



Tech Notes

Revision 12/06/2024

Troubleshooting Control4 Integration Issues

How to Get things to Work between the two systems if you are experiencing issues

Overview:

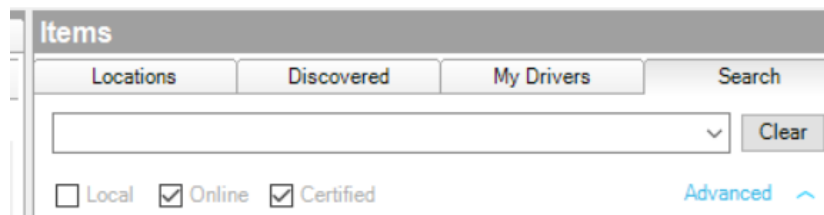
Converging Systems has worked with Control4 for over a decade in providing well engineered/tested drivers to support Converging Systems as well as our OEMs' products. Occasionally, we receive technical support calls that indicate that the Control4 certified drivers don't work. Short of working through our online documentation that can be found within [Composer](#) or our comprehensive Integration Notes available [here](#), we have put together this useful Tech Note for common hurdles and hints that if identified and followed, should eliminate any field issues encountered. We have organized this information in the form of FAQs and helpful answers to those questions.

FAQs

FAQ 1. Drivers where do I get them? "I need the password to download the Control4 drivers for Converging Systems or its OEMs products from the Converging Systems' website."

A. Not really—actually you don't. The drivers are all available within Composer as a C4 **certified** embedded/cloud download. Here is how to get access to those drivers.

- Open up **Composer**, and within **System Design**, go to Search and enter a checkmark ☒ within both the **Online** and **Certified** boxes.



- Within Manufacturer, select "**Converging Systems**" for lighting and motor drivers (or for one of our OEMs partners select "WAC Lighting") for lighting drivers that support fixtures and fanx . Provided you are on-line (connected to the Internet), you will immediately see a rather large list of professionally engineered (free) drivers .

e_Node Hybrid	Converging Systems Inc. ip_CSI_e_Node_Hybrid IP	6/19/2023
WAC Abicus	Converging Systems Inc. ip_WAC_abicus IP	6/19/2023
LED Lighting controller Hybrid	Converging Systems Inc. Light (v2) Other	6/19/2023
LED Lighting controller Abicus	Converging Systems Inc. Light (v2) Other	6/19/2023
LED Lighting controller Multi	Converging Systems Inc. Light (v2) IP	4/16/2021
LED Lighting controller generic	Converging Systems Inc. Light (v2) IP	4/16/2021
e_Node 2010	Converging Systems Inc. ip_CSI_e_Node_2010 IP	4/16/2021

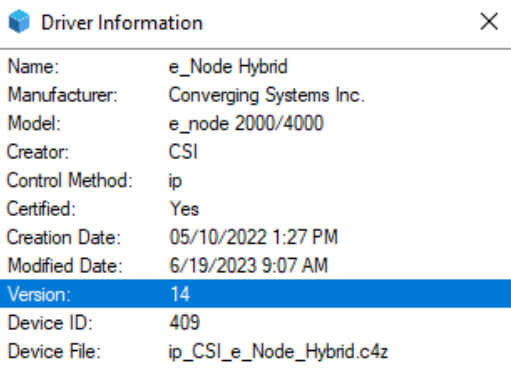
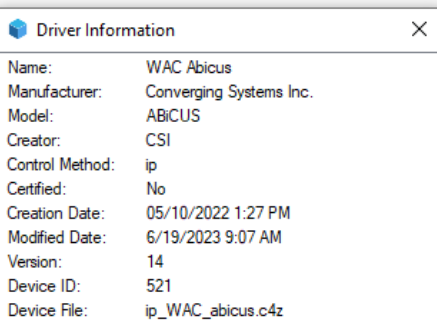
You will need a single **Comm**(unication) Driver for the e-Node (Gateway), as well as one **Load** driver for each connected lighting controller (CS-BUS ILC-xxx, DMX fixture, or DALI fixture). See the table below for those name

	Converging Systems	WAC Lighting
Comm Driver	e_Node Hybrid 6/19/2023 or later	WAC Abicus 6/19/2023
Load Driver	LED Lighting controller Hybrid 6/19/2023	LED Lighting controller Abicus 6/19/2023

FAQ 2. Min Required Version of Driver. How do I verify that the drivers in my project match the minimum requirement for drivers that are certified and will work well with my system?

