

Node Templates

Node configuration templates allow the admin user to define default properties for different types of nodes in the system. There are two types of nodes: “2 Out Node (Regular Node)” and “Supernode”. This templated approach allows the user to create templates that can be applied to specific node circuits that are repeated. As shown below page is in a tabled format that allows the user to see all defined Templates.

CONFIG

Create 2 Out Node TemplateCreate Super Node Template

NAME	CREATED ON	CREATED BY
Test [REG]	01/17/2024 1:14:23 pm	akram Khalisinx4

Showing page 1 of 1, total records 1

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The picture below shows the result of selecting the “View” Action Button. It allows a high level view of what the template defines. In this situation it will configure the device for CV 24V and 2 10 Watt fixtures.

NAME	CREATED ON	CREATED BY
Test [REG]	01/17/2024 1:14:23 pm	akram Khalisinx4

CC/CV	Max Watt	Application	Emergency	Feature	Input
CV: Voltage - 24V	CH1 - 10 watt CH2 - 10 watt	Regular	<div></div>	Channel Detection: None Channel 1 Fade: 60 sec Channel 2 Fade: 60 sec	

Create 2Out Template

2Out is the MHT Technologies firmware that is applied to all MHT-NODE-90 Devices. In this section we will define the settings associated with the configuration. This section will work with only the devices in a standard installation. Integration specific configurations can be found in the specific [Integration Supplemental](#).

Template Name

This section allows the user to define the name of the Template. It is important as a good name can help with the repeated mapping of the same template.

Type

The Type allows the user to define the driver type when the node contains both a cc and cv option.

Total Max Watts

Channel 1 and Channel 2 are programmable to define the wattage of the lights with the corresponding light values

Application

The settings that are defined in this section are Regular and Auto Tune. The Auto Tune setting is when both channel 1 and channel 2 are attached to a single tunable fixture. The regular settings are for individual driver channels to operate separately. The Desk, Delta, Node Extender options information can be found in their respective Integration supplemental.

Emergency

This feature allows the user to define whether or not the node is an emergency node

Feature

Channel Detection

The channel detection feature tells the node to report a disconnect event when a device is unplugged from the node.

Fade

The Fade feature allows the light to shift to on and off with a timed ramp of the fixture.

Input

Disable

The channel detection feature tells the node to report a disconnect event when a device is unplugged from the node.

Motion Policy

The channel detection feature tells the node to report a disconnect event when a device is unplugged from the node.

Follow me

2 Out Node Config Template

Template Name

TEMPLATE NAME
Basic Template

Type

TYPE
CC

Total Max Watts - 50

CHANNEL 1
50

CHANNEL 2

Application

APPLICATION
Regular

Emergency

Feature

Channel Detection

CHANNEL DETECTION
Channel 1

Fade (in Seconds)

CHANNEL 1
60

CHANNEL 2
60

Input

Disable

Motion Policy

Follow me

Save Close

Create SuperNode Template

SuperNode is an MHT Technologies device and firmware that is applied to all MHT-SUPERNODE Devices. In this section we will define the settings associated with the configuration. This section will work with only the devices in a standard installation. Integration specific configurations can be found in the specific [Integration Supplemental](#).

Template Name

This section allows the user to define the name of the Template. It is important as a good name can help with the repeated mapping of the same template.

Template Name

TEMPLATE NAME

Output

The *Output* section allows the user the ability to control the actuators characteristic the sub sections allow for a deeper characterization of the actuators. In the section below we will work through the different settings that define how the SuperNode driver channels are configured.

CC/CV

The CC/CV Section allows the user to define the individual channels driver type there are 2 Options available. CC for Constant Current and CV for Constant Voltage.

CC/CV COLOR CONTROL MAX WATT FADE TIME

Please select channels

CHANNEL 1 CC	CHANNEL 2 CC	CHANNEL 3 CC	CHANNEL 4 CC
CHANNEL 5 -- select --	CHANNEL 6 -- select --	CHANNEL 7 -- select --	CHANNEL 8 -- select --

The Supernode has 8 Individual actuators that can be programmed. Actuator1 - 4 and Actuators 5 - 8 must share the same mode.

Color Control

The *Color Control* section is where channels are defined as regular or specialty lights. The channels that are RGB and RGBW should begin on Channel 1 or 5 to allow the system to auto define the expected driver channels.

