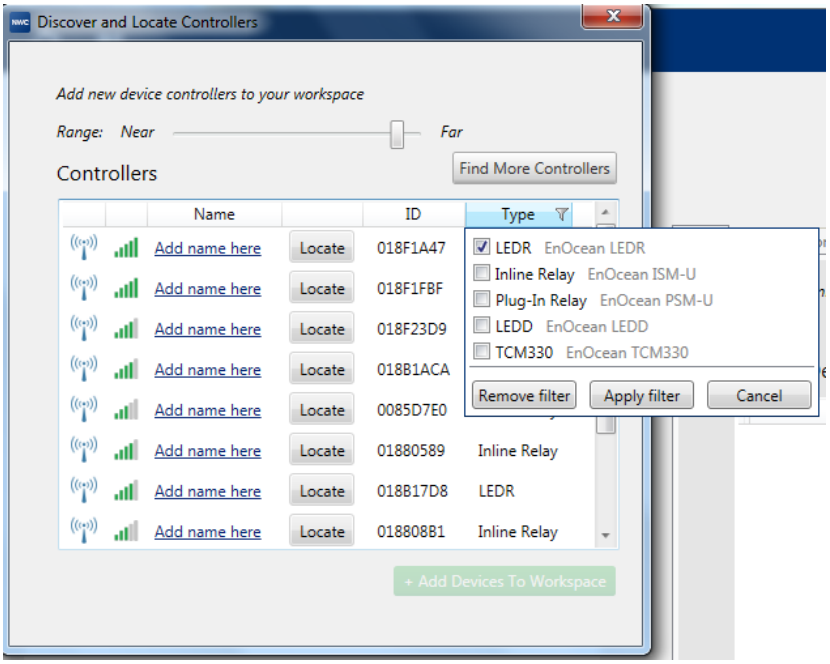
1. Selecting the Controllers in the Zone

The first step for commissioning a zone is finding all controllers in the zone. Navigan has the ability to find all commissionable controllers within wireless range. Please run Navigan in Walk Through mode for details.

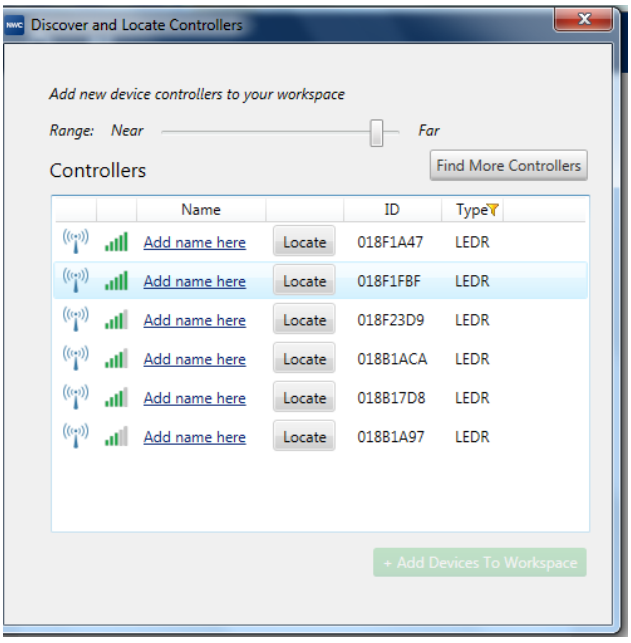


Navigan includes tools to help locate controllers in the zone of interest:

1. The Range Slider – This will remove controllers that are farther away, based on the signal strength of the controller. Generally controllers in the same zone will be physically near each other and the user performing commissioning.
2. The Type Filter – The type filter can be used to filter on the controller type listed. For example, if only LED controllers are being commissioned, unrelated devices can be filtered out. The Type Filter is accessed by clicking the column name, “Type”.



After clicking "Apply filter," only the selected controllers will be shown; in this case this is the LEDR.

