

os@emi

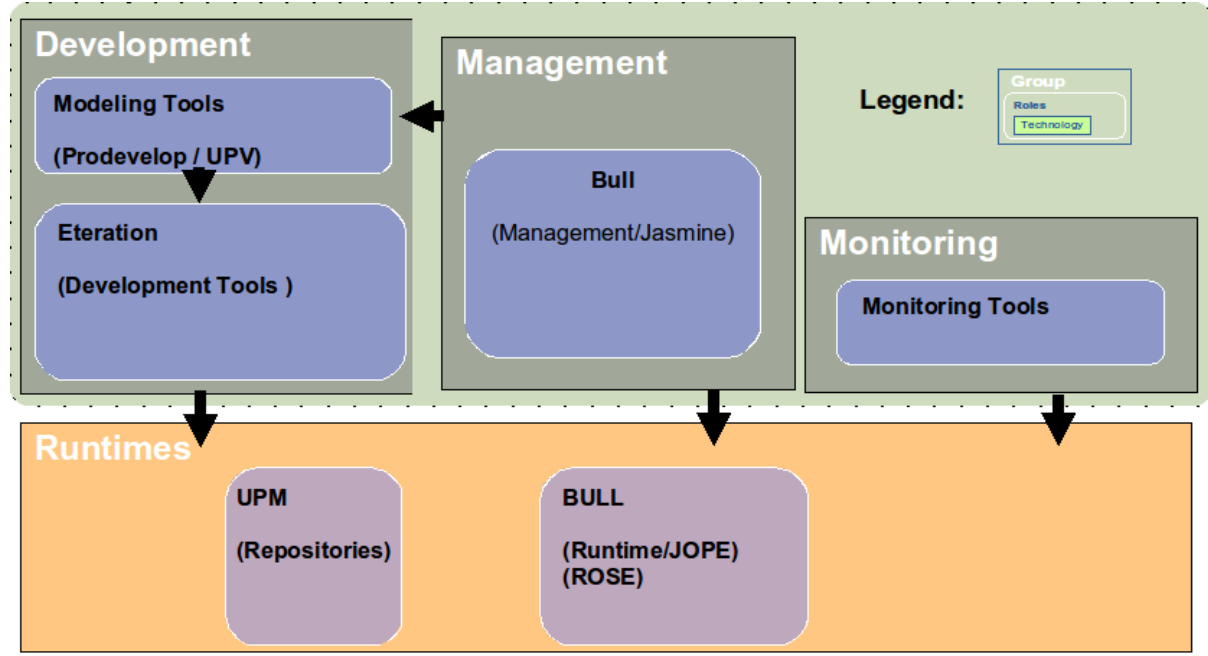
Ambient Development Tools



Ambient Development Tools

An open development platform comprised of extensible frameworks, tools and runtimes for building, deploying and managing OSAmI Applications

