Lesson 3 – Next Steps

Objective

- Provide links to next steps you can take based on your goals

Agenda

1. Learn the cFS
2. Build and run the cFS details
3. Use the cFS GitHub app exchange
4. Write new apps
5. Control a remote target
6. Build Raspberry Pi projects

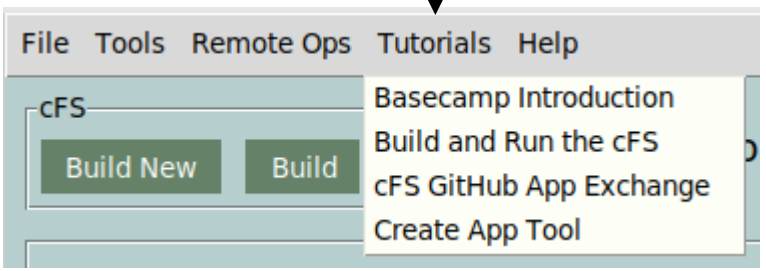
Space Steps Website

Space Steps https://spacesteps.com/ provides educational material covering space careers in general and also contains cFS specific material including Basecamp's hands-on projects

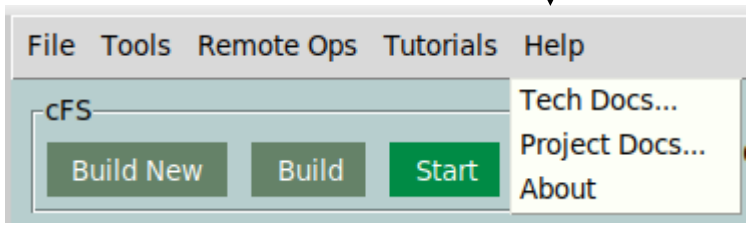
Learn the cFS

The *Tutorial* menu provides tutorials that guide users through topics with hand-on exercises and the *Help* menu provides access to reference documents.

