itdev

Slides

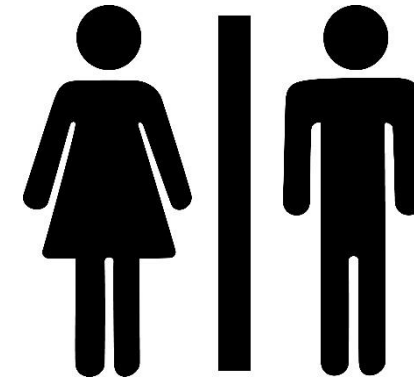| Slides		

• Why are we here?
   – CI Workshop
   – Expectations
 	
• Who are ITDev?
   – Our services
	• Industry presentations
	   – Siemens
	   – CBNL
	   – ITDev
	   – Roke Manor
		• Breakout & Feedback
		   – Challenges
		   – Solutions
		
		• Wrap-up

- Fire Alarms

- Mobile phones

- Toilets

- Lunch

- Jon Older – ITDev Business Development Manager
  - History of running industry networks
  - Passion for industry

- Who are you stood next to …

- ## Who else is here
  - Attendee List

- ## Format of the day
  - Tentative agenda

- ## Feedback form
  - Fill in Key Challenge

- What are our expectations from today?

- Mine
  - To meet industry peers
  - Did last year's event make an impact
  - Learn more about Cloud based CI

- # Continuous Integration challenges
  - Various industry discussions
  - Need for sharing knowledge?
  - Am I alone with my challenges?

- # Opportunity to
  - Share best practices
  - Hear from leading organisations
  - Identify common challenges
  - Address challenges
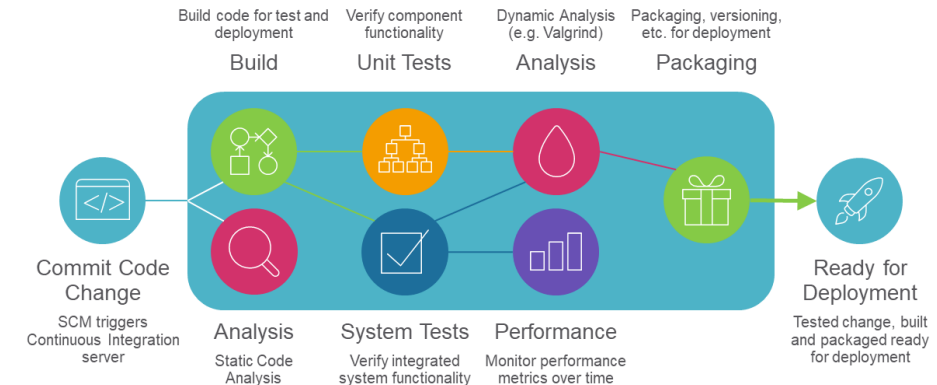
- CI Introduction
  - Understanding CI, how to introduce, …

- Gaining buy-in
  - Management and engineers
- Culture – business view on CI

- Workflow – microservices, CI for web based apps
- Scaling
  - HW integration, complexity management, CI->CD

- Maintenance & Tooling – tools, pipeline, dependencies

- To provide value
  - To clients
  - To wider industry

- Addressing a need
  - Embedded systems network

- Raise our profile

Who are ITDev?

"We believe that we are defined by our shared values."

- Come directly from our team.
- Embodied in our culture.
- Reinforced by our employee rewards scheme.

"They drive our decision making, the way we work and our relationships with our clients, suppliers and peers."

Key Capabilities

Software

- Embedded software
- Drivers
- Firmware
- Digital signal processing

- Virtualisation
- Measurement & control
- Databases
- Web based apps & interfaces
- User interfaces

Hardware

- FPGA & digital IP design
- Architecting
- Design partitioning
- Verification & analysis

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ALTERA.

