

Lesson 3

Objective

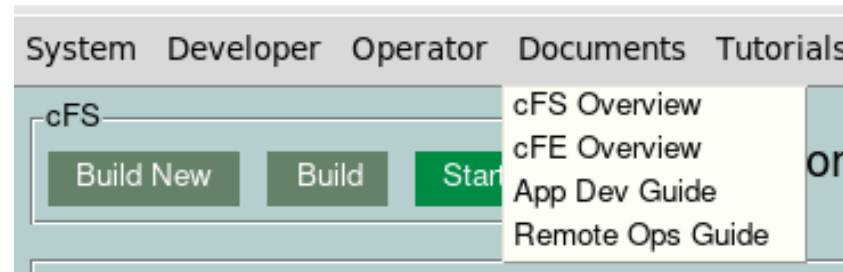
- Provide links to next steps you can take based on your goals

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

Learn the cFS

Basecamp includes introductory cFS material that can be access in cfs-basecamp/docs or from the GUI



Open Mission Stack <https://openmissionstack.com/> contains comprehensive cFS educational material and hands-on projects that utilize Basecamp's App Exchange



Open Mission Stack

Test Project

cFS Payload Manager App

cFS Raspberry Pi LED
Control

cFS MQTT Gateway App

Welcome to our Projects Page

This is where we keep our collection of projects and tutorials.

You can help by:

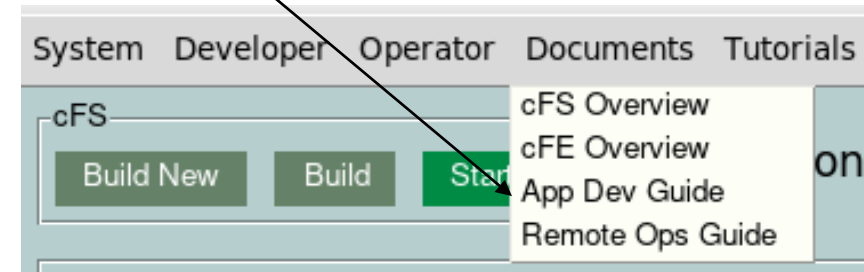
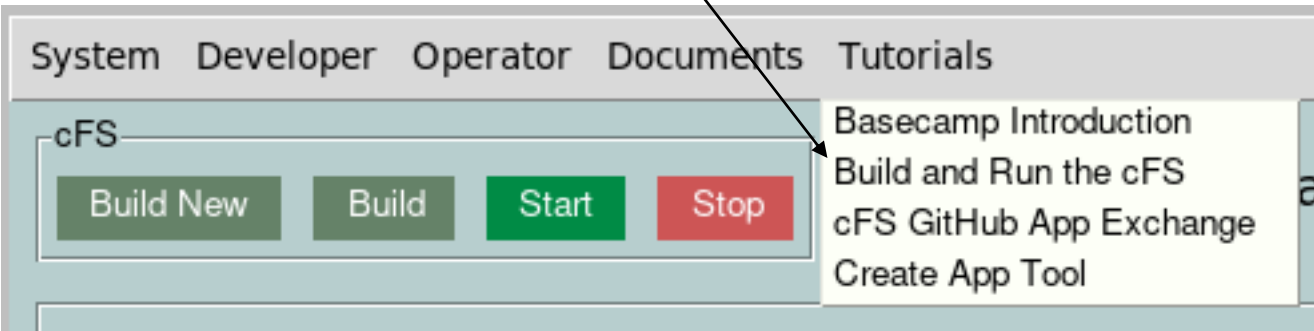
 **Learn CFS**
How can something so
awesome be so affordable?

