



Industrial Embedded Platforms

Kyle Chase, Dennis Leblanc (Ignition Integration Specialists)
Nicola La Gloria (Software Engineering),
Aaron Oki More (Hardware Engineering)

Our goal is to provide a platform that:

- can be used as an agile data aggregator (SQL Bridge) as a solid middleware towards enterprise platforms (headless)
- provide an effective and full featured HMI with touch extensions (headful)
- provide a solid and rugged Machine Controller / Interface for critical equipment operating in harsh environments

Consumer/Commercial hardware has a very attractive pricing however are not built for industrial applications

- OS (if present) is resource heavy, user oriented
- Hardware components are not industrial grade
- Enclosures and I/O are not purpose designed
 - Fans
 - Lacks mounting options like DIN rail.
- Other software components needs to be installed (Scada software and required dependencies, “if I install ubuntu I have everything”)
- No agile OS interface is provided (only ssh)
- Replace the unit on the field is not plug and play

To enable our vision Ignition is the perfect application framework:

- represents the state of the art of modern SCADA software (M2M).
- is a fully Java (Multi platform and multi architecture)
- is a HMI swiss knife army, extremely flexible and “touch” ready
- enables Java DB (H2) or MySQL
- is built on top of standard Java libraries
- has an extremely flexible SDK to provide an OS interaction module for a **unified** user interface.

- Industrial grade hardware in compact form factor
- Linux based OS & Optimized Java VM for ARM
- Platform for Ignition (both server and client). Unified user interaction using Ignition modules for configuration and management
- Remote management using Ignition or internal web interface
- Easy installation and replacement

Introducing our industrial embedded platform, designed by integrators for integrators.

Built as an Ignition Server with:

- 1Ghz industrial ARM quad (4) core processor.
- 2GB memory footprint to run large Ignition projects.
- 4GB internal storage. Expandable up to 512GB Solid State (mSATA).



- Supports industrial power with DC power input: 8-31V
- Connect serial hardware to the two serial ports (software configurable as RS-232/RS-485)
- 2x Gigabit Ethernet & 3x USB 2.0
- DVI for displays & touch panels.
- Built into a rugged, DIN rail mountable enclosure for easy install.

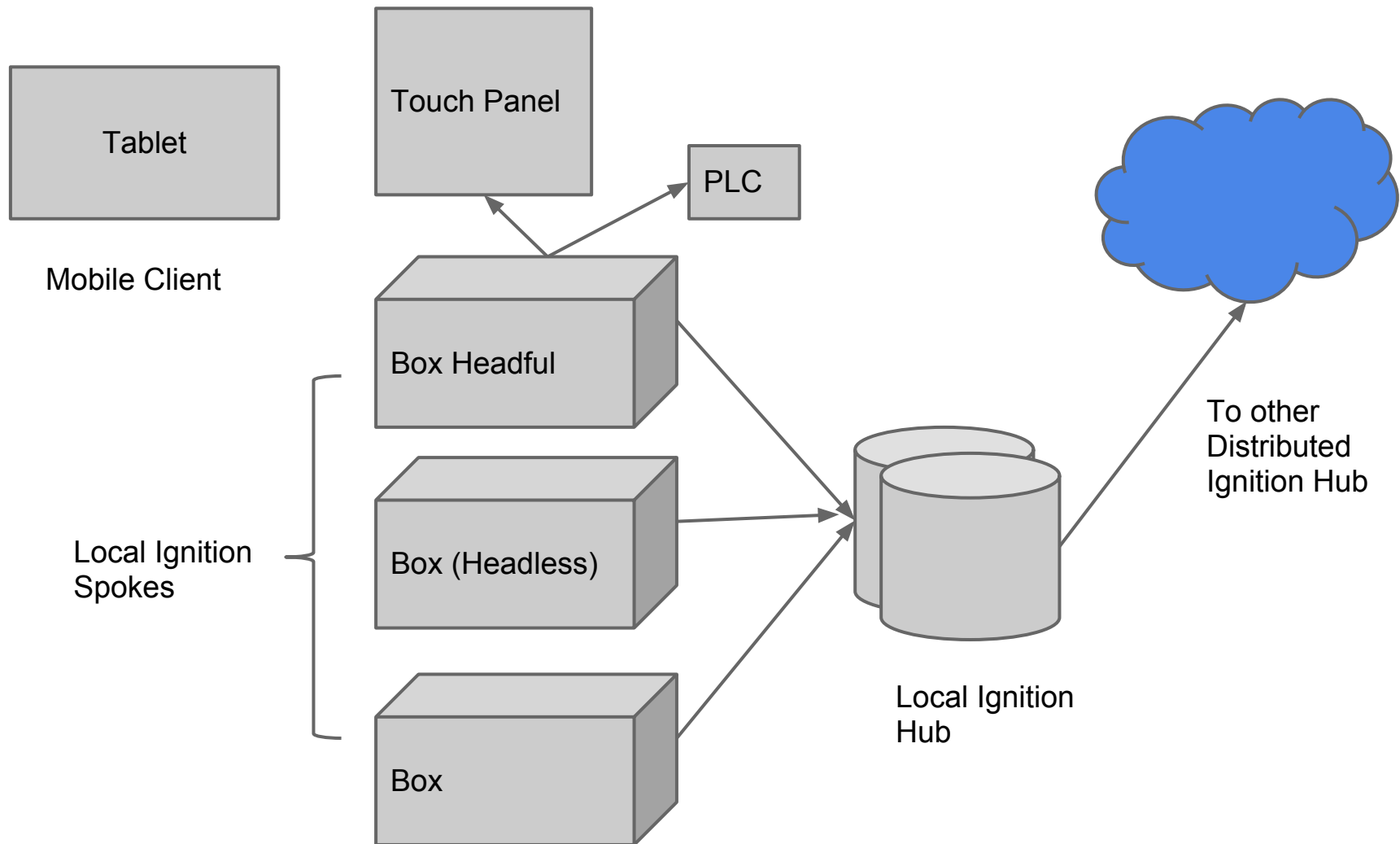


- Built from the ground up with components selected for industrial use and rated up to operating temperature range of -40 to 85C.
- Integrated brownout protection to always stay running.
- Pre-loaded with Ignition Software. Ready to run your projects, right out of the box.
- Designed/Manufactured in North America



- Up to date 3.x Linux Kernel
- i.MX6 Industrial/Automotive processor family patches
(power mgm, GPU, ...)
- OS compiled from source optimized for ARM architecture
- Optimized Oracle JVM (Java SE 7)
- RPM package management
- Web interface (Grails, all Java based)
- USB Bootable for Field Update / Recovery

- Full featured rugged “local” data aggregator expandible through Java Modules
- Use familiar interfaces for device control and configuration. Ability to import your existing Ignition projects.
- Ready touch HMI interface for Clients Applications (pop up Java keyboard provided by Ignition)
- Leverage features like automatic fail-over with hardware redundancy and data replication via SQL bridge.



Thank you. Questions?

- Pre orders November 2013
- General Availability Q1 2014
- Pricing TBD