



## **Pushover Notification Driver**

### Installation and Usage Guide

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## Contents

Overview .....	3
Usage Scenarios .....	3
Features .....	4
Change Log.....	5
Disclaimer.....	5
Driver Installation.....	5
Setting up your pushover service.....	6
Adding the driver to your project .....	9
Sending a notification .....	11
Programmatically changing the user/group key.....	12
Programmatically changing the application token .....	13
Programmatically changing the emergency priority interval .....	14
Programmatically changing the emergency priority expiry.....	15
Sending a notification on low messages.....	16
How to use variables.....	18
Licencing.....	19
Summary .....	19
STEP 1 - Creating your project on driverCentral .....	19
STEP 2 –Purchase driver licence .....	21
STEP 3 – Install and activate the driverCentral cloud driver.....	22
STEP 4 – Install Chowmain driver.....	23

## Overview

The Chowmain Pushover driver for Control4 integrates the Pushover real time notification service into the Control4 home automation system. This provides near instantaneous notifications to your iOS or Android based devices with information about your Control4 enabled home.

For more information about pushover please visit the pushover website <http://www.pushover.net>

## Usage Scenarios

This driver can be used for several different scenarios. Some examples are as below but the limit is really your imagination.

- Warning the owner upon water or gas leak detection
- Notifying the owner upon door bell press. If you have a IP camera at the front door you can also send the camera snapshot if you know the URL.
- Notifying the owner upon security system alarm
- Notifying the owner when the garage door has been left open
- Reminding the owner of special events
- Advising the owner of the current temperature and power consumption/generation.
- Advise a owner when they have left the oven on
- Advising an owner of when a security system is armed or disarmed and by whom.
- Advising an owner on potential electrical faults when low or high consumption detected.

## Features

- Ability to send a message with the following parameters.
  - **Message** – This is the message to be sent out from Control4
  - **Device** – your user's device name to send the message directly to that device, rather than all of the user's devices
  - **Title** – your message's title, otherwise your app's name is used
  - **URL\_IS\_LOCAL\_SNAPSHOT** – if the URL is a local camera. This option will auto download the camera snapshot and upload it to the chunk.io free image host for remote viewing capability.
  - **URL** – a [supplementary URL](#) to show with your message. Set this to control4v2:// to launch the Control4 application on your mobile device.
  - **URL TITLE** – a title for your supplementary URL, otherwise just the URL is shown
  - **Priority**
    - **-2 (Lowest Priority)** : Messages will be considered lowest priority and will not generate any notification. On iOS, the application badge number will be increased.
    - **-1 (Low Priority)** : Considered low priority and will not generate any sound or vibration, but will still generate a popup/scrolling notification depending on the client operating system. Messages delivered during a user's quiet hours are sent as though they had a priority of (-1)
    - **0 (Normal Priority)**: These messages trigger sound, vibration, and display an alert according to the user's device settings. On iOS, the message will display at the top of the screen or as a modal dialog, as well as in the notification center. On Android, the message will scroll at the top of the screen and appear in the notification center.
    - **1 (High Priority)**: These messages will always play a sound and vibrate (if the user's device is configured to) regardless of the delivery time. High-priority should only be used when necessary and appropriate.
    - **2 (Emergency Priority)**: Emergency-priority notifications are similar to high-priority notifications, but they are repeated until the notification is acknowledged by the user. These are designed for dispatching and on-call situations where it is critical that a notification be repeatedly shown to the user (or all users of the group that the message was sent to) until it is acknowledged
  - **Sound** – the name of one of the [sounds](#) supported by device clients to override the user's default choice
- Ability to insert Control4 variables into the message, title, url or url title.
  - Ability to change the user key via the programming tab. This is useful for switching between group keys and different user keys. Eg one for the installer and one for the customer.
  - Ability to change the application token via the programming tab.
- Ability to change the emergency priority retry interval and expiry time (in seconds) via the programming tab.
  - Used for emergency priority intervals / expiries
- Ability to see the last sent message via the properties page in Composer Pro.
- Feedback (via properties page and variables)
  - Maximum Number of Messages per Month
  - Messages Remaining per Month
  - Message Reset Date / Time

## Change Log

### Version #20150121 - 21-JAN-2015

- Deviants host may shut down shortly and is currently inactive. Changed to new chunk.io host for image uploads.