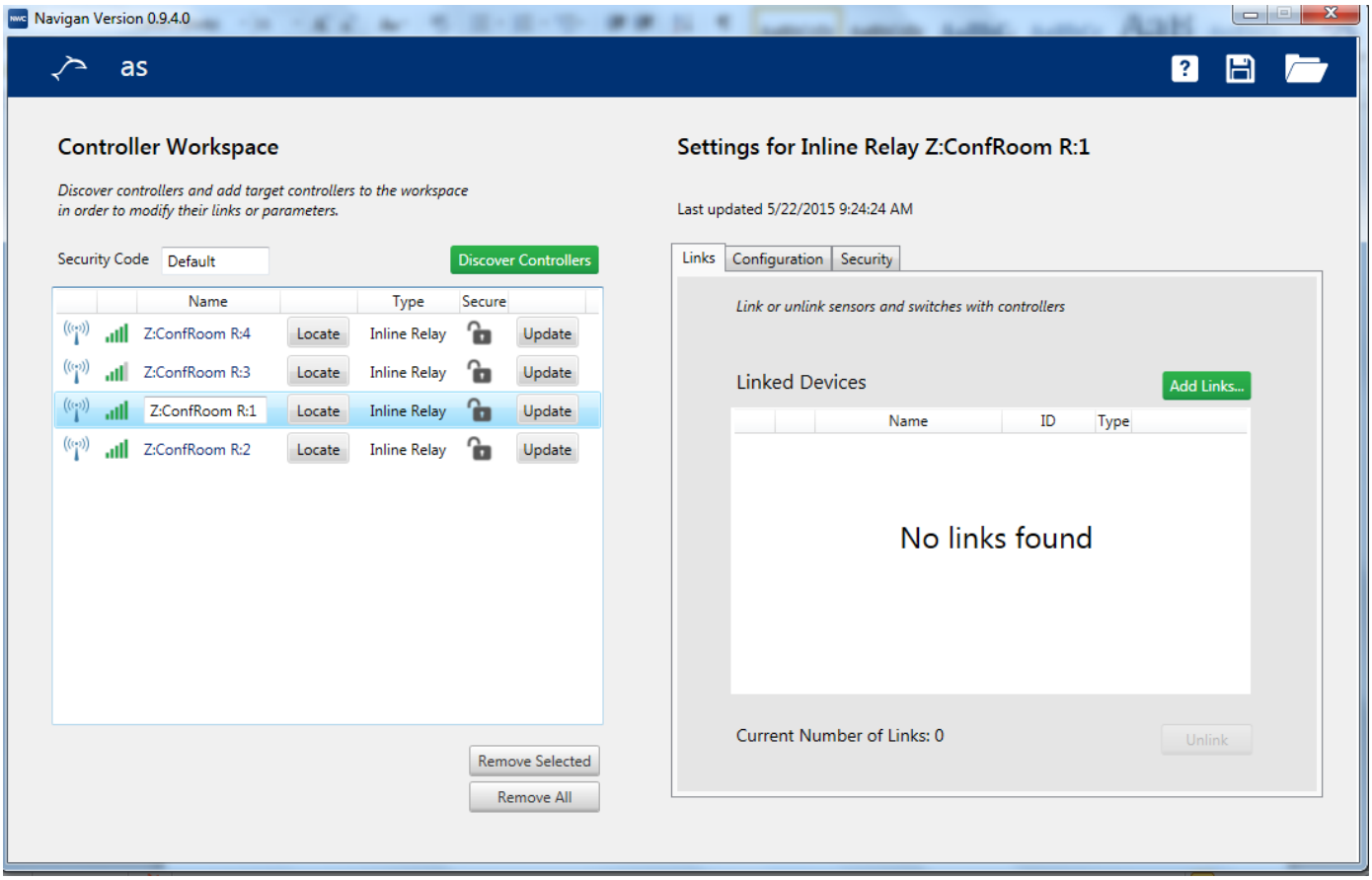


3. The Locate Button – The Locate button has various effects depending on the controller type. It is generally used to determine what an EnOcean controller is connected to, e.g. lighting fixtures. The load will be modified in some way when the Locate button is clicked. This may be an on/off action or dimming. The controller itself may also have indicator LEDs which are flashed or changed in some way.