Tutorials

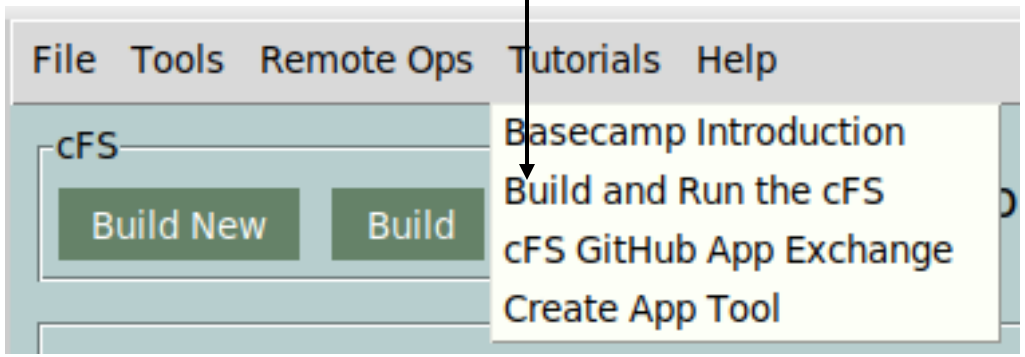


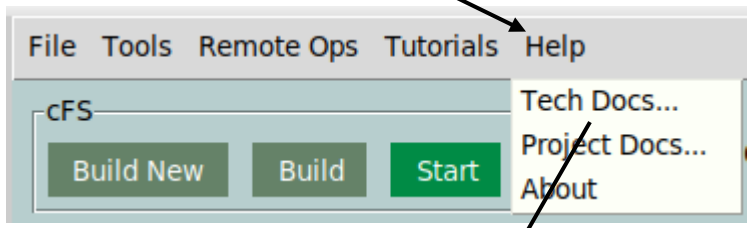
Help

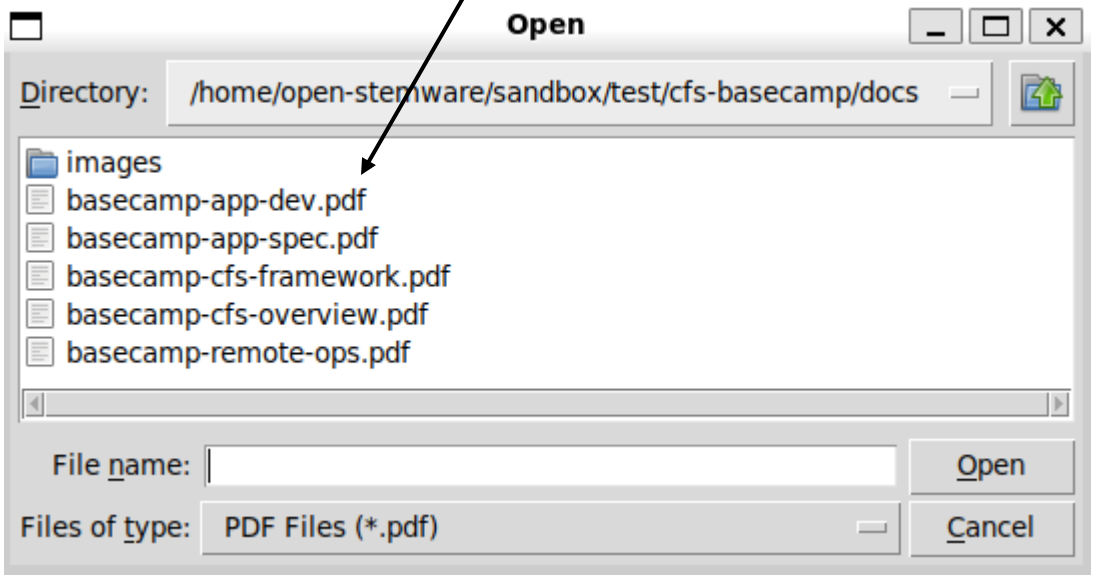


Build and Run cFS Details

The *Build and Run the cFS* tutorial and the *App Dev Guide* (Technical Document) describe the details of building and running Basecamp's cFS target

