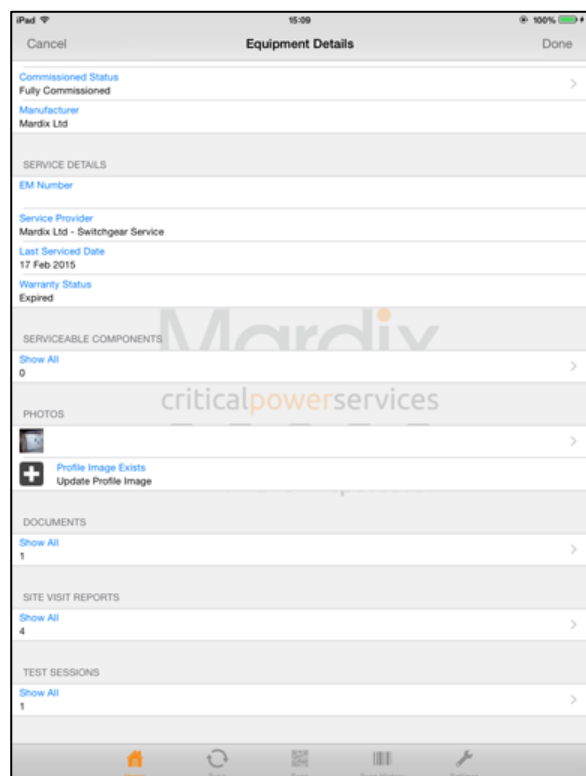# Mark Jackson

## iOS App Work Overview

This document details a number of iOS apps I have built for my current employer, with sample screenshots in each case.
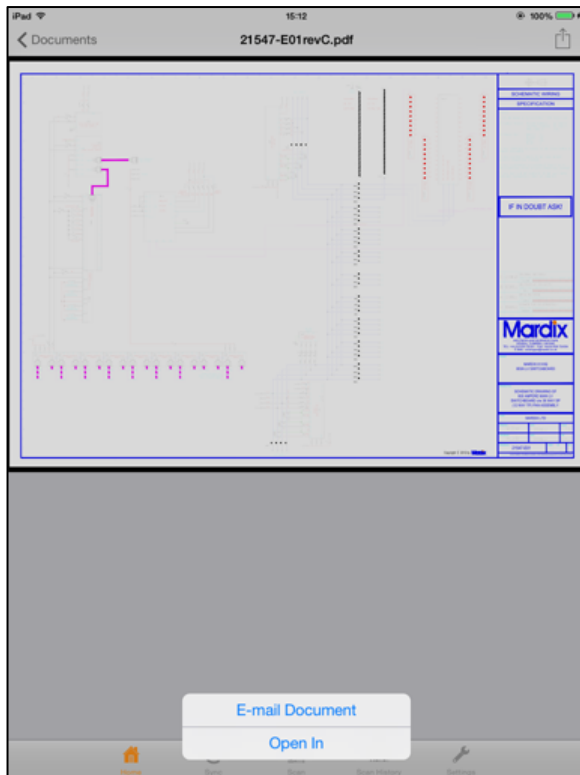
- Most apps were originally built using Objective-C (with first apps being designed for iOS 5), but some now have Swift modules, with one currently undergoing a full rewrite in Swift.
- All apps are rebuilt each year against the latest iOS SDK to keep code maintainable and relevant.
- All apps are coded native, and are designed with fully adaptive layouts to allow universal usage across multiple devices.
- All apps communicate with a common REST-based web API, and authenticate using OAuth with login credentials.
- In addition to the code, I also produce all my own graphics; I am responsible for look and feel as well as functionality.

# Site Visit / Testing App

An app used by site engineers to log site visits, update equipment data, and perform testing.