### Version #20141215 - 15-DEC-2014

- Rectified issue with licencing.

### Version #20141120 - 20-NOV-2014

- Converted from C4I to C4Z filetype

### Version #20140708 - 08-JUL-2014

- Implemented deviantsart.com image uploading service

### Version #20140701 - 01-JUL-2014

- Initial Release

## Disclaimer

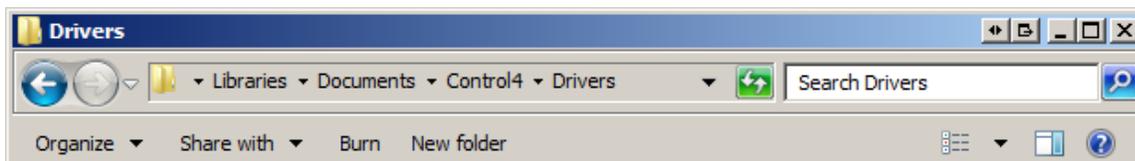
This driver integrates and utilises the pushover.net 3<sup>rd</sup> party push notification service. Chowmain Ltd will update the driver should any API changes effect the usage of the driver. If however the pushover.net service discontinues Chowmain Ltd cannot be held liable for any damages which may occur due to non service from pushover.net. By using this driver you agree that you will indemnify Chowmain Ltd against any losses, costs, damages, expenses, liabilities, proceedings or demands which may incur as a result of the pushover.net service inavailability.

## Driver Installation

1. The driver you have downloaded will be in a zip file. Double click on this file to open it in your preferred zip program (WinZip, WinRar, etc.).



2. Extract the c4i file to the My Documents\Control4\Drivers directory. If you are using Windows 7 or 8 this will be extracted to the Libraries\Documents\Control4\Drivers directory.



3. You are now ready to add and configure the driver via the Composer Pro software.



7. Click on Register an Application

## Your Applications [\(Register an Application\)](#)

8. Fill out the details as per screenshot below.

### Application Information

**Name:**   
This name should be short (20 character maximum), such as "Nagios", "Adium", or "Network Monitor". If messages are sent with no title, this name will be displayed. Cannot be changed once created.

**Type:**

**Description:**

**URL:**   
If this is a public app/plugin, you can include a URL to point to a homepage, Github repo, or anything else related to the app.

**Icon:**  Chowmain-APP image.png  
To customize your app's notifications, upload a 72x72 icon in PNG format (transparent background preferred). Any images not 72x72 will be resized.

By checking this box, you agree that you have read our [Terms of Service](#) and our [Guide to Being Friendly to our API](#).

9. Click on Create Application



10. Click on your application Name

Name	Description	Messages Sent / Allowed
 <a href="#">Control4</a>	Chowmain Pushover Driver for Control4	25 / 7,500

11. Take note of your API Token

## Control4 (Application)

### API Token/Key

To begin using our [API](#) to send notifications, use this application's API token:



12. Purchase and install the iOS and/or the Android application using Apple Appstore or Google Play

<https://pushover.net/clients/android>

<https://pushover.net/clients/ios>

13. Log into your account using your email address and password on the smart phone app.
14. Follow the instructions to setup Control4 to complete setup.

## Adding the driver to your project

**IMPORTANT** – Before undertaking the installation of the driver please follow the licencing steps outlined at the end of this document.

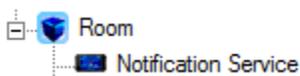
1. Launch the Composer Pro application and connect to your project
2. In the **'System Design'** page select the **'Search'** tab on the right hand side.
3. Select **'Pushover'** as the manufacturer.



Search results interface showing filters and results:

- Search bar (empty)
- Filters:  Local  Online  Certified Only
- Device Types: All Device Types (dropdown)
- Manufacturer: Pushover (dropdown)
- Results: Results (label) Sort by: Relevance (dropdown)
- Result: Notification Service
  - Pushover
  - Pushover Notification
  - Others
  - Local (button)

4. Double click on the **'Notification Service'** driver to add it to your project
5. Highlight the **'Notification Service'** driver on the left hand side.



