



FossFish

Our IoT World

- IoT needs to be pervasive, ubiquitous
- Adoption driven by feature and cost
- Hardware is no longer the cost, it's software

The Solution? Open Source Software!

A Complex World

- Compliance
- Secure boot
- Robust update
- Remote management
- Optimization
- Automated testing
- ...

Let's Collaborate

- That is what infrastructure is for
- Reuse Open Source components
- Local changes, upstream your patch, move on...
- It works well for everyone, right?



Is That Your Job?



Focussing On Delivery

- Building hardware is **hard** enough
- Building firmware and libraries is hard too!
- Innovators want to focus on their **products**

- Your team needs the tools to be productive

Open infrastructure

- Linux
- Connectivity (Wireless, Bluetooth, 3/4G, ...)
- Peer to peer communication infrastructure
- User interface toolkit
- Device management API
- High level, extensible programming language



Effortless Distribution

- A proven platform with established standards
- Development tooling and simulation exists
- Package management is well understood
- Transparent update of firmware and platform
- Fast release cycle



NIH? Great!

Standard Connectivity

- Provided daemon manages all channels
- APIs for application to utilise them easily
- Internet access built in
- Discoverability built in
- Peer to peer built in
- PubSub, Queues and WebSocket supported



User Interface Toolkit

- Desktop class
- Customizable to your needs
- Touch, internationalisation support
- Fast and light for IoT constraints

Device Management

- Robust firmware update
- Independent application update
- Alpha, beta and A/B testing
- Peer2Peer
- Remote connection for diagnostic
- Health report

High Level Language

- Javascript
- Compatible with all node.js JavaScript package
- Full system access
- Low memory profile
- Heavy task done natively by the platform

Peer to Peer Native

- Scalability
- Robustness
- Low cost of operation
- Modern stack (Blockchain, IPFS)

Into the Future

- Financial (crypto) incentive to every contributor
- Application store for multiple app devices
- Automated testing of applications
 - Before application updates
 - Compatibility checks for firmware updates



FossFish

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