System Design Presentation

Peter Kronberg & Daniel Pustka

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Outline

- Subsystem decomposition
- Hardware/software mapping
- DWARF middleware
- Service interaction examples

Subsystem Decomposition

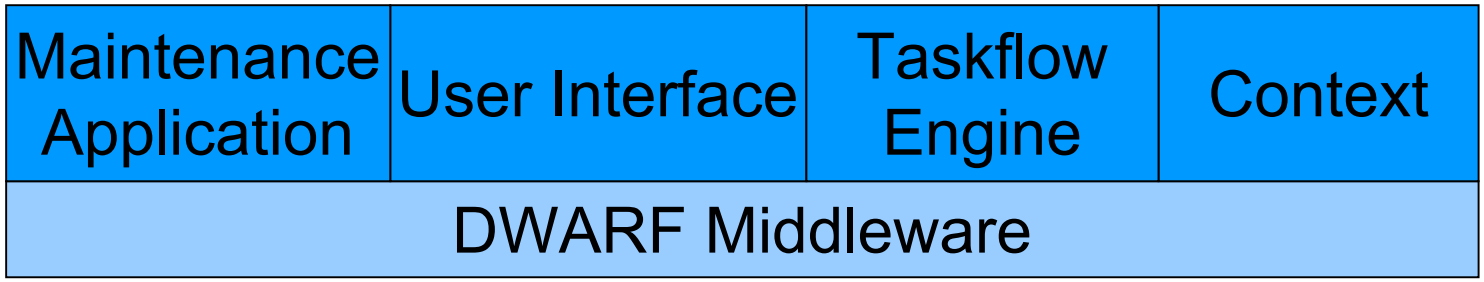
- Application
- Session
- User Interface
- Context
- Network
- Data Storage
- Expert System