6. It will prompt you for the User Key and Application API Token. Enter these in

**Note:** These are obtained in the section labelled setting up your pushover.net account.



Configuration dialog for Notification Service:

- User Key: [Redacted]
- Application API Token: [Redacted]

7. It will prompt you to set the Emergency Priority Retry Interval and Expiry.

**Note:** These are used for level 2 priority messages. Messages with level 2 priority will keep on retrying for interval upto the expiry time until the user acknowledges receipt of the message. This is in seconds.

Emergency Priority Retry Inte	30
Emergency Priority Retry Exp	3600

8. Once you have set this up and have sent your first notification (see section on Sending Notifications) the driver will populate the remaining fields. These fields advise you on what the last message you sent was, the number of messages you can send per month, how many messages remain for the month and when the messages reset.

Last Message	30/06/2014 18:10:39 - test
Maximum Number of Messag	7500
Messages Remaining	7476
Messages Reset	Tue Jul 1 15:00:00 2014

9. Congratulations you have setup the Pushover notification service. Now you will need to set up notifications.

## Sending a notification

1. Click on the '**Programming**' Tab
2. Select the event you want to get the notification of.
3. Under 'Device Actions' select the '**Notification Service**' driver
4. Under the '**Notification Service Actions**' select radio button next to '**Device Specific Command**'
5. In the dropdown box select the '**Send Notification**'.



6. It will prompt you for a few fields to fill out.
  - **Message** – the message you want to send
  - **Device** – your user's device name to send the message directly to that device, rather than all of the user's devices
  - **Title** – your message's title, otherwise your app's name is used
  - **URL\_IS\_LOCAL\_SNAPSHOT** – Set this to true if you want to upload a local camera snapshot to the free chunk.io image host. Useful for doorbell notifications.
  - **URL** – a [supplementary URL](#) to show with your message
  - **URL TITLE** – a title for your supplementary URL, otherwise just the URL is shown
  - **PRIORITY** – send as -2 to generate no notification/alert, -1 to always send as a quiet notification, 1 to display as [high-priority](#) and bypass the user's quiet hours, or 2 to also require confirmation from the user
  - **SOUND** - the name of one of the [sounds](#) supported by device clients to override the user's default sound choice

**Note:** Only the message field is mandatory. Other fields that are left blank will not be sent to pushover.net

7. Drag and drop the green arrow onto the script section.



➡ Send Notification - message: Your doorbell has been pressed, device: , title: Home, url: , url\_title: , priority: 0, sound: bike

8. Congratulations you have setup a notification. Test this out by executing your event or by pressing the execute button.

## Programmatically changing the user/group key

1. Click on the **'Programming'** Tab



2. Select the event you want to execute the key change in.
3. Under 'Device Actions' select the **'Notification Service'** driver
4. Under the **'Notification Service Actions'** select radio button next to **'Device Specific Command'**
5. In the dropdown box select the **'Change Key'**.

**Device Specific Command**

Change Key 

6. It will prompt you for the key. Enter it in

Key  

7. Drag and drop the green arrow onto the script section.

 **Change Pushover user/group key to: abcdefghijklmnopqrstuvwxyz**

8. Congratulations you have setup a key change. Test this out by executing your event or by pressing the execute button.

## Programmatically changing the application token

1. Click on the '**Programming**' Tab



2. Select the event you want to execute the key change in.
3. Under 'Device Actions' select the '**Notification Service**' driver
4. Under the '**Notification Service Actions**' select radio button next to '**Device Specific Command**'
5. In the dropdown box select the '**Change Token**'.

**Device Specific Command**

Change Token

6. It will prompt you for the token. Enter it in

Token

7. Drag and drop the green arrow onto the script section.

 **Change Pushover application API Token to: abcdefghijklmnopqrstuvwxyz**

8. Congratulations you have setup a token change. Test this out by executing your event or by pressing the execute button.

## Programmatically changing the emergency priority interval

1. Click on the '**Programming**' Tab



2. Select the event you want to execute the key change in.
3. Under 'Device Actions' select the '**Notification Service**' driver
4. Under the '**Notification Service Actions**' select radio button next to '**Device Specific Command**'
5. In the dropdown box select the '**Change Interval**'.