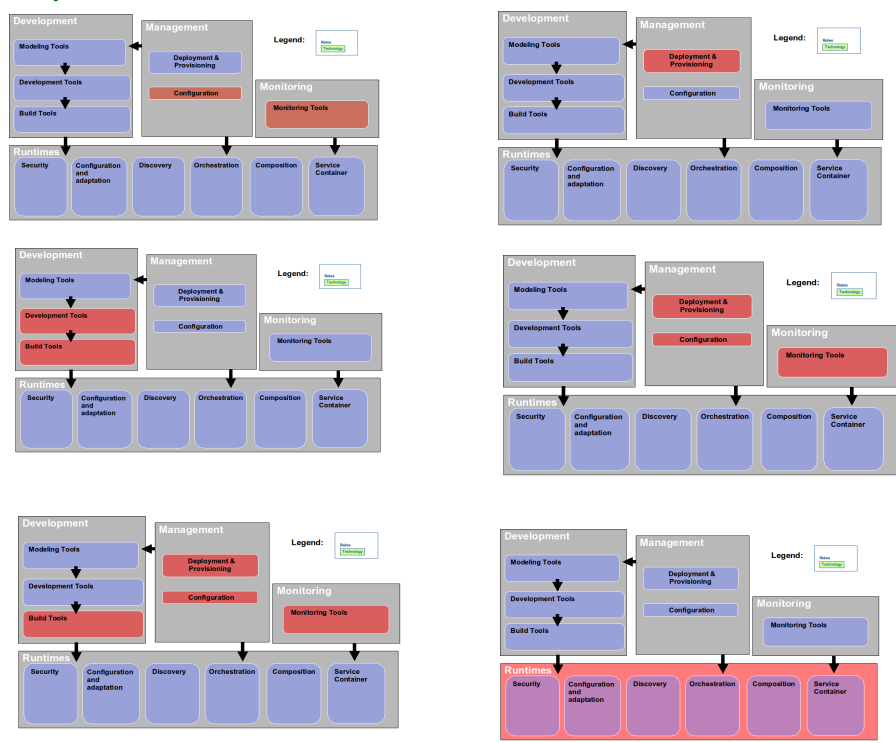
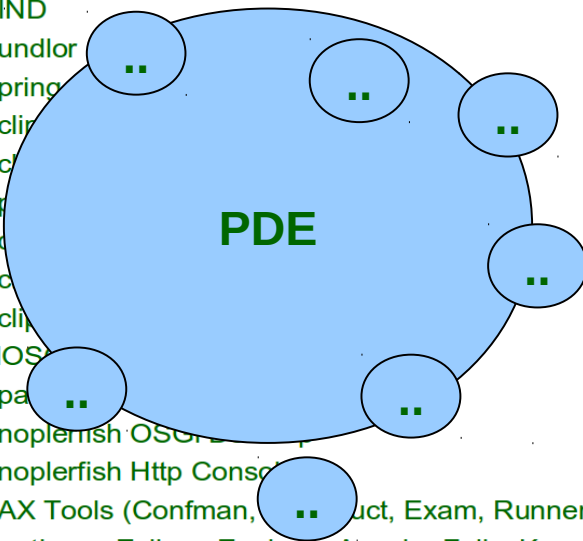
- Eteration (TR)
- Prodevelop (ES)
- UPM (ES)
- Bull (FR)



OSGi Tools Survey

- Report available @ Osami web site 05/2010
 - Service/Web Tooling (Advanced) OSGi Tooling (Primitive)
 - Standards works (OSGi Enterprise Spec)

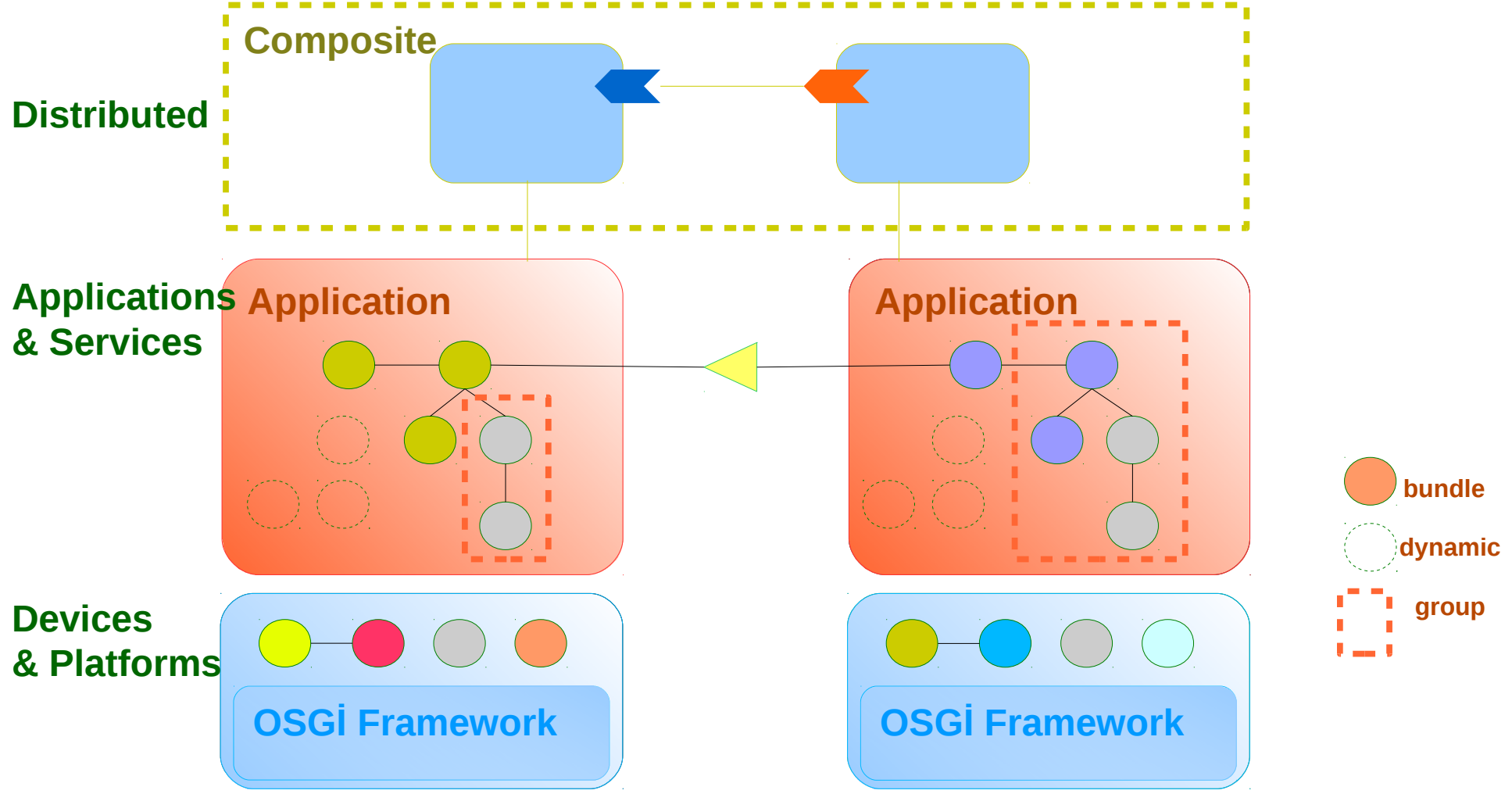
- Bundle Monitor
- OSGi Remote Management Tools
- BIND
- Bundlor
- Spring
- Eclipse
- Ec
- Ap
- Ec
- Ec
- Eclipse
- MOS
- Apa
- Knoplerfish OSGi
- Knoplerfish Http Conso
- PAX Tools (Confman, .., Exam, Runner, Shell)
- Runtimes: Eclipse Equinox, Apache Felix, Knoplerfish, Concierge, uJOnAS