CC/CV COLOR CONTROL MAX WATT FADE TIME

Please select channels

CHANNEL 1 RGBW - R	CHANNEL 2 RGBW - G	CHANNEL 3 RGBW - B	CHANNEL 4 RGBW - W
CHANNEL 5 Tunable White - Cool	CHANNEL 6 Tunable White - Wa...	CHANNEL 7 Regular	CHANNEL 8 Regular

When defining RGBW or Tunable White Lights the secondary channels are define automatically please note this during installation.

Max Watt

The *Max watt* section is where the user defines the wattage of the fixture attached to each channel. If utilizing the RGBW or Tunable White be sure to validate the specific wattage of the individual channels.

CC/CV COLOR CONTROL MAX WATT FADE TIME

Total Watts - 0

CHANNEL 1	CHANNEL 2	CHANNEL 3	CHANNEL 4
CHANNEL 5	CHANNEL 6	CHANNEL 7	CHANNEL 8

Total wattage should not exceed 72 watts on the MHTi-SUPERNODE Device.

Fade Time

The *Max watt* section is where the characteristics of the channel on and off are configured. The formula below is how to determine the fade time of each channel.

$$fadetime = \left(\frac{2500}{maxw} \right) * time$$

CC/CV COLOR CONTROL MAX WATT FADE TIME

Fade Time

CHANNEL 1 FADE TIME 4	CHANNEL 2 FADE TIME 4	CHANNEL 3 FADE TIME 4	CHANNEL 4 FADE TIME 4
CHANNEL 5 FADE TIME 4	CHANNEL 6 FADE TIME 4	CHANNEL 7 FADE TIME 4	CHANNEL 8 FADE TIME 4

Total wattage should not exceed 72 watts on the MHTi-SUPERNODE Device.

Input

The *Input* section allows the user the ability to control the input characteristic. The sub sections of Input allow for a deeper characterization of the Inputs and how the Input interacts with the Inspextor system. In the section below we will work through the different settings that define how the SuperNode driver Inputs are configured.

Input

Please select channels

CHANNEL 1 Press ▼	CHANNEL 2 Release ▼	CHANNEL 3 Press and Release ▼	CHANNEL 4 Toggle Low-to-High ▼
CHANNEL 5 Occupancy Low-to-... ▼	CHANNEL 6 -- select -- ▼	CHANNEL 7 -- select -- ▼	CHANNEL 8 -- select -- ▼
OCCUPIED 0	VACANT 60		

Channel 1
Press
The Input Type **press** informs the SuperNode that the Input Channel should generate an event on the button press.

Channel 2
Release
The Input Type **Release** informs the SuperNode that the Input Channel should generate an event on the button release.

Channel 3
Press and Release
The Input Type **Press and Release** informs the SuperNode that the Input Channel should generate an event on the button press.

Channel 4
Toggle Low-to-High
The Input Type **Toggle Low-to-High** informs the SuperNode that the Input Channel should expect a digital occupancy signal that operates normally on low and has a voltage jump to high when it sense occupancy.

Channel 5
Occupancy Low-to-High
The Input Type **Occupancy Low-to-High** informs the SuperNode that the Input Channel should expect a digital Occupancy signal that operates normally on low and has a voltage jump to high when it sense occupancy. Occupancy however has a timer built in to allow the use of raw sensor output.

Hold Time

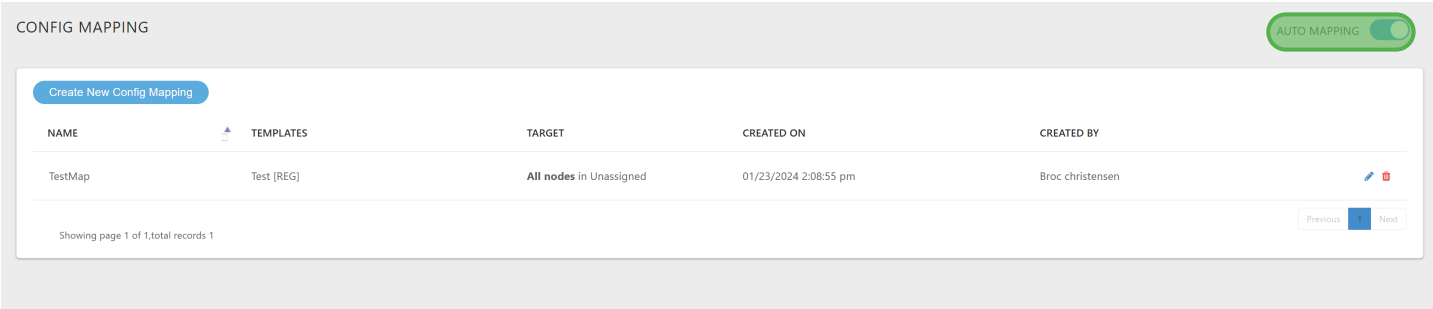
The *Hold Time* is the section that is specifically tied to the **Press** action. It allows the user to utilize the button to hold to send multiple events on that input. The use case is largely for a dim up or dim down scenario each event generated can move the lighting up or down in dim level. The value is measured in seconds.

