



# Building Mobile Workforce Management Solutions

Philip Hayes  
Architect - Red Hat Mobile Practice  
Wednesday 3rd May 2017

# Mobile Workforce Management

# Agenda

- What is a Mobile Workforce Management solution?
- Typical Features
- Common Discussion Points
- Project Overview
- Project Timeline
- Sample flow
- Portal
- WFM Architecture
- Raincatcher
- Open Discussion

# WFM - Workforce Management

What is a workforce management solution?

Provides the ability to schedule jobs to specific users on any device and to track and report on the progress of those jobs.

Current solutions often require the field agent to carry multiple devices e.g.

- Barcode Scanner
- Rugged Laptop
- Smartphone with camera



# WFM - Workforce Management

## Typical Features

- Job Scheduling
- Asset Management
- Online/Offline and Data Sync
- Workflow Engine
- Job Status/Event Updates
- Dynamic Forms
- Emergency Dispatch
- SLA Escalation
- GPS Worker and Job Tracking, Site Navigation
- Team Mgmt. and Time Tracking
- Photo capture and annotation
- Barcode Scanning

# WFM - Workforce Management

## Common Discussion Points

- Domain knowledge
- Data loss
- System capacity / performance testing
- Offline use / connectivity issues
- Compliance updates
- User adoption
- Multiple points of integration
- Fast vs Slow IT
- BYOD
- Security / encryption
- Center of excellence

# WFM - Workforce Management

## Project Overview

- Key players
  - Technical Architect - Backend Integration
  - Business Analyst
  - Business Sponsor
  - Scrum Master
- Agile methodology
- Hybrid client development
- 6 Month project timeline

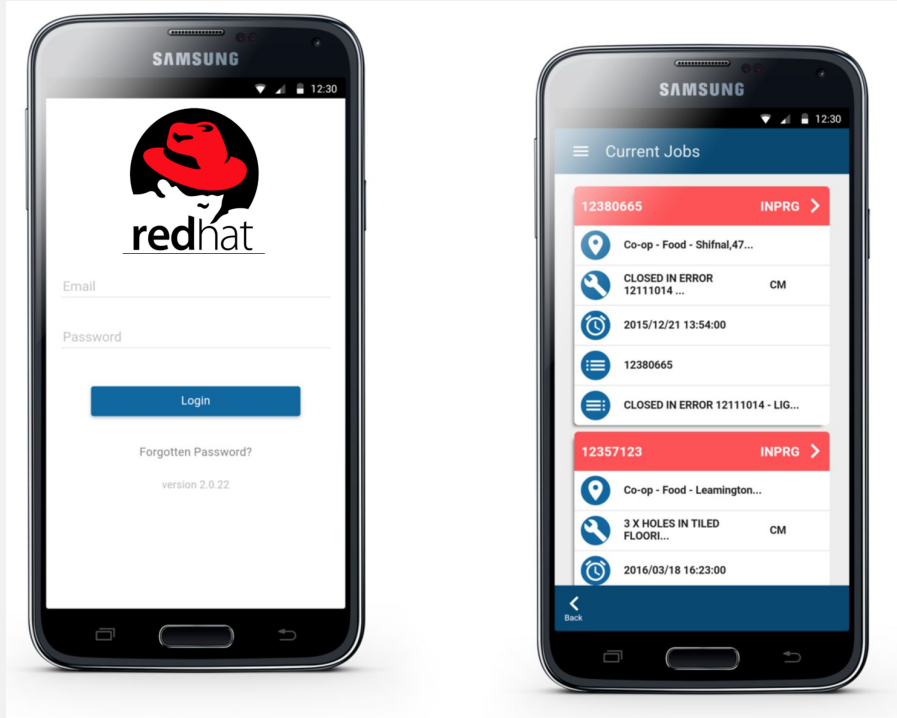
# WFM - Workforce Management

## Project Timeline

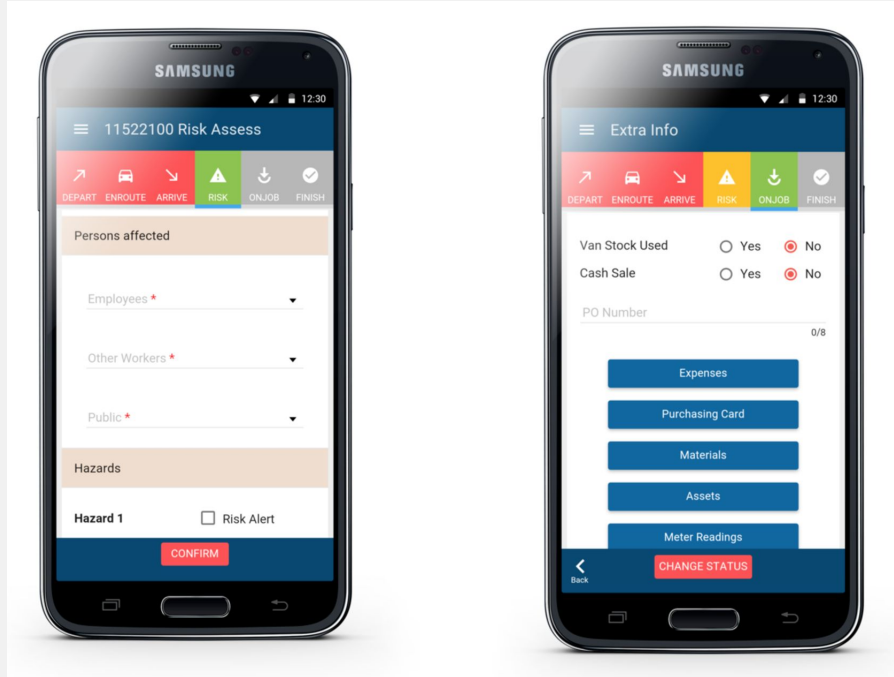
- Project duration 6 months
- Initial deliverable 2 months
  - Early adopters
  - Minimal Viable Product
  - Limited set of workflows
  - Partial device support
- Full project delivery
  - Full functionality
  - Complete set of workflows
  - Ramp up to 100% user adoption



