

Visual Navigator for Control4



Release Notes

Manufacturer: Janus Technology

Current Version: 204

Compatible Interfaces:

- T3/T4 Touch Panel
 - Control4 iOS/Android apps
 - Web browser (see FAQ)
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Introduction

Visual Navigator is a unique new driver that allows you to view and control the state of devices across your entire home from any T3 or T4 touch screen, or via the Control4 iOS/android apps!

Utilising Control4's webview technology, the driver can display the state of all sensors, relays, lights, cameras and security partitions in your project on a floorplan of your site - while allowing control of all drivers from a familiar interface.

Configuration of the driver from a browser is required prior to operation. You can access the webview via the following url:

`http://<controller_ip>/driver/janus_floorplan_dc/dist/`

(Note that <controller_ip> should be replace by the IP address of your main C4 processor). Press on the 'Webview Link' property to access the setup.

Visual Navigator uses the concept of layers. Each layer corresponds to a distinct set of driver types within your Control4 project (e.g. Sensors, Lighting, Security...).

Installation

Driver Installation

One driver file is included in the release package.

`janus_floorplan_dc.c4z`

Copy this file from the zip package to your Control4 driver location (by default this is Documents\Control4\Drivers). Open Composer, choose the Search tab from the Items pane and search for *Visual Navigator*.

Add one instance of the driver into your project.

Licencing

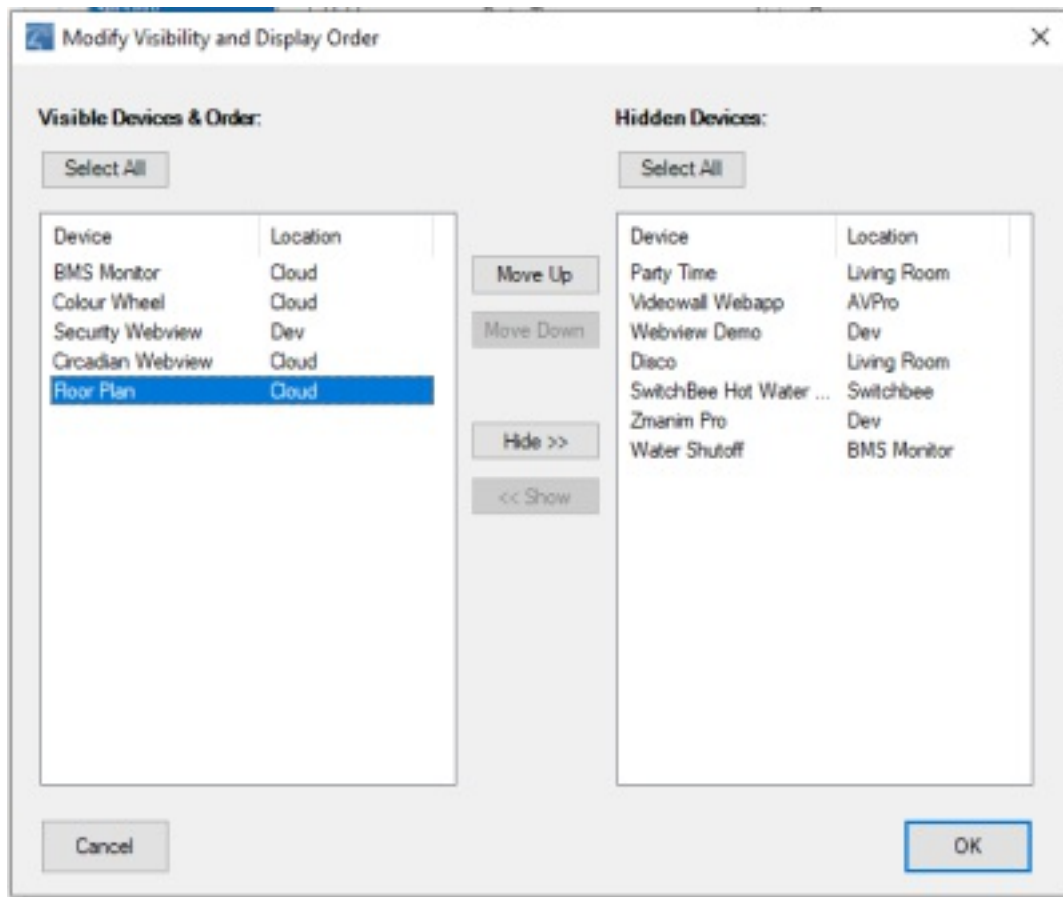
In the System Design view, select the *Visual Navigator* driver to view the properties available for configuration.