 **Find Apps**
Use proven solutions for
common spacecraft tasks

 **Ping Experts**
Tap into the CFS community

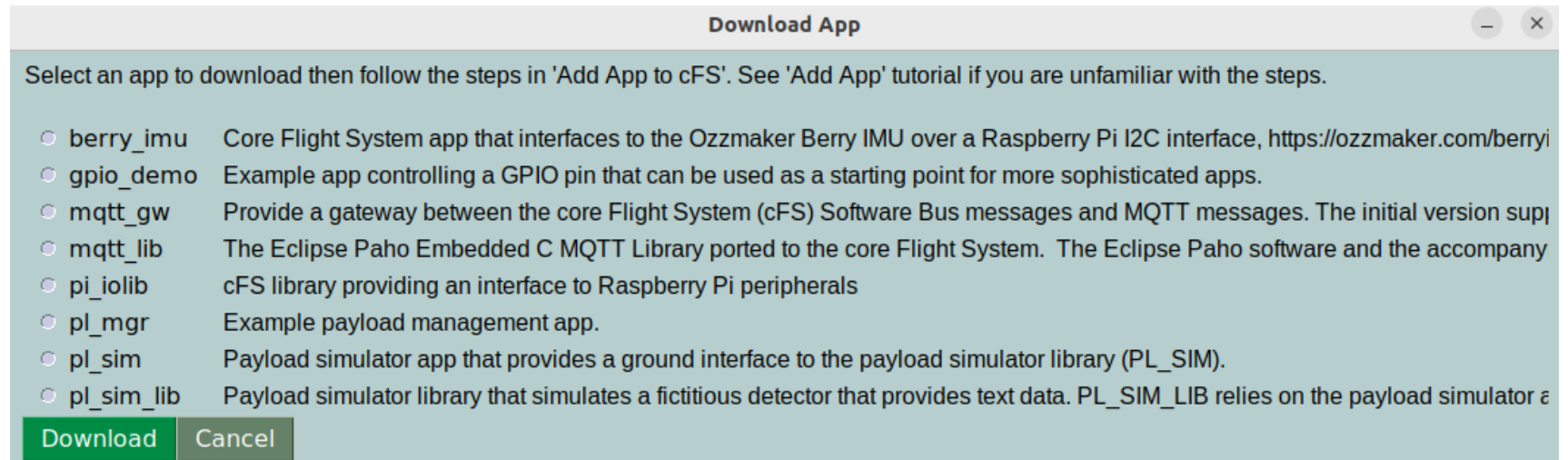
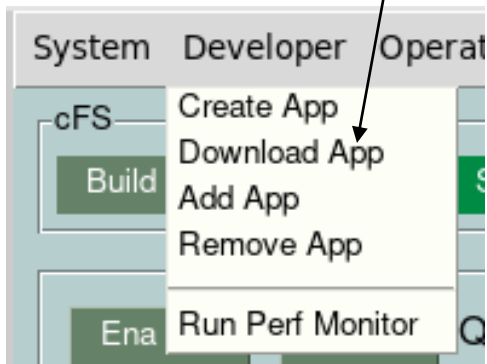
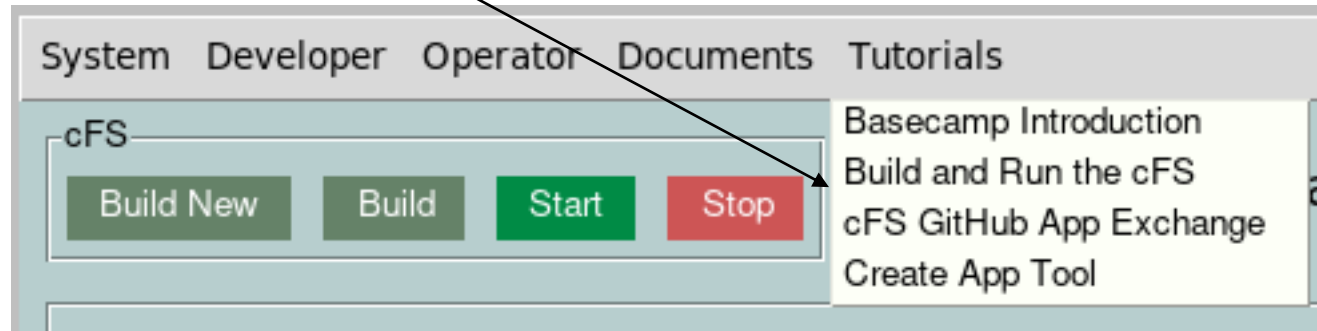
Build and Run cFS Details