Broadcast expertise

- H.264, MPEG2, JPEG 2000, …
- Compression algorithms
- Audio and ancillary data
- Transport over serial and IP

Example products:
- Video encoders & receivers
- Low latency TV broadcast systems

imi cast

Main languages

- C, C++, C#
- Python
- PHP
- SQL
- VHDL

Processes & tools

- Agile: Scrum/Kanban
- Continuous integration
- Feature and bug tracking
- Revision control (SVN, Git)
- Online peer review
- Online portal
- Quality Management System

Embedded Linux expertise

- Custom kernels
- Kernel driver development
- Board Support Packages (BSPs)
  - Buildroot, Linux device tree
- Various micros (STMicroelectronics, Atmel …)
- Application development

Example products:
- Aircraft infotainment systems
- Smartphones, tablets
- Wearable tech
- Industrial sensors
- Vital signs monitoring system

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Business Partners

accu
professionalism in programming

Our company values: Empathy, Trust, Considered, Passionate, Smart

- Project management
- Continuous Integration
- Revision control (SVN, Git)
- Release management

- Agile development
- Regression environments
- Feature and bug tracking
- Online peer review
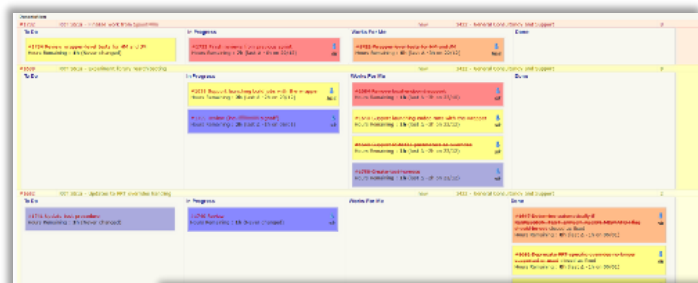
Examples of on-line Scrum board,
Kanban board and burn-down chart
implemented within our client portal.

- Culture
  - Buy-in, business culture, trust
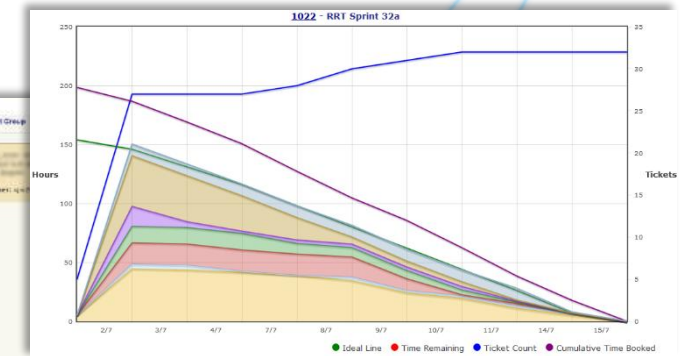
- ROI
  - Justification, quantify ROI, cost curve

- Skills
  - Recruiting, teaching skills, maintainable

- Hardware
  - HW availability, automating hw builds

- Tools
  - Too much choice, what's best

- Scaling
  - Multi-site, multi-target, soak jobs, resource availability

- Workflow
  - Back-out failure vs fix, legacy code, unit testing, sharing/consistency

- David Hoslett – Siemens Mobility
  - Presentation link

- Davide Fiorentino – CBNL
  - Presentation link

- CI tool selection & challenges
  - Cloud based CI
  - Introducing CI
  - HW integration (HIL)

- Split into 6 groups
- Avoid sitting with colleagues
- Quick introductions
  - Who, What, Why CI
  - Finish 12:00pm
- Capture ideas on flipcharts

- ## Steve Dwyer – ITDev
  - Presentation link

- Charlie Woolf – Roke Manor
  - Presentation link

Tool selection & Choices

- Introducing CI

- Cloud Based CI

- HW Integration

- Please complete feedback form
  - Gift in return
  - Check the "keep me informed" boxes

- Follow up with each attendee
  - Personal feedback
  - How to engage others

- Review expectations
  - …

- Embedded Linux event / Next CI event
  - Date tbc

- Please return badges for recycling

Our Company Values…

Empathy, Trust, Considered, Passionate & Smart