Next generation open-source ISU and Web 3.0 platforms (eg. 6Napse)

Jean-Pierre Lorré – R&D director
AGENDA

- EBM WebSourcing
  - Who we are

- Trends for enterprise interoperability
  - ISU, Web 3.0, business networking

- Open-source
  - Interoperability, business models

- 6Napse business network

- Conclusion
  - Links with FoI
EBM WebSourcing today

<table>
<thead>
<tr>
<th>Year</th>
<th>Event/Information</th>
</tr>
</thead>
</table>
| Sept. 2004 | Founded in Toulouse – France  
Professional Open Source editor of SOA technologies for interoperability and collaboration |
| Oct 2004 | Join the European Open Source consortium ObjectWeb  
Project leader of PETALS Enterprise Service Bus |
| 2006 | EBM WebSourcing is a founding member of the new version of European open source consortium: OW2 (www.ow2.org)  
EBM WebSourcing is member of NESSI ETP  
EBM WebSourcing is founding member of InterOP-VLAB GSO |
| Sept 2006 | PETALS V1.0 |
| 2007 | First customers of PETALS  
6Napse feasibility study, business case and first prototypes |
| 2008 | 25 employees located in France (Toulouse and Grenoble)  
More than 10.000 downloads of PETALS  
European projects: SOA4ALL (www.soa4all.eu), SYNERGY (www.synergy-ist.eu), GENESIS  
Launch of DRAGON open-source SOA governance platform |
National R&D projects
JONES / SCORWARE / SEMEUSE

JONES
Java Open ESB

SCorWare
Service Component Oriented softWare

SEMEUSE
Semantic ESB

DRAGON: Distributed Semantic repository

JBI: Java Business Integration

SCA: Service Component Architecture

SAWSDL, WS-Policy

SOA
European projects IST/FP7

- **SOA4ALL (NESSI strategic project)**
  - 9,5 M€ IP project - http://www.soa4all.eu
  - ATOS, BT, Open University, SAP, Univ. Innsbruck, CEFRIEL, EBM Websourcing, Hanival, IBM, INRIA, Intelligent Software Components, Ontotext, TIE, TXT, Univ. Karlsruhe, Univ. Manchester
  - To setup a semantic service infrastructure at the web scale

- **SYNERGY (Interoperability STREP)**
  - 3,9 M€ STREP project - http://www.synergy-ist.eu
  - Coventry University, Forschungszentrum Informatik an der Universitaet Karlsruhe, Institute of Communication and Computer Systems, CIM College d.o.o, Loughborough University, Douglas Connect, Technology Application Network Limited, EBM WebSourcing
  - Supporting highly-adaptive Network Enterprise collaboration through semantically-enabled knowledge services
PEtALS technology

- PEtALS is based on standards: Java, XML and Web Services: JSR 208 – Java Business integration JBI certified.
- PEtALS is based on a Plugin architecture in order to be easily customized.
- PEtALS is a lightweight, highly distributed and scalable platform for both A2A and B2B integration.
- PEtALS offers a solid backbone for enterprise Information System and acts as a Bus where all data are exchanged.
- Distributed under Open Source license (LGPL)
- FraSCAti SCA environment: design & run-time
PETALS: distributed ESB

Orchestration
BPEL engine
POJO

Multi-protocol
routing

Transformation
XSLT

JMS connector

CICS connector

Soap/http connector

 Distributed
registry

Portal

Web Services

Soap/http connector

JMS services

Cobol legacy application with service Facade

Web Services
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Evolving Digital Channels

The Changing Landscape

CONTROL OF CONTENT

User-Generated content
User-Controled Immersive Environment

Web 1.0
Informational Web Sites
Structured

Web 2.0
Wikis
Tagging
RSS
Blogs
Rich Media
Semistructured

Web 3.0
Virtual Worlds
Mobile
Semantic Web
Unstructured

ENGAGEMENT/ COLLABORATION

Access
Find
Share
Participate
Collaborate
Co-Create
Social Computing: the next wave of collaboration

<table>
<thead>
<tr>
<th>1st Wave</th>
<th>2nd Wave</th>
<th>3rd Wave: Social Computing</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
<td>Virtual workspaces</td>
<td>Blogs</td>
</tr>
<tr>
<td>Calendar</td>
<td>Instant messaging</td>
<td>Wikis</td>
</tr>
<tr>
<td>Group scheduling</td>
<td>Enterprise portals</td>
<td>RSS feeds</td>
</tr>
<tr>
<td>Discussion forums</td>
<td>Presence</td>
<td>Social networks</td>
</tr>
<tr>
<td>Directories (taxonomy)</td>
<td>Web conferencing</td>
<td>Tagging</td>
</tr>
<tr>
<td>Groupware</td>
<td>Expertise automation</td>
<td>Social bookmarking</td>
</tr>
<tr>
<td></td>
<td>Personal websites</td>
<td>Personal profiles</td>
</tr>
<tr>
<td></td>
<td>Composite Applications</td>
<td>Mashups</td>
</tr>
</tbody>
</table>

“Social Computing is not a fad. Nor is it something that will pass you or your company by. Gradually, Social Computing will impact almost every role, at every kind of company, in all parts of the world. Firms should approach Social Computing as an ongoing learning process, using some of the best practices of firms that have successfully taken the first steps.”

