Multi-System Driver by DOMAUDEO version 1.1.0 (2212)

This driver allow two Control4 system to "talk" together by cloning devices from one system to the other.

Cloned device on remote system will receive real time update when the source device's state changes and remote system can also control devices just as it is a local device.

Can clone Lights, Thermostats, Contacts, Relays and Door Locks

Communication is bidirectionnal, any system can clone device to the other one.

Use TCP/IP or RS-232 for communication, IP Communication is encrypted.

Can clone devices to multiple remote systems (using multiple instance of the driver)

Compatible with older C4 OS and controllers such as the HC-250

**************** DISCLAIMER ********************

This driver use direct IP communication, no cloud service, no external server is needed. Although the communication is encrypted, it is NOT RECOMMENDED to expose (Port Forward) an IP Port of your controller to the Internet. You are responsible to implement a secure VPN or other structure to insure secure communication path between the two controlers.

Limitations

- You can't natively clone A/V-related driver such as TV or Streaming Services. You can still trigger A/V actions using Custom Events.
- Security Panel cannot be cloned, but you can monitor security zones and devices using cloned contact and relays.
- Cloned devices on remote system will need to be delete manually if they are unselected from the local system, even if they were initially auto-added by the driver.

Make SURE you can reach the remote system from the local site (try to PING the other system's IP). The driver will NOT work if there is something preventing proper intersite network communication and we do NOT offer any networking technical support.

Step-by-step setup procedure:

1- Decide which system will act as the Server. Any of the two systems can be the server, but only one of them. Set the **Connection mode** property accordingly (*Server* for system 1, *Client* for system 2)

2- For IP communication, start by seting up the Server system, choose an IP port (9001 is the default) and choose the communication protocol (TCP is recommended).

3- On the client system, enter the server IP Address in the **Remote System IP Address** property, make sure the port and protocol match the server's settings. You might need to use the WAN ip of the other site depending of your network setup, again, make SURE you can reach (PING) the other system prior of configuring this driver.

4- Wait for **Remote System Status** property to show "ONLINE" (the server system will also show "Connected" in the **IP Server Status** property)

5- Optional: For serial communication of two locally located systems, just connect a null modem cable between the two controller's serial ports and do not enter any value in the IP configuation properties. Don't forget to bind the driver to the right controller's serial port. Serial is used automatically when the ports are bound.

6- Register the driver using DriverCentral Cloud. Client system does not need a separated licence code, it will automatically register when connected to a licensed server system

7- In the **Devices to Clone** section chose any devices you want to control on the remote system. Each device type have a different device selector.

Devices to Clone

Source Light Devices | | Select

On local system, click **Select** and choose the devices to be cloned to the remote system
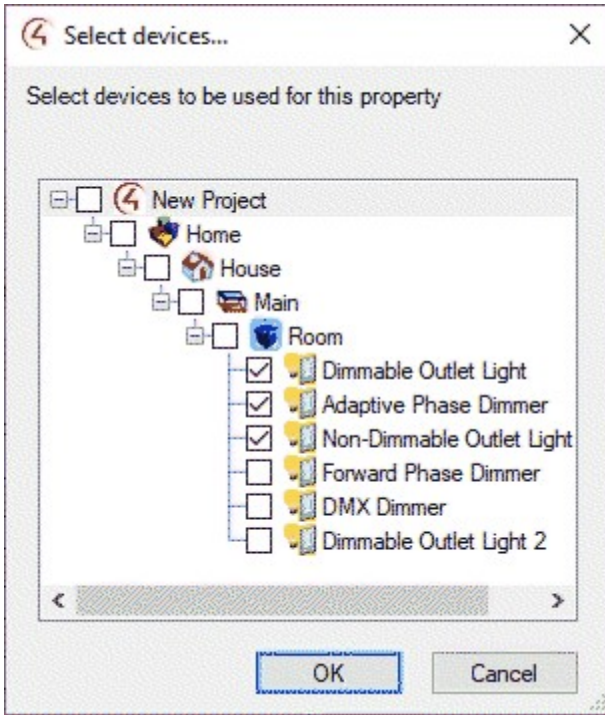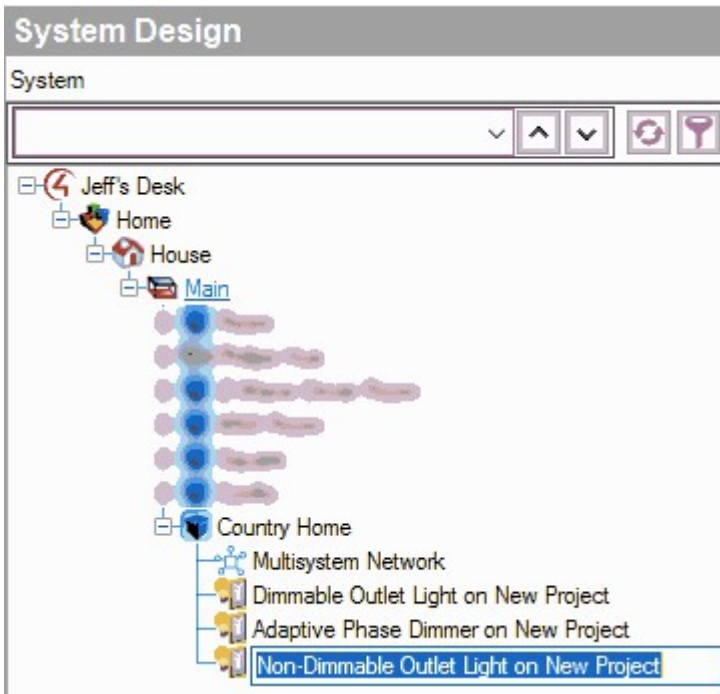
Then click **Set** and you should see the devices added automatically on the remote system (OS 3.1+ requiered, any older OS will require manual adding).

