Android meets Docker #1

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Yet another talk about Dockerizing things ¯_(ツ)_/¯

The issues that we usually get

- Environment setup is taking too much time
- Reproducing the testing environment isn’t easy for newbie
- Impractical if we keep most the things on our side
- “It worked on my machine, it’s the CI machine issue!” ¯_(ツ)_/¯

The idea

- Why don’t we have our development/testing tools packaged just like jenkins?
- We should package everything in containers.
- Those things are importable/exportable/executable

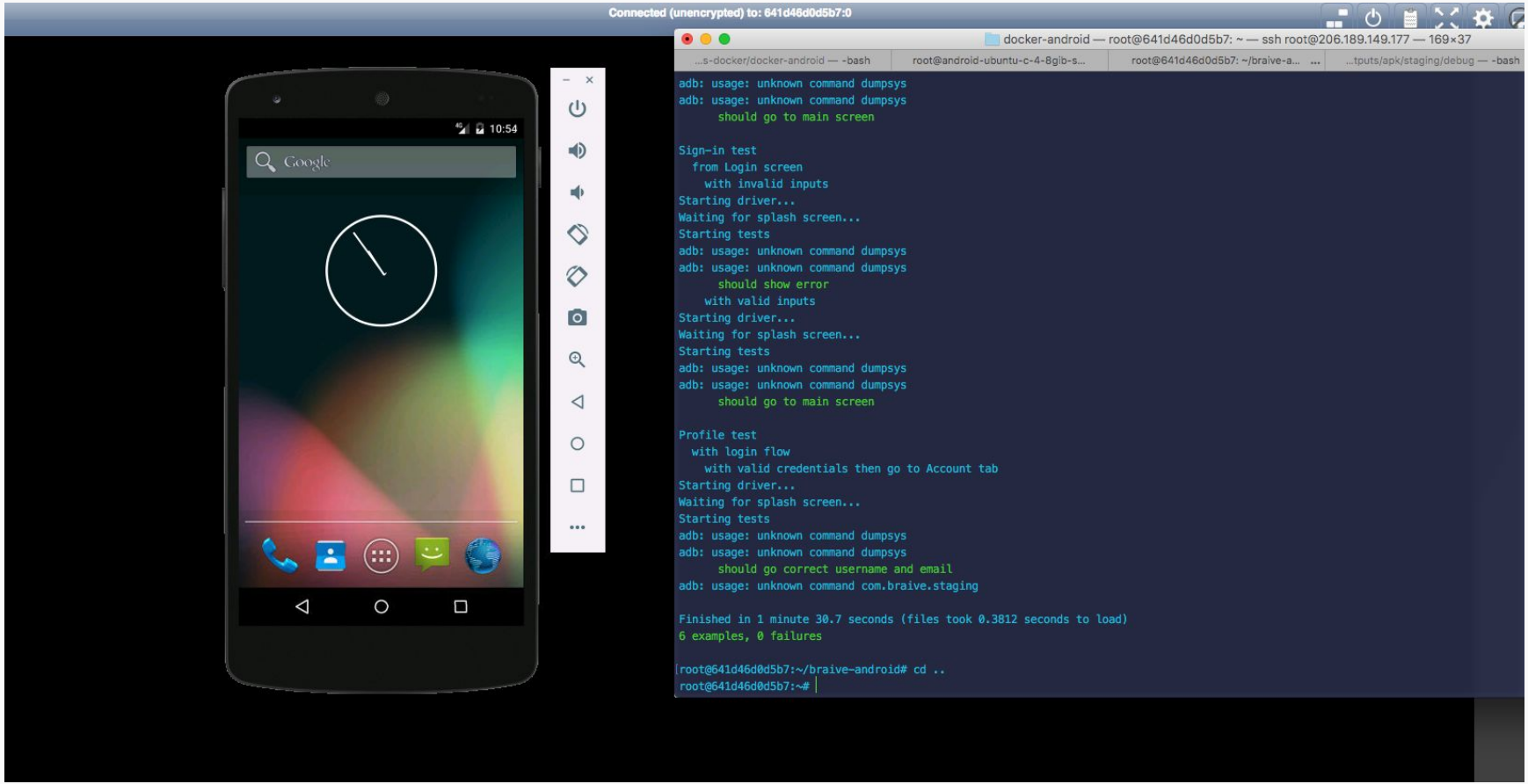
The problem we meet

- Android emulator is too slow so we need Hardware Acceleration software (HAXM or KVM) to run x86 emulators (wayyyy faster!)
- Mac OS is using HAXM, and it’s not supporting for translatable acceleration code into Docker container natively.
- Need to use Parallels or VM Fusion for Mac/Windows

The solution

- Use linux based host on DigitalOcean
- Using Docker to host a container act as our dedicated slave which includes:
  - Android SDK
  - X86 Emulator
  - Remote access to observe the GUI via NoVNC
  - Git, Appium, Rspec, Ruby...our toolset.

Achievements and progress



Achievements and progress

- Able to setup and executing UI & Unit test in our projects
- WIP:
  - Reproduce the image to another container and try running them simultaneously.
  - Connect JNPL Slave connection to our Jenkins Master.
  - Adding more options on Android SDK tools, emulator API versions…
  - Documenting.

It’s promising!

Thanks!

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