Ensure that the driver is activated via DriverCentral. You can check this status with the *Cloud Status* property. If you want to trial the driver before purchasing, you can use Visual Navigator for 7 days with full functionality, after which you must purchase a license to continue operation.

Setting up the webview

OS3

To set where you can access Visual Navigator, in the **System Design** view, click on a room and then on the **Navigator** tab.



Press the experience menu you wish to place the webview in, and press **Modify** (note that custom UI buttons such as this cannot be added to all experience menus due to limitations set by Control4). Highlight *Visual Navigator* and press **Show** then **OK**.

Now refresh the navigators in your project, and Visual Navigator will be accessible from the experience menu (and room) you placed it in.

OS2

To set up your project for use with a WebView, in the **System Design** view, select the **Agents** tab. If the agent **Guest Services** does not exist, click on **Add** and then on **Guest Services**. Select **Guest Services** then press **UI Button**. Select the Visual Navigator driver and press **OK**.

Once you have added the UI button, ensure that you refresh the navigators in your project, and Visual Navigator will now be accessible from the **Agents** menu.

Configuration

Composer Properties

This driver has several properties that should be configured before accessing the webview

DriverCentral Cloud Settings

Ensure that the driver is activated via DriverCentral. You can check this status with the *Cloud Status* property. If you want to trial the driver before purchasing, you can use Visual Navigator for 7 days with full functionality, after which you must purchase a license to continue operation.

OpenWeatherMap Settings

Visual Navigator utilises OpenWeatherMap to provide current weather, outdoor temperature and humidity information.

To use the service it is necessary to have an API key from OpenWeatherMap.

To obtain an API key, please visit the following URL and signup for an account (free tier)

https://home.openweathermap.org/users/sign_up

Having signed up, an API key is automatically created for you. When you are logged in this can be retrieved from the API keys menu option under your username in the top righthand menu bar ("My API Keys").

Copy the key value and paste into the API key property in the lua driver. The driver immediately checks the validity of this and reports status in the property field

OpenWeatherMap API Status.

Note that it can take a couple of hours after account creation before the API key becomes active.

Webview Configuration

- **Sidebar Position** - Choose whether you want the layer selection sidebar to appear to the left or right of the screen.
- **Authorization Code** - Enter a simple authorization code that must be entered when accessing the webview from a browser. Leave blank for no code. You will never be prompted when accessing from a Control4 UI (e.g. T3/T4 screen, iOS/android app).
- **Webview Link** - Press on the link to open the Visual Navigator webview in your browser.

Layer Visibility

Choose which layers you want to be available from the webview. Layers set to 'hidden' will not lose any configuration.

Comfort Layer Configuration

There are no properties for configuring the comfort layer currently.