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

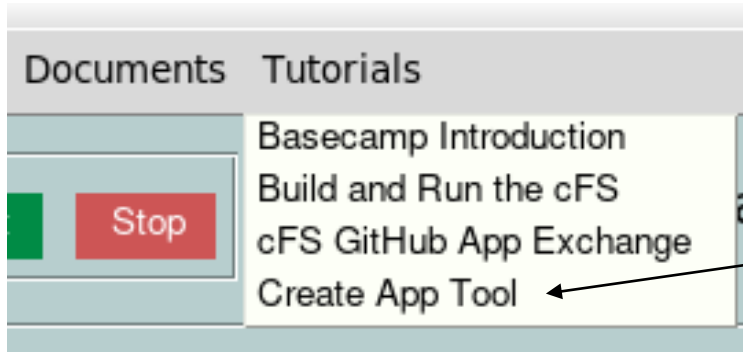


Use the cFS Github App Exchange

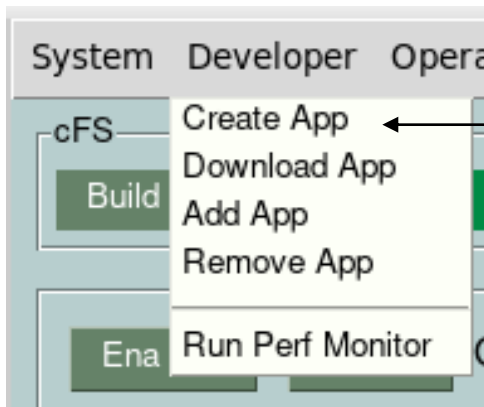
The *cFS Github App Exchange* tutorial describes how to use Basecamp's github cfs-app repo interface to download and integrate apps into your system



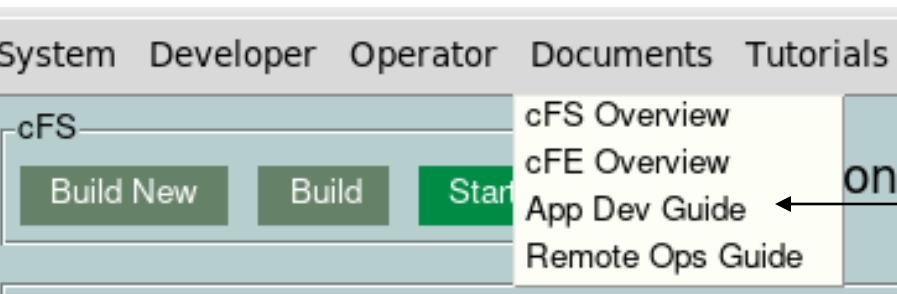
Write New Apps



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



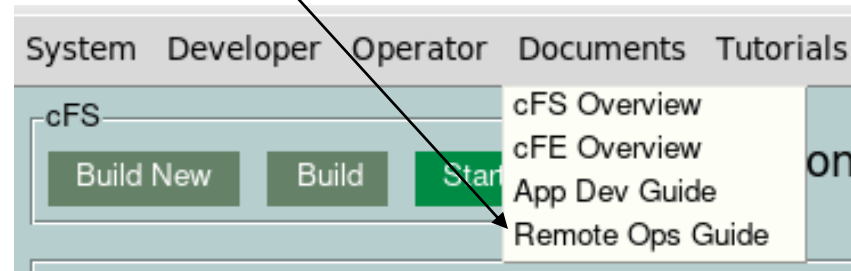
Developer->Create App launches the *Create App Tool* that presents you with a menu of apps that you can create.