# WFM - Sample flow



# WFM - Sample flow



# WFM - Portal

FeedHenry Work Force Management

Scheduler

Workers

Workers	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm
Trever Smith								Job Order - Footpath in disrepair		Job Order - Chimney in disrepair			
Daisy Dialer													
Max A. Million													
Phylis Lexy													

5/2/2017

FeedHenry Work Force Management

Map

FeedHenry Work Force Management

Work order: Roof in disrepair

Please remove damaged items and SOP-FCF AND-FLYX UNDP-NEUR/CENTRE UN 123 X 130 call away from site outside number 4

Workflow: Static forms

Risk Assessment

Complete  
Risk Assessment

*[Handwritten Signature]*

Risk Assessment signature

Vehicle Inspection

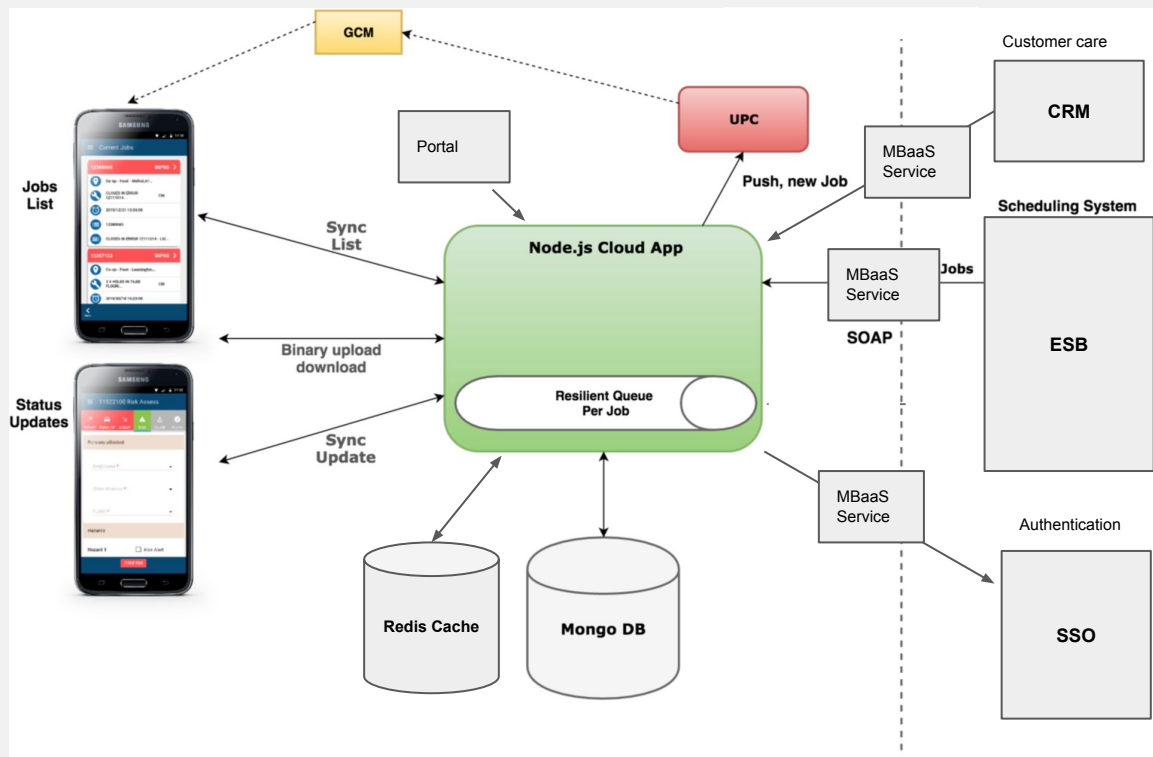
- Fuel: 75%
- Tires: Pass
- Lights: Pass

