HTML GUI Documentation

VERSION HISTORY:

Date	Version Number	Release Notes
2022-05	**1.0**	**Initial Release**
2022-06-06	**1.1**	**Added New Layout**
2022-09-26	**1.2**	**Added Yealink overlay, Notes on whitelist**
2022-12-08	**1.3**	**Updated volume component. Changed icons, added new config options**
2023-02-07	**1.4**	**Updated color preference load process, updated CSS to use variable definitions for custom color overlays.**

DESCRIPTION:

This document details the steps required to setup and use of an HTML 5 interface with Netlinx connectivity. This document only covers the HTML 5 setup and configuration. See the implementation guide found with the relevant duet module for setup considerations and information.

REQUIRED FILES:

> *gui.zip – The zip file containing the relevant web files for deployment*
>
> *configuration file – a .json file containing the configurations desired for the user interface.*

PROCESS:

LOAD FILES TO PROCESSOR:

In Netlinx Workspace:

> *Right Click on the "Other" Folder*
>
> *Select Add Existing Other File*
>
> *Add the gui.zip file*
>
> *Add the configuration file*
>
> *Load the Files (and program) to the controller and reboot the controller.*
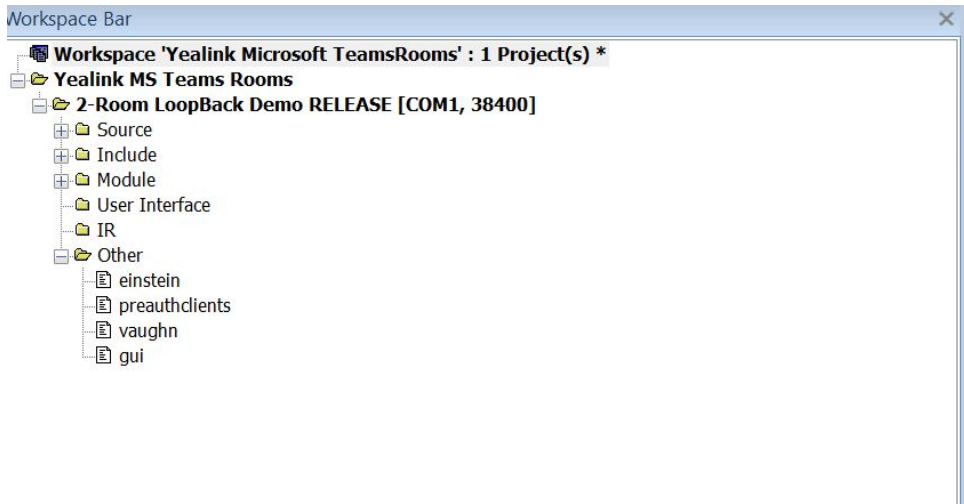
Pre-Authorized Client Database

When required a Pre-Authorized Client database will be enabled at this module. This is exclusively predicated on the limitation at the connecting client hardware of maintaining the Persistent Authorization JWT Cookie for the specified 400-days.

When deployed on a DNS network the FQDNS HostName must be referenced as the client in any Command or the csv file.

CREATING USER ACCOUNT:

Each new processor will need to have a security role created, and user accounts created for each instance that will be connecting.

CREATE A NEW ROLE:

If not already complete, a new role should be created in Security settings for the HTML interface. This step only has to be done once per processor.

- Select Security > Role
- Select "Add Role"
- Role Name = webui
    - "webui" is an example name, and another can be substituted.
    - Note: Username is case sensitive.
- Permissions
    - check "HTTP/HTTPS"
- Select Accept

Add New Role

Role Name: ★

WebUIRole

Permissions:

☐ Audit Log 🚫	☐ Device Configuration
☐ Firmware/Software Update	☐ FTP Access
☐ General Configuration	☑ HTTP/HTTPS
☐ Network Configuration	☐ Program Port Access
☐ Security Control	☐ Telnet/SSH/SSH FTP Access
☐ Touch Panel Administration	☐ User Access 1
☐ User Access 2	☐ User Access 3
☐ User Access 4	☐ User Management

✖ Cancel   ✔ Accept

CREATE A NEW USER:

- Select Security > Users
- Select "Add User"
- Fill out the User Name and Password fields
- Choose Type > Device
- Choose Roles > webui (or role name created in previous step)
- Click Accept.

Add New User

User Name: ★

Room Name

Type:

Device ▾

Roles:

webui ▾

> Your new password must be between 4 to 20 characters.

New Password: ★

•••••••••••••••••

Confirm Password: ★

•••••••••••••••••

Permissions:

HTTP/HTTPS

✖ Cancel   ✔ Accept

ACCESSING THE WEB INTERFACE:

The URL for each user interface will vary depending on the settings used in the netlinx program.   The URL variable includes the device number from the netlinx code (this allows differentiation between user interfaces/rooms).

The URL is constructed as follows:

http://<NX_CONTROLLER_IP>:8080/web/ui/<ui_device_number>/home/

Assuming the IP address of the controller is 172.20.254.175 and the below Netlinx code:

```
DEFINE_DEVICE

vdvWebServer   = 41999:1:0;
vaughnUI          = 41100:1:0;
dvVaughnUI         = 0:2:0;

vdvWebServer_2  = 41998:1:0;
einsteinUI          = 41101:1:0;
dvEnsteinUI     = 0:3:0;
```

The URL for the two rooms would be:

- http://172.20.254.185:8080/web/ui/41100/home/
- http://172.20.254.185:8080/web/ui/41101/home/

LOGIN:

Once connected to the controller's web page, the user account needs to login on the first access.   Note - Login is persistent and is a one-time task per touch interface.

Provide the appropriate details and the system should connect and redirect to the example layout:
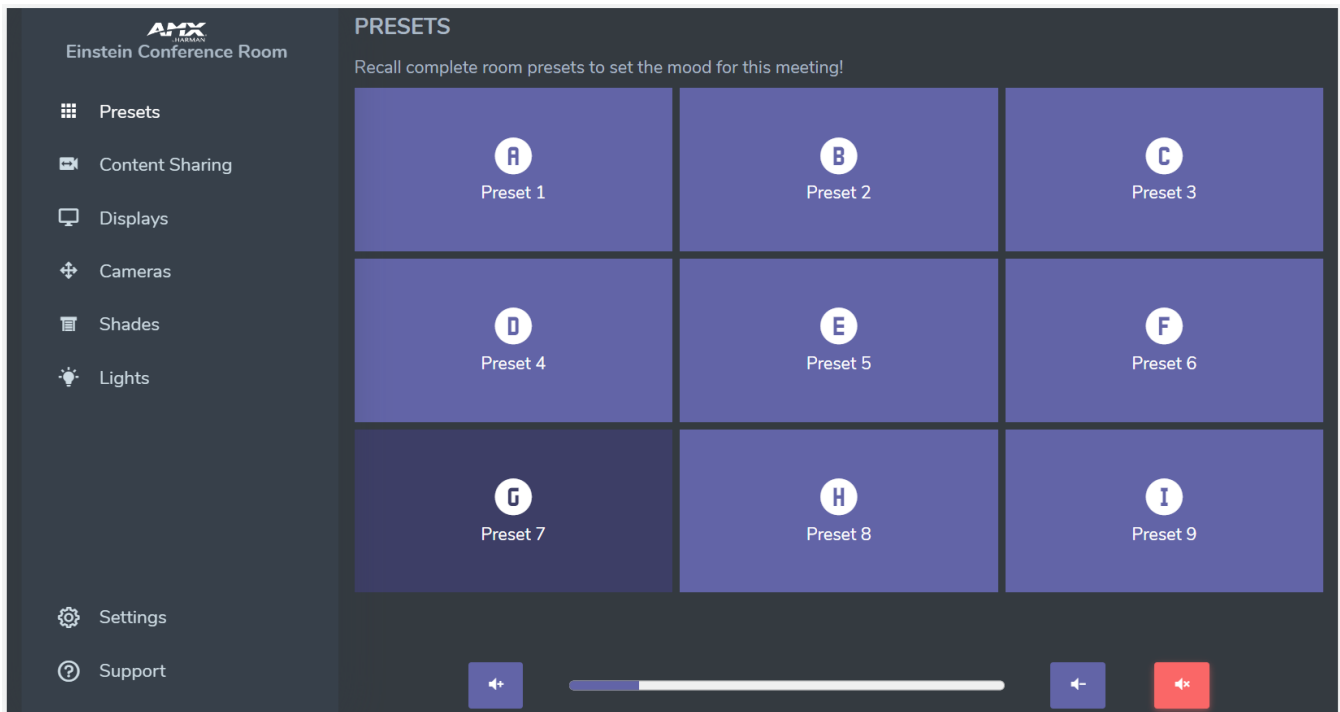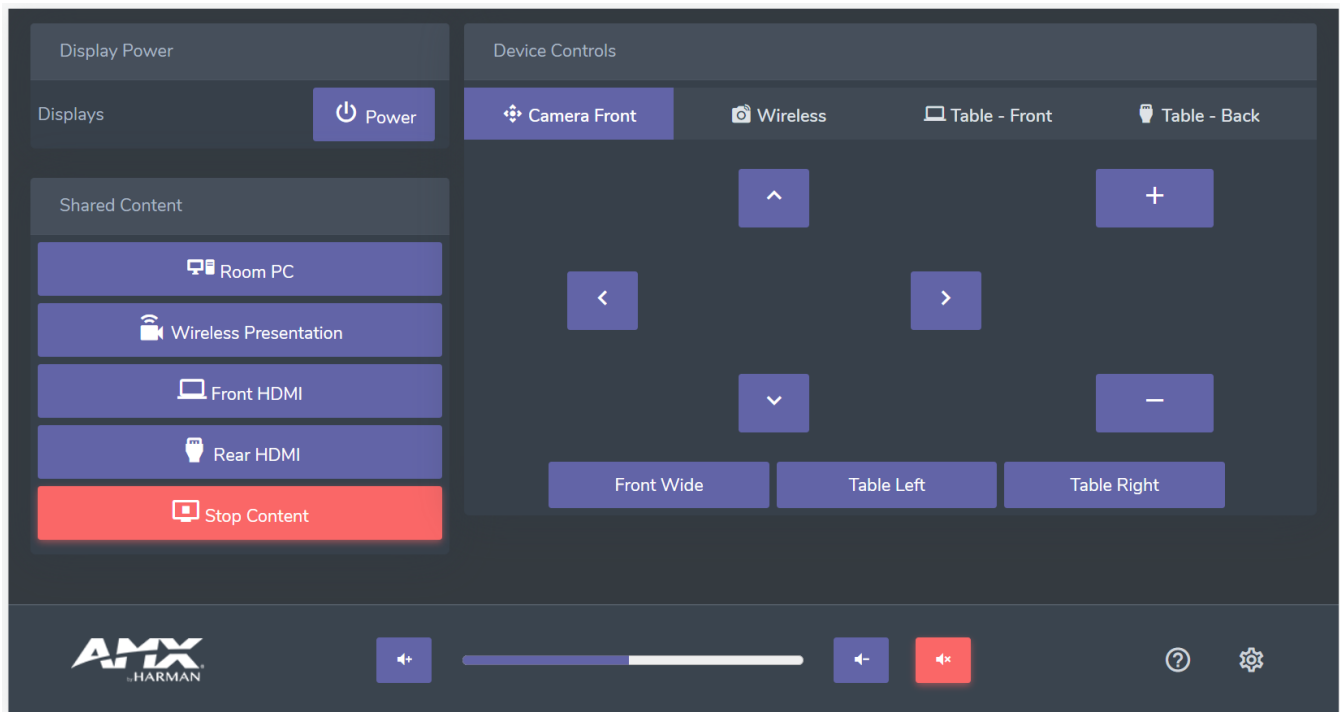
CONFIGURATION JSON FILE

