

A modest proposal for a core technical strategy in OW2

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① Back to the future

② Proposal

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An exokernel vision for middleware in 4 strata :

- Component substrate
 - e.g. Fractal
- Architectural frameworks
 - e.g. JORM
- Distributed system services
 - e.g. Perseus
- Platforms and personalities
 - e.g. JDO

What happened ?

- Consortium expansion (members, projects)
- Little uptake of OW component technology
 - despite AOKell/Koch, Cecilia/Think, JORM/Perseus, Petals, Frascati, Jade, etc
- Little reuse across projects
 - despite some interesting examples e.g. Petals
 - some ad-hoc integration e.g. JOnAS
- Little cross-project pollinization

What to do ?

- Nothing
 - OW2 turns into a community à la Apache (differentiation ?)
 - OW2 turns into a forge (interest ?)
- Revive part of old vision
 - Small scale, around existing, interested projects
 - Need a rallying cry, technical impetus

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- Rallying cry

Architecture-based programming

- Technical impetus
 - Small core of projects
 - around Fractal, Frascati, Jade/Jasmine, Petals, and other Fractal-based projects
 - To serve as a showcase
 - integration, extensibility and automated management
 - And provide a new generation middleware core for OW2
 - position OW2 as a technical innovator

Architecture-based programming

- Explicit software architecture
- Selective, architected reflection
- Basis for distribution and automated management
 - beyond OSGI, and IoC containers

Architecture-based programming in Galaxy

- Galaxy : INRIA development project (7 teams involved)
- Goal :
 - consolidate and extend Fractal technology
 - build an integrated SOA environment
- Expected output
 - ADL for dynamic architectures, incl. workflows
 - IDE/MDE support
 - Support for distributed deployment and configuration
 - Support for monitoring and supervision

- Form a small core of interested projects
 - no all-encompassing in initiative
 - proceed by example
 - around Fractal-based projects
- Outline vision of architecture-based programming / SOA
exo-kernel
 - white paper
 - online digest

Supporting actions

- Standards strategy and presence
- Online strategy and presence