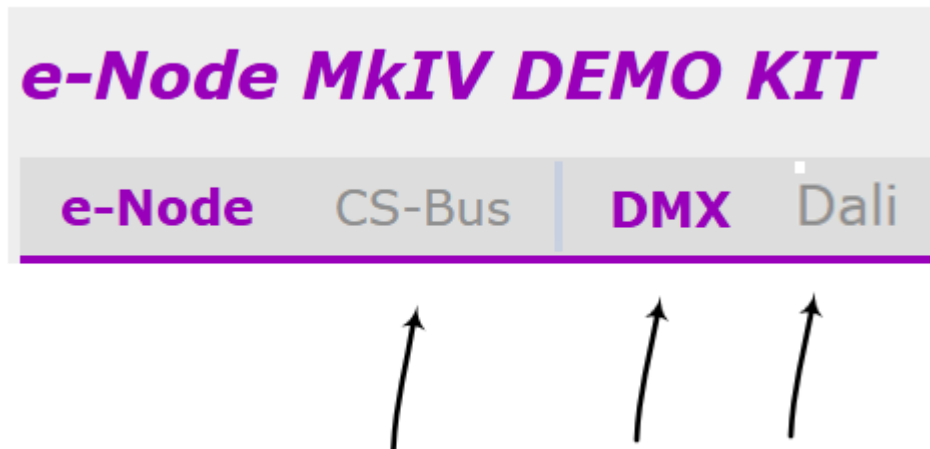
A. Again, simple. Within Composer right click on the Comm Driver and select **INFO**.

Comm Drivers

For e-Node 4000/2000 as well as 4100/2100 the Comm driver shows up as:	For WAC G10 as well as G20 the Comm driver shows up as follows
 <p>Driver Information</p> <p>Name: e_Node Hybrid</p> <p>Manufacturer: Converging Systems Inc.</p> <p>Model: e_node 2000/4000</p> <p>Creator: CSI</p> <p>Control Method: ip</p> <p>Certified: Yes</p> <p>Creation Date: 05/10/2022 1:27 PM</p> <p>Modified Date: 6/19/2023 9:07 AM</p> <p>Version: 14</p> <p>Device ID: 409</p> <p>Device File: ip_CSI_e_Node_Hybrid.c4z</p>	 <p>Driver Information</p> <p>Name: WAC Abicus</p> <p>Manufacturer: Converging Systems Inc.</p> <p>Model: ABICUS</p> <p>Creator: CSI</p> <p>Control Method: ip</p> <p>Certified: No</p> <p>Creation Date: 05/10/2022 1:27 PM</p> <p>Modified Date: 6/19/2023 9:07 AM</p> <p>Version: 14</p> <p>Device ID: 521</p> <p>Device File: ip_WAC_abicus.c4z</p>

Note: You must have one instance of the Comm driver for each e-Node or private labeled Gateway—just one.

However, you must also load one instance of a Load Driver for each supported fixture (i.e., for an ILC-400 which enables 4 separately controlled monochrome fixtures as an available option, you would load 4 Load drivers here, and for the dual bi-white option on the same product you would load 2 drivers here.) or dual BI-WHITE devices) you will need one Load Driver instance for each “fixture.”



Load Drivers

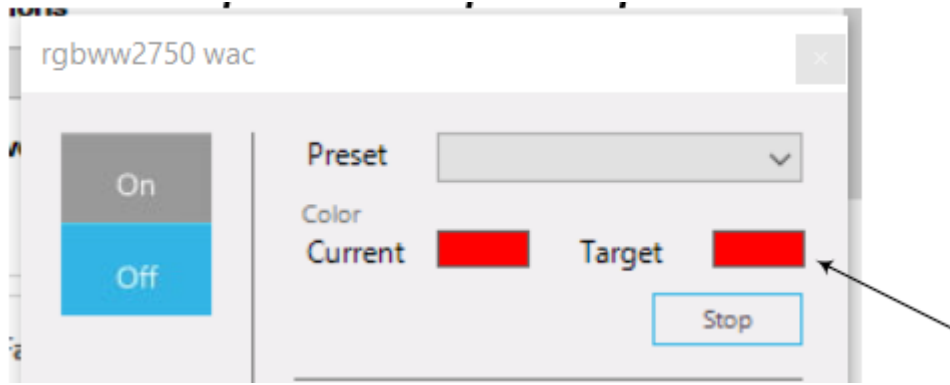
For each instance of a “Fixture” (regardless if it is a **CS-Bus** device, a **DMX** fixture or **Dali** fixture, you will need **one** load driver as shown below with at minimum the Version number shown below.