Security Layer Configuration

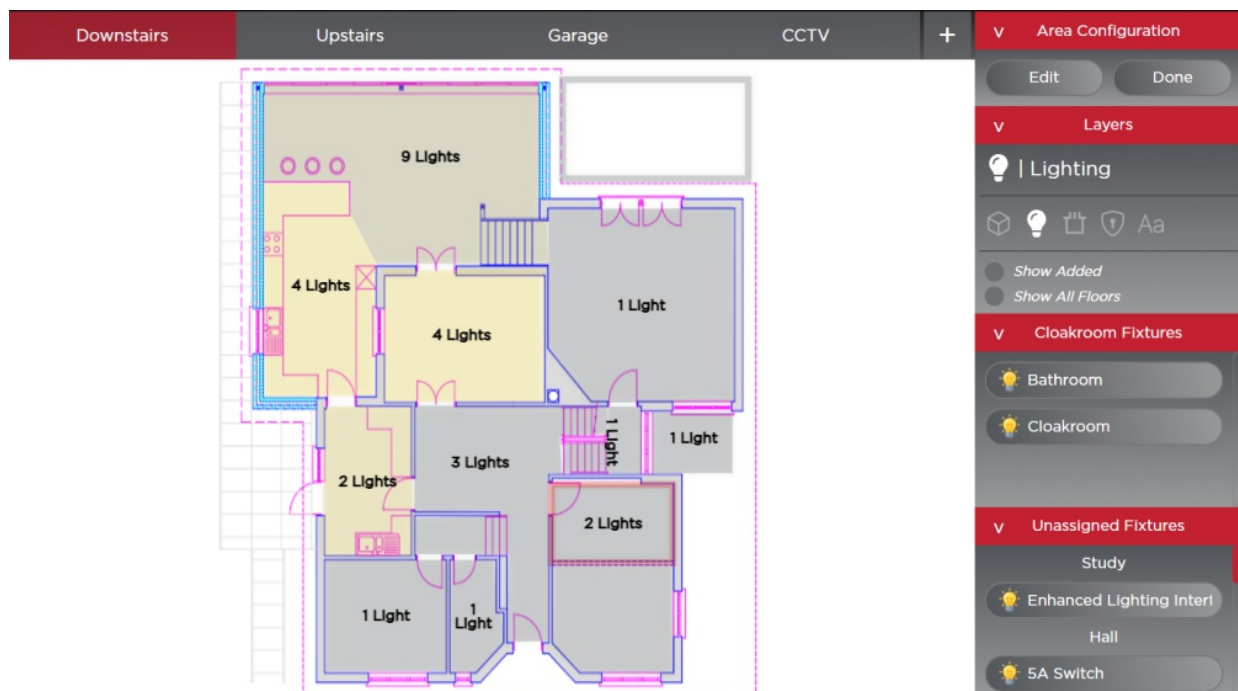
Use these properties to set the snapshot refresh rate for CCTV cameras in your project (50 == 5 seconds).

Sensors Layer Configuration

Use these properties to set custom state (open/close) colours for individual sensors/relays in your project.

Webview Configuration

Before this driver can undergo normal operation, some setup is required. This setup cannot be performed from a touch panel, and must be done from a web browser. Ensuring your Computer is on the same network as your C4 controller, note down the IP address of the controller (displayed in the bottom-right in Composer). Navigate to http://<controller-ip>/c4z/janus_floorplan_dc/www/dist, and press the **Setup** button in the top-right of the screen.