Devices to Clone

| Source Light Devices | Dimmable Outlet Light (23), Adaptive Phase Dimmer (26), | Select |

On remote system:

8- NOTE FOR THERMOSTATS: To get full control over a thermostat on a remote system, you need to add a special driver to the project at least once.
The driver is included with this one and it is called "**Temperature Display Driver (Enhanced)**".
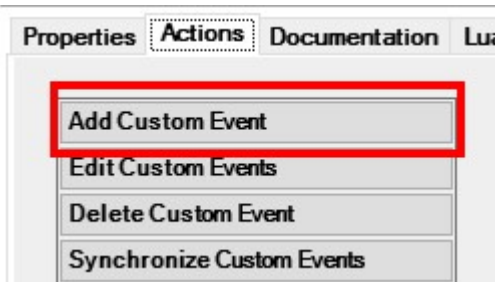Make sure to add this driver to the project before cloning thermostat devices:

Once any thermostat device is cloned, you can delete the initial instance of the Temperature Display driver as it is only needed once.

9- To control cloned devices from the remote system, just use them in the Control4 app just like you would have done if the device is local, all commands will be forwarded to the remote system.
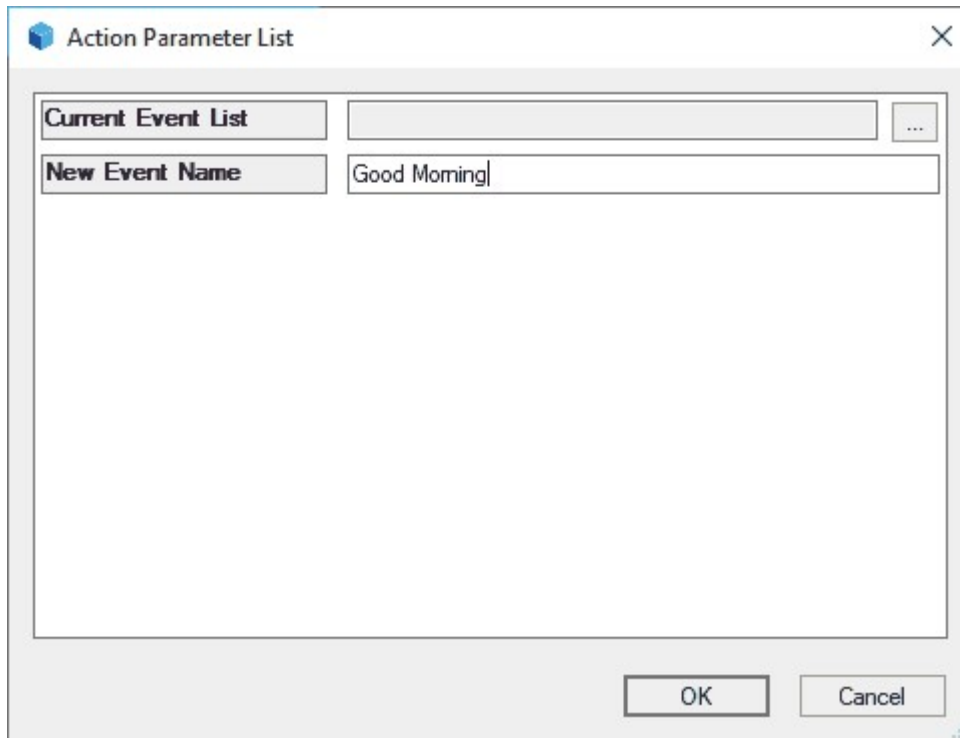
Using Custom Events

Custom Events are useful to simplify programming and reduce the number of steps needed in Composer to trigger any event on the remote system.