The system configuration is done via modifications to the JSON file, which is then loaded to the NX controller. Different templates will have different JSON structures, with a shared set of core options to select. Refer to documentation for each layout to determine appropriate JSON options.

CORE FIELDS:

Name	Default	Options	Description
template	None	See List of Templates Below	Sets desired template. Should be first. Will alert/error if not included in file.
colorScheme	Dark	dark | light	

overlay	None	SEE TABLE BELOW	
title	None	String	Title to show for room and tab in browser
support	{}	Email, phone	If not defined, the help button will not show in rendered panel
showSupport	None	true | false	If true, but support details not included, the option will not be shown
showHeader	True	true | false	Hides the top navigation bar
showFooter	True	true | false	Hides the bottom footer bar

OVERLAY OPTIONS:

Field Value	Description
""	No value will default to a basic black and white color scheme.
"teams"	Generates a purple, MS Teams color scheme.
"yealink"	Generates a Yealink specific color scheme to match the existing Yealink colors and present a more unified experience.
"googlemeet"	Generates a color scheme based off of google meet colors. Default application should be light.

TEMPLATE LIST:

Name	JSON Value	Description
Side By Side	sideBySide	Two large almost equal columns of content. Left includes an option for power, source selection, and an area for device controls.
Left Bar	leftBar	Left hand navigation pane, large tab content page on the right. volume control on the bottom of the page (sticky)

Appendix: Left Bar Layout

This template requires the following fields for basic configurations.   Device/Sub-Pages are contained within the categories array, which have the same general structure for each category.   Configuration of individual category options follows the structure for the components they are built off of.   Excessive buttons will force a scroll bar to appear.   On most browsers the scroll bar will disappear when not actively scrolling.

This template supports the following options:

- Volume control - displayed in the footer of the content tabs. Always visible
- Presets - Simple grid of buttons
- Vertical Button Group - Single column of buttons
- Display Power - Configurable toggle or discreet controls
- Camera Controls - Note: Presets are moved in this layout to category preset section
- Shade Control - Includes up/down/stop
- Lighting control - both level/dimmable and toggle options.

TEMPLATE MINIMUM CONFIGURATION OPTIONS:

NOTE - for proper display, showFooter and showHeader must be defined as false.

```
"template": "leftBar",
"colorScheme": "dark",
  "overlay": "teams",
  "title": "Einstein Conference Room",
  "showHeader": false,
  "showFooter": false,
"categories":[
        {"title":"CATEGORY 1" ...},
        {"title":"CATEGORY 2" ...},
        {"title":"CATEGORY 3" ...},
}
```

CATEGORY STRUCTURE:

Name	Default	Options	Description
title	None	String	Title of Category, displays in navigation structure and optionally on top of tab content
showTitle	None	true | false	Show or hide title in sub-template. Will still show in the navigation structure
icon	None	valid MDI icon	"mdi-my-icon"
type	None	btngrid | vertbtngroup | displays | cameras | shades | lights	Defines the sub-template to be loaded for category
instruction	None	String	Instruction block of text to show
showInstruction	None	true | false	Show or hide the instruction block
presets	None	{}	See preset configuration table
<type specific definition>	None		Each type has a different configuration. Refer to the appropriate table for name/options.

PRESETS STRUCTURE AND MINIMUM CONFIGURATION OPTIONS:

Please note, the Presets category (defined by "type:"btngrid") uses the button grid as a default and has a mildly different configuration setup.

```
"presets": {
        "config": {
          "title": "Presets",
          "showTitle": true,
          "gridJustify": "start",
          "gridSize": 6,
          "btns": [
              {"text":"Wide","channel":219,"icon": "mdi-account-group"},
              {"text":"Podium","channel":220,"icon": "mdi-podium-gold"},
              {"text":"Privacy","channel":221,"icon": "mdi-eye-off"}
          ]
        }
      }
```


BUTTON GRID CONFIGURATION:

