Paris, France

OSGi Alliance

2005 Developer Forum & World Congress
2005 OSGi Alliance Status

John R. Barr, Ph.D.
Past President, OSGi Alliance
Chair OSGi World Congress
The OSGi Alliance is an open organization:
- Established in 1999, currently 44+ members
- Membership spans many industries
- Voting members treated equally
- Membership information available at www.osgi.org
History of OSGi Alliance

- Companies start work on Java Embedded Server in 1998
- Open Services Gateway Initiative launched in March 1999
- First Member Meeting: London – May 1999
- Specification Releases:
  - R1 – May 2000 (JES Framework)
  - R2 – October 2001 (Gateway Management)
  - R3 – March 2003 (Automotive)
  - R4 - October 2005 (Core + Mobile + Vehicle)
- OSGi World Congress:
  - Stockholm – 24-27 September 2002
  - Düsseldorf – 21-24 October 2003
  - Barcelona – 11-15 October 2004
  - Paris - 11-14 October 2005
Market Vision

- More devices are intelligent and adaptable
  - Automotive electronics / telematics
  - Smartphones
  - Even high-end home theater remote controls
- Data networks have become ubiquitous
- All of these components need increasingly complex software
Market Opportunity

- **OSGi technology:**
  - Makes software components easier to manage
  - Enables portability of value-added services across markets and devices
  - Enables desired business model

Multi-Vendor, Open  Walled Garden
What is OSGi technology?

An enterprise-class execution environment for dynamically deploying and managing software components that deliver services and applications to networked devices.
OSGi Service Platform Roadmap

- **Home & Industrial Automation**
  - Mobile
  - Vehicle

- **2000**
  - Framework
  - HTTP
  - Log
  - Device Access

- **2001**
  - Package Admin
  - Configuration Admin
  - Permission Admin
  - User Admin
  - Preferences
  - Meta Type
  - Service Tracker

- **2003**
  - UPnP
  - Initial Provisioning
  - Name Space
  - Start Level
  - IO Connector
  - Wire Admin
  - XML Parser
  - Measurement and State
  - Position
  - Execution Environment

- **2005**
  - Application Tracker
  - Signed Bundles
  - Declarative Services
  - Power Management
  - Device Management
  - Security Policies
  - UPnP Exporter
  - Diagnostic/Monitoring
  - Framework Layering

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**R1**

**R2**

**R3**

**R4**
Why Standards & Not Proprietary?

- **Reduce risk**
  - Avoid single vendor dependence
  - Increases interoperability
- **Flexibility**
  - Multiple sources / suppliers
  - Switching costs reduced
- **Durability of solution**
  - Multiple industry stakeholders foster long term investment
  - Single vendor approaches often abandoned more quickly
- **Quality**
  - Industry collaboration increases quality of the standard
  - Competition between sources / suppliers increases quality of products and services
What’s In It For You?

OSGi Alliance

INPUT AND ACCESS ACROSS THE ENTIRE VALUE CHAIN

- Manufacturers
- Service Providers
- Content & Media Providers
- Application Developers
- IT Providers

- Cost Savings
- Increased Speed to Market
- Strategic Market Differentiation
- Increased Revenue
- Consolidated Support

AUTO
OFFICE
HOME
MOBILE
Key Technical Benefits

- Full local and remote application lifecycle management (manage heaps of code)
- Standardized service-oriented component architecture
- Deliver lowest cost Bill Of Materials for an open, portable Service-Oriented Architecture
- Dynamic discovery and binding of software components during runtime
- Enterprise class runtime for embedded devices
- Accommodates desired policy and security model
Position In The Ecosystem

Semiconductor & OS Providers
Platform & System Integrators
Device Manufacturers

“In-to” - Pre-Design / Embedded
Pre-enable new devices
Enablement
Composition
Client Platform (into)

Client Platform (onto)
OSGi Service Platform

“On-to” - Aftermarket / Download
Post install Platform, Apps & Data

Enterprises
Solution Integrators, ISVs

Applications & Services
Solutions

“On-to” - Aftermarket / Download
Post install Apps & Data

Service Providers
Solution Integrators, ISVs

Applications & Services
Solutions

OSGi Service Platform

Solution Integrators, ISVs

Applications & Services
Solutions
OSGi Adoption

- OSGi member company applications
  - Connected Home
  - Automotive Infotainment/Telematics
  - Mobile/Service Provisioning
- EU-projects
  - TEAH
  - CENELEC SmartHouse Code of Practice
  - ERTICO 3GT and GST
- OSGi Users’ Forum/Groups
  - Japan, France, Korea (⋯)
- Liaisons with other organizations
  - JCP (Java Community Process)
  - HGI (Home Gateway Initiative)
  - ERTICO GST (Automotive/Telematics)
  - OMA (Open Mobile Alliance)

Deployment Fact Sheet on www.osgi.org
Tuesday, the OSGi Alliance announced the official release of OSGi Service Platform R4

- R4 Core Specification (pdf)
- R4 Core Companion Code (jar)
- R4 Service Compendium Specification (pdf)
- R4 Service Compendium Companion Code (jar)
- R4 Minimum Execution Environment (jar)
- R4 Foundation Execution Environment (jar)

Available at www.osgi.org
Soon to be released for R4

- **OSGi Service Platform, Mobile Specification**
  - Submitted to JCP for adoption as JSR-232 “Mobile Operational Management”
    - Jon Bostrom, Nokia, and Venkat Amirisetty, Motorola, are co-specification leads for JSR-232.
    - Early Draft Review started 7 October 2005
  - Target Release Date: 1Q2006

- **OSGi Service Platform, Vehicle Specification**
  - Hans-Ulrich Michel, BMW, and Olivier Pavé, Siemens AG, are co-chairs of the Vehicle Expert Group
  - Liaison with ERTICO Global System Telematics (GST) Project
  - Target Release Date: 2Q2006
Craig Hayman, Vice President, Development & Technical Support, Workplace, Portal & Collaboration Software Division, IBM

- Responsible for delivery of:
  - IBM’s Client Technology
  - Voice
  - RFID
  - Industry Solutions
- XML standard for objects in transactional systems
- WebSphere Studio line of products