Hold Time

CHANNEL 1 HOLD TIME 0	CHANNEL 2 HOLD TIME 0	CHANNEL 3 HOLD TIME 0	CHANNEL 4 HOLD TIME 0
CHANNEL 5 HOLD TIME 0	CHANNEL 6 HOLD TIME 0	CHANNEL 7 HOLD TIME 0	CHANNEL 8 HOLD TIME 0

Node Mapping Templates

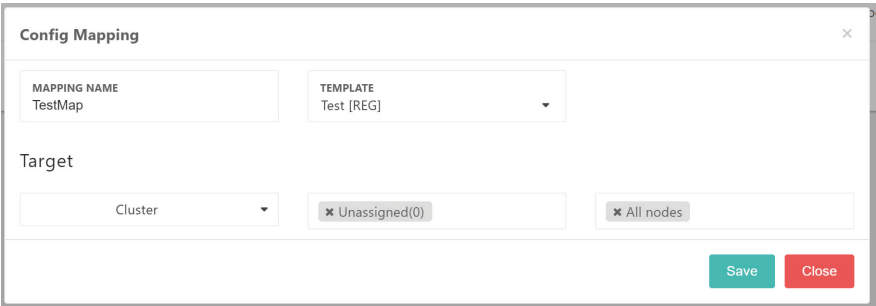
In the previous section we looked at developing a clean template where we could apply it to multiple devices. In this section we will utilize that template to map to multiple devices. The Image below is a view of the *Node Mapping Templates Page*. The page is in a tabled format that allows the user to see all defined mapping with the name of the mapping, the Template selected and a Target group of devices.



The Auto Mapping Toggle in the upper right hand corner is in the toggled “on” state which means that when a new map is created or a map is edited the map will be automatically be pushed to the devices. In the *Node Mapping Log* Section we will discuss this further.

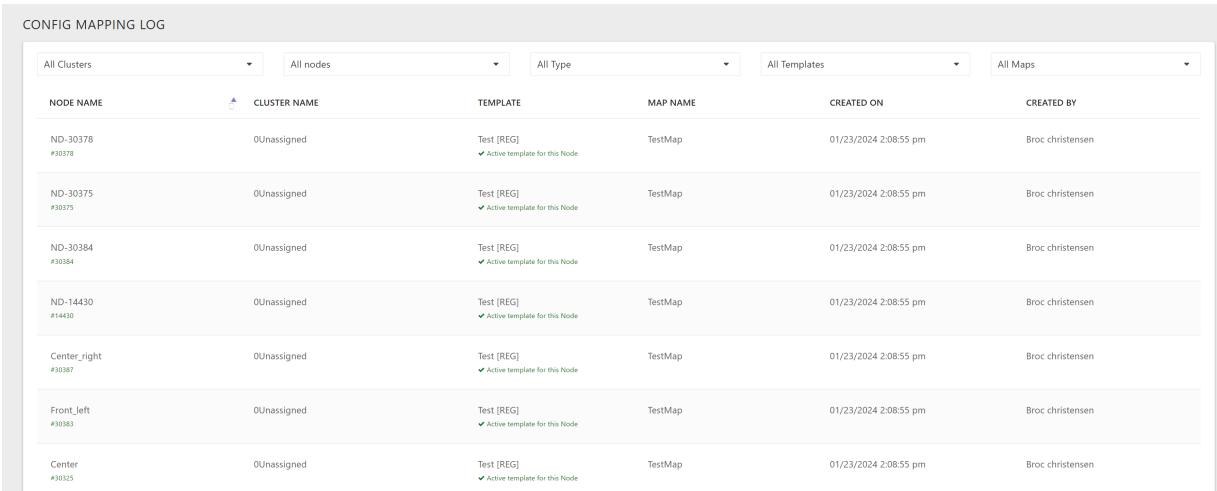
Create New Config Mapping

When creating or editing a configuration map you will be presented with a pop-out menu that can be seen here. This pop out will allow the user to select the target devices and the template that is being applied to them. The system will not allow the same devices to exist in 2 different mappings. The system will also not distribute the Template until the *Auto Mapping* feature that is highlighted above is activated.