For e-Node 4000/2000 as well as 4100/2100	For WAC G10 as well as G20
<div> <div>Driver Information</div> <div> <p>Name: LED Lighting controller Hybrid</p> <p>Proxy: light_v2</p> <p>Manufacturer: Converging Systems Inc.</p> <p>Model: ILC 3/4</p> <p>Creator: TPS</p> <p>Control Method: other</p> <p>Certified: No</p> <p>Creation Date: 02/17/2022 4:43 PM</p> <p>Modified Date: 03/17/2023 11:30 AM</p> <p>Version: 15</p> <p>Device ID: 436</p> <p>Proxy ID: 437</p> <p>Device File: LEDLight_CSI_Hybrid.c4z</p> <p>Proxy File: light_v2.c4i</p> </div> </div>	<div> <div>Driver Information</div> <div> <p>Name: LED Lighting controller Abicus</p> <p>Proxy: light_v2</p> <p>Manufacturer: Converging Systems Inc.</p> <p>Model: Abicus</p> <p>Creator: TPS</p> <p>Control Method: other</p> <p>Certified: No</p> <p>Creation Date: 02/17/2022 4:43 PM</p> <p>Modified Date: 6/19/2023 9:07 AM</p> <p>Version: 15</p> <p>Device ID: 517</p> <p>Proxy ID: 518</p> <p>Device File: LEDLight_WAC_abicus.c4z</p> <p>Proxy File: light_v2.c4i</p> </div> </div>

FAQ 3. My loads don’t respond to the Control 4 “Control/Control-widget.” Have I missed something that causes Control4 processor not to communicate with Converging Systems’ devices?

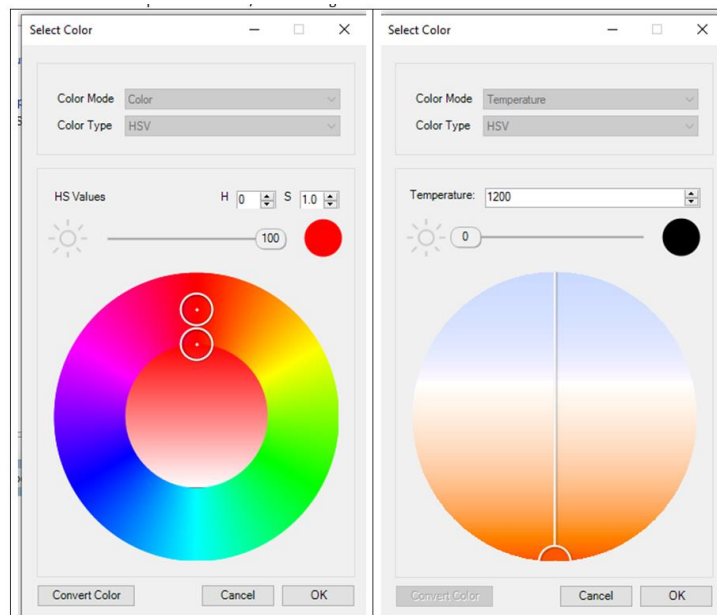
A. The Control4 control/control [widget](#) is very useful tool to test things communication/setup. Let’s use this tool to continue the diagnostics...

- To get started, double click on any Converging Systems' load programmed within the **System Design** window to expose the **Properties** window and the subsequent [widget](#) (see following image).
- Position your mouse within the Target color window and execute a double click operation.



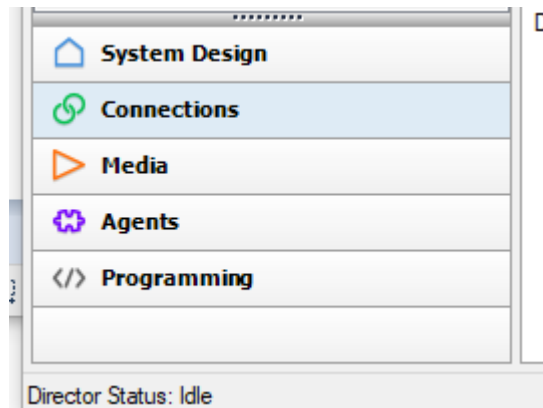
This will spawn the “control/control [widget](#)” as shown below.

Note: For TW (Tunable White) devices, the UI on the right below will be appear when Color Mode is set to **Temperature**. For full color devices, the UI on the left below will be appear if Colot Mode is set to **Color**.



- Now test the connectivity of the connected device by moving the applicable controls above. **Make sure you always move the brightness slider** or else no output will be seen. Typically, if nothing reacts by moving the UI controls, several causes may be the issues. Review those below:

Cause 1. Loads **may not** be connected within “Connections.” Within Composer go to the **Connections** tab/ControlAV window



And for each load connected to the e-Node gateway make sure that the Control Input (**CSBus**) has been dragged down (linked) to the appropriate Gateway (e-Node). Here is an example

Name	Type	Connection	Input/Output	Connected To
Control Outputs				
CSBus	Control	485_BUS	Output	new 52 (LIGHT)->CSBus, new 52 (SUMMER)->CSBu...