**Device Specific Command**

Change Interval

6. It will prompt you for the interval. Enter it in

Interval 300

7. Drag and drop the green arrow onto the script section.

 **Change Pushover Emergency Priority Retry Interval to: 300**

8. Congratulations you have setup an emergency priority interval change. Test this out by executing your event or by pressing the execute button.

## Programmatically changing the emergency priority expiry

1. Click on the '**Programming**' Tab



2. Select the event you want to execute the key change in.
3. Under 'Device Actions' select the '**Notification Service**' driver
4. Under the '**Notification Service Actions**' select radio button next to '**Device Specific Command**'
5. In the dropdown box select the '**Change Expiry**'.

**Device Specific Command**

Change Expiry

6. It will prompt you for the expiry. Enter it in

Expiry 3600

7. Drag and drop the green arrow onto the script section.

 **Change Pushover Emergency Priority Retry Expiry to: 3600**

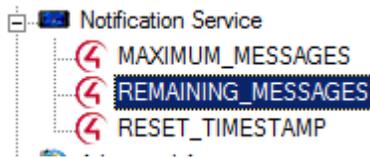
8. Congratulations you have setup an emergency priority expiry change. Test this out by executing your event or by pressing the execute button.

## Sending a notification on low messages

1. Click on the '**Programming**' Tab



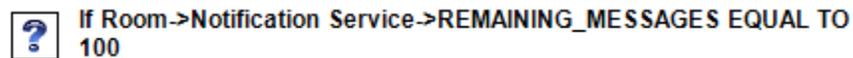
2. Expand the Notification Service Device.



3. Click on REMAINING\_MESSAGES
4. Under 'Device Actions' expand the '**Notification Service**' driver
5. Click on REMAINING\_MESSAGES
6. Click on Conditionals
7. Set it '=' and the number of messages you want to notify on



8. Drag the Question mark onto the script section



9. Click on '**Notification Service**'
10. Under the '**Notification Service Actions**' select radio button next to '**Device Specific Command**'

11. In the dropdown box select the 'Send Notification'.



12. For the message type in 'You have only 100 messages left for the month'.

13. Drag and drop the green arrow onto the question mark of the script section.

 **When the variable Room->Notification Service->REMAINING\_MESSAGES changes**

 If Room->Notification Service->REMAINING\_MESSAGES EQUAL TO 100

 Send Notification - message: You have only 100 messages left for this month, device: , title: Home, url: , url\_title: , priority: 0, sound: bike

14. Congratulations you have setup notification on low messages.

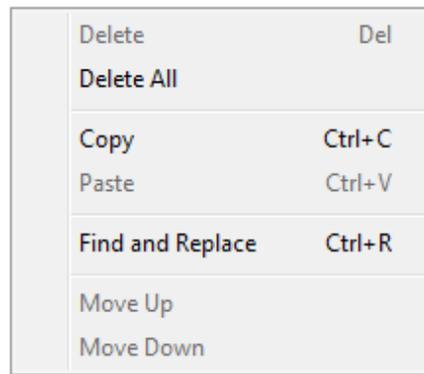
## How to use variables

1. In the programming tab create an action with the variable you want to get.

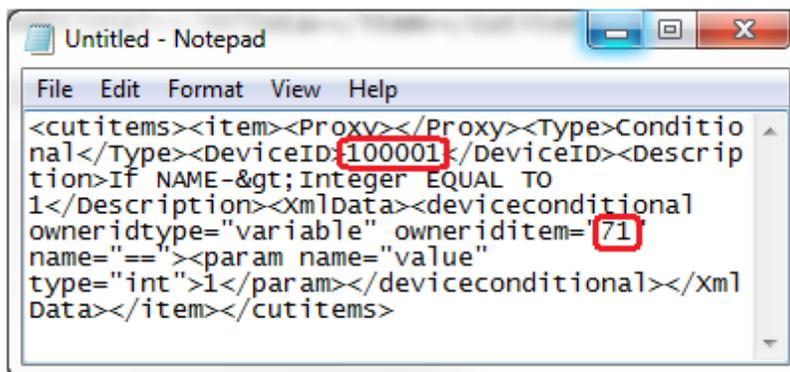


? If Variables->Integer EQUAL TO 1

2. Right click and click on Copy



3. Open a text editor (notepad is available on all versions of windows) and paste the copied content.



```

<cutitems><item><Proxy></Proxy><Type>Conditional</Type><DeviceID>100001</DeviceID><Description>If NAME->Integer EQUAL TO 1</Description><XmlData><deviceconditional owneridtype="variable" owneriditem=71 name="=="><param name="value" type="int">1</param></deviceconditional></XmlData></item></cutitems>

