# Overview

The MQTT Broker driver connects Control4 to an MQTT broker (such as Mosquitto, HiveMQ, or other MQTT-compatible platforms). It manages the connection and provides pub/sub services to child drivers that connect via the MQTT broker connection binding.

## Driver Suite

The MQTT driver suite consists of two drivers:

| Driver | Direction | Purpose |
|---|---|---|
| **MQTT Broker** | N/A | Connection management to your MQTT broker |
| **MQTT Universal** | Inbound | External MQTT device -> Control4 (create relays, contacts, buttons, variables from MQTT topics) |

**Typical Setup:**

1. Add the **MQTT Broker** driver and configure your broker connection
2. Add **MQTT Universal** if you need to bring external MQTT devices into Control4

# Index


- System Requirements
- Features
- Installer Setup
  - DriverCentral Cloud Setup
  - Driver Installation
  - Driver Setup
    - Driver Properties
      - Cloud Settings

        - Driver Settings
        - MQTT Settings
    - Driver Actions
    - Programming
- Developer Information
- Support
- Changelog

# System Requirements

- Control4 OS 3.3+
- An MQTT broker accessible on the local network

# Features

- Local network communication requiring no cloud services
- Connects to any standard MQTT broker
- Supports username/password authentication
- Manages subscriptions for connected child drivers
- Automatic reconnection on disconnect
- Message caching for late-subscribing devices

# Installer Setup

## DriverCentral Cloud Setup

> If you already have the DriverCentral Cloud driver installed in your project you can continue to Driver Installation.

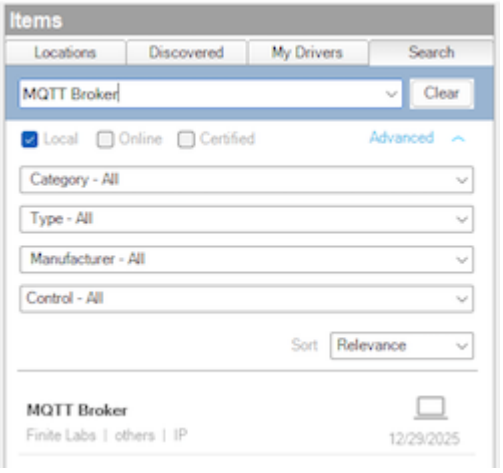
This driver relies on the DriverCentral Cloud driver to manage licensing and automatic updates. If you are new to using DriverCentral you can refer to their Cloud Driver documentation for setting it up.

## Driver Installation

Driver installation and setup are similar to most other ip-based drivers. Below is an outline of the basic steps for your convenience.

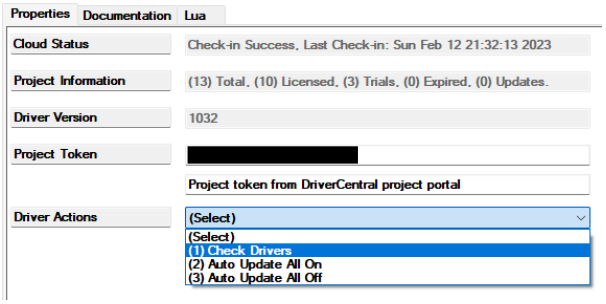
1. Download the latest `control4-mqtt.zip` from DriverCentral.
2. Extract and install the `mqtt_broker.c4z` and `mqtt_universal.c4z` drivers.
3. Use the "Search" tab to find the "MQTT Broker" driver and add it to your project.

   > ⚠️ A ***single*** broker driver instance is required per broker you wish to connect to.

4. Select the newly added driver in the "System Design" tab. You will notice that the `Cloud Status` reflects the license state. If you have purchased a license it will show `License Activated`, otherwise `Trial Running` and remaining trial duration.

5. You can refresh license status by selecting the "DriverCentral Cloud" driver in the "System Design" tab and perform the "Check Drivers" action.




6. Configure the Device Settings with the connection information.

7. After a few moments the `Driver Status` will display `Connected`. If the driver fails to connect, set the `Log Mode` property to `Print` and run action `Reconnect` from the actions tab. Then check the lua output window for more information.

# Driver Setup

## Driver Properties

### Cloud Settings

#### Cloud Status

Displays the DriverCentral cloud license status.

#### Automatic Updates

Turns on/off the DriverCentral cloud automatic updates.