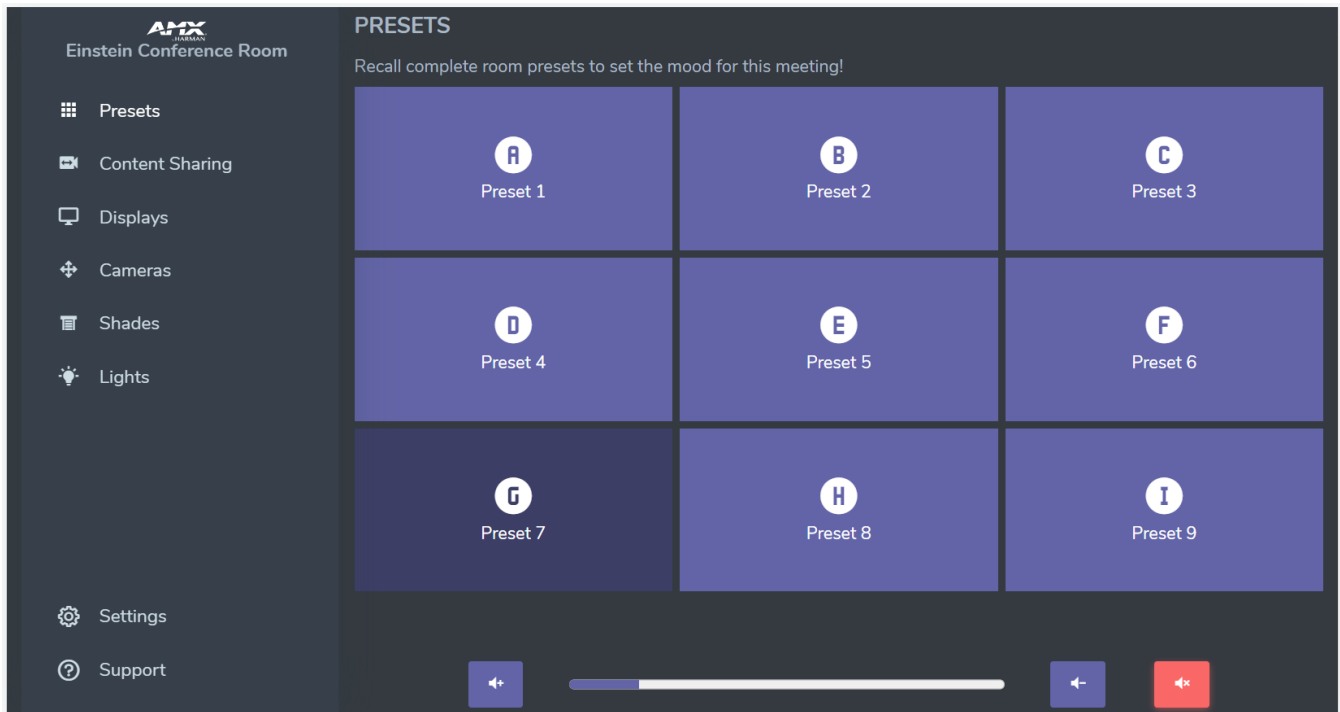| Name	Default	Options	Description
id	unique value	String	Sets id for HTML and JS use
port	1	1-20	Netlinx Port
title	Button Grid	String	
showTitle	false	true | false	
titlePOS	start	start | center | end	Position of text. start = left. center = center. end = right
instruction	None	String	Instruction block displayed directly under the title
showInstruction	false	true | false	
instructionPOS	start	start | center | end	Position of text. start = left. center = center. end = right
gridSize	4	1,2,3,4,6,12	Changes the number of buttons in a single row. Buttons increase/decrease in size depending on number of buttons in a row.
gridMargin	1	0-5	Changes space between each button in a row. May force buttons to a second row if the combo of grid size and margin exceeds row max width
gridJustify	center	start | center | end	Position of the grid (useful for grids with less buttons)
color	primary	primary | secondary | success | error | warning | info | light | dark | link	Bootstrap 5.0 color variants
btns	array		Array of objects to define each button

BTNS[{}]

Name	Default	Options	Description
text	none	String	Button label text
icon	none	valid mdi icon	
color	none	primary | secondary | success | error | warning | info | light | dark | link	Bootstrap 5.0 color variants
channel	none	1-1024	Netlinx channel

CATEGORY - btngrid

This sub-template uses the configuration options of the btngrid component for display. It's structure varies from the other pages as their is no "presets" section, and the title and instruction block is contained in the config object which parent is the category object and not the preset object. Refer to the example below for minimum structure definition.

Name	Default	Options	Description
title	None	String	Display title
icon	None	valid MDI icon	Icon displayed in side navigation
type		btngrid	Sets btngrid sub-template
config			Button grid configuration options
btns	array		Defines displayed buttons

```
"categories": [
    {
        "title": "Presets",
        "icon": "mdi-apps",
        "type": "btngrid",
        "config": {
          "title": "Presets",
          "showTitle": true,
          "instruction": "Recall complete room presets to set the mood for this meeting!",
          "showInstruction": true,
          "gridSize": 3,
          "btns": [
            {"text":"Preset 1","channel":201,"icon": "mdi-alpha-a-circle"},
            {"text":"Preset 2","channel":202,"icon": "mdi-alpha-b-circle"},
            {"text":"Preset 3","channel":203,"icon": "mdi-alpha-c-circle"},
            {"text":"Preset 4","channel":204,"icon": "mdi-alpha-d-circle"},
            {"text":"Preset 5","channel":205,"icon": "mdi-alpha-e-circle"},
            {"text":"Preset 6","channel":206,"icon": "mdi-alpha-f-circle"},
            {"text":"Preset 7","channel":207,"icon": "mdi-alpha-g-circle"},
            {"text":"Preset 8","channel":208,"icon": "mdi-alpha-h-circle"},
            {"text":"Preset 9","channel":209,"icon": "mdi-alpha-i-circle"}
          ]
        }
    }
]
```

CATEGORY - vertbtngroup

Category uses default category object. with "sources" as the container for the configuration option of the vertical button group.

Name	Default	Options	Description
title	None	String	Display title
showTitle	false	true | false	Shows title on sub-template
icon	None	valid MDI icon	Icon displayed in side navigation
type		vertbtngroup	Sets vertbtngroup sub-template
presets	None	config:{}	Uses btn grid configuration
sources	object	Button Group Configuration	Defines displayed buttons

SOURCES {} - BUTTON GROUP CONFIGURATION:

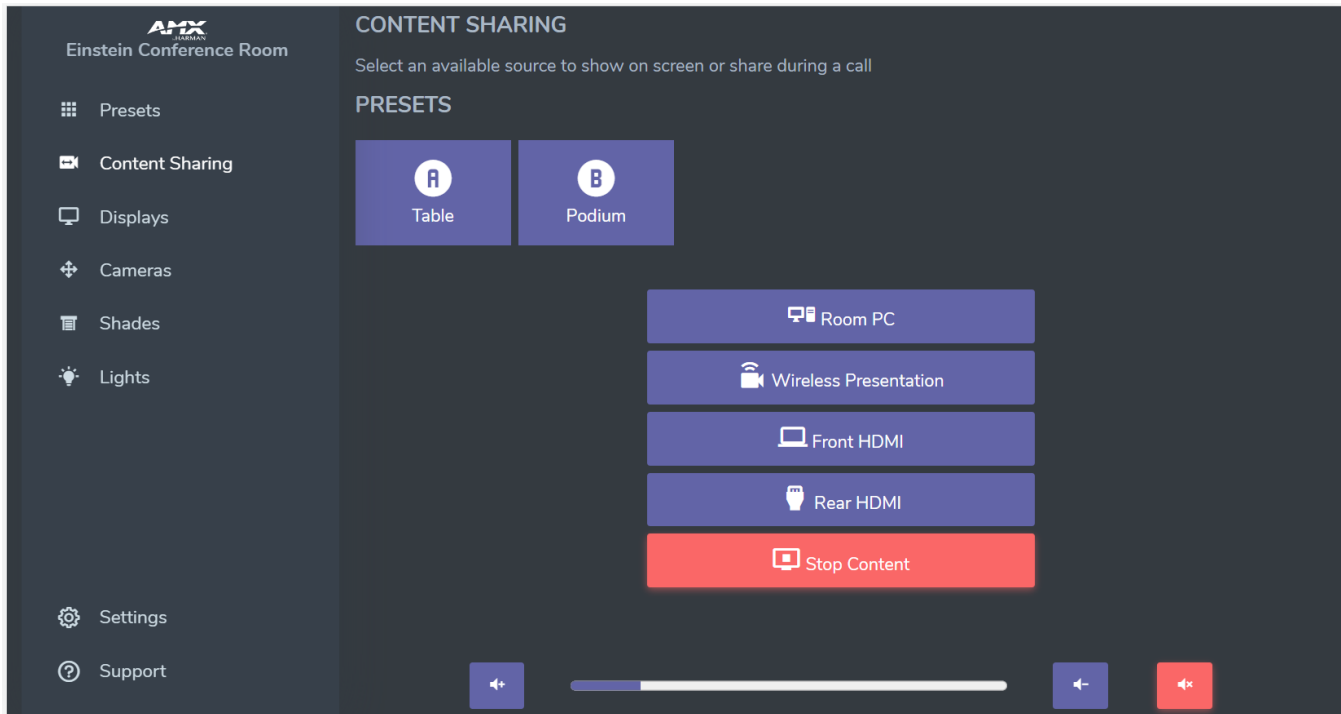| Name	Default	Options	Description
id	Auto-Generated unique ID		Provides HTML ID for associated buttons.
port	1	Integer from 1 - XXX	Netlinx port
mutuallyExclusive	false	true | false	Defines if multiple buttons in group are allowed to show active state at the same time.
color	primary	primary | secondary | success | error | warning | info | light | dark | link	Sets color choices based on bootstrap 5.0 color variants
display	none	rounded, outline	Can be stacked - "rounded outline", or individual "rounded"
spacing	3	0 - 5	Margin applied to the bottom of the button
showIcon	false	true | false	Show icon defined for button on the button.
btns	none	See Below Table	Will generate error/alert if no btns defined.

btns[{}]:

btns is an array, with object to determine the settings for the buttons

Name	Default	Options	Description
label	none	string	Text shown on button
icon	audio-video	any valid mdi icon	Icon list from theme pack. Name of icon without the preceding mdi. IE - "mdi-audio-video", becomes "audio-video"
chan nel	none, but field is mandatory	integer	Netlinx Channel for output and feedback
mar gin	none	0 - 5	Replaces the spacing defined in the configuration options object with spacing to "this" button only. Only applies to margin bottom
color	none	primary	secondary	success	error	warning	info	light	dark	link	Replaces the default color scheme with the color defined for "this" button.

