



Getting Started with OSK's

Research & Development

These are a collection of notes that will be transformed into a document in OSK v3.2

OSK v3.1



Introduction



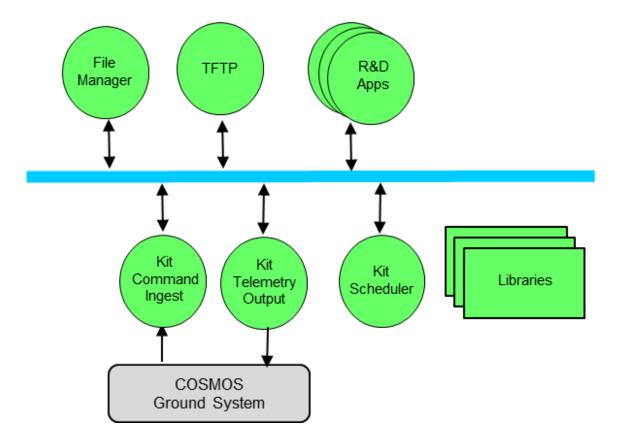
- The Research & Development target (cFS sandbox target) contains the following types OSK apps
 - Technology apps that don't belong in other OSK targets but may be of value to the cFS community
 - Prototype apps that are in various states of maturity
- Users can use this target for exploratory efforts without disturbing other OSK targets



cFS R&D Target



 Baseline target contains minimal set of OSK apps that provide an app runtime environment and file services

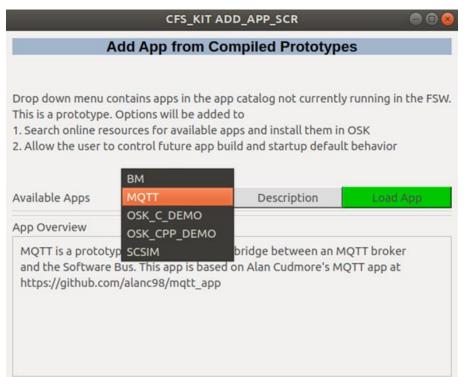




R&D App Library



- Contains OSK apps that are not part of another target, that may be useful to the cFS community
- OSK supports adding/removing apps during runtime
 - Prototyping concepts for a cFS "app store"



 Good environment to create STEM related apps that don't require the complexity of SimSat

BM - Runs performance benchmarks

MQTT – Publish MQTT messages on cFE message bus

SCSIM – Simulate spacecraft ground passes



OSK Main Screen

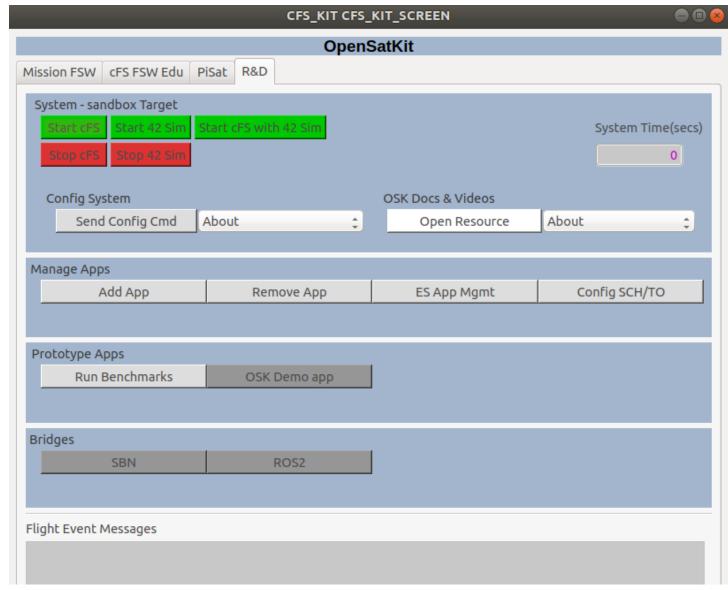


Same as Mission
FSW System Sections

Dynamically
Manage Apps

Technology
Apps with
OSK interfaces

Potential OSK Extensions



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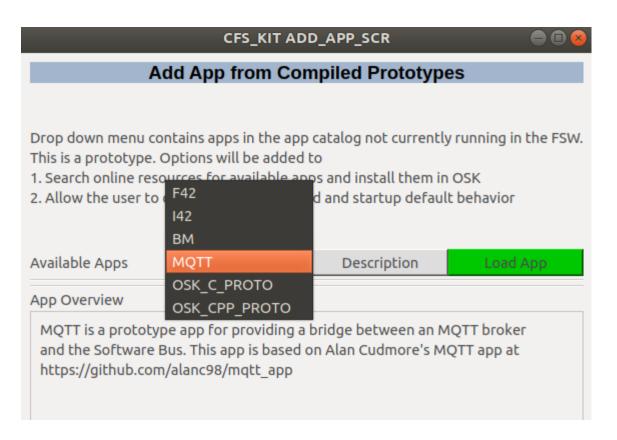


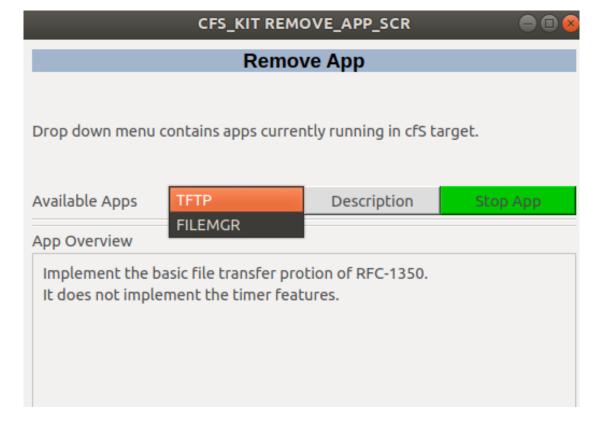
Dynamically Manage Apps



Drop down app list created when screen launched

- Add app list created by analyzing which apps compiled during sandbox build and which apps are currently running
- Remove app list created from currently running apps





OSK - Making Space for Apps

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Adding a New R&D App



- Create the new app in <osk>/cfs/apps
- Add app to sandbox target in targets.cmake and if needed any files that need to be copied from osk_defs to /cf directory
- Create COSMOS target