Workers

Search

- Driveway in disrepair  
131 4c, 163 Keefer St, Vancouver, BC V6A 1X4
- Roof in disrepair  
2930 Virtual Way, Vancouver, BC V5M 0A5
- Sink in disrepair  
3820 Oak St, Vancouver, BC V6H 2M5
- Wall in disrepair  
1095 W Pender St, Vancouver, BC V6E
- House in disrepair  
1088 Burrard St, Vancouver, BC V6Z 3R9
- Carpet in disrepair  
860 Drake St, Vancouver, BC V6Z 2P2
- Door in disrepair  
2795 East Hastings St, Vancouver, BC V5K 1Z8
- Yard in disrepair  
1780 E Broadway, Vancouver, BC V5N 1W3
- House in disrepair  
2035 Yukon St, Vancouver, BC V5Y 3W3
- Light repair  
1, Jenkins Avenue
- Window in disrepair  
1502 E Hastings St, Vancouver, BC V5L 1S5

# WFM - Typical architecture



# Raincatcher

# Raincatcher

- Overview of components
- Form creation
- Portal
- Client builds
- Sample work order

# Raincatcher overview of components

## </> Apps, Cloud Apps & Services

Below are all Apps, Cloud Code Apps and associated Services in this Project

**Apps** +

- mobile**  
Cordova Light  
Updated an hour ago  
git@testing.feedhenry.me:tes... [Copy](#)
- portal**  
Cordova Light  
Updated 41 minutes ago  
git@testing.feedhenry.me:tes... [Copy](#)

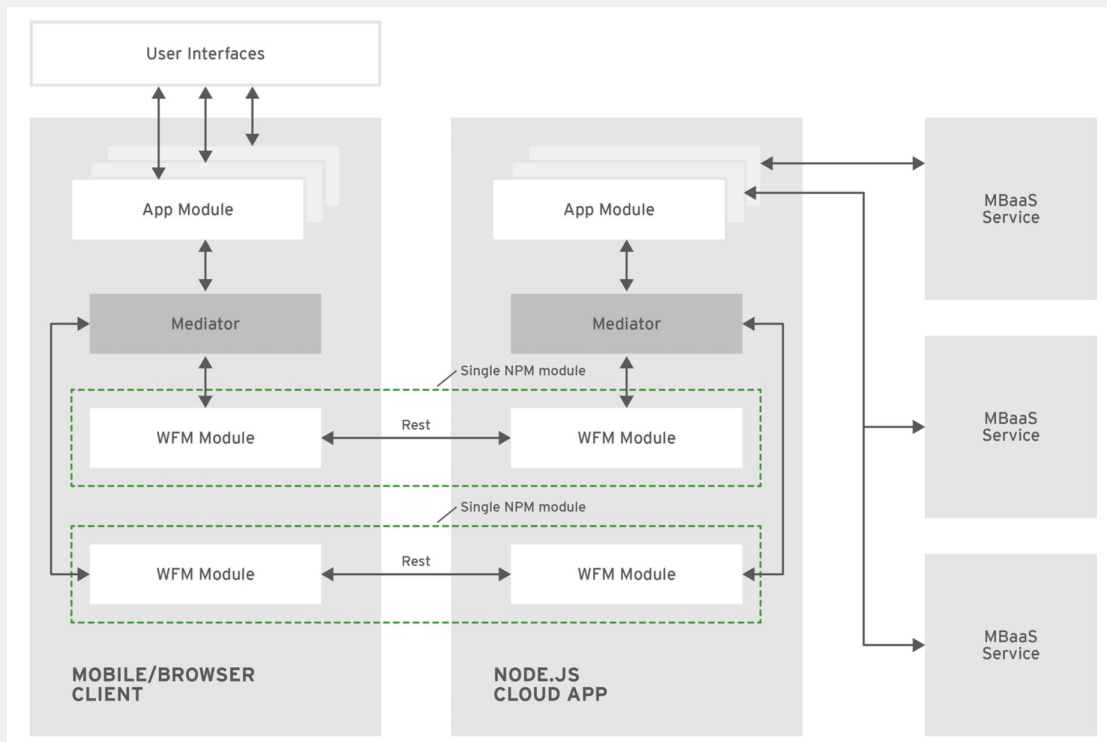
**Cloud Code Apps** +

- cloud**  
Node.js Cloud App  
Updated 2 hours ago  
git@testing.feedhenry.me:tes... [Copy](#)

**MBaaS Services** +

- wfm-auth - Connector**  
Service  
Updated 2 hours ago  
[Discover](#)

# Raincatcher components





# Open discussion



# THANK YOU



[plus.google.com/+RedHat](https://plus.google.com/+RedHat)



[facebook.com/redhatinc](https://facebook.com/redhatinc)



[linkedin.com/company/red-hat](https://linkedin.com/company/red-hat)



[twitter.com/RedHatNews](https://twitter.com/RedHatNews)



[youtube.com/user/RedHatVideos](https://youtube.com/user/RedHatVideos)

The logo for Red Hat Summit, featuring the text "RED HAT SUMMIT" in white, bold, sans-serif font. "RED HAT" is in a smaller size above "SUMMIT". The text is contained within a white speech bubble shape with a tail pointing downwards.

**RED HAT  
SUMMIT**

**LEARN. NETWORK.  
EXPERIENCE  
OPEN SOURCE.**