vertbtngroup configuration

```
{
     "title": "Content Sharing",
     "showTitle": true,
     "type": "vertbtngroup",
     "icon": "mdi-video-switch",
     "instruction": "Select an available source to show on screen or share during a call",
     "showInstruction": true,
     "presets": {
       "config": {
         "title": "Presets",
         "showTitle": true,
         "instruction": "",
         "showInstruction": false,
         "gridJustify": "start",
         "gridSize": 6,
         "btns": [
           {
             "text": "Table",
             "channel": 210,
             "icon": "mdi-alpha-a-circle"
           },
           {
             "text": "Podium",
             "channel": 211,
             "icon": "mdi-alpha-b-circle"
           }
         ]
       }
     },
     "sources": {
       "mutuallyExclusive": true,
       "showIcon": true,
       "spacing": 1,
       "btns": [
         {"label":"Room PC","icon":"mdi-desktop-tower-monitor","channel":212},
         {"label":"Wireless Presentation","icon":"mdi-video-wireless","channel":213},
         {"label":"Front HDMI","icon":"mdi-laptop","channel":214},
         {"label":"Rear HDMI","icon":"mdi-video-input-hdmi","channel":215},
         {"label":"Stop Content","icon":"mdi-television-stop","channel":216, "color": "danger"}
       ]
     }
   }
```

CATEGORY - displays

Category uses default category object with "displays" as the container for the configuration option of the display power group.
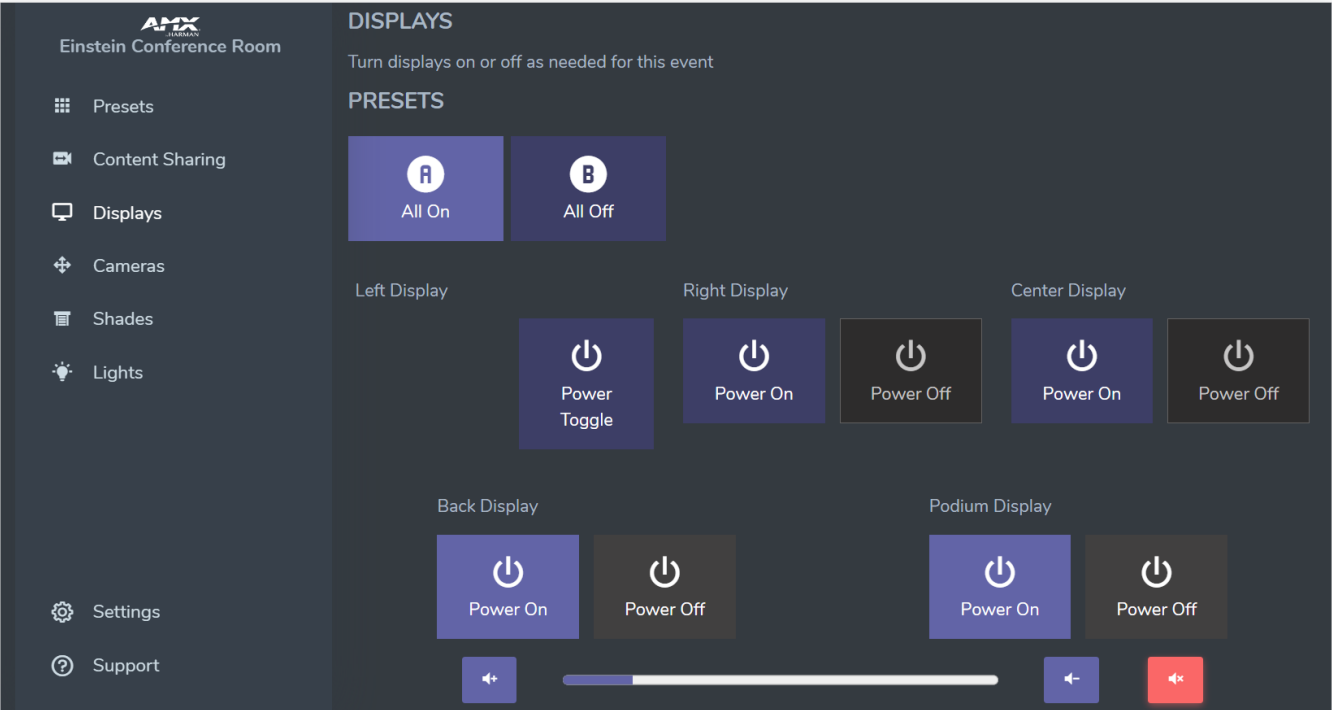
Name	Default	Options	Description
title	None	String	Display title
showTitle	false	true | false	Shows title on sub-template
icon	None	valid MDI icon	Icon displayed in side navigation
type		displays	Sets vertbtngroup sub-template
presets	None	config:{}	Uses btn grid configuration
displays	array	Button Group Configuration	Defines displayed buttons

DISPLAYS [{}] - BUTTON GROUP CONFIGURATION

Name	Default	Options	Description
title	none		Title displayed next to widget
mode	"discreet"	"sb-discreet" | "sb-toggle"	Discreet renders individual buttons for both ON and OFF. Toggle will render a single button to toggle the power
label	["Power On","Power Off"]		Formatted as an array, any text value is accepted.
icon	mdi-power	Any valid mdi icon	Check supported list of icons to verify. String should be structured as "mdi-my-icon"
port	1	Netlinx Device Port	Device Port declared in Netlinx programming
fbChannel	255	Netlinx SNAPI channel	

displays power configuration

```
"categories":[
 {
      "title": "Displays",
      "showTitle": true,
      "instruction": "Turn displays on or off as needed for this event",
      "showInstruction": true,
      "icon": "mdi-monitor",
      "type": "displays",
      "presets": {
        "config": {
          "title": "Presets",
          "showTitle": true,
          "instruction": "",
          "showInstruction": false,
          "gridJustify": "start",
          "gridSize": 6,
          "btns": [
            {"text":"All On","channel":217,"icon": "mdi-alpha-a-circle"},
            {"text":"All Off","channel":218,"icon": "mdi-alpha-b-circle"}
          ]
        }
      },
      "displays": [
          {
            "title": "Left Display",
            "port": 1,
            "showTitle": true,
            "mode": "sb-toggle",
            "label":[""],
            "margin": 0
          },
          {
            "title": "Right Display",
            "port": 2,
            "showTitle": true,
            "mode": "sb-discreet",
            "margin": 0
          },
          {
            "title": "Center Display",
            "port": 3,
            "showTitle": true,
            "mode": "sb-discreet",
            "margin": 0
          },
          {
            "title": "Back Display",
            "port": 4,
            "showTitle": true,
            "mode": "sb-discreet",
            "margin": 0
          },
          {
            "title": "Podium Display",
            "port": 5,
            "showTitle": true,
            "mode": "sb-discreet",
            "margin": 0
          }
        ]
    }

]
```

