

UniFi Network Controller Driver

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Compatible Control4 Systems:

Designed to work with OS 2.10.x, 3.0+

Compatible Hardware:

Dream Machine Pro, Cloud Key Gen2, Cloud Key Gen 1, UniFi Network Controller Software

License Purchase, Driver Download & Change Log:

Please visit <https://www.drivercentral.io>

Documentation

<https://drivercentral.io/platforms/control4-drivers/security/unifi-network-controller/>

Features/Overview

- Perform Network Actions from Composer Programming
 - Turn on/off PoE ports on any UniFi PoE switch
 - Block/Unblock Network access to clients
 - Change Port configuration (Change VLAN)
 - Enable/Disable WiFi via SSID name
 - Run speed test, turn on/off auto test and adjust interval between auto tests
 - Control UniFi Power devices (Power Plug)
- Notifications (Push/Email/Text/Voice/Popup)
 - New Network client discovered
 - Client connected/disconnected to network
 - Client Blocked/Unblocked
- Variables (Composer Programming)

- Speed Test information (Download Speed, Upload Speed, Latency)
- Event based search (Network Client IP, NAME or MAC address)
- Connections
 - Relay binding for all PoE ports
 - Turn On/Off/Cycle Power of any PoE port

Dealer Notes

The driver monitors network clients, devices, ports and link status. Because of this the driver requires more memory and processor power than a typical driver. Dealers can increase speed by disabling Monitoring of link status and network clients however they will lose these event triggers for these types of events

Average time to turn on/off a PoE port is about 20-30 seconds.

The driver listens to changes from UniFi. It does not Poll for changes. Sometimes updates take 20-45 seconds to receive notifications.

The driver is very powerful and allows dealers to block/disable ports and clients. This means you 'could' block yourself out of the network. Pay attention to what you are doing!

Turning On/Off wifi requires all Access Points attached to that SSID to re-provision (reboot). This means clients may disconnect/reconnect. Keep this in mind when doing this.

Touchscreen Dashboard

Using Control4 T3/T4 touchscreens control and monitor network devices and clients. To start using the dashboard select the Driver Action: *Download Latest App*

Setup

- Create limited Admin account on UniFi system
 - Note: On Dream Machine Pro, the user is created and then assigned permissions to network
 - Driver cannot use Ubiquity Accounts for login
 - DO NOT create a super admin for the Control4 system. Each site should have its own admin account for each Control4 system. The driver requires Limited Admin permissions
- Set the API Version
 - Dream Machine Pro, UDM Pro, Cloud Key Gen 2 => V2
 - Cloud Key Gen 1, Remote Network Controller Servers, Local Servers => V1
- Enter IP Address or url of network controller
 - Example: using Dream Machine Pro: 192.168.1.1 (Port 443)

Example: using Cloud Key Gen2: 192.168.1.8 (Port 443)

Example: Cloud Server: unifi.mycompany.com (Port 443)

- Set the Port: Most other devices use 443 or 8443
- Set the Username
- Set the Password.
 - The password is encrypted once entered.
 - The property will remain blank even though the password has been saved
- Enter the Site Id
 - Normally the Site Id is *default*
 - If Controller has multiple sites dealers will use this field to pick which Site the driver interacts with
- Driver will scan UniFi system and load information

Driver Properties

- Driver Actions
 - View Status*: Displays general history and event information on the Lua tab of the driver
 - Test Service Email*: Will send a test email to the service email provided
 - Test Customer Email*: Will send a test email to the customer email provided
 - Show Icon in All Rooms*: Will show this icon under the SECURITY section
 - Hide Icon in All Rooms*: Will hide this icon from the SECURITY section
 - Reset Driver*: Will reset the driver including all saved client data, relay connections and default the driver. Only use if you are changing network controllers
 - Scan for UniFi Devices*: Sends request for current UniFi devices on network. Results will be displayed on the Lua tab
 - Scan for Network Clients*: Sends request for all configured clients. Displays results on the Lua tab
 - Run Speed Test*: Will trigger the UniFi speed test. Speed test is from Network Controller -> ISP. Debug Mode must be on. Composer Variables will be updated with found data
 - Download Latest App*: Downloads the dashboard for T3/T4 touchscreens. Note: Uses Control4 touchscreens to give customers a more advanced network dashboard.
- Credential Properties. These properties are used to configure access to the UniFi refer to setup: API Version, Address, Network Port, Username, Password, Site Id
- Port Link Status: Disables monitoring of switch port link status in the driver. Set to No if not using this feature
- Network Clients: Disables monitoring of network clients. Disabling will block all Network Client monitoring, events, and actions.