Node Mapping Log

The Node Mapping Log allows the User to verify the results the Auto Mapping feature from the Node Mapping Page. The page is in a tabled format that allows the user to see system defined deployments of the “Node Mapping”.



Analyzing the Node Map Log

In the previous section we introduced the Node Mapping Log and how it is influenced by the Auto Mapping feature on the Node Mapping Templates. In this section we are going to look at the details provided by this log. on the Node Mapping Log page the user will find the “eye” icon at the end of each individual record if this is selected the user will be presented with the pop out pictured here. The Data present in this pop out presents us with a clear picture of the commands being sent to the Node to achieve the desired templated configuration. The records are populated with the Date, Time, and commands being sent. This pop out also allows the user to download the log as a whole in order to view on your local machines. In the upper right hand corner of the pop out you will find the download button. The file will download with a “.log” file type this file type can be opened in the notepad on windows machines.

Config Mapping Log Data - Showing last 100 lines

03/07/2024 16:37:16 - NODE -> 3: inx,network autotune S 101

03/07/2024 16:41:04 -

=====

03/07/2024 16:41:04 - Apply template to node 3 started

03/07/2024 16:41:04 - NODE -> 3: inx,actuators,actuator1 cccv S 0

03/07/2024 16:41:19 - NODE -> 3: inx,actuators,actuator2 cccv S 0

03/07/2024 16:41:34 - NODE -> 3: inx,actuators,actuator2 maxw S 100

03/07/2024 16:41:49 - NODE -> 3: inx,sensors,sensor1 dlight S 13

03/07/2024 16:41:49 - NODE -> 3: inx,actuators,actuator1 lightonen S false

03/07/2024 16:41:49 - NODE -> 3: inx,actuators,actuator2 lightonen S false

03/07/2024 16:41:49 - NODE -> 3: inx,actuators,actuator2 fadetime I 1500

03/07/2024 16:41:49 - NODE -> 3: inx,actuators motdsbl S 3

03/07/2024 16:41:49 - NODE -> 3: inx,network cmd S set_ws 0

03/07/2024 16:41:49 - NODE -> 3: inx,network autotune S 101

03/07/2024 16:51:57 -

=====

03/07/2024 16:51:57 - Apply template to node 3 started

03/07/2024 16:51:57 - NODE -> 3: inx,actuators,actuator1 cccv S 0

03/07/2024 16:52:12 - NODE -> 3: inx,actuators,actuator2 cccv S 0

03/07/2024 16:52:27 - NODE -> 3: inx,actuators,actuator2 maxw S 100

03/07/2024 16:52:42 - NODE -> 3: inx,sensors,sensor1 dlight S 13

03/07/2024 16:52:42 - NODE -> 3: inx,actuators,actuator1 lightonen S false

03/07/2024 16:52:42 - NODE -> 3: inx,actuators,actuator2 lightonen S false

03/07/2024 16:52:42 - NODE -> 3: inx,actuators,actuator2 fadetime I 1500

03/07/2024 16:52:42 - NODE -> 3: inx,actuators motdsbl S 3

03/07/2024 16:52:42 - NODE -> 3: inx,network cmd S set_ws 0

03/07/2024 16:52:42 - NODE -> 3: inx,network autotune S 101

03/07/2024 16:54:58 -

=====

03/07/2024 16:54:58 - Apply template to node 3 started

03/07/2024 16:54:58 - NODE -> 3: inx,actuators,actuator1 cccv S 0

03/07/2024 16:55:13 - NODE -> 3: inx,actuators,actuator2 cccv S 0

03/07/2024 16:55:28 - NODE -> 3: inx,actuators,actuator2 maxw S 500

03/07/2024 16:55:43 - NODE -> 3: inx,sensors,sensor1 dlight S 13

03/07/2024 16:55:43 - NODE -> 3: inx,actuators,actuator1 lightonen S false

03/07/2024 16:55:43 - NODE -> 3: inx,actuators,actuator2 lightonen S false

3 - NODE -> 3: inx,actuators,actuator2 fadetime I 300

NODE -> 3: inx,actuators motdsbl S 3

NODE -> 3: inx,network cmd S set_ws 0

NODE -> 3: inx,network autotune S 101

Close

Data Log Record Explained

Time	Target	Path	Context	Data Type	Value
03/07/2024 16:41:34	NODE	inx,actuators,actuator2	maxw	S(String)	100