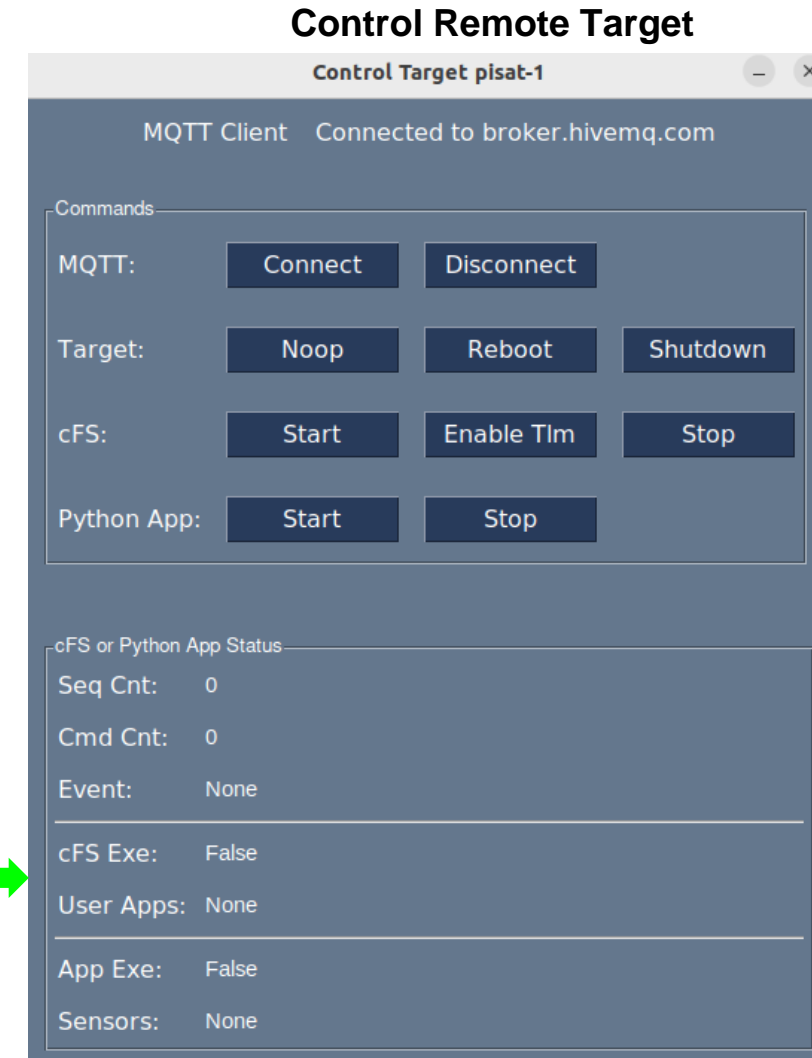
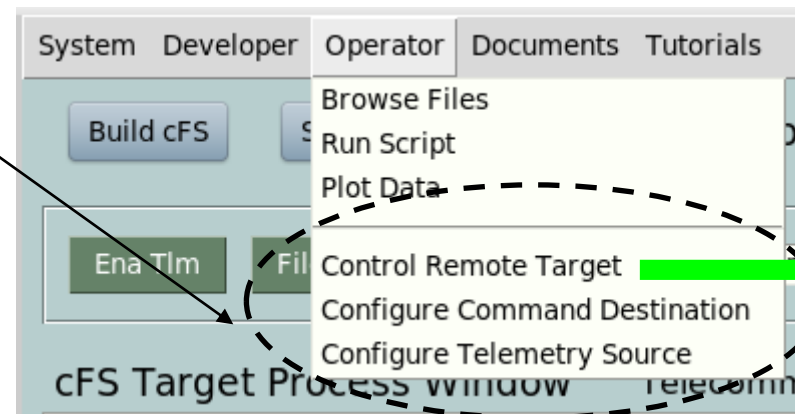
The *Basecamp App Developer's Guide* provides in depth material for writing apps

Control a Remote Target

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

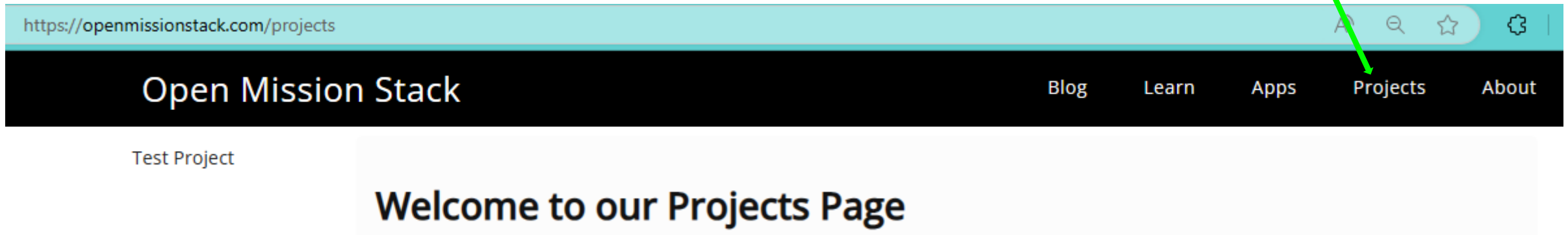


Configure & control remote target interface



cFS-Based Projects

Go to the Open Mission Stack projects page <https://openmissionstack.com/projects> to access cFS-based projects. These projects use Basecamp's App Exchange so users can easily create new cFS targets for the project.



Example projects:

1. Configure and extend a cFS target that includes an example payload manager app with a payload simulator.
2. Configure a cFS target for the Raspberry Pi that contains an app that blinks an LED connected to the Pi's GPIO interface.