- Active and Offline Clients: Dropdown list of all configured clients. This list opens additional properties for adjusting client information.
 - Client Name*: The current name of the client.
 - Notify When Offline*: If set to Yes, the driver will trigger a notification when the user has not connected to the network in 3 hours. Default is No
 - Notify When Online*: If set to Yes, the driver will trigger a notification when the user connects to the network. Default is No
 - Notify When Online/Offline (Service)*: Sends an alert to addresses in the Email: Service property
 - Is Blocked*: Blocks/Unblocks a client
 - Is Protected*: Prevents the network client from being blocked in Control4 and on the dashboard. Set this to yes if you DO NOT want to allow customers to block this device. By default UniFi and Control4 equipment have this set to Yes
 - Client Timeout*: Length of time (in minutes) a network client has to be offline before a notification is triggered. Default: 60 minutes

Connections

Used to connect the other UniFi drivers (WiFi Control, Client Control, PoE Port Control, Speed Test, and Power Plug).

Event and Notifications

- Events: Dropdown list of different notification events. This allows dealers to customize how the notification is sent to the customer. Events are as follows:
 - CLIENT_BLOCKED/CLIENT_UNBLOCKED: Event notification settings when a client is blocked/unblocked. Note: this is disabled if Network Client Control driver is connected to this client.
 - CLIENT_OFFLINE: When a network client has been disconnected for past the Client Timeout property (default: 60 minutes). Notify When Offline for the client must be enabled
 - CLIENT_ONLINE: When a network client connects to the network. Notify When Online for the client must be enabled
 - NEW_CLIENT: When a new network client connects to the network
 - Display Status: Configure notification when Display Status is triggered. Example: Driver Icon is pressed

Email/Text Notification Settings

Events have the ability to send customized email, text and push notifications to certain groups of people. The Properties listed here set those groups for easier programming.

Email: Service. This property is intended to send an email to the installer or dealership of the project. The email subject line will be: Control4 System: [PROJECT_NAME]. Example Control4 System: Smith Residence.

Email: Customer. This property is for the customer. When a message is sent the subject line will come

from the property Email: Subject

Email: Subject. This property is the subject line of the email (or push notification subject line). When the driver will build this subject line based on the following criteria.

When first loaded the driver will scan the project and look for another driver with the property 'Email: Subject' and if found will use what is already being used

If no driver is found with 'Email: Subject' the driver will use the zipcode of the project [CITY] Smart Home. Example: Denver Smart Home

If the driver cannot find a city the subject line will default to: My Control4 Smart Home

UI Settings

This driver uses the UI button proxy from Control4. This proxy allows a custom icon to be displayed on Control4 Navigator. The driver has the ability to trigger quick actions when the icon is pressed.

UIButton: Single Tap. This property will trigger with the driver icon is pressed once

UIButton: Double Tap. This property will trigger when the driver icon is pressed twice. NOTE: As of OS3 double tap must be done SLOWLY! Press, Press... It will NOT work if you quickly press the button twice. Control4 is aware of this bug on Navigator.

Icon Style. This property defines the icon look. Choose the correct icon style for the project here. You do not need to Refresh Navigators when changing this value

Control4 Navigators. This property defines which Touchscreens will receive the Navigator Popup event (if enabled under the Events section).

Development Tools

Driver communicates between local UniFi OS controllers running the Network controller software and Control4.

Websockets communication: Control4 Websockets Package adapted by Cindev

Push Notification uses the Control4 MyHome app and 4Sight

Email Notifications use Cindev Notification System (Sendgrid Email API).

DriverCentral Licensing and Driver Management including Auto Update

Webview using Vue.JS

Warranty & Disclaimer

<https://www.cindev.com/terms-and-conditions>