### Driver Settings

#### Driver Status (read-only)

Displays the current status of the driver.

#### Driver Version (read-only)

Displays the current version of the driver.

#### Log Level [ Fatal | Error | Warning | *Info* | Debug | Trace | Ultra ]

Sets the logging level. Default is `Info`.

#### Log Mode [ *Off* | Print | Log | Print and Log ]

Sets the logging mode. Default is `Off`.

## MQTT Settings

### Broker Address

Sets the broker IP address (e.g. `192.168.1.30`). Domain names are allowed as long as they can be resolved to an accessible IP address by the controller. HTTPS is not supported.

> ⚠️ If you are using an IP address, you should ensure it will not change by assigning a static IP or creating a DHCP reservation.

### Port

Sets the broker port. The default port for most brokers is `1883`.

### Username

Sets the username for broker authentication (optional).

### Password

Sets the password for broker authentication (optional).

### Keep Alive

Sets the keep-alive interval in seconds. Default is `60`.

## Driver Actions

### Reconnect

Manually trigger a reconnection to the MQTT broker.

# Programming

**Events:**

- **Broker Connected** - Fires when the driver connects to the MQTT broker
- **Broker Disconnected** - Fires when the driver disconnects from the MQTT broker

**Conditionals:**

- **Broker Connected** - Check if the broker is connected or disconnected

# Developer Information

Copyright © 2026 Finite Labs LLC

All information contained herein is, and remains the property of Finite Labs LLC and its suppliers, if any. The intellectual and technical concepts contained herein are proprietary to Finite Labs LLC and its suppliers and may be covered by U.S. and Foreign Patents, patents in process, and are protected by trade secret or copyright law. Dissemination of this information or reproduction of this material is strictly forbidden unless prior written permission is obtained from Finite Labs LLC. For the latest information, please visit https://drivercentral.io/platforms/control4-drivers/utility/mqtt

# Support

If you have any questions or issues integrating this driver with Control4 or MQTT, you can contact us at driver-support@finitelabs.com or call/text us at +1 (949) 371-5805.

# Changelog

## v20260415 - 2026-04-15

### Fixed

- Fixed MQTT Broker auto-reconnect reliability.

## v20260414 - 2026-04-14

### Fixed

- Fixed MQTT Universal variables losing their programming "Set Variable" callback after the first inbound MQTT message on the variable's state topic.
- Fixed MQTT Universal BOOL variables not toggling reliably from programming due to incorrect serialization to Control4.
- Fixed MQTT Universal variables losing their writable state after a controller reboot or driver reload.

## v20260217 - 2026-02-17

### Changed

- Broker properties (Automatic Updates, Update Channel) now automatically sync across all MQTT Broker driver instances.
- Temperature conversions (Fahrenheit/Celsius) now use single decimal precision instead of rounding to the nearest integer or half degree.

### Fixed

- Fixed variable restore order during driver initialization on controller reboot.

## v20260120 - 2026-01-27

### Fixed

- Fixed incorrect DriverCentral product ID in MQTT Universal driver.

# v20260120 - 2026-01-20

## Fixed

- Fixed consumer bindings (e.g., BUTTON_LINK for Event entities) not restoring their connections on controller reboot. The bindings module now tracks connection info and automatically re-establishes consumer binding connections when bindings are restored.

# v20260119 - 2026-01-19

## Added

- Added Event entity type to MQTT Universal driver for receiving MQTT events and triggering Control4 buttons/keypads.

## Changed

- Updated MQTT Broker documentation to include Programming section with events and conditionals.
- Updated MQTT Universal documentation to include missing read-only properties and BUTTON_LINK binding information.

## Removed

- Removed deprecated MQTT Switch, MQTT Contact, and MQTT Button drivers.

# v20260117 - 2026-01-17

## Added

- Added the MQTT Universal driver for managing multiple MQTT devices from a single driver instance. Supports relays, contacts, buttons, variables, and sensors with features including:
  - Keypad button linking for MQTT buttons
  - Device availability conditionals and events
  - State variables for relay and contact items

    - JSONPath value extraction for complex JSON payloads
- Added "Broker Connected" conditional and events to the MQTT Broker driver.

## Deprecated

- Deprecated the MQTT Switch, MQTT Contact, and MQTT Button drivers. Use MQTT Universal instead. This is the terminal release for these drivers.

# v20251229 - 2025-12-29

## Added

- Initial Release.