



OSGi Alliance Community Event

June 26th - 27th, 2007

Siemens AG Campus - Munich, Germany



OSGi Alliance Community Event

**Enterprise Expert Group Update
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Background on OSGi creation

- OSGi motivation
 - People using OSGi for enterprise applications
 - Benefit of standardization in this area
- Enterprise workshop Sept. 11 2006
 - Validated requirements
 - Draft charter
- Group approved December 2006
 - Initial meeting January 30 Dublin
 - Calls/F2F every other month (roughly)



OSGi Process – (after EEG was started)

- Group members create Requests for Proposal (RFPs)
 - 15 or so created for EEG – 10 in progress
 - Some handed off to other Egs (sec, mgmt)
- Requests for Comment (RFCs) based on RFPs
 - These are the design docs
 - Can be multiple for same RFP
- RFCs are merged into OSGi specs by Peter Kriens
 - Need Reference Implementation, TCK
- Acceptance process at each step



Goals and likely results

- Next major version of OSGi
 - Probably mid-late next year
 - Early drafts of some specs by end 2007
- Add some new capabilities
 - Map existing enterprise technologies
 - Modify OSGi core
 - OSGi core changes driven by mapping of existing technologies – security, management, distribution



Debates/issues

- Modularization of JEE
- Extending native OSGi programming model for distributed computing/interoperability
- One OSGi or many?
- Multiple solutions to requirements
 - SCA, JBI, native, JEE...
- Spring config subsume OSGi DS? (yes)
- How much to change OSGi core?



One OSGi or many?

- EEG is about OSGi in less resource constrained environments
 - than home gateways, cars, or mobile phones
 - In other words, “server side” OSGi
- But a lot of server side stuff already exists!
 - JEE, SCA, Web services – some with OSGi
- Can there really be a single OSGi?
 - Initial goal is yes – single OSGi, OSGi is not YAJEEC



Modularization of JEE

- Sun has a competing JSR – 277
- JEE 6 identifies profiles as a goal (JSR 316)
- OSGi is adopted into JSE – JSR 291 (Sun objected)
 - IBM, BEA already modularizing app servers on OSGi
 - Others said to be following suit
- Adopt a proven standard? New spec for JEE 6?



OSGi and enterprise IT requirements

- Most requirements can be met by mapping other technologies onto OSGi
 - JEE, SCA, JBI
- Spring/OSGi is more of a marriage
- What is needed beyond existing enterprise technologies?
 - Dynamic, configurable runtime
 - Lightweight “container” with mix ‘n’ match



Define new or map existing?

- Lots of enterprise technology exists
 - CORBA, MQ, CICS, Tuxedo, JEE, .NET
 - Databases, commercial Web sites
- Spring-OSGi illustrates one approach
 - Combine the best of both
- SCA-OSGi possibly another approach
 - Working with the SCA folks to define a mapping
- Level of extension the main topic of discussion



Current status

- Requirements phase closed, on to design
- Several work-streams
 - Distributed OSGi
 - Extended lifecycle management
 - OSGi and Spring
 - SCA and OSGi
 - J2EE and OSGi
 - Browsers (“universal OSGi”)
 - Nonfunctional areas



RFPs approved, RFCs started

- External services & service discovery (combined into RFC 119)
- Component model = Spring-OSGi (RFC 124)
- Relational database service
- JNDI integration
- Web applications (extend RFC 44)
- Security, framework booting, classloading, third party dependence (CPEG)
- Management enhancements (RMEG)



RFPs still under discussion

- Modularizing JEE
 - XML processing, EJB container, Web services, etc.
- SCA mapping
- Framework state management enhancements
- Universal OSGi (no driver now)



Summary

- EEG formed to address requirements for enterprise use of OSGi
- Work completed depends on participation
- Among the (potential) work items:
 - JEE modularization
 - Access to external systems
 - SCA mapping
 - Spring marriage
 - Improvements to various Core features