1- Use the Action tab to add a new Custom Event:

Properties **Actions** Documentation Lua

Add Custom Event
Edit Custom Events
Delete Custom Event
Synchronize Custom Events

2- Name the new event:

Action Parameter List   ✕

| Current Event List | [   ] [...] |
| New Event Name | Good Morning |

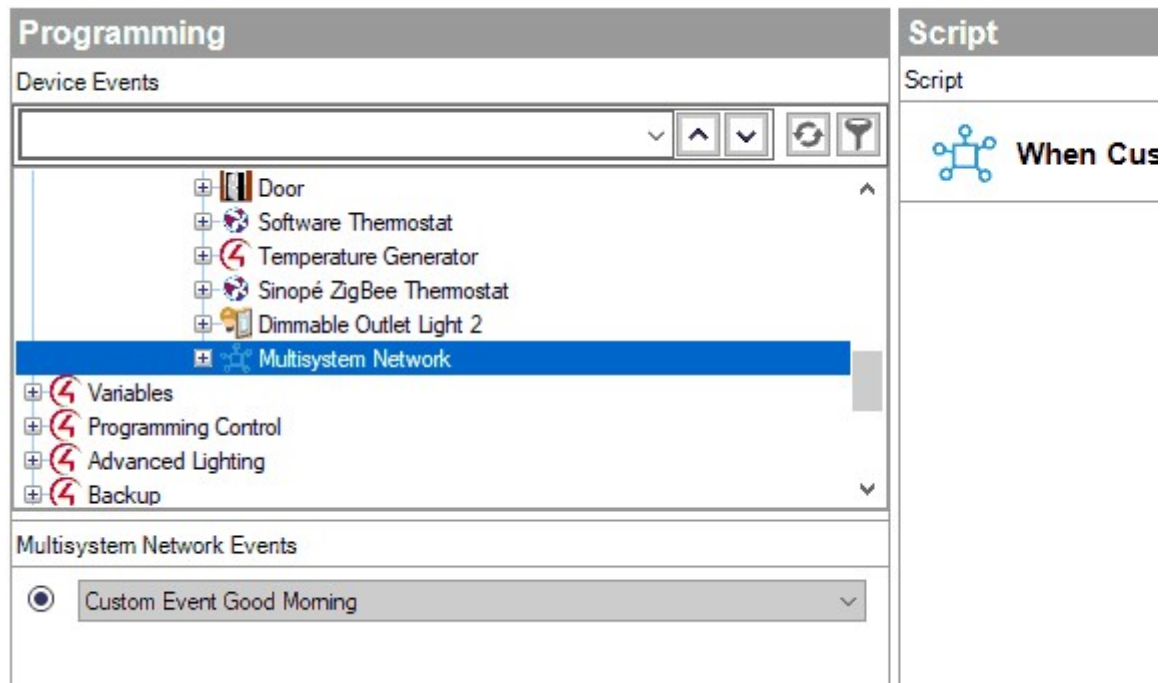   OK   Cancel

Current Event List will show you a list of the previously created events.

3- Now use the Programmating tab on the local system, in the Action tab, select your newly

