# How Lightweight Is the Liberty Profile?

Simon Maple, IBM



## Agenda

- → What is the Liberty Profile all about?
- → Raspberry Pi
- → Embedding the Enterprise
- → Mobilising Liberty
- → Tinker Forge

## **Today's Presenter**

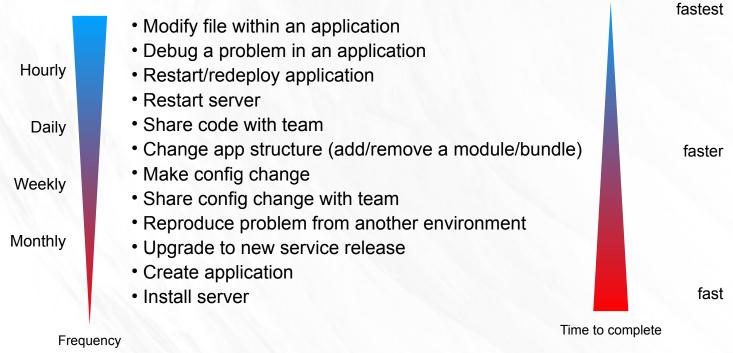


Simon Maple

@sjmaple
Technical Evangelist
IBM Hursley Park, UK

## What do developers care about?

Common development tasks include:



 All tasks should be as painless as possible, with special emphasis on the more frequent ones. If the time taken to accomplish these tasks is an impediment to the development, the cost of the fidelity of the test server runtime is challenged

### **Introducing WAS V8.5 Liberty Profile**

A highly composable, dynamic Server profile

#### **Dynamic Server Profile**

Not static like Web Profile – determines by app at a fine-grained level

#### **Developer First Focus**

Simplified, shareable server config (like a dev. artifact). One XML file or several to simplify sharing & reuse of config

#### **Incredibly fast:**

start times: < 5 secs

#### <u>Lightweight runtime</u>

Small memory footprint: (46MB for TradeLite)

### WAS v8.5

**Liberty Profile** 

#### Small Download:

< 50MB

#### **Dynamic Runtime**

Adding features & updating configs does not require server restart

#### **Integrated Tooling**

Powerful tools. Simple Eclipse feature

### Integration with ND Job Mgr

Optionally manage server lifecycle through ND Job Mgr

#### **Unzip Install & Deploy**

IM or unzip to install. Unzip deploy of server + app + config

#### **Popular Platforms**

Adds MAC OS for development

#### Fidelity to full profile WAS

Same reliable containers & QOS (easy migration from dev to ops)



### **No Hurdles to install**

- Tools and runtime are **free** for development. No time limit
- Eclipse feature install for tools; 40MB zip download for server profile.
  - Installation Manager also supported → same installed result.
- 2 minutes from "Nothing" to "Done":
- 1. Install WAS Developer Tools for Eclipse Feature



Use the Tools to download the WAS Liberty Profile or download 40MB zip from WASdev.net



www.wasdev.net



### **Simplified Configuration**

```
Features control which capabilities
<server>
                                             (bundles) are installed in the server
    <featureManager>
         <feature>jsp-2.2</feature>
         <feature>jdbc-4.0</feature>
                                                'singleton' configurations specify
    </featureManager>
                                                properties for a runtime service like
                                                logging
    <logging
        traceSpecification="webcontainer=all=enabled: *=info=enabled"/>
                                                   'instance' configurations specify
                                                   multiple resources like applications
                                                   and datasource definitions
    <application name="tradelite" location="tradelite.war"/>
    <dataSource jndiName="jdbc/TradeDataSource">
           properties.derby.embedded
               databaseName="${server.config.dir}/tradedb"/>
    </dataSource>
</server>
                               Any of this configuration could be put
                               into a separate xml file and 'included' in
                               this 'master' configuration file
```