Identified Issues to be Addressed (Reported with ToolsV1)

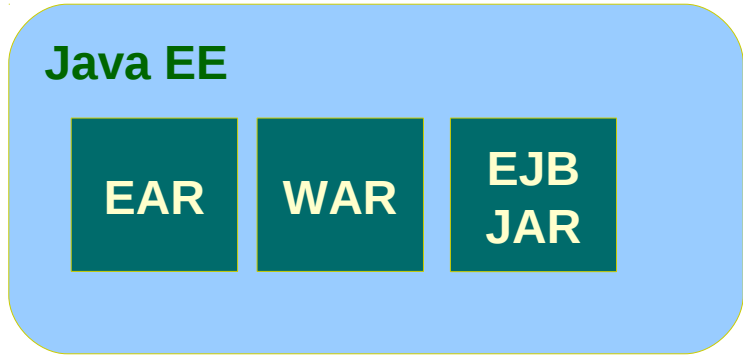


Developing OSAMI Applications



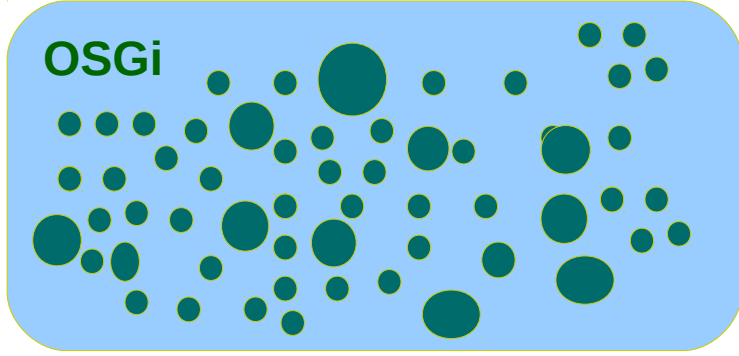


The Application Model Controversy



?