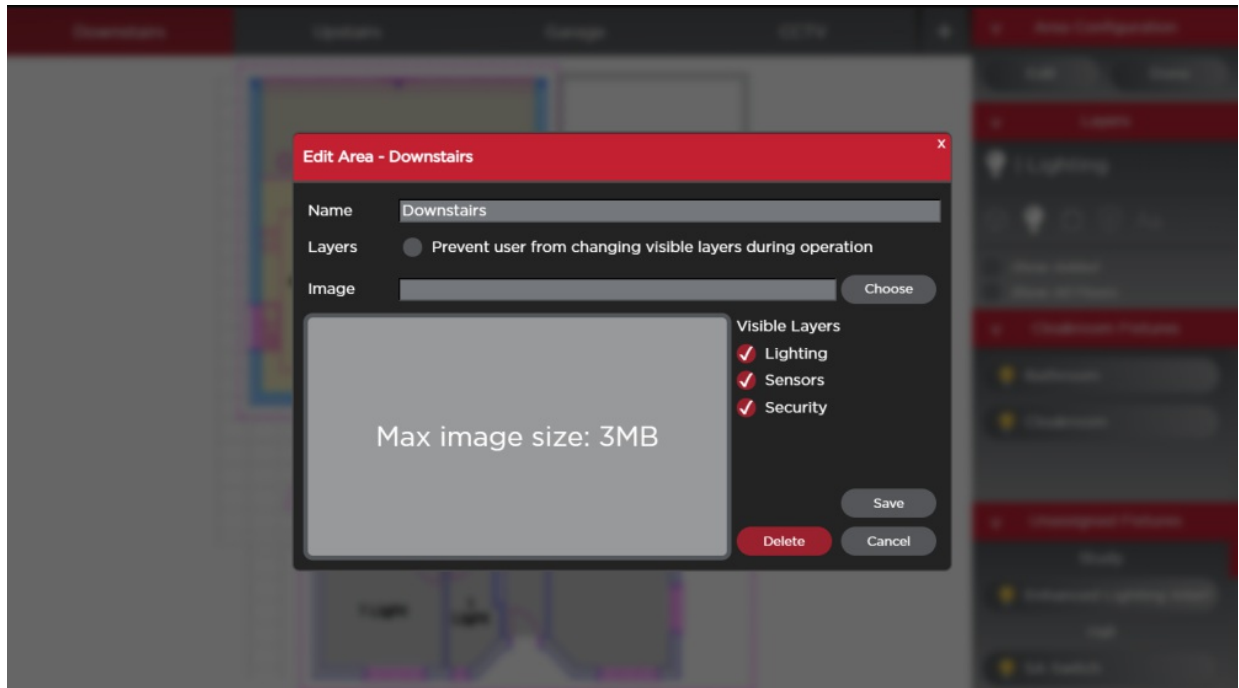
Areas

When the driver is first initialised, up to 5 default areas will be added to your project, matching the names of the floors defined in your Control4 project.

To add a new area, click on the add button, next to the existing zones. Note: you can only have a maximum of 5 areas.

To edit or remove an existing area, click on the area tab to bring up an edit popup, or press the *Edit Area Configuration* button in the sidebar.

When adding or editing an area, the following interface is available:



You can define the name of this area, and choose an image to be displayed in the background (usually a floor plan). When choosing an image, keep in mind that the image will be stretched to occupy the entire space of the touch panel, which has dimensions 962x551 (roughly 16:9). Using an image of roughly that aspect ratio will minimise any image distortion.

Supported image file formats are **.png**, **.jpg** and **.jpeg**, with a maximum allowed file size of 3MB. It is not recommended to go above 1MB however, due to the noticeable performance decrease on initial load that this entails.

The checkbox for *Prevent user from changing visible layers during operation* can be used to lock the view of this area to display only the selected visible layers for all users, with no ability to change them.

This could be useful for a dedicated CCTV layer, locked to only showing the Security layer!

You can restrict which layers are available for the area using the *Visible Layers* checkboxes.

Layers

In the configuration process, you must configure each layer independently, and in turn. We **Strongly** recommend that you fully configure the *Rooms* layer before tackling any other layers.

Select which layer to configure by selecting that layer from the checkbox list in the sidebar.

Rooms

With the rooms layer selected, you will see a sidebar section detailing the rooms defined in your Control4 project that have not yet been assigned to the floor plan.

You can add a room to the floorplan by clicking on it in the sidebar, where you can start drawing the shape (see *Drawing a new shape*).

Fixtures

With a fixture layer selected, you will see a sidebar section detailing the fixtures within that layer that have not yet been added to the floor plan, and that exist within a room in your Control4 project that has already been added to the selected area on the floor plan.

You can add a fixture to the floorplan by clicking on it in the sidebar, where you can choose to start drawing the shape (see *Drawing a new shape*), add this fixture to the shape defined for its parent room, or drag n drop it to an existing shape on the layer.

Drawing a new shape

You can draw a new shape for rooms or fixtures, but these are largely done in the same way.

Click on an item to begin to add it to the current area! You can choose the shape type (rectangle/circle/polygon) for the item, and define whether you want the shape to be filled, or empty (outline only).