CATEGORY - camera

Category uses default category object. with "cameras" as the container for the configuration option of the PTZ Configuration Option. For proper display and operation, remove any presets defined in the camera control and add them to the category preset option.
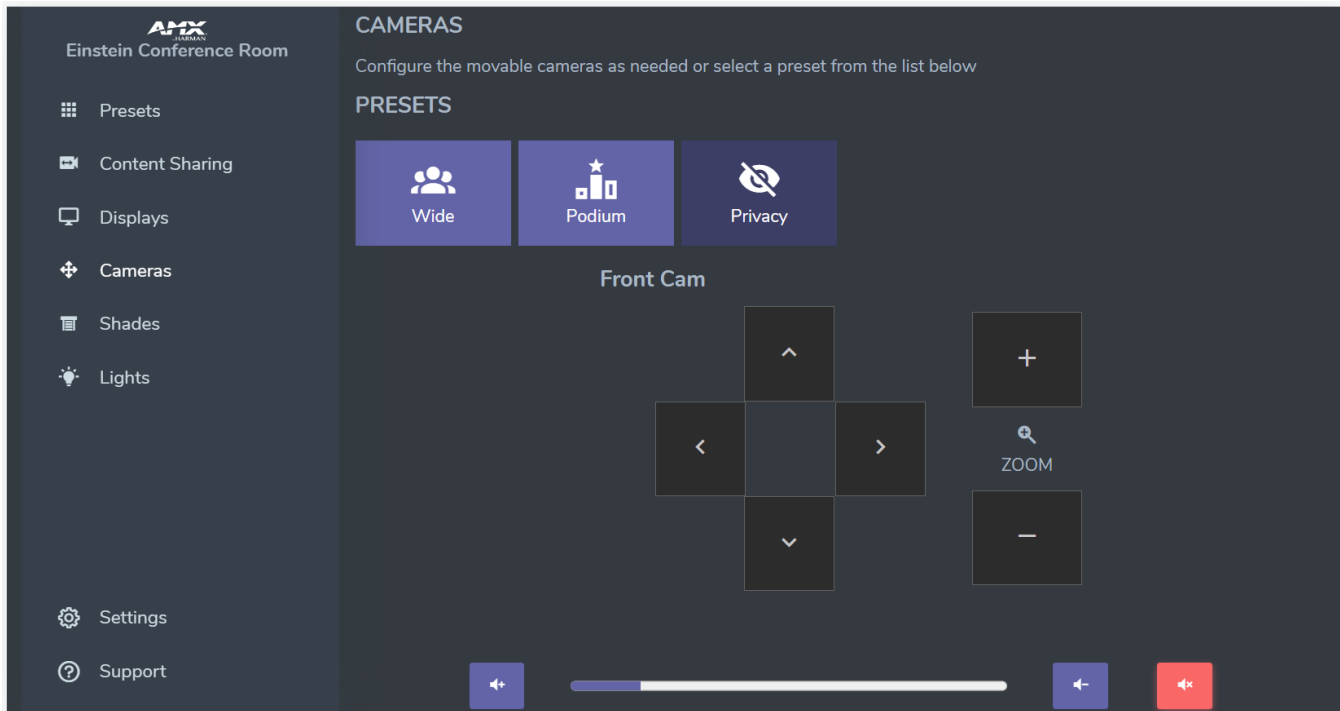
Name	Default	Options	Description
title	None	String	Display title
showTitle	false	true | false	Shows title on sub-template
icon	None	valid MDI icon	Icon displayed in side navigation
type		cameras	Sets camera sub-template
presets	None	config:{}	Uses btn grid configuration
cameras	array	Button Group Configuration	Defines displayed buttons

CAMERA CONFIGURATION

Name	Default	Options	Description
id	None	String	Used for HTML purposes
port	1	1 – 20	NX programming port
Title	None	String	Title to show for project
showTitle	false	True | false	Hide or show the title block
type	none	none | 'style1'	style1 is used for proper display in left bar template.

Camera Configuration

```
"categories":[
 {
     "title": "Cameras",
     "showTitle": true,
     "type": "cameras",
     "icon": "mdi-arrow-all",
     "instruction": "Configure the movable cameras as needed or select a preset from the list below",
     "showInstruction": true,
     "presets": {
       "config": {
         "title": "Presets",
         "showTitle": true,
         "gridJustify": "start",
         "gridSize": 6,
         "btns": [
           {"text":"Wide","channel":219,"icon": "mdi-account-group"},
           {"text":"Podium","channel":220,"icon": "mdi-podium-gold"},
           {"text":"Privacy","channel":221,"icon": "mdi-eye-off"}
         ]
       }
     },
     "cameras": [
       {
         "title": "Front Cam",
         "type": "style1",
         "showTitle": true,
         "port": 1
       }
     ]
   }
]
```


CATEGORY - shades

Category uses default category object. with "shades" as the container for the configuration.

Name	Default	Options	Description
title	None	String	Display title
showTitle	false	true | false	Shows title on sub-template
icon	None	valid MDI icon	Icon displayed in side navigation
type		shades	Sets shades sub-template
presets	None	config:{}	Uses btn grid configuration
shades	array	Button Group Configuration	Defines displayed buttons

SHADES CONFIGURATION

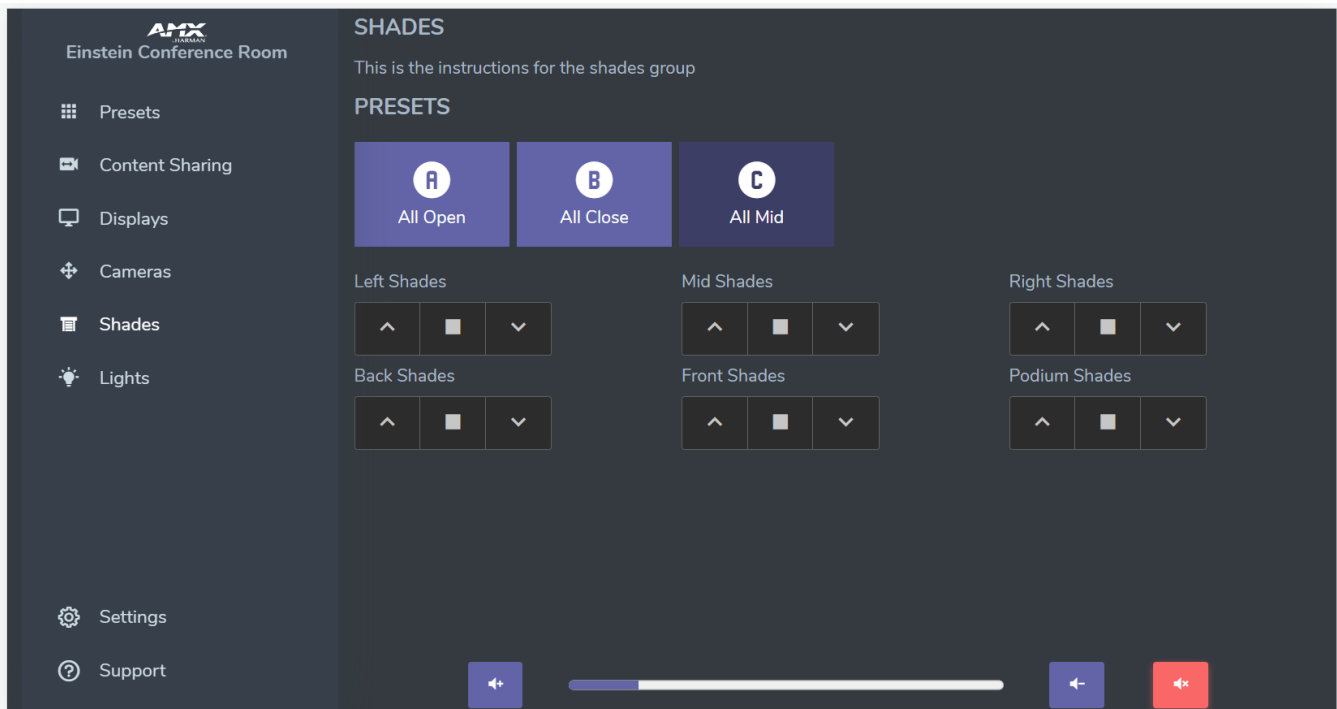| Name	Default	Options	Description
id	uniqe	string	
port	1	1-20	Netlinx port
title	Shade Control	String	Descriptive label
showTitle	false	true | false	
titlePOS	start	start | center | end	
showStop	true	true | false	hide/show the stop button
showText	false	true | false	Show button label text

Shades Configuration

```
"categories":[
{
     "title": "Shades",
     "showTitle": true,
     "instruction": "This is the instructions for the shades group ",
     "showInstruction": true,
     "icon": "mdi-window-shutter",
     "type": "shades",
     "presets": {
       "config": {
          "title": "Presets",
          "showTitle": true,
          "instruction": "",
          "showInstruction": false,
          "gridJustify": "start",
          "gridSize": 6,
          "btns": [
             {"text":"All Open","channel":222,"icon": "mdi-alpha-a-circle"},
             {"text":"All Close","channel":223,"icon": "mdi-alpha-b-circle"},
             {"text":"All Mid","channel":224,"icon": "mdi-alpha-c-circle"}
          ]
       }
     },
     "shades": [
       {
         "title": "Left Shades",
         "port": 1,
         "showTitle": true,
         "showStop": true,
         "showText": false
       },
       {
         "title": "Mid Shades",
         "port": 2,
         "showTitle": true,
         "showStop": true,
         "showText": false
       },
       {
         "title": "Right Shades",
```

```
        "port": 3,
        "showTitle": true,
        "showStop": true,
        "showText": false
      },
      {
        "title": "Back Shades",
        "port": 4,
        "showTitle": true,
        "showStop": true,
        "showText": false
      },
      {
        "title": "Front Shades",
        "port": 5,
        "showTitle": true,
        "showStop": true,
        "showText": false
      },
      {
        "title": "Podium Shades",
        "port": 6,
        "showTitle": true,
        "showStop": true,
        "showText": false
      }
    ]

  }
]
```

CATEGORY - lights

Category uses default category object. with "shades" as the container for the configuration.