Knee Jerk
Response



Concept of an “Application”

Standards **Static Resolution**

Coarse Grain

Standalone Units

Concept of “Services”/Bundles

Adhoc Model Dynamic Resolution

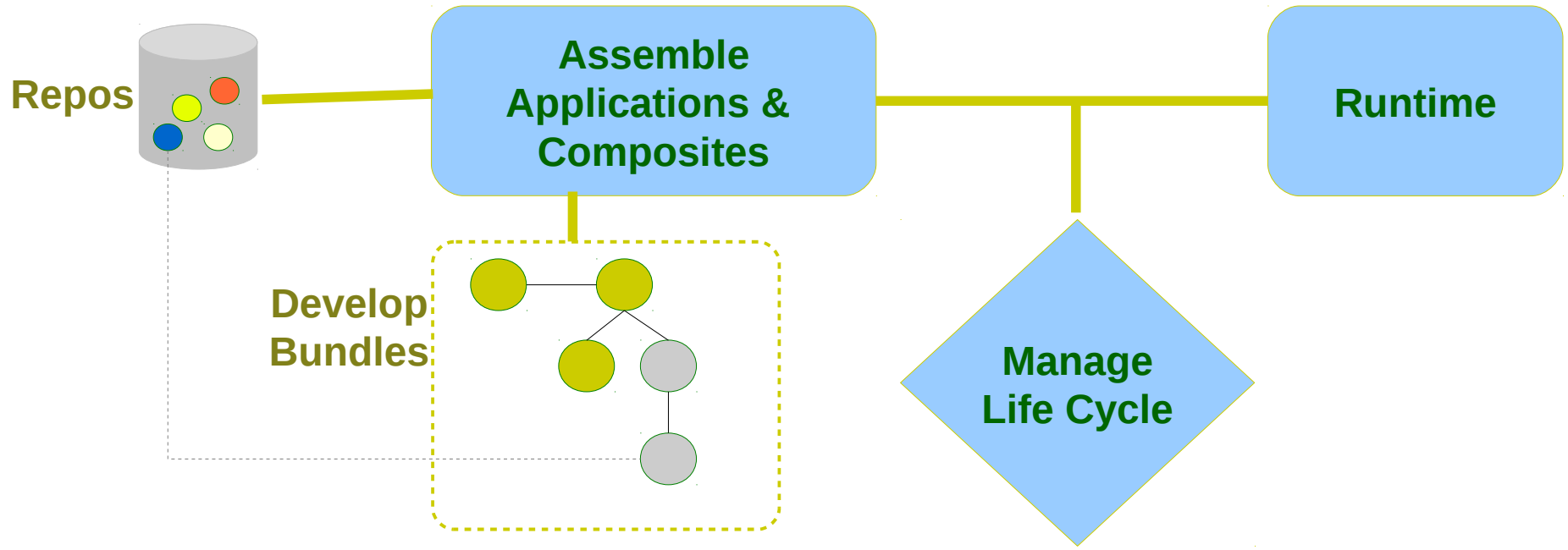
Fine Grain **Scalable**

Complex dependencies

- Development-Time Application Assembly
- Assemble Bundles/Bundle groups
 - Service Discovery/Repository Access
 - Dependency Management

