TAPS Protocol Discovery

Do we want to solve this problem?
TAPS

Native to operating system

App brings its own

Installer modifies TAPS config

Installer modifies config

hard-coded

application API?

Trusted Package Installer

Github
Sad outcomes for TAPS

- recompiles every time there’s a new protocol
- can’t use user space stuff
- power users can’t use bleeding edge code
  - corollary: can’t use common libraries (e.g. openssl) until that project supports TAPS
- security vulnerabilities for ordinary users
- apps have to bring their own protocols
An example

Protocol Installer (root privileges)

Protocol Name
Unique Name
Properties
Path to Library

/etc/taps

Installs library

Protocol Library - contains standard API function names
An example (2)

1. Preconnection request

2. Scan directory for protocol candidates
   2a. Validate entries?

3. Open socket(s)

/etc/taps

TAPS Dynamic Library (libtaps.so)

Application

Protocol Library
What now?

- I’m writing some code here
- Would this be a useful draft?