Brandon the Mechanic

Apple PowerBook

Motorola G4 Processor

Mac OS X operating system



Brandon the Mechanic

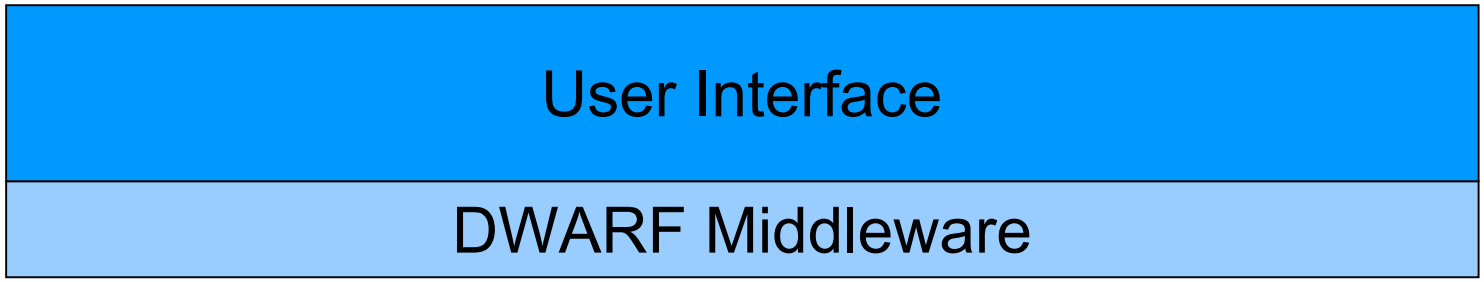
Compaq iPAQ 3630

StrongARM CPU 206 MHz

32 MB RAM

Linux operating system

320*240 pixels display



Brandon the Mechanic

Peripherals connected to laptop

GPS Receiver
Garmin eTrex Summit
Includes magnetic compass