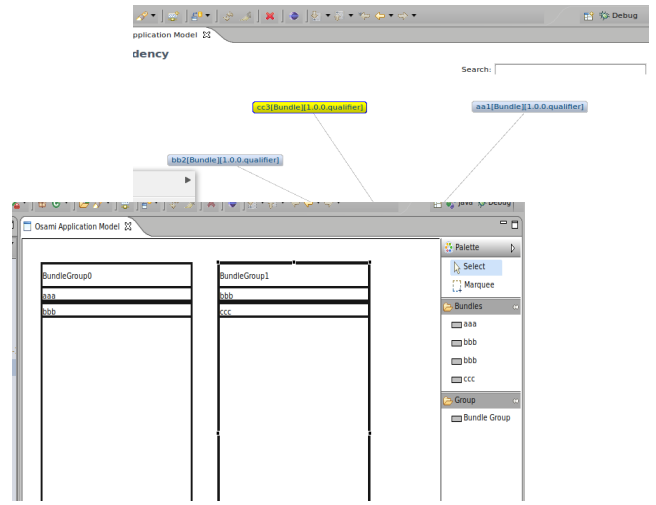
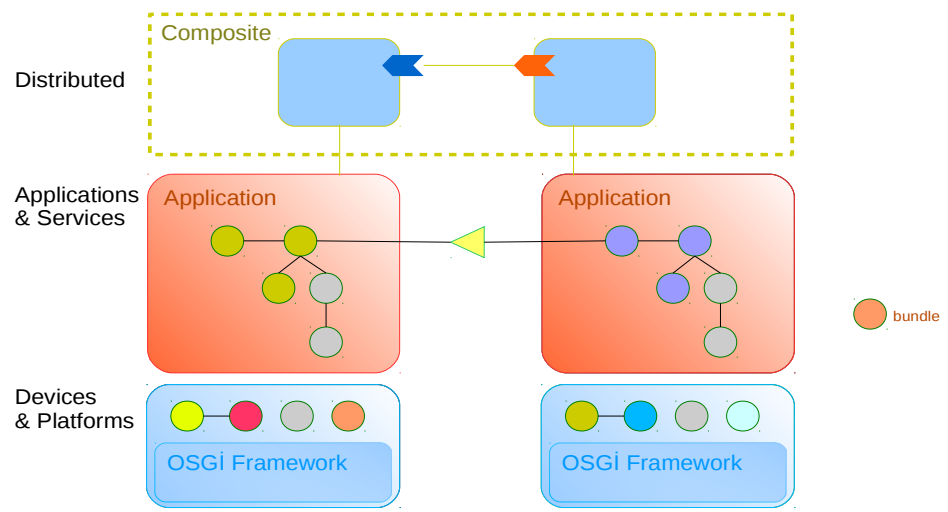
Virgo/Aries
Eclipse Features
Nested
Frameworks,
SCA Composite