```

4. Take note of the DeviceID and the owneriditem numbers (the above example is 100001 and 71)
5. Follow the steps in the section of the document labelled 'Sending a Notification'. To use the parameter type in PARAM{x,y} where x is the DeviceID and Y is the owneriditem (variable id).

EG. "The current lighting level is PARAM{100001,71} percent."

## Licencing

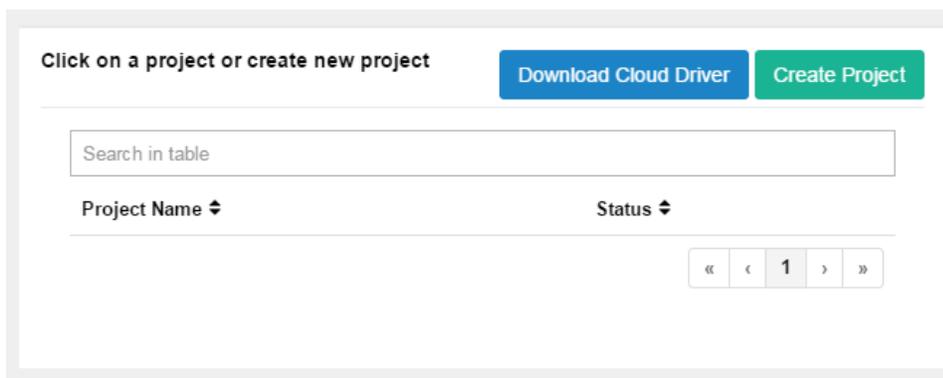
Chowmain drivers require a valid licence to use the driver. Drivers can be purchased from our distributor [driverCentral](#) however all Chowmain drivers come with a 7 day trial. We recommend that prior to purchasing a driver that you test the driver out to ensure that it will work with your hardware and will meet your requirements. The licencing procedure is broken down into 4 steps. A summary of the steps are below along however we have also provided detailed steps if the summary is not sufficient.

## Summary

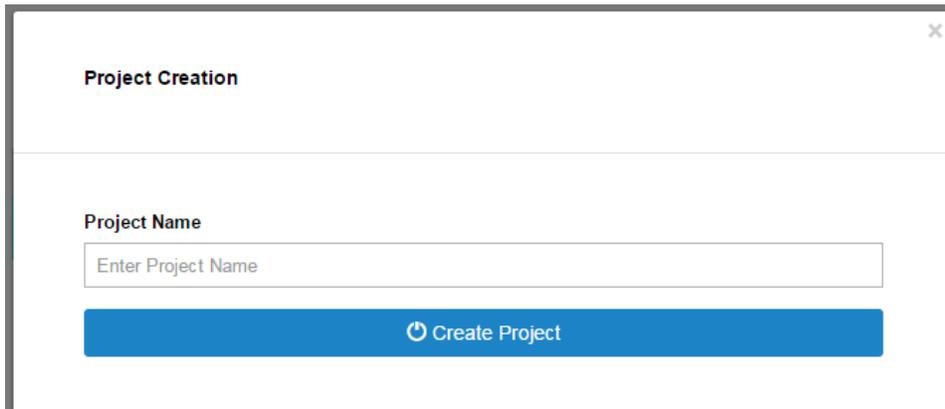
1. Create your project on the driverCentral.io website (This will generate a specific token which you will use in the next step)
2. Download, install and activate the driverCentral cloud driver in your project (Only once per project. Use the token generated in step 1)
3. (Optional) To try a driver, simply download it and install it in your project
4. To purchase a driver:
  - a. On driverCentral, purchase a license and register it to your project
  - b. If the driver is not already installed in your project, download it and install it
  - c. If necessary, use the cloud driver's Action: "Check Drivers" to force licence download to the project.