Serial connection

Inertial Tracker
Intersense Intertrax 2
Serial connection

Head Mounted Display
Sony Glasstron
800x600 resolution
VGA connection

Camera
iBot
640x480 resolution
Firewire connection

Toni the Customer Representative

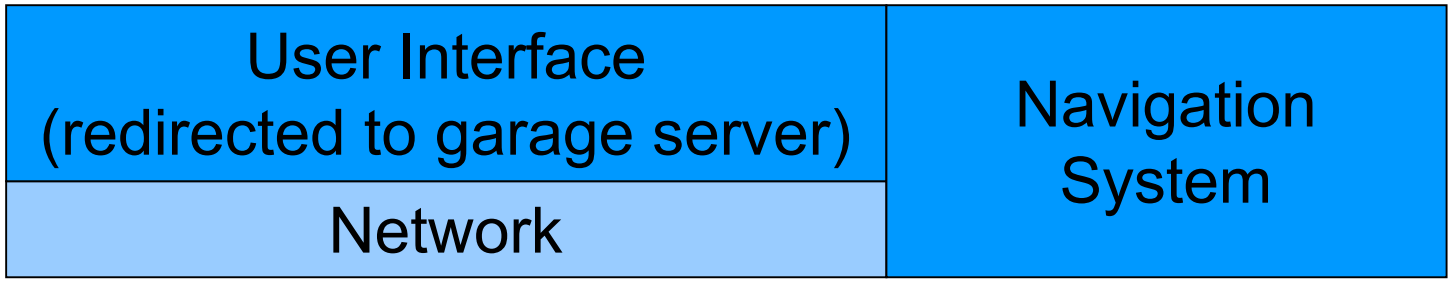
Compaq iPAQ 3630

StrongARM CPU 206 MHz

32 MB RAM

Linux operating system

320*240 pixels display