Development Use-Case





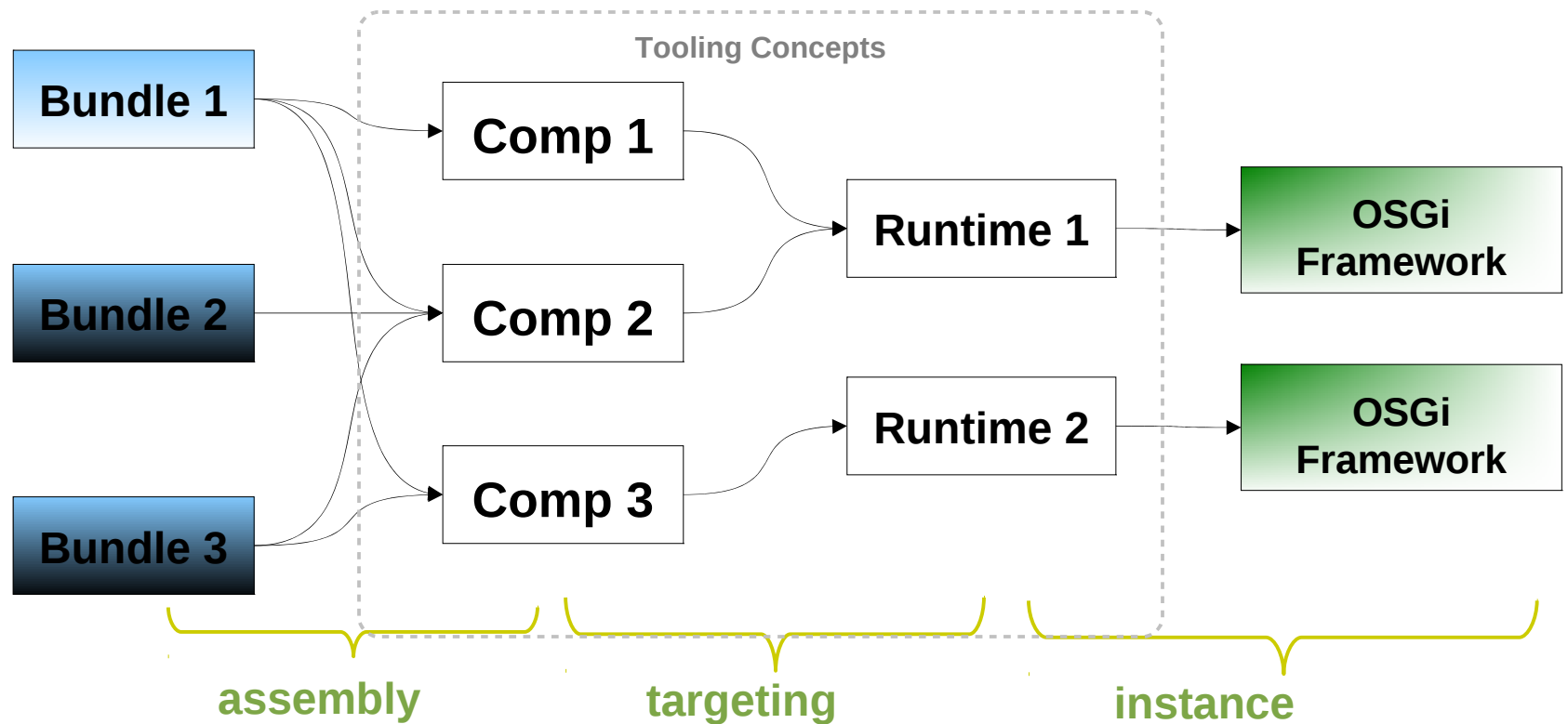
OSaml Composite Editor



- Assembly
- Discovery & Provisioning
- Targeting to Runtimes

Marriage of concepts

- WTP Server Adapters and PDE-UI OSGi Frameworks





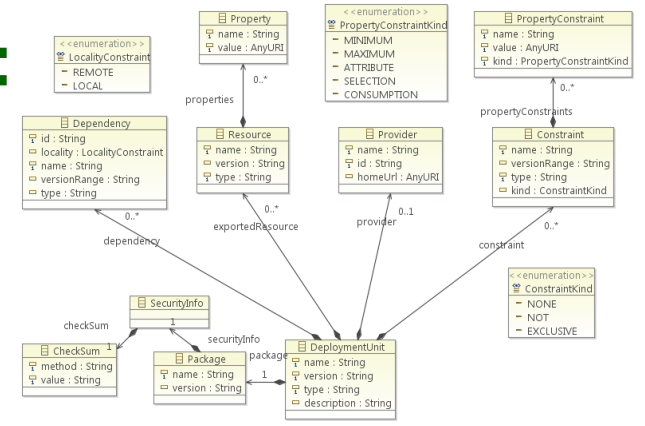
- **Tools V1**
 - **Eclipse Tools Package:**
 - Access Services from Repositories
 - OSGi Meta Framework
 - Support for any OSGi capable runtime
 - Application Management
 - **Support OSAMI certified platforms/runtimes:**
 - Definitions (runtime + services)
 - Meta Framework
 - Supported: Equinox / Felix
 - Planned: Jonas, Knopflerfish, Apache Aries, Eclipse Virgo
 - **Application Assembly**
 - Assemble bundles
 - Automated Dependency Management



Repository tools(UPM)

OSAmI repository web interface:

- CRUD operations for bundles and descriptors
- Adaptation to OSAmI security specifications



eLuzien client

- Eclipse plugin
- Integration with remote interface
- Usability improvements



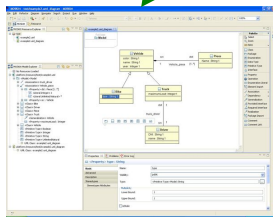
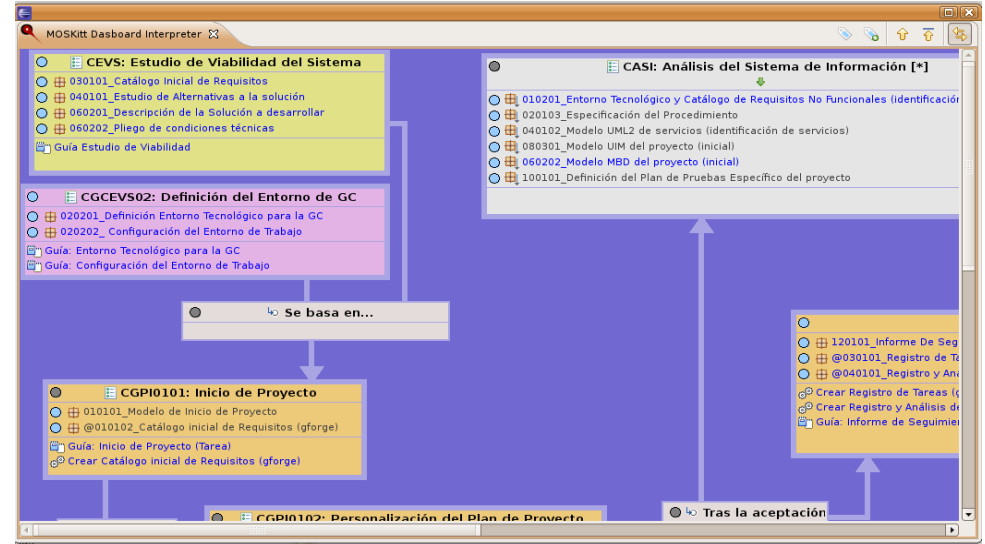