Once all controllers in a zone are found and named, they should be added to the workspace where their links and parameters can be modified.

2. Commissioning the Lead Controller of the Zone

Once all controllers in the same zone are named and ready, the links and parameters of the first controller can be set. This controller, which will be referred to as the Lead Controller, can be any controller in the zone. In this example there are four EnOcean ISMs in a conference, each controlling a fixture, to be commissioned.



1. Add links to the Lead Controller

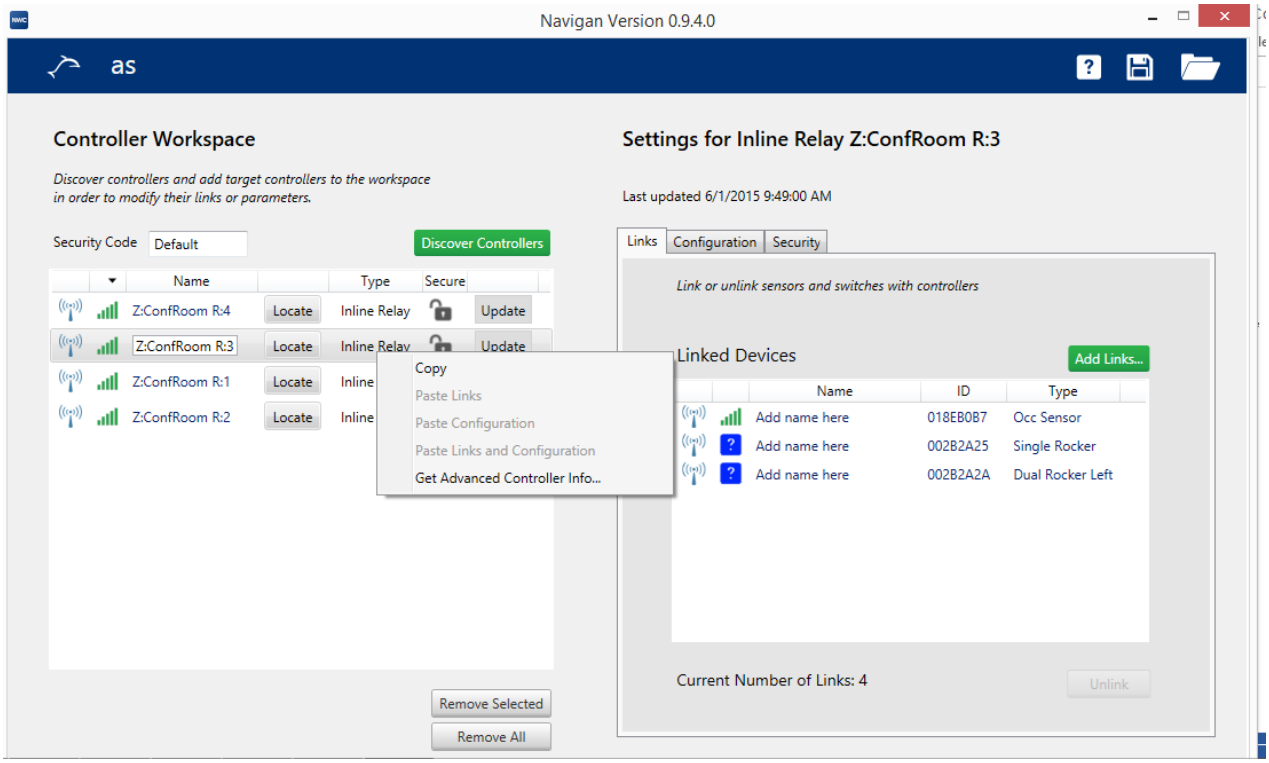
First, link all the sensors from the zone to this controller as with any another controller. Please run Navigan in the Walk Through mode for details.