Once you click 'Draw', you can begin to draw your shape onto the floor plan;

- For circles, press down on the floor plan and drag the mouse to change the circle size. Release your mouse button to finish drawing the shape.
- For rectangles, press down on the floor plan and drag the mouse to change the rectangle size. Release your mouse button to finish drawing the shape.
- For polygons, click once on the floorplan for each point of the polygon you are creating. To finish drawing, simply double click at the position of your last point.

Note that you can change the shape type and fill state at a later time, your choice here is not locked.

Editing an existing shape

To edit the dimensions of an existing shape, simply click on it to bring up the surrounding select box.

- Once selected, circular and rectangular-shaped groups can be moved, rotated and manipulated in size.
- For polygon shapes, each corner becomes a draggable point which you can use to reshape the polygon however you see fit. You can add a new point by right-clicking on the line between two existing points, or delete an existing point by right-clicking it.
- Note - If you delete enough points on a polygon so that only 2 or less remain, the shape will be automatically deleted after a short timer

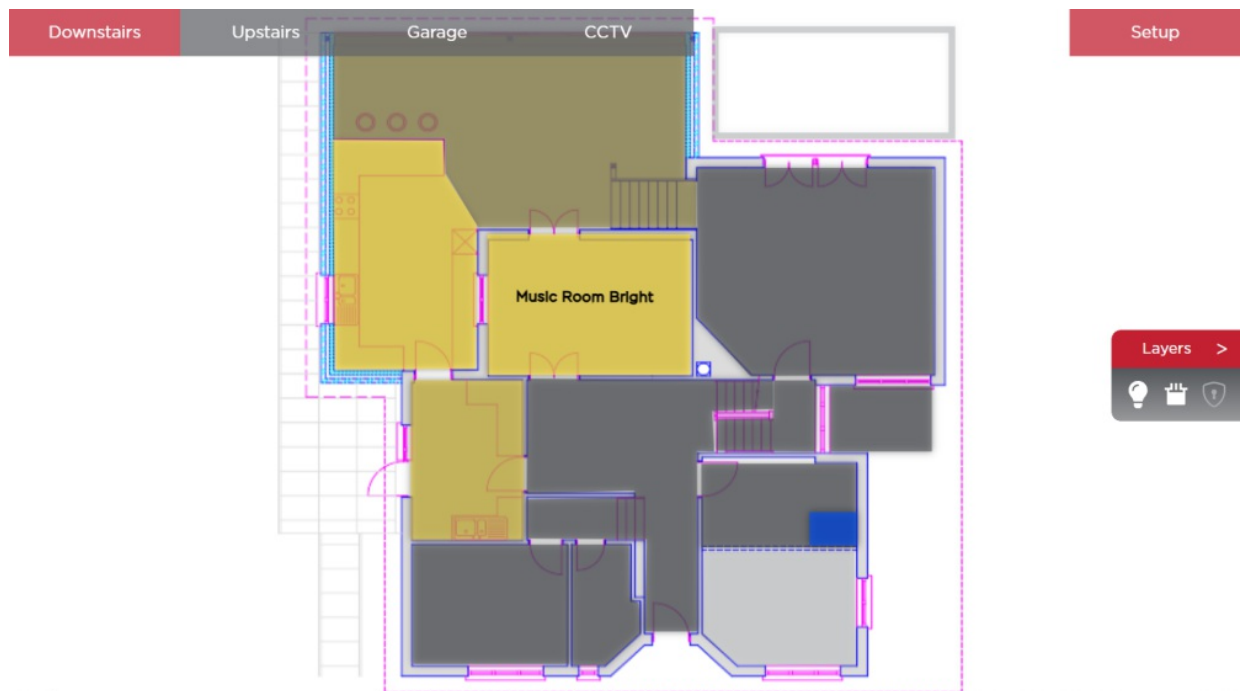
When you have a shape selected, an extra sidebar menu will appear to show the fixtures that are linked to the selected shape. If you want to quickly link new fixtures to this shape, or remove linked fixtures, you can drag & drop between the *Selected Shape Fixtures* and *Fixtures to be Added* menus.