- Forrester Research

“To thrive in an era of Social Computing, companies must abandon top-down management and communication tactics, weave communities into their products and services, use employees and partners as marketers, and become part of a living fabric of brand loyalists.” ¹

“Enterprise social software provides an open and freeform environment that (1) stimulates large-scale participation through informal interactions, and (2) aggregates these interactions into an emergent structure that reflects the collective attitudes, dispositions and knowledge of the participants.” ²

“The executives say they are investing in Web 2.0 to communicate with customers and business partners and to encourage collaboration inside the company.” ³

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¹ Source: Forrester Research, Inc. “How Networks Erode Institutional Power, And What to Do About It” , February 2006
² Source: Gartner Presentation, “Wikis and Social Software: How to Create and Harvest Value from Informal People Networks” by Nikos Drakos, March 19-1, 2007
Business Social network

- Business social network
  - Application of the Social Networking concepts to enterprises
  - Market will grow to $428.3 million by 2009 (Source IDC)

- Web 2.0 & social network applied to enterprise ecosystems and virtual enterprises

- Social Networking concepts
  - Expanding your business/social network by connecting through your existing contacts.
  - Examples: Facebook, MySpace, LinkedIn, etc.
  - Each new member in a network adds value, which attracts new members
Technology stack

User interface

Mashup  Tagging  Social search

Ontology: OWL  BPMN

SCA  BPEL  Fractal

SAWSDL  WSMO  PVM

JBI  WSDL  UDDI  SPARQL

WS-*  UDDI  WS-*

XML

Social computing
Semantic business processes
Dynamic orchestration
Semantic services
Integration
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ObjectWeb

- Founded in 2000
- A joint project funded by INRIA, Bull and France Telecom
  - 100 projects
  - 650 committers
  - 5100 contributors
  - 12,200 subscribers
  - 80 countries
  - 2,400,000 downloads

OrientWare

- Founded in 2004
- Sponsored by the Chinese Ministry of Science and Technology (MOST)
  - Chinese National High Tech. Program (863 Program)
  - US$1billion+ investment

In 2007, ObjectWeb and OrientWare merge to form OW2
The mission of the consortium is to develop open source middleware* and to foster a vibrant community and business ecosystem.

*Middleware at large, including tools for the development, deployment and management of distributed applications
Membership Status

13 Strategic Members, 41 Corporate Members
+800 Individual Members as of May 2008

Strategic Members
1. Beihang U.
2. Bull SAS
3. CVIC SE
4. DOCSC
5. Engineering
6. France Telecom
7. INRIA
8. ISCAS
9. NUDT
10. Peking U.
11. Red Hat
12. SERPRO
13. Thales

Corporate Academia
1. GET
2. GMRC

Corporate Research Labs
1. Charles University
2. Fraunhofer FOKUS

Corporate Micros
1. Arctic.Park
2. Experlog
3. Neociclo
4. Obeo
5. Orbeon
6. Oxymel
7. Requea
8. Scalagent
9. Ubikis
10. XPerNet

Corporate SMORGs
1. Arimaan Global Consulting
2. Avane
3. EBM WebSourc.
4. Edifixio
5. eteration
6. European Dynamics
7. eXo Platform
8. Funambol
9. Iona
10. Intervision
11. Linagora
12. Open Wide
13. Requea
14. Serli
15. Talend
16. TongTech

Corporate LORGs
1. Placenet.cn
2. Sogeti
Current Code Base*

*Selection based on: downloads, most recent update, number of developers
Industry-Grade Projects
2007 top downloads

- lomboz
- funambol
- asm
- exoplatform
- jonas
- xwiki
- ops
- spagobi
- jotm
- acceleo
- bonita
- javaservice
- shark
- salomé-tmf
- joram
- petals

2,456,900 downloads
An Initiative is a joint effort by companies targeting the same market need. Initiatives aim at:
- facilitating technology integration between projects
- helping build business synergies between companies.

Initiatives developed in '08
- Business Intelligence
  - Engineering, Talend, Artemis, Trento U., Milan U., Bologna U.
- SOA
  - Bull, EBM WebSourcing, Engineering, INRIA, ISCAS, BUAA
- E-Government
  - Thales, Bull, EBM WebSourcing, BUAA, DOCSC, CSIP, CVIC SE, ID-Logism, ISCAS, Nanhai Science and Technology Information Bureau, TongTech, Digital China

Coming soon
- Telco initiative
- Embedded initiative
Open Source business model

Model choice
- Open Source is « commoditization », meeting the needs of costs reduction, better interoperability and standard based solutions.

Customer advantage
- Lower TCO: 10 times lesser than proprietary solutions
- Standards based
- Interoperability
- Better Quality: community of developers and users
- Source code access and no lock-in effect

High potential
- Analysts (Gartner Group) predict that 80% of public sector investments will go towards Open Source.
- Sales of Open Source associated services will raise 13 billion$ in 2010.
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Our goal: to develop and operate a collaborative framework dedicated to enterprises ecosystems
Overall collaborative framework

Network characterization

Collaboration ontology

Rules

Collaborative process ontology

Process handbook

BPMN collaborative process model

Network Editor

protégé

Transformation

6Napse

"PETALS Enterprise Service Bus
6Napse general description

- Business network
  - Allows description of businesses
  - Viral propagation

- A trustable space for members to establish relations among them
  - Communicating through the services provided by the platform
  - Integrating information systems of the partners and defining more complicated collaborative process
    - Leverage PEtALS & P2P technologies
  - mediator between information systems of the partners

- A collaborative tool available thanks to a SaaS business model
  - To provide pervasive collaborative services
    - Shared space, mail, chat, etc.
  - Easy to use, one-click installation, free download
6Napse technical architecture

- A p2p architecture
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There are many dimensions to the Future Internet

- New ways to work together
- Social computing
- Large scale distribution
The secret to creating a thriving Long Tail business can be summarized in two imperatives:

- Make everything available
- Help me find it

*Chris Anderson: The Long Tail*

Cheap, utility-supplied computing will ultimately change society as profoundly as cheap electricity did. As information utilities expand, the changes will only broaden, and their pace will only accelerate.

*Nicholas Carr: The Big Switch*
Thanks

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