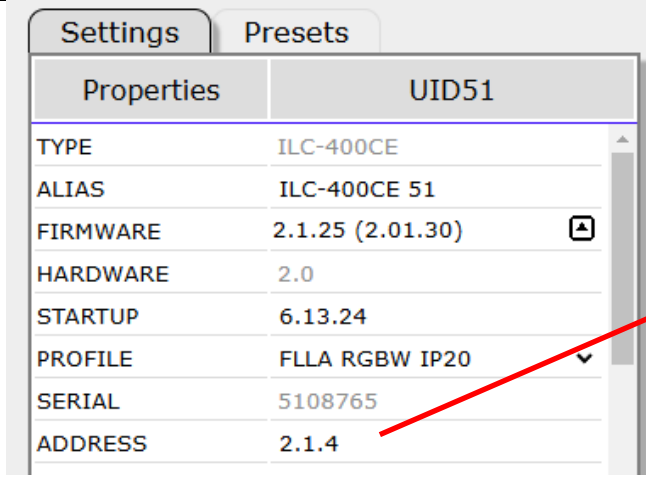
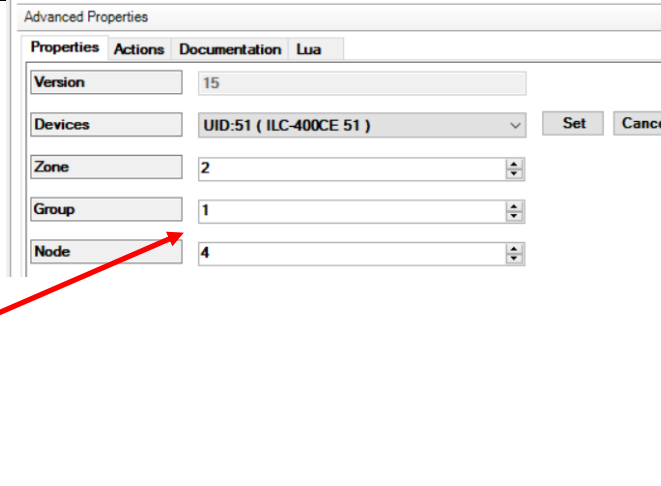
485_BUS Input Devices			
Filters:	All Rooms	All Connections	
Device	Name	Location	Connections
Atmospher	CSBus	WAC MK 4	
AM Lighting	CSBus	WAC MK 4	
LED lab 9	CSBus	WAC MK 4	
LED lab 10	CSBus	WAC MK 4	
aurora	CSBus	WAC MK 3	
new 52 (LIGHT)	CSBus	WAC MK 4	WAC MK3->CSBus
new 52 (SUMMER)	CSBus	WAC MK 4	e-Node MkIV->CSBus
new 52 (WINTER)	CSBus	WAC MK 4	e-Node MkIV->CSBus

Note: If any load has not been linked to its parent Gateway (e-Node), that load will not operate.

Cause 2. Loads may not be addressed with their Zone/Group/Node (ZGN) number within System Design.

Make sure that each load has an automatically discovered Zone/Group/Node address within the Properties windows.

- Within System Design/Properties make sure that there is a valid **Zone/Group/Node** (ZGN) address that matches the actual **ZGN** of the load device (as seen within the web page for the e-Node gateway)

As seen within the gateway's CS Bus/DMX/ or DALI page	As seen within Composer/System Design/Properties page
 <p>The screenshot shows a table with properties for a device with UID 51. The ADDRESS is 2.1.4. A red arrow points from the ADDRESS field to the Node field in the adjacent screenshot.</p>	 <p>The screenshot shows the Advanced Properties window with the following values: Version 15, Devices UID:51 (ILC-400CE 51), Zone 2, Group 1, and Node 4. A red arrow points from the Node field to the ADDRESS field in the adjacent screenshot.</p>

Note: in order to obtain these values automatically within Composer, within Systems Design, select the parent e-Node and then select **Actions** and select **Discover**. That process will automatically import all previously commissioned **ZGN** information into Compose.

FAQ 4. Is there a way to troubleshoot data communication (or lack thereof) either within Composer or within the Converging Systems environment.

Troubleshooting from within Composer. Within Composer for any device that is experiencing communication problems, go to **System Design** and first select the Gateway (e-Node) and set the Debug level **5 or greater** (and hit SET) and set Debug Mode to **Print and Log** (and hit SET) for both the **comm** driver and the **load** driver. The observe what happens within the **Lua (within Composer/System Design/ Properties) window** what traffic is coming over to the targeted Gateway or controller. If there is traffic, then the e-Node and controller(s) should be receiving the data, but if no traffic or traffic with errors is observed, review your setup. See the documentation that is

available from within this Windows.



Troubleshooting using the Converging Systems Pilot application.

See separate Pilot Users Guide.

https://www.convergingsystems.com/bin/doc/pilot/pilot_diagnostics.pdf