## Highly composable runtime based on 'features'

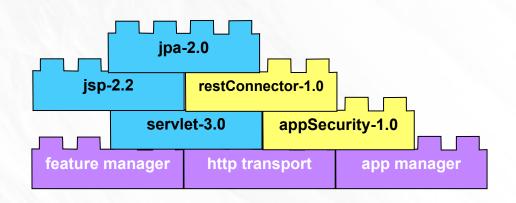
WAS
Extensions

Java EE
support

Runtime
services

**Full WAS Profile** 

config model

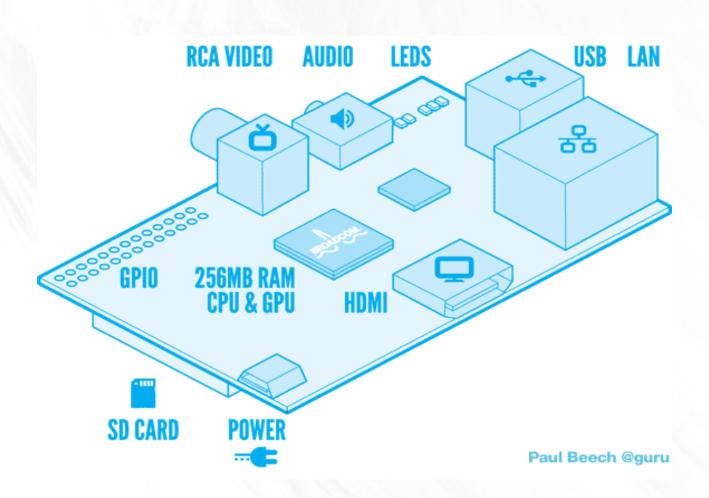


WAS v8.5 Liberty Profile

## Demo

→ The Liberty Profile

## **Raspberry Pi**



## **Liberty Pi**



WASdev

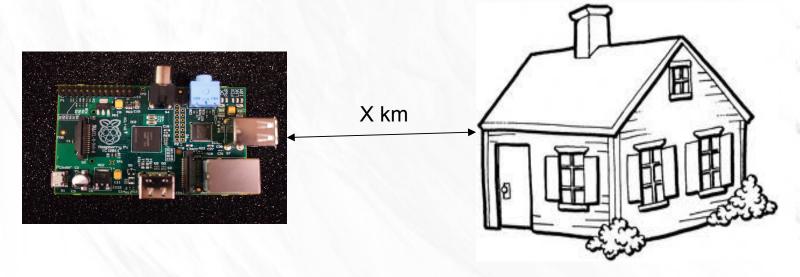
WebSphere. software

www.wasdev.net



→ Liberty Pi

### **Home Automation**



- WAS Liberty Profile
- MQTT client (eclipse paho)
- RSMB (Really Small Message Broker)

- X10 modules with devices attached
- MQ Message broker

## Demo

- → Home automation
- → Liberty mobilized

### **Mobilising Liberty**

1. Connect to nexusOne WIFI network

2. Load the Blog:

http://192.168.43.1:9080/nexusBlog/

- 3. Creating a post, you must fill out:
  - Title
  - Post
  - User guest@ibm.com

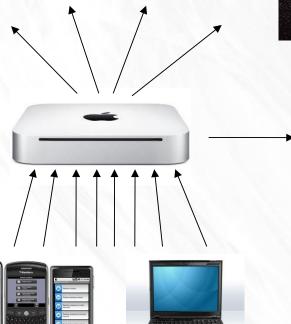
## **JAX Conf Social Area**













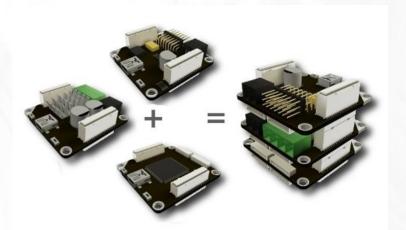
### **SOCIAL AREA**

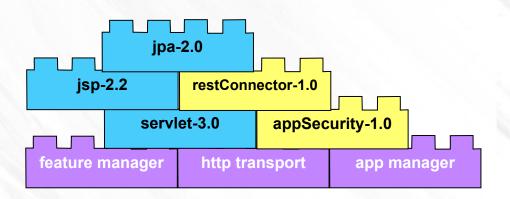
sponsored by





## Tinker Forge





## Demo

→ Tinker Forge

## Thanks for listening



# Simon Maple @sjmaple

Technical Evangelist IBM Hursley Park, UK