Current Work

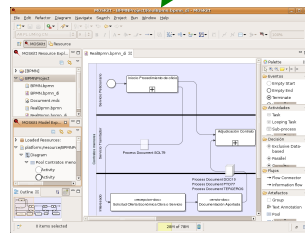
Method Dashboard

- Method definition
 - Tasks, Resources, Dependencies, ...
- Method execution
 - Opening tools
 - Starting wizards
 - Documentation cheatsheets

MOSKitt Method Dashboard



UML2 Editor



BPMN Editor

...



Other MOSKitt Modeling Tools



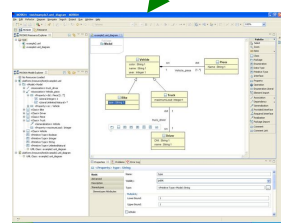
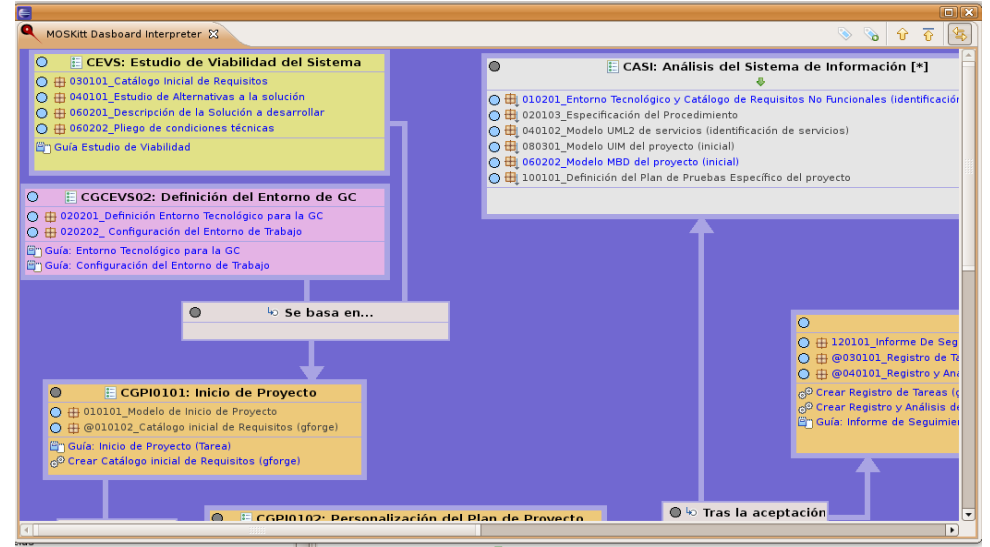
Next Steps

WP2

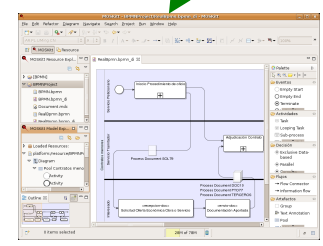
OSAmI Method

- Defining OSAmI Method
 - In WP2
- Adapting current tools
- Developing new modeling tools and generators

MOSKitt Method Dashboard with OSAmI Method



UML2 Editor + OSAmI Profile



BPMN Editor



OSAmI specific Modeling Tools



OSAmI code generators



Next Steps: Bundle Development Environment

- Extend Eclipse PDE
 - OSGi/Bundle Projects
- Managing Target Platforms
- Repository Integration
- Provisioning Support
- Application Models vs Service Assembly & Targeting
- Transparent Support Multiple OSGi Frameworks
 - Configure/Customize
 - Projects are independent of Runtimes