- Data is synced to and from an in-house ERP system via a web API, to allow offline working while on site and potentially out of signal range.
- Equipment items are scanned using dedicated QR codes, the data from which is then used to identify and display their details stored in a local SQLite database.
- Site visit details are logged by text input, and by taking photos in-app.
- Electronic test certificates can be synced from the server and completed in the app; this functionality used the Foxit iOS SDK.
- App interrogates the PDF form data comprising test certificates, to extract additional metadata and automatically set the properties of certain fields.
- App also allows time logs to be entered.
- Emergency sandbox transfer facility to allow local database and files to be synced directly to the server to aid with remote support and diagnosis of issues.

**Screenshot 1 (iPad — PDF viewer)**

iPad — 15:12 — 100%

< Documents — 21547-E01revC.pdf

Mardix

SCHEMATIC WIRING SPECIFICATION

IF IN DOUBT ASK!

E-mail Document
Open In

**Screenshot 2 (iPhone — Test Certificate)**

Carrier — 3:38 PM — 100%

< Test Certificate — STF01

EQUIPMENT: Main Switchboard c/w 36way SP / 12way TP Pan Assembly
PANEL REFERENCE: Main LV Switchboard
UNIT SERIAL NO: 21547/001/11

CARRY OUT VISUAL INSPECTION OF:

COMMENTS

sign n/a in comments for non-applicable inspections

1. Cabinet finish
   a. Defect free
   b. Colour in accordance with GA drawing
   c. Internally clear of foreign bodies/debris

   including uniquely coloured doors where applicable

2. Components
   (in accordance with GA & schematic drawing)

3. Wiring
   a. Presentable
   b. AC & DC/volt free/comms segregated
   c. Sizing (in accordance with schematic drawing)

4. Labels
   a. Voltage warning per inner door / cover
   b. Circuit / IO device references
   c. Mardix Service Tag & peel off sticker
   d. Designation marking
   e. Interface terminal ID markers
   f. Fuse & relay ID markers

5. Phase indication
   a. Input & output terminals
   b. Main busbars per unit section
   c. STS & transformer cable ID tags

   Comments

6. Degree of protection
   a. External (in accordance with GA drawing)
   b. Internal (IP20)
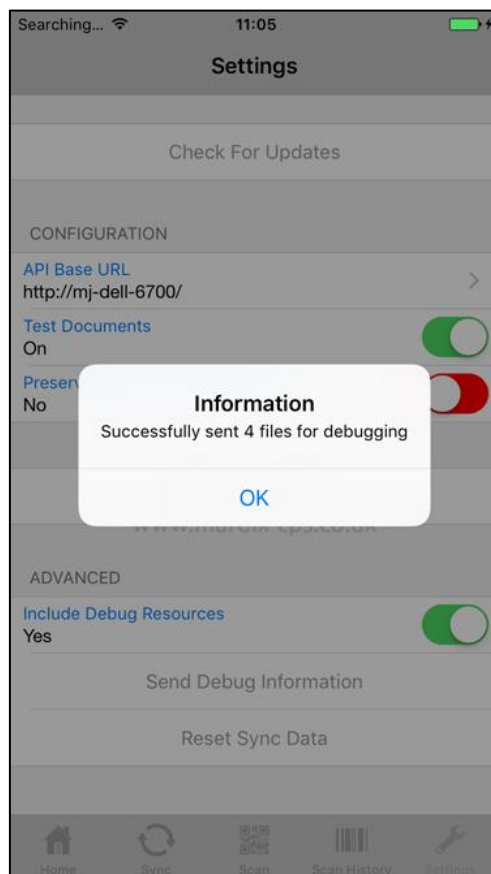
7. Segregation (in accordance with GA drawing)