## STEP 1 - Creating your project on driverCentral

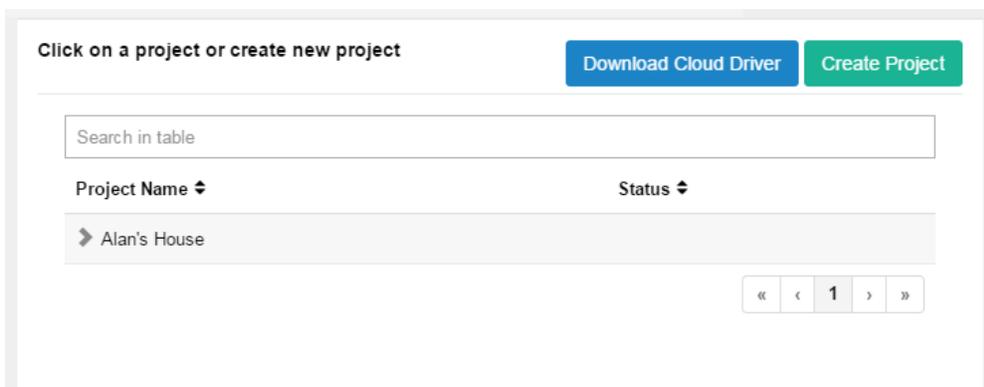
1. Visit <http://www.drivercentral.io>
2. Log into your driver Central dealer account.
3. Visit the Project Portal
4. Click on Create Project



- It will prompt you for a project name. Type in a meaningful name for your customer's project



- Click on Create Project
- Click on the project we just created to expand the project



- Take note of the Project Token as this will be used in STEP 3 when we install the driverCentral cloud driver.

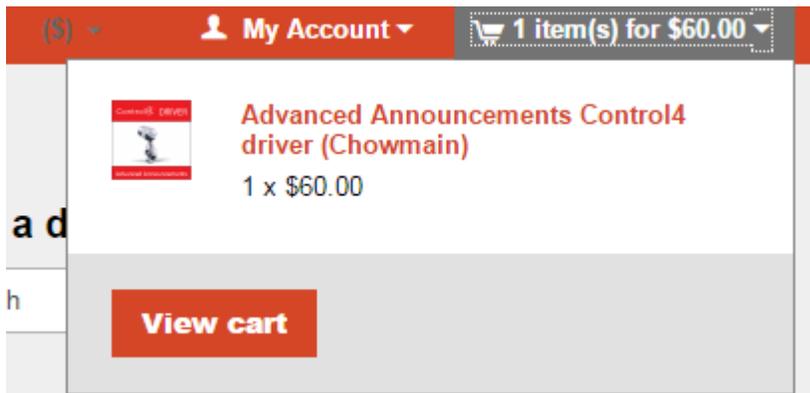
Project Name: <input type="text" value="Alan's House"/>	MAC Address: <b>Not Connected to Project</b>	Action:
Project Token: <b>ABCDEFGHIJ</b>	Last Communication: <b>Not Connected</b>	Connection Status: <b>Not Connected</b>

## STEP 2 –Purchase driver licence

1. Visit <https://www.drivercentral.io/chowmain-ltd/> and find the product/driver you want to purchase a licence for.
2. Click on the Add to Cart button