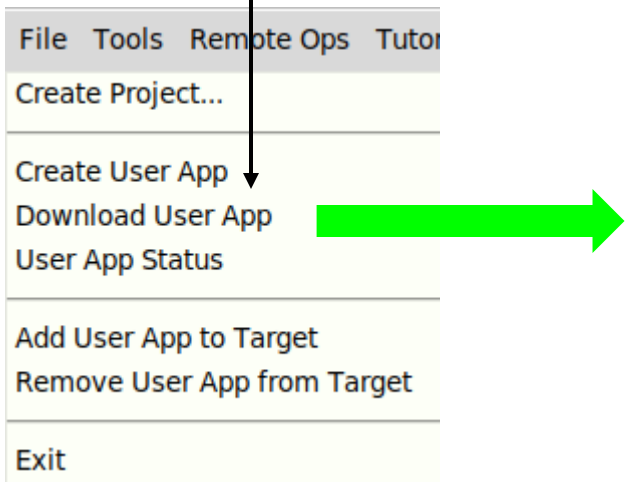


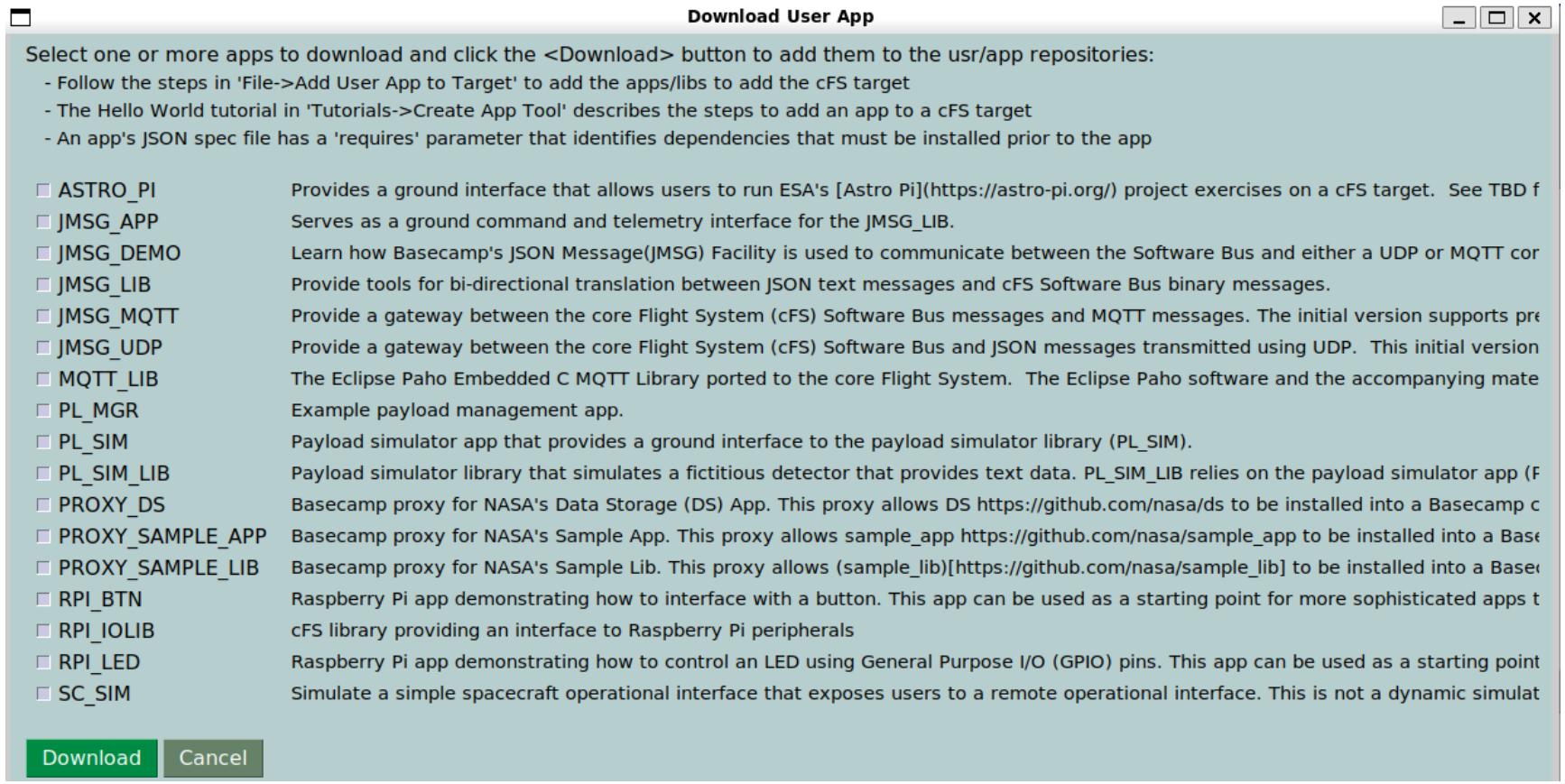




Use the cFS Github App Exchange (1 of 2)

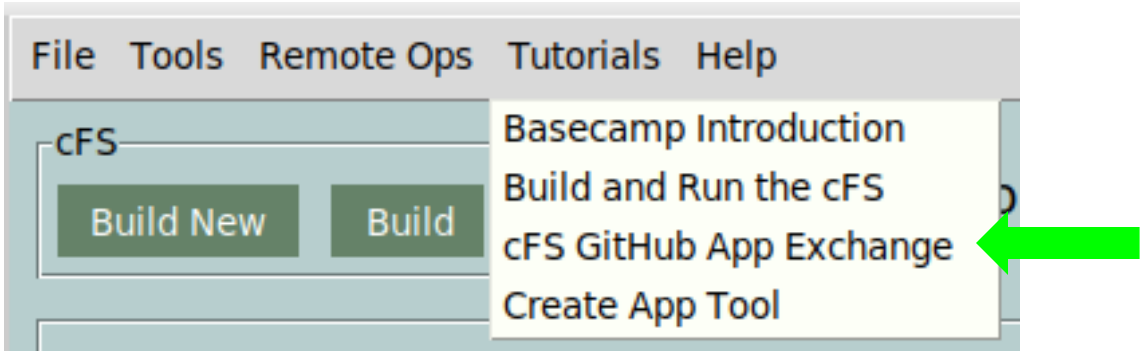
The *File->Download User App launches the Download User* App tool that allows users to download apps from Basecamp's github cfs-app.



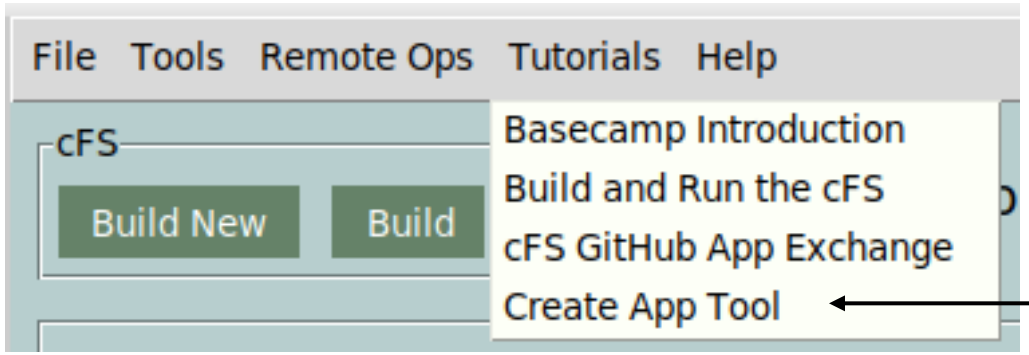


Use the cFS Github App Exchange (2 of 2)