Q W E R T Y U I O P ⌫
A S D F G H J K L Done
⇧ Z X C V B N M ! ? ⇧
.?123 😀 .?123

**Screenshot 3 (iPhone — Settings)**

Searching... — 11:05

Settings

Check For Updates

CONFIGURATION

API Base URL
http://mj-dell-6700/

Test Documents
On

Preserv...
No

**Information**
Successfully sent 4 files for debugging

OK

www.mardix...cps.co.uk

ADVANCED

Include Debug Resources
Yes

Send Debug Information

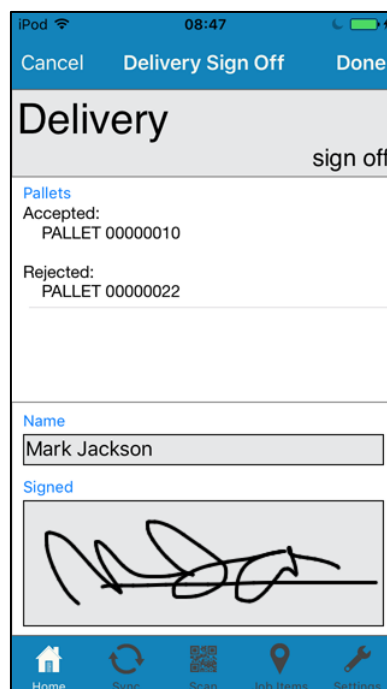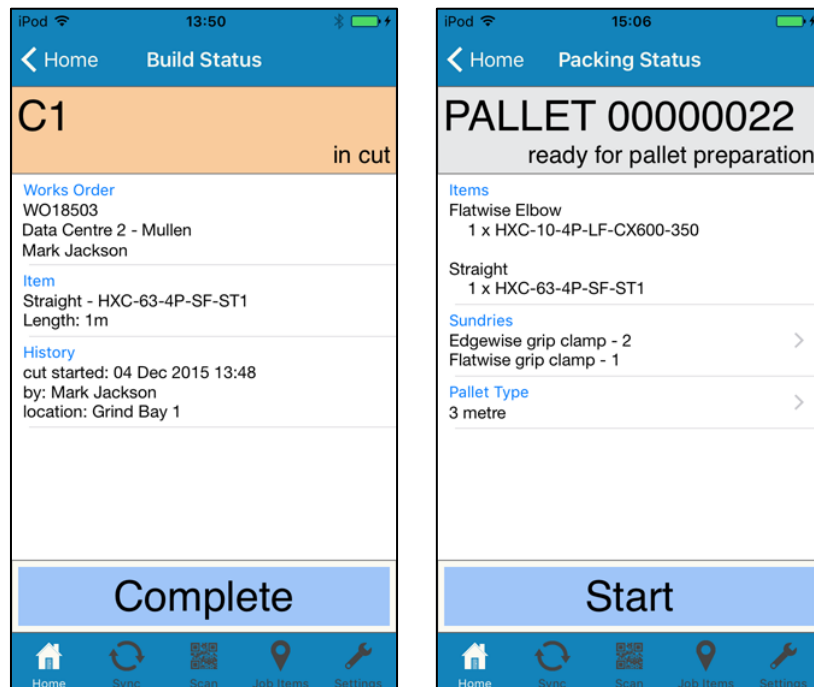Reset Sync Data

Home — Sync — Scan — Scan History — Settings

# Production Monitoring App

App used to progress production parts through the factory manufacturing process.

- App uses real-time API calls instead of offline working.
- Point-and-scan functionality to allow parts and factory locations to be quickly and accurately identifier without need for search or text input.
- Design optimised for iPod Touch for convenience of use.
- High volume usage.
- Capture metrics used for production monitoring and capacity planning.

# Factory Process Tracking App

App used to track specific factory processes relating to conductor bar manufacture.

- Simple search functionality performs type-ahead lookup directly from web API.
- Allows close monitoring and real-time process updating.
- Lightweight app with highly dedicated functionality.

# Stock Management App

App to track and update stock on warehouse shelves.

- Point-and-scan functionality allows easy scanning of parts and shelves to book stock in/out.
- Displays up-to-date stock levels.
- Allows overall stock counts to be reset or blind-counted.
- Data captured is used in stock value/usage reports.