3. Click on the Shopping Cart icon in the top right corner and click on View cart



4. Confirm that your order is correct and click on Proceed to checkout



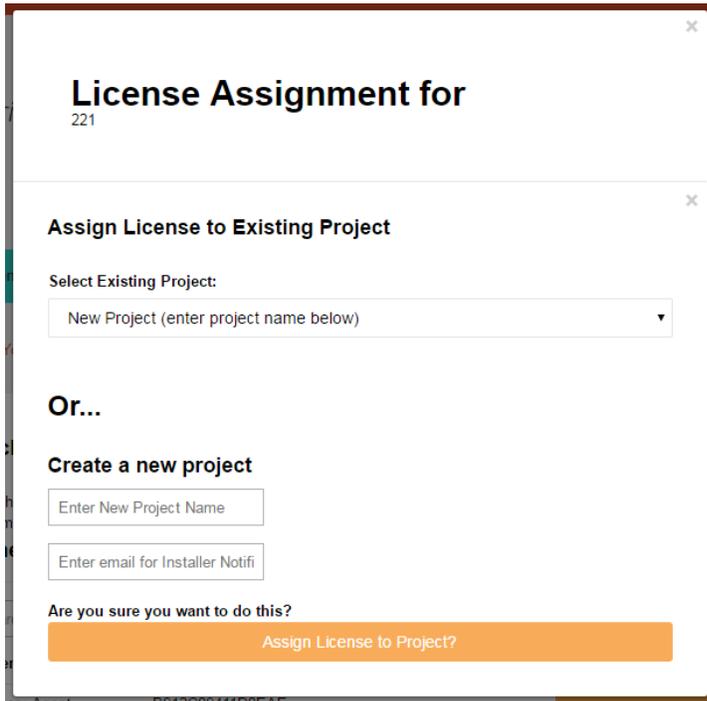
5. Follow the prompts and click on Submit my order



6. This will take you to PayPal for payment.
7. Pay via PayPal. It will automatically return to the marketplace when confirmed.
8. You will now be at a page where you can see your purchased licence.

License Name ↕	License Key ↕	Project Assigned ↕	Action ↕
[REDACTED]			Assign to Project

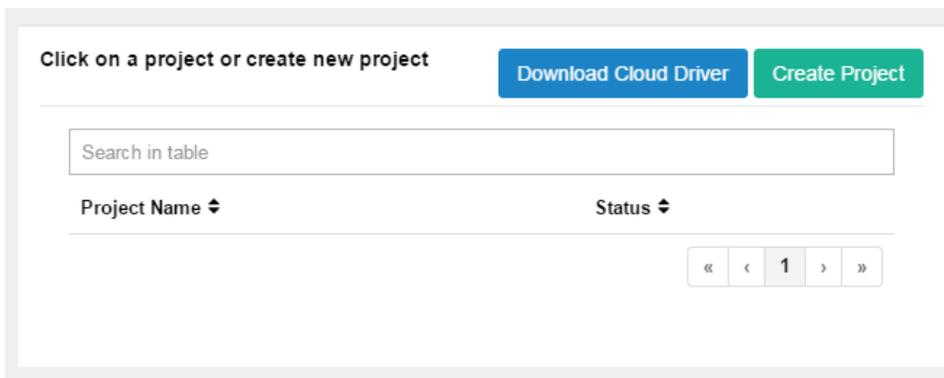
- From here assign the licence to the project we created or if you did not follow that step create a new project



### STEP 3 – Install and activate the driverCentral cloud driver

**NOTE:** Only one instance of the driverCentral cloud driver installed per project. Do not install additional cloud drivers.

- Visit <http://www.drivercentral.io>
- Log into your driver Central dealer account.
- Visit the Project Portal
- Click on Download Cloud Driver



- Copy the C4Z driver to My Documents\Control4\Drivers directory.
- Add the driver to your project.

- Click on the driver to view it's properties

<b>Cloud Status</b>	Please enter cloud project token below...
<b>Project Information</b>	(1) Total, (0) Licensed, (0) Trials, (1) Expired, (0) Updates.
<b>Driver Version</b>	1001
<b>Project Token</b>	<input type="text"/>
	Project token from driverCentral.io project portal
<b>Driver Actions</b>	<input type="button" value="v"/>
<b>Debug Mode</b>	Off <input type="button" value="v"/>

- Type in the project token we took note of in STEP 1.
- Click on the Actions tab
- Click on Check Drivers

#### STEP 4 - Install Chowmain driver

- Install the Chowmain driver
- You will notice that the Activation Status reflects a Licence Activated state.
- Any driver that does not have a purchased licence will have a trial licence activated via the marketplace. Note that there is no way to reactivate the trial so please use wisely.
- If you do not then press the Check Drivers action in the driverCentral Cloud driver again.

<b>Activation Status</b>	Update Available!!! License Activated
<b>Driver Version</b>	1002
<b>Driver Information</b>	Navigate to connections tab and make serial binding
<b>Automatic Updates</b>	Off <input type="button" value="v"/>