To edit the properties of an existing shape, double-click on it to bring up a configuration popup, enabling you to change the fill state and shape type of the shape, or even delete it if you no longer want this shape on your floor plan.

Operation

OS v2.9.x/v2.10.x - From the Control4 GUI home page, navigate to **Services** and then **Visual Navigator**.

OS v3.x - From the Control4 GUI home page, navigate to the experience menu you placed the driver under, and then press **Visual Navigator**. Note that by pressing and holding the Visual Navigator icon, you can add it as a favourite to the room you are in.



Use the area buttons at the top of the page to switch between the active areas you have defined, and you will be able to see the current state of your system on the floorplan.

Viewing different layers

By using the layer selection helper (can be configured to appear on the left or right using Composer properties), you can toggle which layer(s) you wish to view at once. The shapes you have defined on the floorplan during the setup process will show the current state of any fixtures they contain within the layers you have selected.

Note that the *Security* layer cannot be viewed in conjunction with any other layer.

Controlling devices

Press on a shape on the floorplan to bring up the status/control interface. From here, depending on the layers that exist of the selected shape, you can view the status of and devices linked to the selected shape, from a familiar Control4 interface

If you select a shape that was created via the Rooms layer, this will show the state and allow control of every device that exists within this room in your Control4 project.

Comfort

Any thermostat (v1 or v2) within the selected shape will display here. You can view temperature and humidity, control the current setpoint, change the mode & fan mode, and even recall presets.

Sensors

Any Control4 generic sensor/relay drivers within the selected shape will display here. You can view the current state, along with toggling relay state.

Lighting

You may see up to 3 sub-categories for lighting;

- Lights: Control of standard Control4 Dimmers and Switches
- Scenes: Activate the Advanced Lighting Scenes which have been made available to the selected room
- Colour: Advanced control for compatible RGB/RGBW/CT drivers using a colour wheel

Security

Here you will find Security partitions and CCTV cameras in your project.

For partition control of a security system, the rooms in which a partition is available in is decided by the location (in Composer) of sensors connected to the security driver.

For CCTV, Visual Navigator can currently display snapshots, and MJPEG streams (RTSP is not currently supported), for both authenticated and unauthenticated http streams.

Driver Actions

In the **System Design** view, select **Actions**. This driver has following actions;

Clear Touchscreen Cache

If one of your T3/T4 touch screens is not displayed the updated webview interface following a driver upgrade, you can use this action to force any touch screen in your project to clear its cache.

Cleanup Project

USE WITH CARE - This is a powerful action with multiple choices of increasing severity; you can

- **Delete Fixture Shapes** - All shapes for fixtures within your setup will be removed (note that rooms will still keep their shapes)
- **Delete All Shapes** - All shapes will be deleted (and all devices/rooms will be unassigned)
- **Delete All Images** - Only the images you associated with each Area will be deleted. All other configuration will remain unchanged
- **Reset Project** - This will reset your *Visual Navigator* driver to its initial state following installation

Interrogate project

If you have a compatible device in your project that isn't showing up on the webview interface, press this action to force the driver to re-scan your project for devices.

Display Config

This action will print the current configuration of your Visual Navigator system to the Lua output, indicating the devices that are assigned to each shape, and the area in which each shape is in. It will also report a list of unassigned devices.

Rebuild WebView

If the IP range your processor is on changes, the driver will no longer be able to connect to the WebView – simply press this action to safely rebuild the webview interface on the new IP range. No data will be lost.

FAQ

What RGB/CT Lighting Systems does it currently work with?

In addition to this, you'll need to install drivers for the individual lights you wish to control.