Name	Default	Options	Description
title	None	String	Display title
showTitle	false	true | false	Shows title on sub-template
icon	None	valid MDI icon	Icon displayed in side navigation
type		lights	Sets lights sub-template
presets	None	config:{}	Uses btn grid configuration
lights	array	Button Group Configuration	Defines displayed buttons

LIGHTS CONFIGURATION

Configuration options vary between a dimmable light source and a toggle light source

SHARED OPTIONS

Name	Default	Options	Description
id	unique	String	
port	1	1-20	Netlinx port
title	None	String	Displays title near the device controls
showTitle	false	true | false	

DIMMABLE LIGHT

Name	Default	Options	Description
level	1		Netlinx level
min	0	Integer	Minimum value allowed
max	255	Integer	Maximum value allowed
step	1	Integer	+/- amount for each slide movement
initValue	127.5	Integer	Sets the initial position prior to receiving update from code
showValue	true	true | false	Shows the % value of the range
valuePOS	end	start | center | end	Positions text label
showThumb	true	true | false	Show/hide the standard round thumbnail from the range track
changeOn	change	input,change, input change	Controls when to send outbound command to controller. • input = send as sliding. • change = send after movement and slider is released. • input change = both of these event

TOGGLE LIGHT:

Name	Default	Options	Description
channel	1	1-1024	Netlinx channel
color	none	none | bool | primary | success | info | warning | danger | secondary	Bootstrap 5 switch colors
onLabel	No text	String	Sets text of switch when in the on state
offLabel	No Text	String	Sets text of switch when in the off state

```
"categories":[
 {
     "title": "Lights",
     "icon": "mdi-lightbulb-on",
     "showTitle": true,
     "instruction": "Some instruction block can go here.",
     "showInstruction": true,
     "type": "lights",
     "presets": {
       "config": {
```

```json
          "title": "Presets",
          "showTitle": true,
          "instruction": "",
          "showInstruction": false,
          "gridJustify": "start",
          "gridSize": 6,
          "btns": [
            {
              "text": "On Call",
              "channel": 225,
              "icon": "mdi-alpha-a-circle"
            },
            {
              "text": "Standard",
              "channel": 226,
              "icon": "mdi-alpha-b-circle"
            },
            {
              "text": "Cleaning",
              "channel": 227,
              "icon": "mdi-alpha-c-circle"
            }
          ]
        }
      },
      "lights": [
        {
          "port": 1,
          "level": 2,
          "type": "dimmable",
          "title": "Overhead",
          "showTitle": true,
          "justify": "start",
          "max": 100,
          "initValue": 50,
          "showValue": true,
          "changeOn": "input"
        },
        {
          "port": 1,
          "level": 3,
          "type": "dimmable",
          "title": "Track",
          "showTitle": true,
          "justify": "start",
          "max": 100,
          "initValue": 50,
          "showValue": true
        },
        {
          "port": 1,
          "channel": 228,
          "type": "toggle",
          "title": "Bar",
          "showTitle": true,
          "color": "bool",
          "onLabel": "On",
          "offLabel": "Off"
        }
      ]
    }
]
```

VOLUME CONTROL

Volume control definition is not place specific and is not contained within the categories array.

Name	Default	Options	Description
id	Auto-generated unique	string, no special characters	Generates html id for associated widget
title		String	Label for volume control. Layouts vary and may not show label
showTitle	false	true | false	Hide or show title label. If false label will not show on screen. Layout dependent, some may not show the label
port	1	Netlinx Limits	Netlinx Device Port
nxLevel	1	Netlinx Limits	Netlinx Device Level
nxMute	199	Netlinx Limits	Netlinx Channel for mute feedback
minLevel	0	integer	Minimum value for range
maxLevel	255	integer	Maximum value for range
stepLevel	1	integer	Step value for range
showThumb	false	true | false	Hide or show the thumb for slider
color	primary	primary | secondary | success | error | warning | info | light | dark	Sets color values for buttons
muteColor	danger	primary | secondary | success | error | warning | info | light | dark	Sets color value for Mute
downIcon	mdi-volume-minus	Valid MDI icon	Use full icon class (IE: "mdi-this-icon")
upIcon	mdi-volume-plus	Valid MDI Icon	Use full icon class (IE: "mdi-this-icon")

muteIcon	mdi-volume-mute	Valid MDI Icon	Use fill icon class (IE: "mdi-this-icon")
iconSize	18	18,24,36,48	Adjust size of icon in pixels.
setMute States	false	true | false	Changes behavior of button to switch between the colors defined in customMuteColor for feedback. Standard behavior is inactive = muteColor; Active = muteColor + "active" with muteStates = true behaviour changes to inactive = customMuteColor[0] and active = customMuteColor[1]
custom MuteCol or	["success", "danger"]	primary | secondary | success | error | warning | info | light | dark	set as an array. First option is the inactive color, Second option is the active color. ["success","danger"]

MINIMUM CONFIGURATION OPTIONS

Volume Configuration

```
"volume": {
    "nxLevel": 1,
    "showThumb": false,
    "justify": "center"
  },
  "showVolume": true
```

COMPLETE EXAMPLE CONFIGURATION FILE:

Complete Example File

```
{
  "template": "leftBar",
  "colorScheme": "dark",
  "overlay": "yealink",
  "title": "Einstein Conference Room",
  "showHeader": false,
  "showFooter": false,
  "support": {
    "email": "einstein@mysupport.com",
    "phone": "844-776-4899"
  },
  "categories": [
    {
      "title": "Presets",
      "icon": "mdi-apps",
      "type": "btngrid",
      "config": {
        "title": "Presets",
        "showTitle": true,
        "instruction": "Recall complete room presets to set the mood for this meeting!",
        "showInstruction": true,
        "gridSize": 3,
        "btns": [
          {"text":"Preset 1","channel":201,"icon": "mdi-alpha-a-circle"},
          {"text":"Preset 2","channel":202,"icon": "mdi-alpha-b-circle"},
          {"text":"Preset 3","channel":203,"icon": "mdi-alpha-c-circle"},
          {"text":"Preset 4","channel":204,"icon": "mdi-alpha-d-circle"},
          {"text":"Preset 5","channel":205,"icon": "mdi-alpha-e-circle"},
          {"text":"Preset 6","channel":206,"icon": "mdi-alpha-f-circle"},
          {"text":"Preset 7","channel":207,"icon": "mdi-alpha-g-circle"},
          {"text":"Preset 8","channel":208,"icon": "mdi-alpha-h-circle"},
          {"text":"Preset 9","channel":209,"icon": "mdi-alpha-i-circle"}
        ]
      }
    },
    {
      "title": "Content Sharing",
      "showTitle": true,
      "type": "vertbtngroup",
```

```
        "icon": "mdi-video-switch",
        "instruction": "Select an available source to show on screen or share during a call",
        "showInstruction": true,
        "presets": {
          "config": {
            "title": "Presets",
            "showTitle": true,
            "instruction": "",
            "showInstruction": false,
            "gridJustify": "start",
            "gridSize": 6,
            "btns": [
              {
                "text": "Table",
                "channel": 210,
                "icon": "mdi-alpha-a-circle"
              },
              {
                "text": "Podium",
                "channel": 211,
                "icon": "mdi-alpha-b-circle"
              }
            ]
          }
        },
        "sources": {
          "mutuallyExclusive": true,
          "showIcon": true,
          "spacing": 1,
          "btns": [
            {"label":"Room PC","icon":"mdi-desktop-tower-monitor","channel":212},
            {"label":"Wireless Presentation","icon":"mdi-video-wireless","channel":213},
            {"label":"Front HDMI","icon":"mdi-laptop","channel":214},
            {"label":"Rear HDMI","icon":"mdi-video-input-hdmi","channel":215},
            {"label":"Stop Content","icon":"mdi-television-stop","channel":216, "color": "danger"}
          ]
        }
      },
      {
        "title": "Displays",
        "showTitle": true,
        "instruction": "Turn displays on or off as needed for this event",
        "showInstruction": true,
        "icon": "mdi-monitor",
        "type": "displays",
        "presets": {
          "config": {
            "title": "Presets",
            "showTitle": true,
            "instruction": "",
            "showInstruction": false,
            "gridJustify": "start",
            "gridSize": 6,
            "btns": [
              {"text":"All On","channel":217,"icon": "mdi-alpha-a-circle"},
              {"text":"All Off","channel":218,"icon": "mdi-alpha-b-circle"}
            ]
          }
        },
        "displays": [
            {
              "title": "Left Display",
              "port": 1,
              "showTitle": true,
              "mode": "sb-toggle",
              "label":[""],
              "margin": 0
            },
            {
              "title": "Right Display",
              "port": 2,
```

```
          "showTitle": true,
          "mode": "sb-discreet",
          "margin": 0
        },
        {
          "title": "Center Display",
          "port": 3,
          "showTitle": true,
          "mode": "sb-discreet",
          "margin": 0
        },
        {
          "title": "Back Display",
          "port": 4,
          "showTitle": true,
          "mode": "sb-discreet",
          "margin": 0
        },
        {
          "title": "Podium Display",
          "port": 5,
          "showTitle": true,
          "mode": "sb-discreet",
          "margin": 0
        }
      ]
    },
    {
      "title": "Cameras",
      "showTitle": true,
      "type": "cameras",
      "icon": "mdi-arrow-all",
      "instruction": "Configure the movable cameras as needed or select a preset from the list below",
      "showInstruction": true,
      "presets": {
        "config": {
          "title": "Presets",
          "showTitle": true,
          "gridJustify": "start",
          "gridSize": 6,
          "btns": [
            {"text":"Wide","channel":219,"icon": "mdi-account-group"},
            {"text":"Podium","channel":220,"icon": "mdi-podium-gold"},
            {"text":"Privacy","channel":221,"icon": "mdi-eye-off"}
          ]
        }
      },
      "cameras": [
        {
          "title": "Front Cam",
          "type": "style1",
          "showTitle": true,
          "port": 1
        }
      ]
    },
    {
      "title": "Shades",
      "showTitle": true,
      "instruction": "This is the instructions for the shades group ",
      "showInstruction": true,
      "icon": "mdi-window-shutter",
      "type": "shades",
      "presets": {
        "config": {
          "title": "Presets",
          "showTitle": true,
          "instruction": "",
          "showInstruction": false,
          "gridJustify": "start",
          "gridSize": 6,
```

```
      "btns": [
        {"text":"All Open","channel":222,"icon": "mdi-alpha-a-circle"},
        {"text":"All Close","channel":223,"icon": "mdi-alpha-b-circle"},
        {"text":"All Mid","channel":224,"icon": "mdi-alpha-c-circle"}
      ]
    }
  },
  "shades": [
    {
      "title": "Left Shades",
      "port": 1,
      "showTitle": true,
      "showStop": true,
      "showText": false
    },
    {
      "title": "Mid Shades",
      "port": 2,
      "showTitle": true,
      "showStop": true,
      "showText": false
    },
    {
      "title": "Right Shades",
      "port": 3,
      "showTitle": true,
      "showStop": true,
      "showText": false
    },
    {
      "title": "Back Shades",
      "port": 4,
      "showTitle": true,
      "showStop": true,
      "showText": false
    },
    {
      "title": "Front Shades",
      "port": 5,
      "showTitle": true,
      "showStop": true,
      "showText": false
    },
    {
      "title": "Podium Shades",
      "port": 6,
      "showTitle": true,
      "showStop": true,
      "showText": false
    }

  ]

},
{
  "title": "Lights",
  "icon": "mdi-lightbulb-on",
  "showTitle": true,
  "instruction": "Some instruction block can go here.",
  "showInstruction": true,
  "type": "lights",
  "presets": {
    "config": {
      "title": "Presets",
      "showTitle": true,
      "instruction": "",
      "showInstruction": false,
      "gridJustify": "start",
      "gridSize": 6,
      "btns": [
        {
```

```
                              "text": "On Call",
                              "channel": 225,
                              "icon": "mdi-alpha-a-circle"
                            },
                            {
                              "text": "Standard",
                              "channel": 226,
                              "icon": "mdi-alpha-b-circle"
                            },
                            {
                              "text": "Cleaning",
                              "channel": 227,
                              "icon": "mdi-alpha-c-circle"
                            }
                          ]
                        }
                      },
                      "lights": [
                        {
                          "port": 1,
                          "level": 2,
                          "type": "dimmable",
                          "title": "Overhead",
                          "showTitle": true,
                          "justify": "start",
                          "max": 100,
                          "initValue": 50,
                          "showValue": true,
                          "changeOn": "input"
                        },
                        {
                          "port": 1,
                          "level": 3,
                          "type": "dimmable",
                          "title": "Track",
                          "showTitle": true,
                          "justify": "start",
                          "max": 100,
                          "initValue": 50,
                          "showValue": true
                        },
                        {
                          "port": 1,
                          "channel": 228,
                          "type": "toggle",
                          "title": "Bar",
                          "showTitle": true,
                          "color": "bool",
                          "onLabel": "On",
                          "offLabel": "Off"
                        }
                      ]
                    }
                  ],
                  "volume": {
                    "nxLevel": 1,
                    "showThumb": false,
                    "justify": "center",
                    "setMuteStates": true,
                    "iconSize": 24
                  },
                  "showVolume": true
                }
```

Appendix: Side By Side Layout

This template supports the following options:

- Volume – Displayed in footer of the page. If Footer hidden, volume will also be hidden.
- Displays – Power Control of the displays in the room.
- Source - Allows source selection switching
- Devices – Supports devices with the following sub-pages
    1. Camera Control
    2. Wireless Presentation Block
    3. Hero instruction block

VOLUME:

CONFIGURATION OPTIONS:

Name	Default	Options	Description
id	Auto-generated unique	string, no special characters	Generates html id for associated widget
title		String	Label for volume control. optional but should be used
showTitle	false	true | false	Hide or show title label. If false label will not show on screen
port	1	Netlinx Limits	Netlinx Device Port
nxLevel	1	Netlinx Limits	Netlinx Device Level
nxMute	199	Netlinx Limits	Netlinx Channel for mute feedback
minLevel	0	integer	Minimum value for range
maxLevel	255	integer	Maximum value for range
stepLevel	1	integer	Step Value for Range
showThumb	false	true | false	Hide or show the thumb for slider
color	primary	primary | secondary | success | error | warning | info | light | dark	Sets Color values for buttons
muteColor	danger	primary | secondary | success | error | warning | info | light | dark	Sets color value for Mute
display	none	rounded, outline	Modifies buttons to use rounded or outline settings

MINIMUM CONFIGURATION OPTIONS:

```
"volume": {
  "nxLevel": 1,
  "showThumb": false
}
```

DISPLAYS:

Name	Default	Options	Description
title	"System Status"	String	Title to display for power block in template
config	none	Formatted as array. Configuration options below.	Configuration options for each display power block.

CONFIGURATION OPTIONS:

Name	Default	Options	Description
title	none		Title displayed next to widget
mode	"discreet"	"discreet" | "toggle"	Discreet renders individual buttons for both ON and OFF. Toggle will render a single button to toggle the power

display	square, standard button	rounded, outline	Rounded = button with rounded corners.
			Outline = no fill in inactive state. Active states are filled.
			toggle buttons only use the text for Power ON, or label[0]
label	"Power On", "Power Off", circle buttons display no text and show an icon	["ON","OFF"]	Formatted as an array, any text value is accepted.
icon	mdi-power	Any valid mdi icon	Check supported list of icons to verify. string should be structured as "mdi-my-icon"
showIcon	false	true | false	Show icon next to text in rounded or square buttons
port	1	Netlinx Device Port	Device Port declared in Netlinx Programming
fbChannel	255	Netlinx SNAPI channel	

MINIMUM CONFIGURATION OPTIONS:

```
"displays": {
  "title": "Display Power",
  "config": [
    {
      "title": "Displays",
      "showTitle": true,
      "mode": "toggle",
      "margin": 0
    }
  ]
}
```

SOURCES:

Name	Default	Options	Description
title	"System Sources"	String	Title to display for source selection block in template
config	none	Required configuration for the button group. Uses settings below.	Configuration options for each is below

Name	Default	Options	Description
id	Auto-Generated unique ID		Provides HTML ID for associated buttons.
port	1	Integer from 1 - XXX	Netlinx Port
mutuallyExclusive	false	true | false	Defines if multiple buttons in group are allowed to show active state at the same time.
color	primary	primary | secondary | success | error | warning | info | light | dark	Sets color choices based on Bootstrap 5.0 color variants
display	none	rounded, outline	can be stacked "rounded outline", or individual "rounded"
spacing	3	0 - 5	Margin applied to the bottom of the button
showIcon	false	true | false	Show icon defined for button on the button.
btns	none	See Below Table	Will generate error/alert if no btns defined.

btns[{}]:

btns is an array, with object to determine the settings for the buttons

Name	Default	Options	Description
label	none	string	Text shown on button
icon	audio-video	any valid mdi icon	Icon list from theme pack. Name of icon without the preceeding mdi. IE - "mdi-audio-video", becomes "audio-video"
channel	none, but field is mandatory	integer	Netlinx Channel for output and feedback
margin	none	0 - 5	Replaces the spacing defined in the configuration options object with spacing to "this" button only. Only applies to margin bottom
color	none	primary | secondary | success | error | warning | info | light | dark	Replaces the default color scheme with the color defined for "this" button.