The *cFS GitHub App Exchange* tutorial explains how to download and integrate apps into your cFS target.

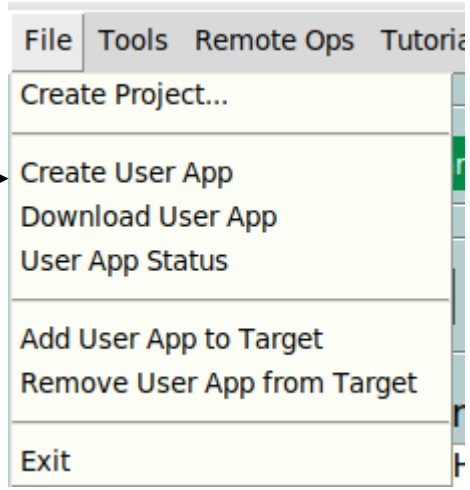


Write New Apps (1 of 2)



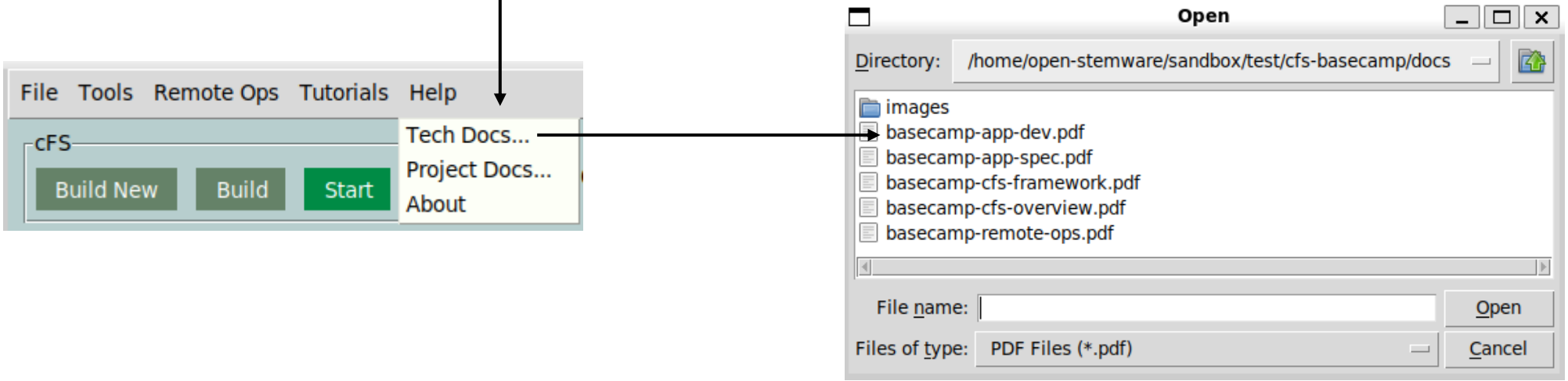
The *Create App Tool* tutorial teaches you what the tool can do for you and how to use it

File->Create User App launches the *Create App Tool* that presents you with a menu of apps that you can create.



