Ideas

Pipelines

- Any CI/CD framework has them
  - Stages: build, run, deploy
    - Jobs: beagle, raspi..
      - Steps: apt-get, make, ftc, ...

Interactive mode

- Steps
  - Send a string + \n
  - Match the response (with timeout)U
- Use cases
  - U-boot testing
  - RTOS testing
  - Provisioning in u-boot: tftpboot, bootargs..
  - Simple tests
    - Execute command
    - Match response

Interactive mode

- LAVA
  - https://validation.linaro.org/static/docs/v2/actions-test.html?highlight=interactive#interactive-test-action

```
- name: network
  prompts: ["=>", "/ # "]
  script:
  - name: dhcp
    command: dhcp
    successes:
    - message: "DHCP client bound to address"
    failures:
    - message: "TIMEOUT"
      exception: InfrastructureError
      error: "dhcp failed"
  - name: setenv
    command: "setenv serverip {SERVER_IP}"
  - name: wait for the prompt
    command:
```

Interactive commands

- We could support the same YAML interface
- And also a command-line interface (this area is probably tricky and has problems with timeliness)

```
ftc power-on -b bbb
ftc expect -b bbb --serial --regex "^u-boot>" --send SIGINT
ftc expect -b bbb --serial --regex “^u-boot>" --send "run tftpboot"
ftc expect -b bbb --serial --regex "^login:” --send "root"
ftc run-test -b bbb -t Functional.StressFilesystem
ftc power-off -b bbb
```

Provisioning a kernel or app

- Installing something
  - ftc sync -b bbb -t ssh vmlinuz-4.19.175 */boot*
  - *ftc exec -b bbb -t serial “ln -s* /boot/vmlinuz-4.19.175 vmlinuz”

Provision rootfs/kernel/initrd/dtb

- Tftpboot
  - kernel/initrd/dtb: using tftpboot
  - You can flash from initrd
- NFS
  - ftc provision -b bbb –nfs \
    --image xxx.img (or tar.gz)
- USB-SDCard
- Update in place ← nice for research!!
- Software updates
- PXE
  - Clonezilla