MINIMUM CONFIGURATION OPTIONS:

```
"sources": {
  "title": "Shared Content",
  "config": {
    "mutuallyExclusive": true,
    "showIcon": true,
    "spacing": 1,
    "btns": [
      {"label":"Room PC","icon":"mdi-desktop-tower-monitor","channel":101},
      {"label":"Wireless Presentation","icon":"mdi-video-wireless","channel":102},
      {"label":"Front HDMI","icon":"mdi-laptop","channel":103},
      {"label":"Rear HDMI","icon":"mdi-video-input-hdmi","channel":104},
      {"label":"Stop Content","icon":"mdi-television-stop","channel":105, "color": "danger"}
    ]
  }
}
```

DEVICES

Name	Default	Options	Description
title	None	String	Title to show on device tab
icon	None	Valid mdi icons	Icon value should be in form of "mdi-my-icon"
content	None	camera | wireless | hero	Currently supported sub pages
config	None	Dependent on content options	See tables below

CAMERA:

Name	Default	Options	Description
id	None	String	Used for HTML purposes
port	1	1 – 20	NX Programming Port
Title	None	String	Title to show for project
showTitle	false	True | false	Hide or show the title block
titlePOS	Start	Start | end | center	Position of title block
showZoomText	False	True | false	Show/Hide a label between the Zoom buttons labelled "Zoom"
presets	None	[] SEE BELOW	Presets to use with camera controller.
presetPOS	Center	Start | end | center	Position of preset buttons

CAMERA – PRESETS:

Name	Default	Options	Description
Text	None	String	Button Label
Channel	None	1 – 1024	NX Programming Channel

```
{
  "title": "Camera Front",
  "icon" : "mdi-camera-control",
  "content": "camera",
  "config": {
    "presets": [
      {"text":"Front Wide","channel":201},
      {"text":"Table Left","channel":202},
      {"text":"Table Right","channel":203}
    ]
  }
}
```

WIRELESS:

Name	Default	Options	Description
Instructions	None	String	Instruction block of text. Doesn't support inline HTML
url	None	String	URL provided by wireless presentation device
Code	None	String	Passcode provided by wireless presentation device

```
{
  "title": "Wireless ",
  "icon" : "mdi-camera-wireless",
  "content" : "wireless",
  "config": {
    "instructions":"Connect your device via the USB button, and press the button to begin.    Connect
smartphones, tablets or other wireless devices via mobile apps, the available link, or screen mirroring.",
    "url":"http://mywirelessdevice.com",
    "code":"1988"
  }
}
```

HERO:

Name	Default	Options	Description
Icon	None	Valid MDI icons	Icon to show at the top of the instruction block
Title	None	String	Title to show above the body text
Body	None	String	Body instructions/text

```
{
  "title": "Table Input - Front",
  "icon" : "mdi-laptop",
  "content": "hero",
  "config": {
    "icon": "mdi-video-input-hdmi",
    "title": "Front HDMI ",
    "body":"Find the HDMI cable in the front of the table and connect to the laptops video output."
  }
}
```

Appendix: Custom Color Schemes

Custom colors and styles can easily be applied to all layouts with the use of the overlay listing.   Every layout loads the overlay CSS sheet defined in the configuration file last, which allows for custom colors and even custom CSS styles to be applied. The CSS for Yealink, Teams, and Google Meet are predefined and useable without any color customization.

CONFIGURING THE CSS:

- Copy the following code into a new CSS file in your code editor.
- In your code editor of choice, modify either the color code (#474d56), the rgb values (135,144,247) or rgba values (135,144,247,0.5) as needed;
- These CSS classes represent the basic button colors, background colors, text colors, and card background colors used in all of the templates provided.
- Please note: The variables are represented twice - once in the section for light and once for dark. This provides flexibility if you'd like a completely different color scheme for each layout.
- Once complete, save the CSS File.

CUSTOM CLASS VALUES:

As this style sheet will load last during the site loading process, custom classes can be applied by adding the relevant class to the bottom of the style sheet and styling is as necessary.   For examples on which class to modify, refer to the bootstrap 5 support website: https://getbootstrap.com/

Applying Changes:

- Once the style sheet is created, add the custom file to **assets/css/** folder found within the zip file.
- Modify the rooms configuration values. set the "overlay" value to match the name of the css file.
- Load both the configuration and updated zip to the processor and reload/refresh your web instance.

Custom Colors CSS

```
[data-layout-color="light"]{
    --amx-body-bg:#fafbfe;

//NOTE: These stay defined as --bs;
    --bs-body-color: #838c96;
    --bs-body-color-rgb: rgb(131, 140, 150);

    --amx-white: #fff;
    --amx-dark-text: #474d56;

    --amx-primary: #6264A7;
    --amx-primary-active: #201F1F;
    --amx-primary-disabled: #8790F77F;
    --amx-primary-box-shadow-rgba: rgba(135, 144, 247, 0.5);

    --amx-secondary: #2d2c2c;
    --amx-secondary-active: #565e64;
    --amx-secondary-disabled: #828A917F;
    --amx-secondary-box-shadow-rgba: rgba(130, 138, 145, 0.5);

    --amx-success: #42d29d;
    --amx-success-active: #329e76;
    --amx-success-disabled: #5ED9AC7F;
    --amx-success-box-shadow-rgba: rgba(94, 217, 172, 0.5);

    --amx-info: #44badc;
    --amx-info-active: #3a9ebb;
    --amx-info-disabled: #60C4E17F;
    --amx-info-box-shadow-rgba: rgba(96, 196, 225, 0.5);

    --amx-warning: #f9bc0d  ;
    --amx-warning-active: #fac631;
    --amx-warning-disabled: #DEAB187F;
    --amx-warning-box-shadow-rgba: rgba(222, 171, 24, 0.5);

    --amx-danger: #fa6767;
```

```css
    --amx-danger-active: #652b2b;
    --amx-danger-disabled: #FB7E7E7F;
    --amx-danger-box-shadow-rgba: rgba(251, 126, 126, 0.5);

    --amx-light: #eef2f7;
    --amx-light-active: #f1f4f8;
    --amx-light-disabled: #D5D9DF7F;
    --amx-light-box-shadow-rgba: rgba(213, 217, 223, 0.5);

    --amx-dark: #474d56;
    --amx-dark-active: #393e45;
    --amx-dark-disabled: #63686F7F;
    --amx-dark-box-shadow-rgba: rgba(99, 104, 111, 0.5);

    --amx-left-side-menu: #313a46;
    --amx-left-side-menu-shadow-rgba: rgba(49, 58, 70, 0.15);

    --amx-card-bg: #fff;
    --amx-card-border: #fff;
    --amx-card-header-bg:#eef2f7;
    --amx-card-header-border:#f1f3fa;
}

[data-layout-color="dark"] {
    --amx-body-bg:#343a40;
//NOTE: These stay defined as --bs;
    --bs-body-color: #aab8c5;
    --bs-body-color-rgb: rgb(170, 184, 197);

    --amx-white: #fff;
    --amx-dark-text: #474d56;

    --amx-primary: #6264A7;
    --amx-primary-active: #201F1F;
    --amx-primary-disabled: #8790F77F;
    --amx-primary-box-shadow-rgba: rgba(135, 144, 247, 0.5);

    --amx-secondary: #2d2c2c;
    --amx-secondary-active: #565e64;
    --amx-secondary-disabled: #828A917F;
    --amx-secondary-box-shadow-rgba: rgba(130, 138, 145, 0.5);

    --amx-success: #42d29d;
    --amx-success-active: #329e76;
    --amx-success-disabled: #5ED9AC7F;
    --amx-success-box-shadow-rgba: rgba(94, 217, 172, 0.5);

    --amx-info: #44badc;
    --amx-info-active: #3a9ebb;
    --amx-info-disabled: #60C4E17F;
    --amx-info-box-shadow-rgba: rgba(96, 196, 225, 0.5);

    --amx-warning: #f9bc0d  ;
    --amx-warning-active: #fac631;
    --amx-warning-disabled: #DEAB187F;
    --amx-warning-box-shadow-rgba: rgba(222, 171, 24, 0.5);

    --amx-danger: #fa6767;
    --amx-danger-active: #652b2b;
    --amx-danger-disabled: #FB7E7E7F;
    --amx-danger-box-shadow-rgba: rgba(251, 126, 126, 0.5);

    --amx-light: #eef2f7;
    --amx-light-active: #f1f4f8;
    --amx-light-disabled: #D5D9DF7F;
    --amx-light-box-shadow-rgba: rgba(213, 217, 223, 0.5);

    --amx-dark: #474d56;
    --amx-dark-active: #393e45;
    --amx-dark-disabled: #63686F7F;
    --amx-dark-box-shadow-rgba: rgba(99, 104, 111, 0.5);
```

```
    --amx-left-side-menu:#313a46;
    --amx-left-side-menu-shadow-rgba: rgb(40, 47, 56);

    --amx-card-bg: #37404a;
    --amx-card-border: #4d5662;
    --amx-card-header-bg:#464f5b;
    --amx-card-header-border:#4d5662;

}
```