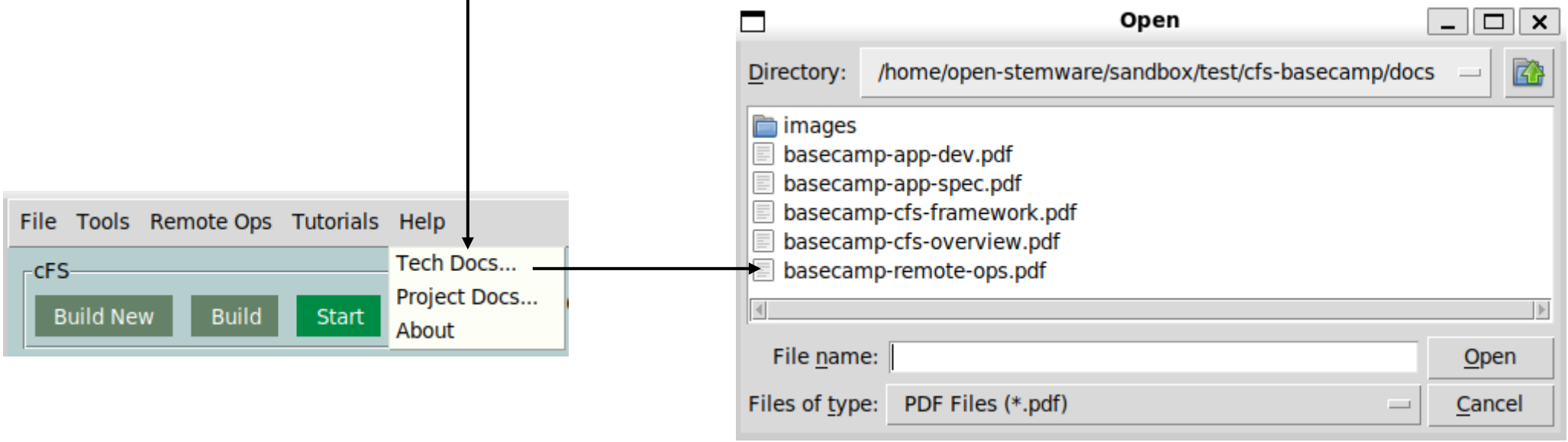
Write New Apps (2 of 2)

the *App Dev Guide* (Technical Document) provides in depth material for writing apps



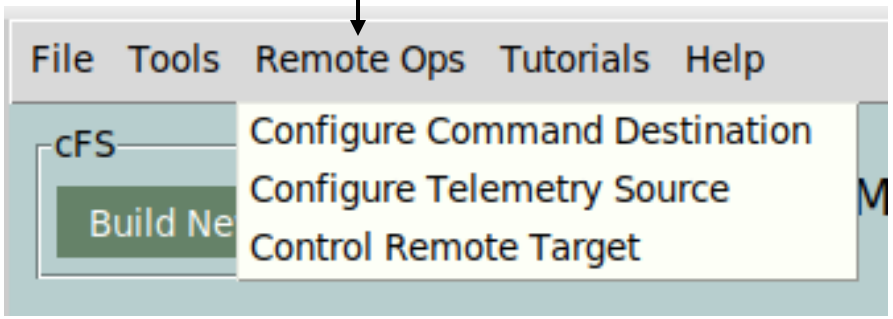
Control a Remote Target (1 of 2)

The *Remote Operations Guide* describes how to configure and control a remote target from the Basecamp GUI