2. Modify the Controllers Configuration Parameters for the Lead Controller

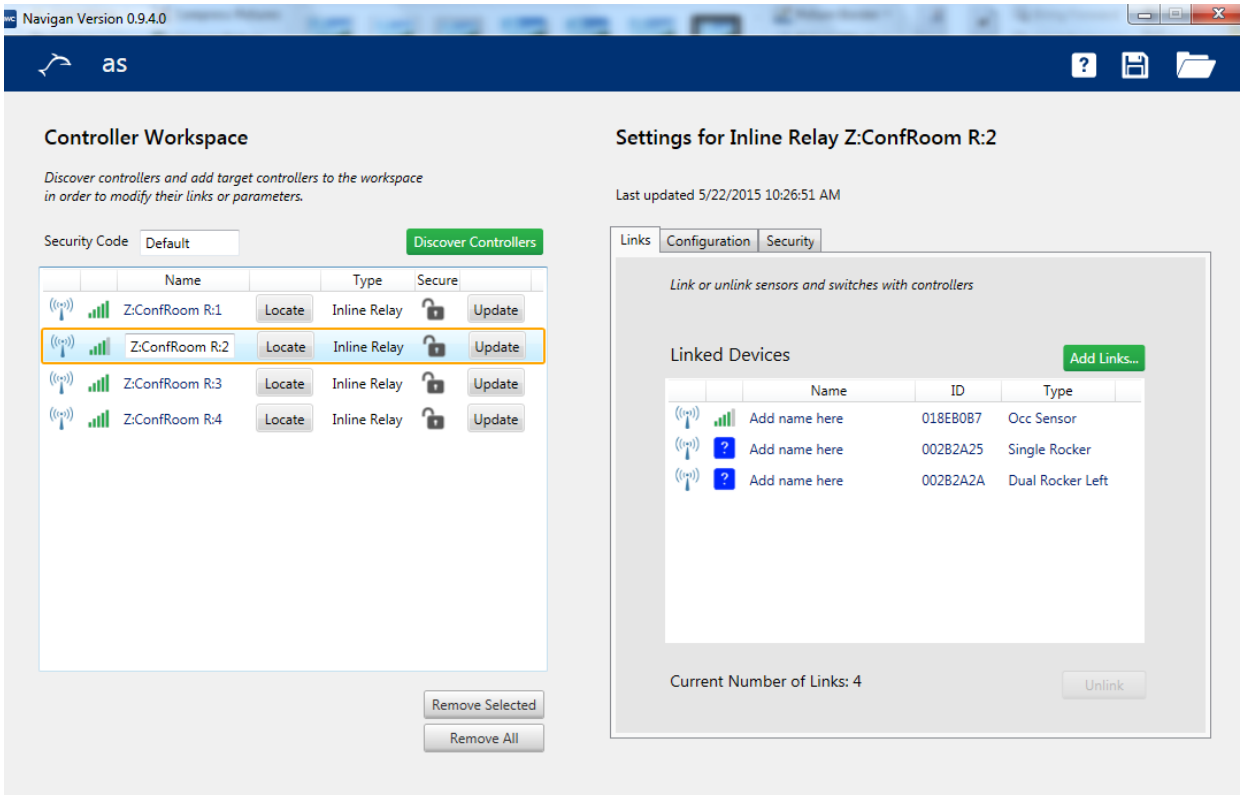
Set the controller's parameters as required to enable the desired application.

3. Copy From The Lead Controller

Navigan supports a copy paste functionality to enable the quick creation of zones. This is accessed by right-clicking the controller to from which to copy. Again, this example uses the Lead Controller, Z:ConfRoom R2.

