Integrating **SOA Tooling and Monitoring** through the STP Intermediate Model

Adrian Mos, INRIA

IN'Tech, 12 November 2009, Montbonnot
Problem

Design and Runtime spaces are disconnected
during design...
Business Process Design
Architecture Definition
Development
but...
everybody uses their own tools

BPMN, BPEL

SCA, Spring

JBI, Java, WS*
so it is difficult to...
express the same requirements
and move SOA artefacts around
at runtime...
multi-layer infrastructure
several monitoring systems
myriad of tuning options
insufficient context
so it is difficult to...
understand reasons of QoS issues
and implications of decisions

...at the appropriate level
Integrated Space

Ideal World

strong multi-space coordination
gives two-way correlation
during design...
Business Process Design
Architecture Definition
so even though...
everybody uses their own tools

BPMN, BPEL

SCA, Spring

JBI, Java, WS*
it becomes easier to...

express the same requirements
and move SOA artefacts around
so at runtime...
we can control...

what and when to monitor

how to better tune the system
and it becomes easier to...
understand reasons of QoS issues and implications of decisions

...at the appropriate level
intermediate model...

a conceptual bridge for SOA artefacts
A metamodel-based approach
Eclipse Modelling Framework
transformation plugins
example...
exporting artefacts...
transported elements
generating SCA...
SCA
refactoring...
Design Space

- Infrastructure
- SOA @ IT Level
- SOA @ Business Level

Runtime Space

- Infrastructure
- SOA @ IT Level
- SOA @ Business Level

Modelling Information

Automatic Correlation

galaxy - INRIA project
agility through dynamic software architecture
contextual QoS data display