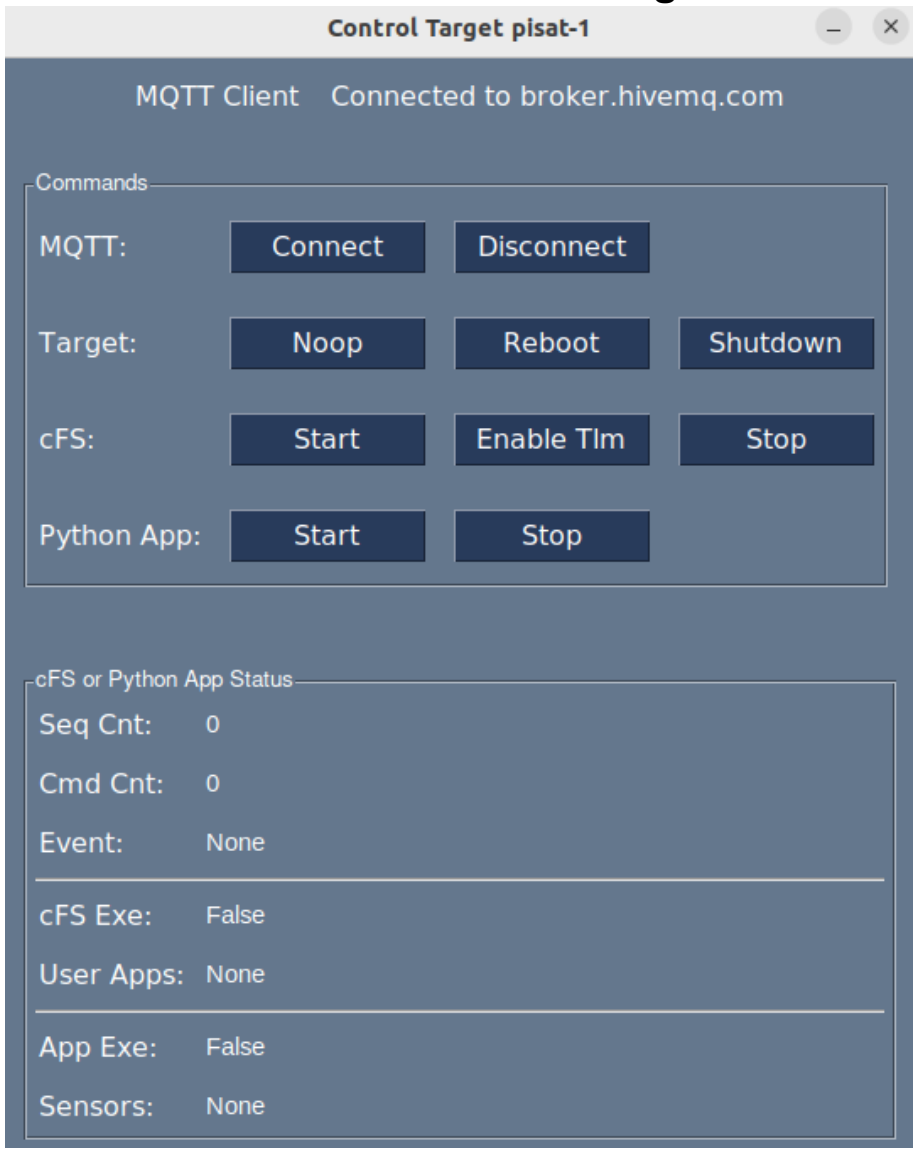


Control a Remote Target (2 of 2)

The *Remote Ops* menu provides tools to configure & control remote target interfaces

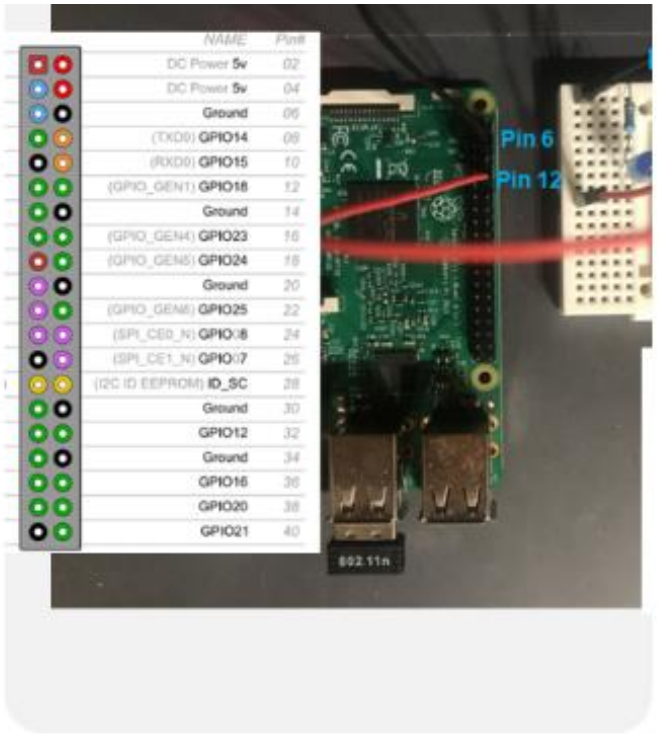


Control Remote Target



cFS-Based Projects

- Search for “projects” on the Space Steps https://spacesteps.com/ website to get a list of available projects
- These projects use Basecamp’s App Exchange so users can easily create new cFS targets for the project



cFS Raspberry Pi LED Control

Oct 12, 2024 — by Dave McComas in Projects

In this project you will connect an LED to a Raspberry Pi's General-Purpose Input/Output (GPIO) header and control the LED using a cFS app. It helps cFS developers gain experience with using a library and an app to interface and control an external hardware component using low-cost materials.

cFS Payload Manager App

Oct 12, 2024 — by Dave McComas in Projects

This project helps answer the common cFS question, “How should I design a cFS app to manage a science payload?” There are multiple approaches towards solving this problem. This project is not intended to provide a survey of designs, rather it shows a specific design that you can evaluate within the context of your situation.