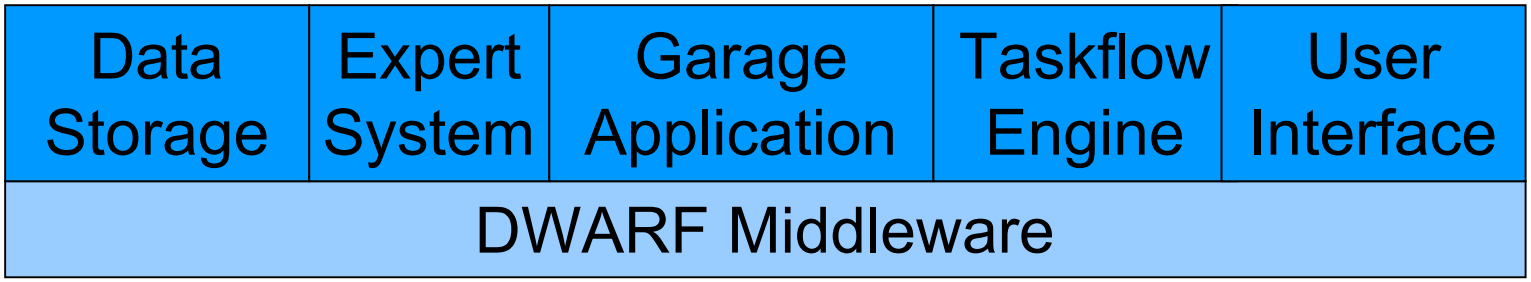
Garage

Server

Apple G4

Motorola G4 Processor

Mac OS X operating system

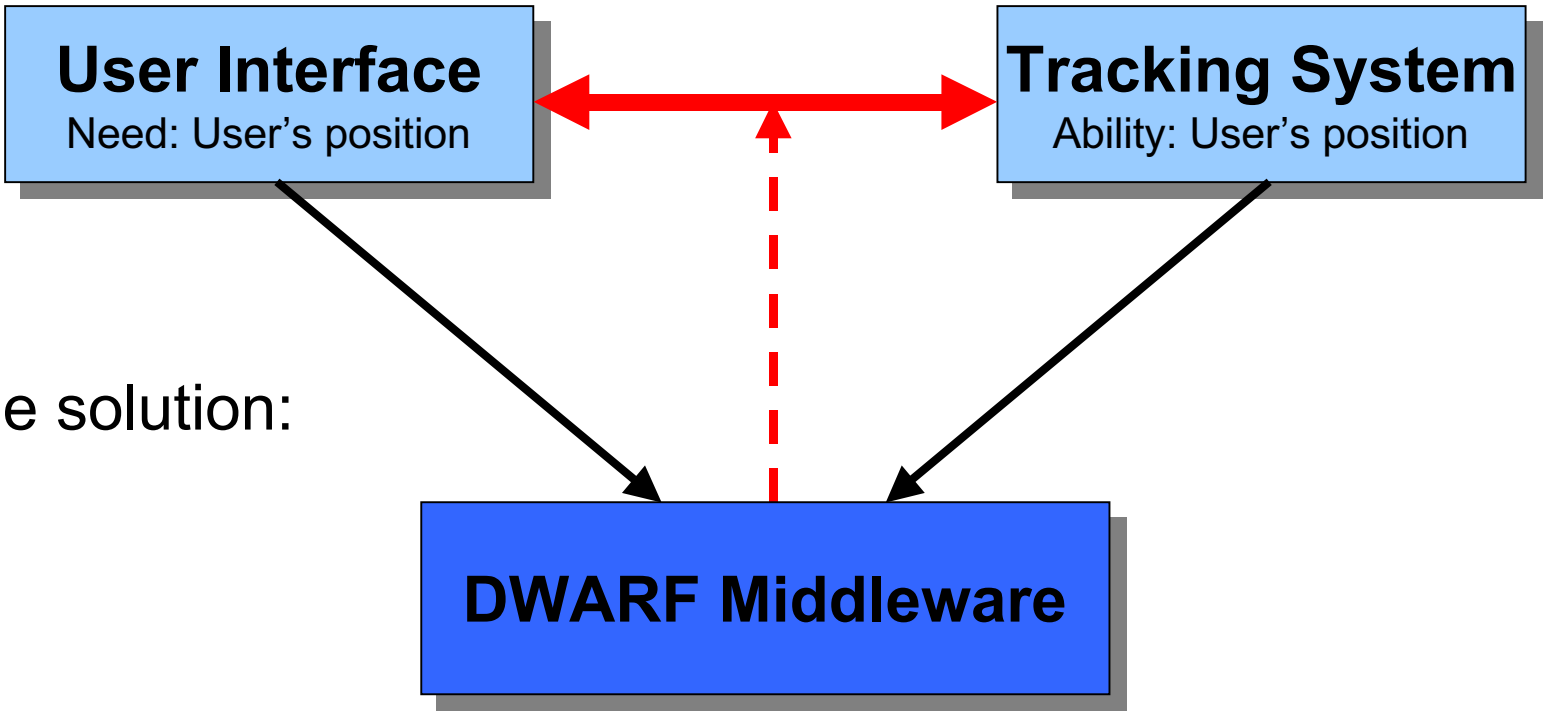


Network

- Wireless Ethernet IEEE 802.11
- only available inside garage

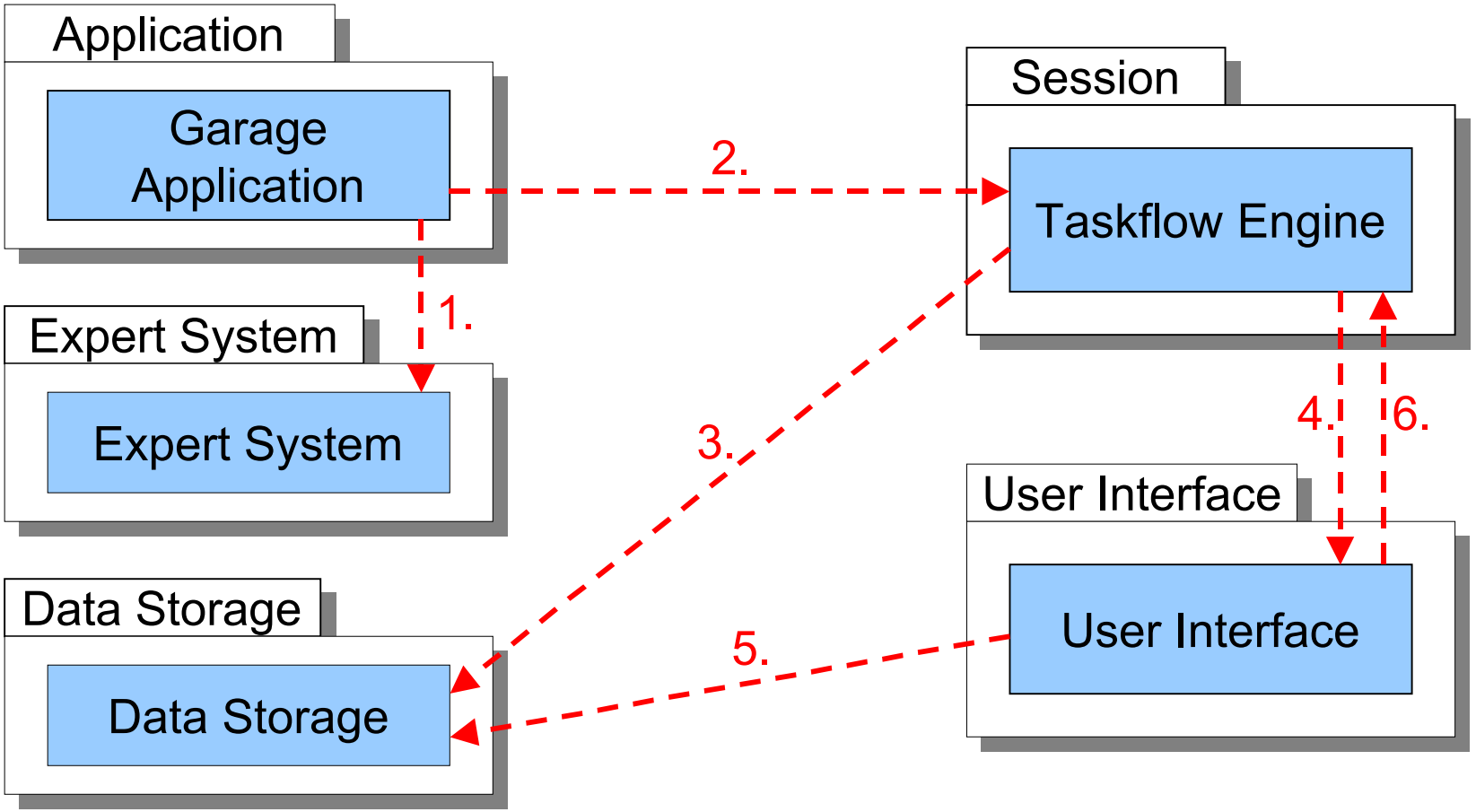
DWARF Middleware

The problem:

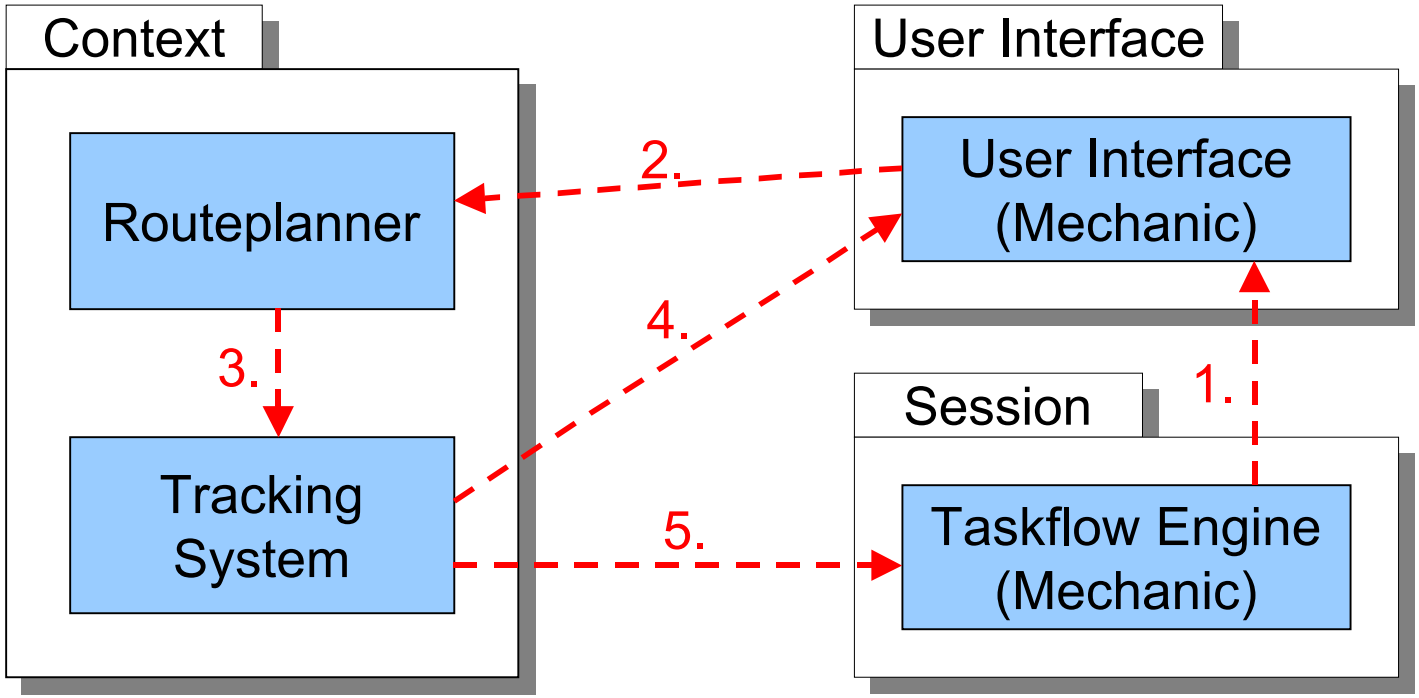


The solution:

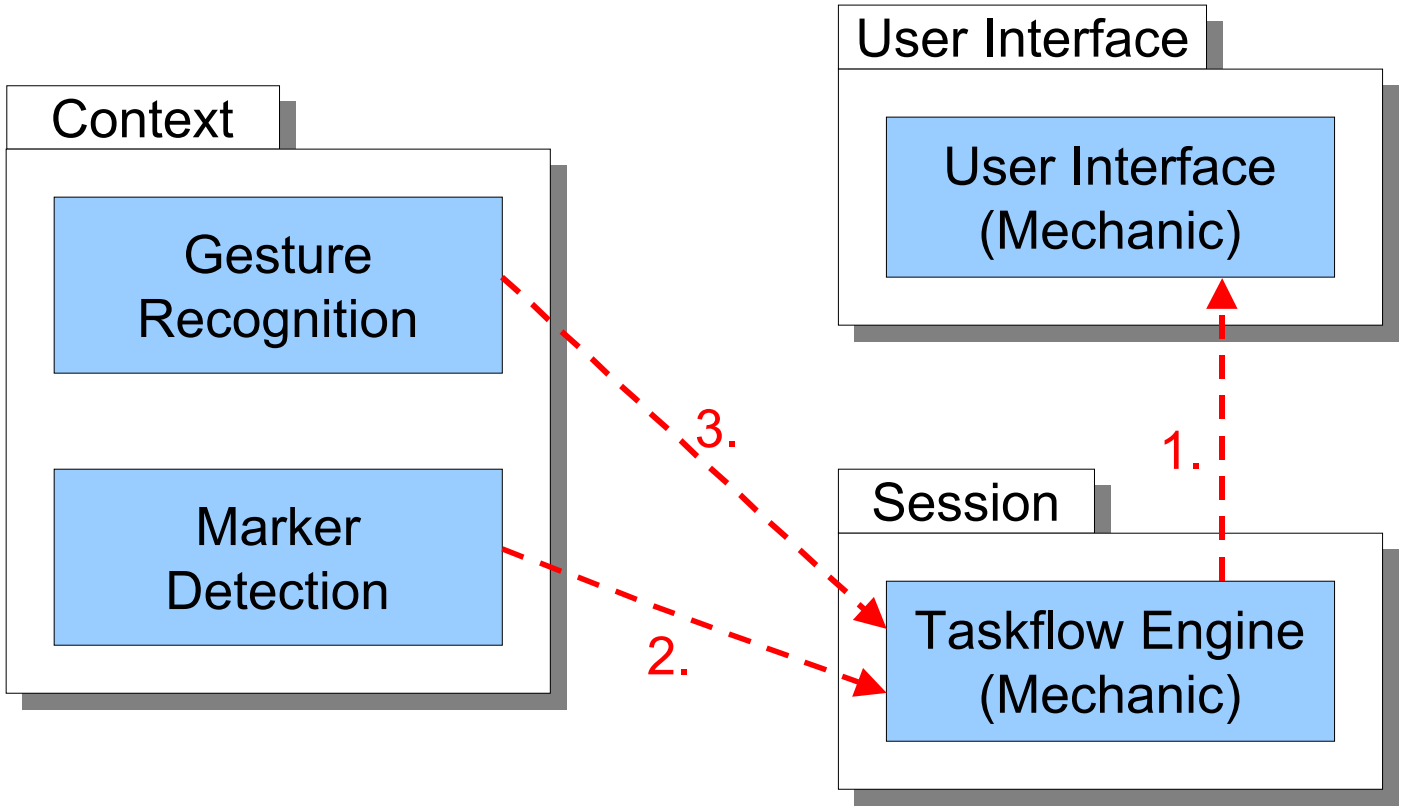
Taskflow Initialization



Navigation


Context
Routeplanner
Tracking System
User Interface
User Interface (Mechanic)
Session
Taskflow Engine (Mechanic)
1.
2.
3.
4.
5.

Maintenance



Questions?