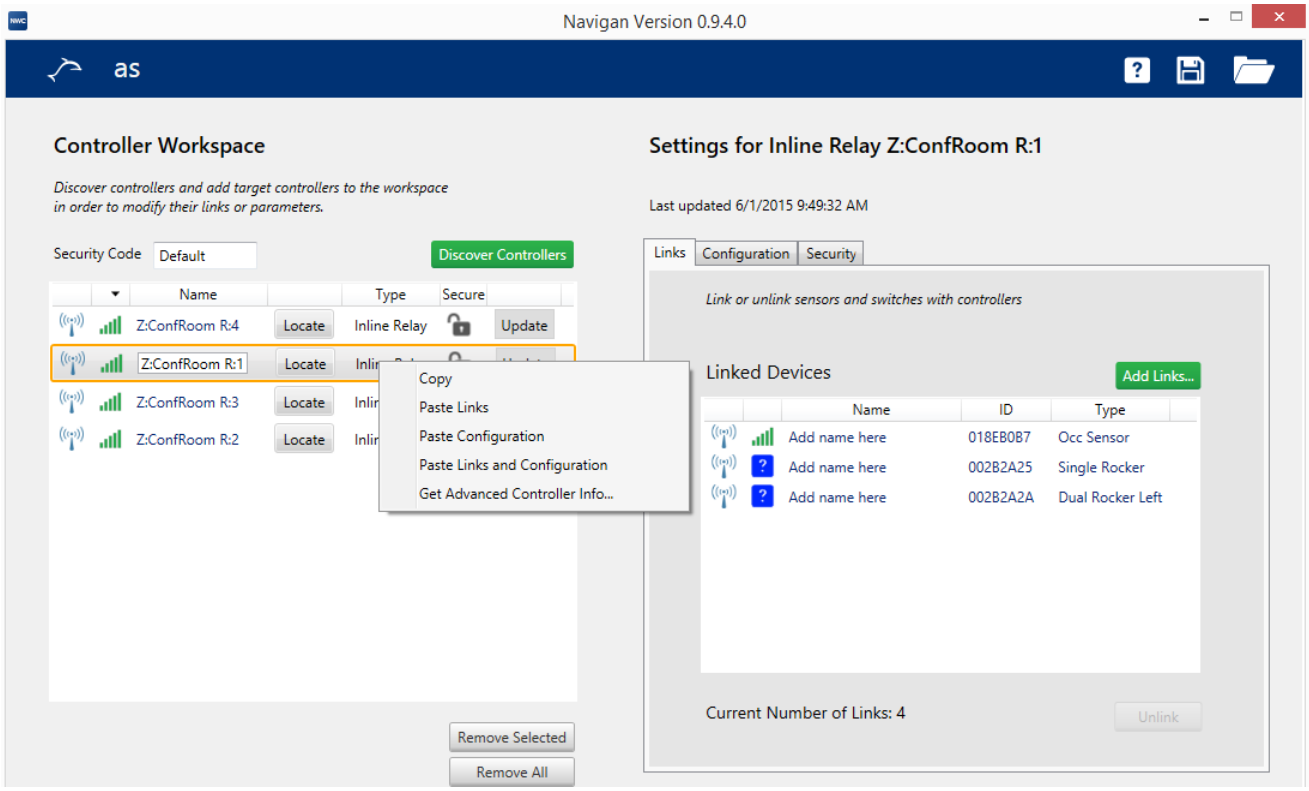


Selecting “Copy” enables an orange border around the Lead Controller to denote it is the “copy from” controller. Note that the options for “Paste Links,” “Paste Configuration,” and “Paste Links and Configuration” are inactive until a controller has been copied.



4. Paste the Links, or Links and Configuration Parameters to the other Controllers in the Same Zone

The Lead Controller's Links and Configuration Parameters can now be pasted to every other controller in the Zone as required. Click update next to each controller in the zone in order to read their current configuration. After updating, right click on an un-commissioned controller. Note that the options for "Paste Links," "Paste Configuration," and "Paste Links and Configuration" are now active.



After pasting the Links the Linked Devices of the Lead Controller and the pasted controller will be the same.

If required paste the configuration or modify the individual configuration parameters as needed.

Repeat step 4 for each controller in the workspace to complete the zone configuration.

5. Test the Zone and Ensure the Application Specifications are Met

Test each sensor and switch for correct linking and reliable communication. Ensure timeouts and other settings operate as expected.