

Ecole Supérieure Privée d'Ingénierie et de Technologies





# Eclipse in BPM & Systems based on Alfresco

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- Events, activities (tasks) and gateways (choices) of a workflow.
- User tasks are assigned to human performers (users).
- System tasks perform some kind of operation against the Alfresco repository.





- Alfresco: An open-source ECM alternative for SharePoint
- Companies that can't meet Microsoft's price for its a SharePoint content management package might want to try Alfresco
- Enterprise Content Management (ECM) is a formalized means of organizing and storing an organization's documents, and other content, that relate to the organization's processes. The term encompasses strategies, methods, and tools used throughout the lifecycle of the content.



# **BPM Engine on Alfresco**



The Task Model provides a description for each of the user tasks in the workflow. Each task description consists of:

Alfresco provides a "Data Dictionary" for describing types of object to store, view and edit. This mechanism is also used to describe Workflow Tasks.



### **Document Management**

- Full ECM functionality delivered through the modern, consumer-like Share interface
- A single unified repository to manage any content Documents, Images, Video and Audio
- Easily collaborate on content and projects with a globally dispersed team
- New social features, such as status, tags and content activity feeds make teams more effective
- Powerful team tools include a document library, blog, wiki, calendar and simple workflow
- More scalable and open than SharePoint and runs on an open source stack



### **Eclipse in BPM**

 The eBPM (eclipse Business Process Management) project aims to realize a complete BPM solution for OSGi. The eBPM project provides UI and runtime support, to allow to deploy and manage the OSGi services in a declarative way as well as to leverage the capabilities of the OSGi declarative services.



# **The missing Chain**

At present, the OSGi technology appears to be the best answer to the demand of stable, modular and easily extensible solutions according to the SOA guidelines. On the other hand, OSGi really misses a central concept of a BPM platform that enables to describe the integration process in terms of OSGi services orchestration.

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### The eBPM aims at the realization of a complete BPM solution for OSGi.

Several connectors are available, that allow to activate the services by the most common protocols, such as **SOAP**, **JMS**, **FTP**, **Mail**, and many more

#### **Don't care about communication!**

eBPM core framework gives a way to realize OSGi Services based on the *messaging paradigm* that uses the *OSGi Event Admin Service* to communicate with each others.





### Application / Bundles Services Service registry

Life cycle

Security

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Modules

**Java Virtual Machine** 

### **Operating System**

Hardware

**Open Services Gateway initiative framework** 



- Module system and service platform for the Java programming language that implements a complete and dynamic component model, something that as of 2011 does not exist in standalone Java/VM environments.
- Applications or components (coming in the form of bundles for deployment) can be remotely installed, started, stopped, updated and uninstalled without requiring a reboot; management of Java packages/classes is specified in great detail.
- Application life cycle management (start, stop, install, etc.) is done via APIs that allow for remote downloading of management policies.
- The service registry allows bundles to detect the addition of new services, or the removal of services, and adapt accordingly.

# **JBOSS jBPM**



# **Questions**?