The following drivers are directly supported with Visual Navigator:

- **ArtNet DMX** - Uses the RGB/RGB-M drivers in the ExtraVeg ArtNet DMX driver suite.
- **Aurora** - Uses the new AOne lighting driver suite that will be available from our website soon!
- **Axxess** - Uses the DCM5 RGBW/CT driver

- **Collingwood** - Specific RGB/RGBW/CT light driver suite that is available from DriverCentral.
- **Converging Systems** - Uses the ILC-x00 drivers, available from www.convergingsystems.com.
- **Domaudeo** - DMX Driver Suite providing RGB/RGBW control (tunable white in development), available from www.domaudeo.com (v2.3.0 or higher).
- **Fibaro** - New RGBW drivers written by Control4.
- **Govee** - Uses the Control4 ChowMain drivers, available from DriverCentral
- **KNX Coloured Lighting** - Uses the new KNX Coloured Lighting driver suite (RGB, RGBW, CT), available from DriverCentral
- **LIFX** - Support the driver suites from Chowmain and Axon Engineering, available from DriverCentral.
- **LiteWave wLightBox** - Uses the wLightBox RGB/RGBW drivers, available from DriverCentral.
- **Nexlux** - Uses the Nexlux light strip drivers, available from DriverCentral.
- **Nicolaudie** - Driver suite for the Nicolaudie Stick DE3 that is available from our website.
- **P5 FutureNow** - FN RGB driver, available from the P5 website.
- **Philips Hue** - Uses the Control4 Philips Hue drivers, available from the Control4 cloud.
- **Rako** - New RGB/RGBW driver from our Rako driver suite (v141 or higher), available from our website.
- **Shelly IoT** - Supports RGB/RGBW/CT driver from both the Janus and Chowmain driver suites.
- **TP-Link** - Uses the Control4 ChowMain drivers, available from DriverCentral (v20191009 or higher).
- **Tuya** - Uses the Control4 ChowMain drivers, available from DriverCentral.
- **Velbus** - Uses the RGB/RGBW/CT drivers, available from the Janus Technology website.
- **YeeLight** - Uses the Control4 ChowMain drivers, available from DriverCentral (v20190712 or higher).
- **Zuma Lumisonic** - Uses the new Lumisonic lighting drivers, available from the Janus Technology website.
- **Enhanced Lighting Interface (v121+)** - This allows existing individual dimmers to group as RGB/RGBW/WW fixtures and display in Visual Navigator as a coloured light. Supported dimmers include:

The following drivers are compatible via Enhanced Lighting Interface, which allows existing individual dimmers to group as RGB/RGBW/WW fixtures and display in Colour Wheel.

- **Adeo DALI/DMX**
- **ArtNet DMX (ExtraVeg)**

- **ArtNet DMX (Nexgentec)**
- **Clipsal C-Bus**
- **ColorBeam**
- **Control4 Centralized**
- **Domaudeo**
- **FutureNow**
- **KNX**
- **Lutron Caesta**
- **Lutron Homeworks**
- **Lutron Homeworks QS**
- **Lutron LEAP**
- **Lutron RA2**
- **Rako (Rako Controls)**
- **Rako (ExtraVeg)**
- **Vantage InFusion**
- **Vantage QLink**
- **WiZ Lighting**

Additional systems can be very quickly added – please send us a copy of the driver and we'll incorporate into Proxy Interface

What interfaces does it work on?

Visual Navigator is available on any T3/T4 screens in your project. For systems running OS v3.2 or later, you will also be able to access Visual Navigator from the iOS and Android apps.

You can also access the webview from any browser, by accessing http://<controller_ip>/c4z/janus_floorplan_dc/www/dist/

Can I place Visual Navigator within the lights experience menu?

Unfortunately, the Control4 UI prohibits devices that are not specifically light drivers from appearing within the lights experience menu.

Visual Navigator can, be shown alongside Comfort, Listen, Security and Watch. This can be customised from the room navigator interface in composer.

For systems running OS v3.x, you can also favourite Visual Navigator to the room by pressing and holding on the Visual Navigator UI icon.

Do you offer free demo license for dealer showroom?

Yes - we offer a free showroom demo license via the DriverCentral showroom project.

Troubleshooting

If you encounter any issues with the driver, please contact us at <http://www.janustechnology.co.uk/support>, and we will be happy to assist however needed.