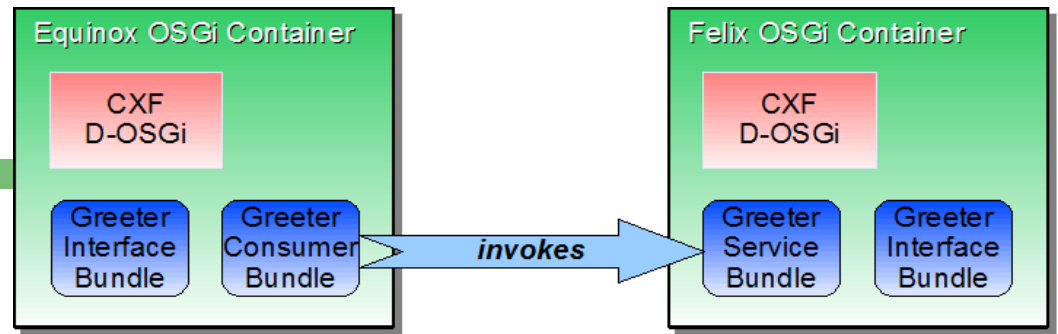
Next Steps: Joint Project Incubation

Incubation

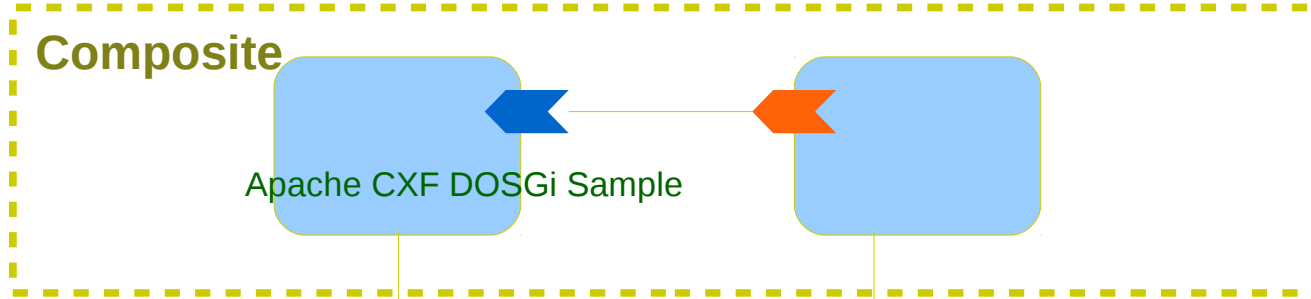
- Planning stage
- Q4 – 2010
- Eclipse/Apache decision to be made
- Contributors
 - Eteration
 - ProDevelop
 - UPM
 - Bull?

Concepts DEMO

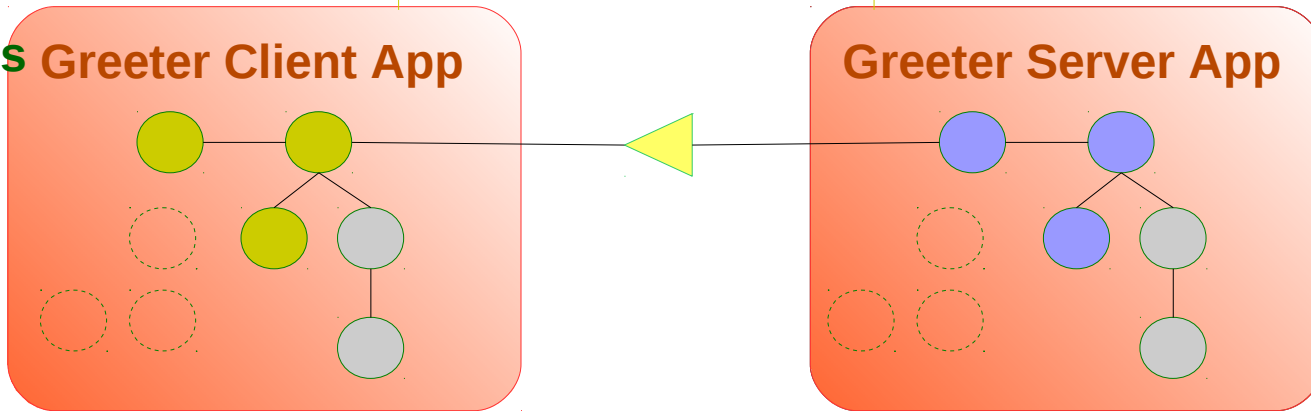
Open Source Ambient Intelligence Commons



Assembly



Applications & Services



Runtime Profiles