created event and use it as any programming action:
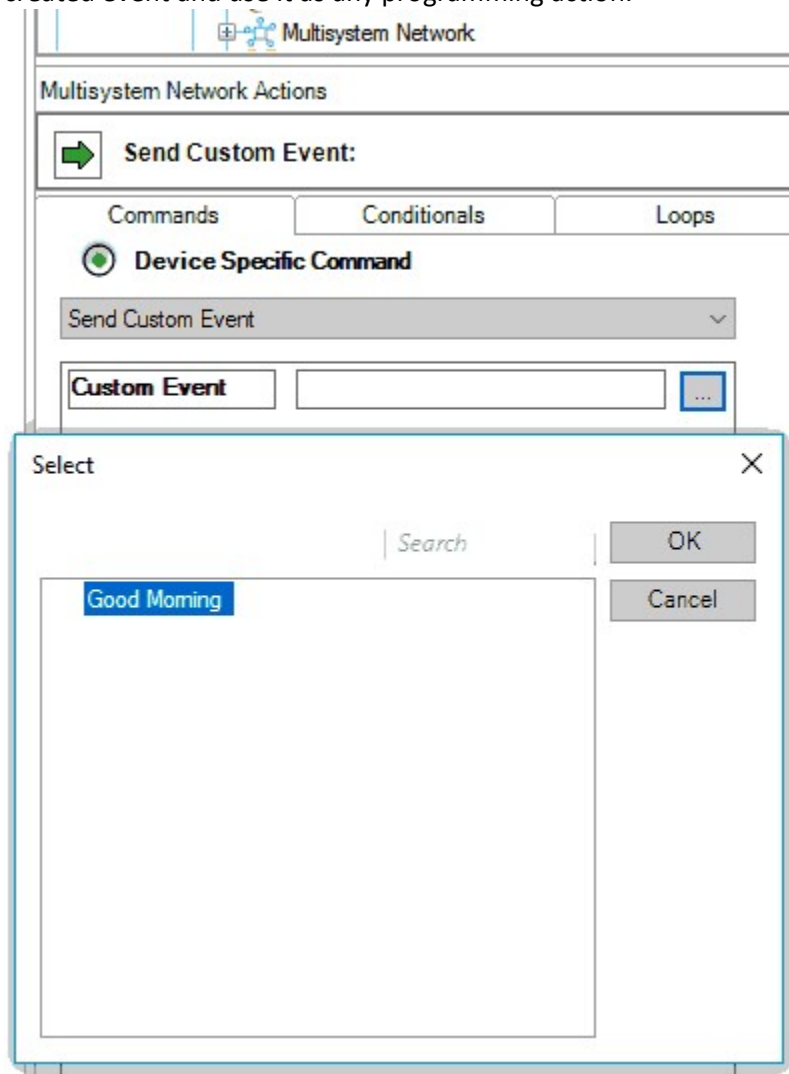
4- Lastly, on the remote system, if you check the Programmation tab, in Event section, you'll see your Custom Event available for programming

Sending and Receiving Custom Variable Values

The driver offers different variables to allow sending any custom data to the remote system. Go to Programming, under this driver tree, you'll see them:

FLOAT_TO_SEND
NUMBER_TO_SEND
STRING_TO_SEND

Each of them allow you to send data from a specific format.

And te received data will set value corresponding variable on the remote system:

STRING_RECEIVED
NUMBER_RECEIVED
FLOAT_RECEIVED

That also trigger the event "**Variable Received**"

Just use programming conditions based on the value of those variables, then send a string over IP or RS-232 and have the event triggered.
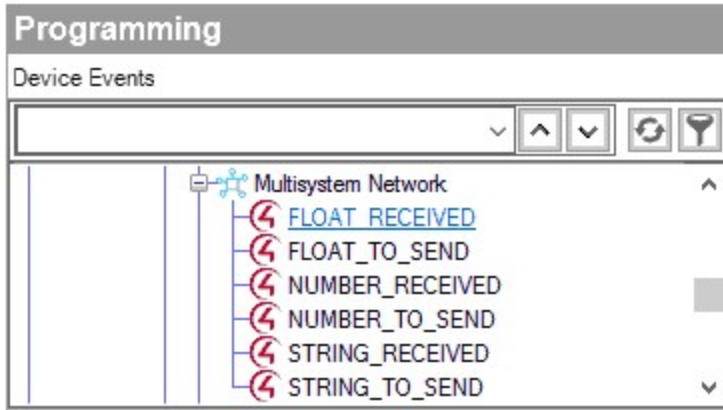
Manual Binding of cloned devices

If you're using an older system such as OS 2.10.6 or if you have issue with the Auto-Add Remote Devices feature, you can still manually add the required drivers on the remote system. Each device type is presented as a separated binding connection:

From the screenshot above you can see which generic driver to use with which cloned device:

      - For Light device, use the **Control4 Dimmable Light (Outlet)** or **Non-Dimmable Light (Outlet)** from Composer Database

      - For Contact, Relay and Lock, just use the corresponding generic driver of the same name

      - For Thermostat, you can use either the **Control4 Temperature Display Driver (OS 2.10 +)** or the bundled **Temperature Display (Enhanced)** driver (Highly recommended!)

Troubleshooting

As the driver run on two different systems, something may go wrong and they become out of sync. The ultimate "reset" tool is the "Delete All Bindings" Action, it will reset all device connections and delete all bindings (use this action with care!). You may or may not delete the cloned device in the projet. Once all binding are delete, you can rebuilt them easily from the

remote system by re-adding the same devices to clone. If you have kept the old cloned devices in the projet, you might want to disable the "**Auto-Add Remote Devices**" and bind the original device drivers manually.