



# Best Practice SOA goes Eclipse

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Eclipse Summit Europe, Ludwigsburg  
October 10, 2007



# Agenda



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- The value of SOA and Open Source
  - Past technical inhibitors of SOA
  - Eclipse as a leader in Open Source SOA
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## Key Messages

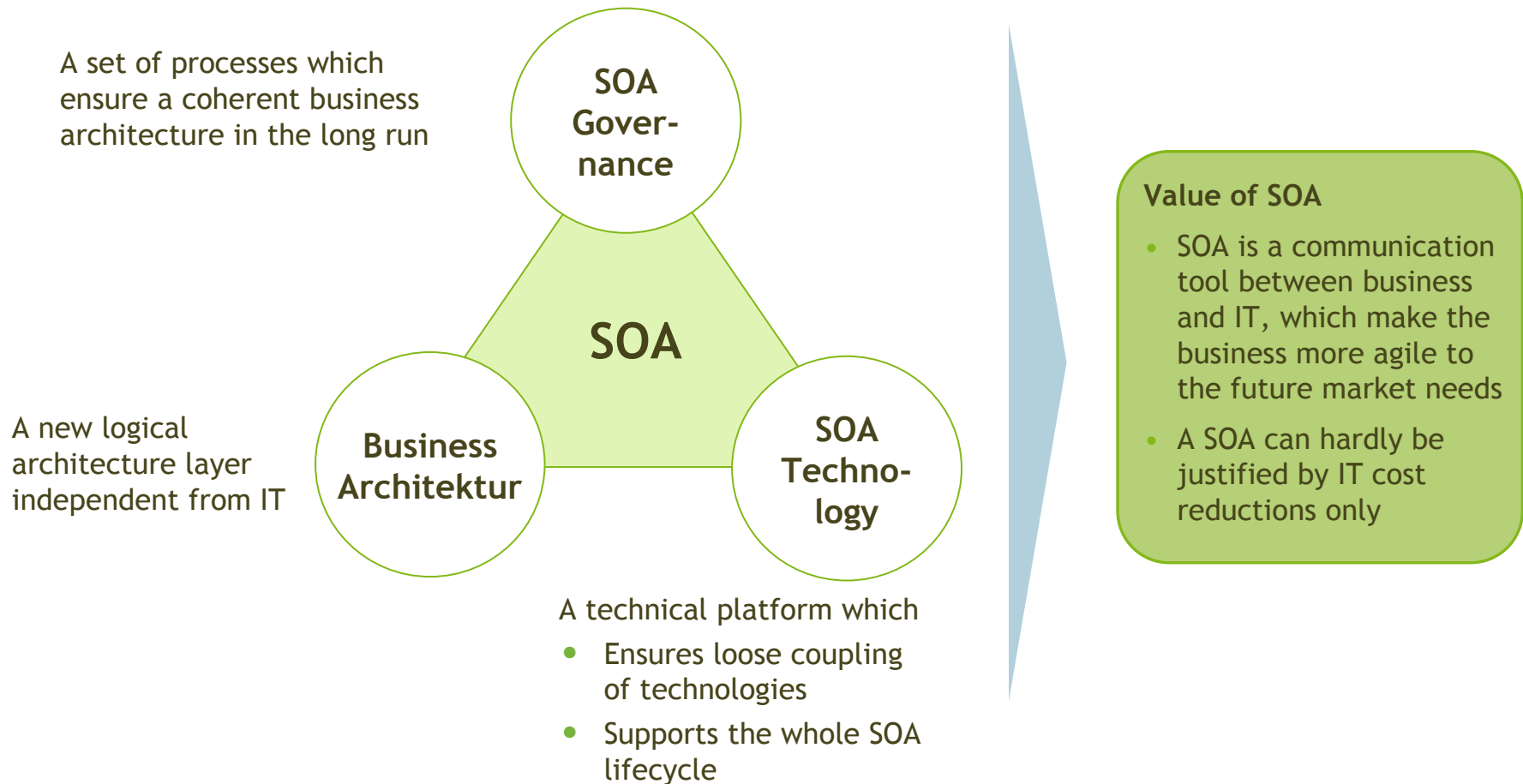
- SOA and Open Source offer high business value for enterprises
- In the past this value has not been fully captured
- The Eclipse Swordfish project will help enterprises to capture that value
- SOPERA offers the first complete open source SOA Suite, which is based on Eclipse Swordfish

# Agenda

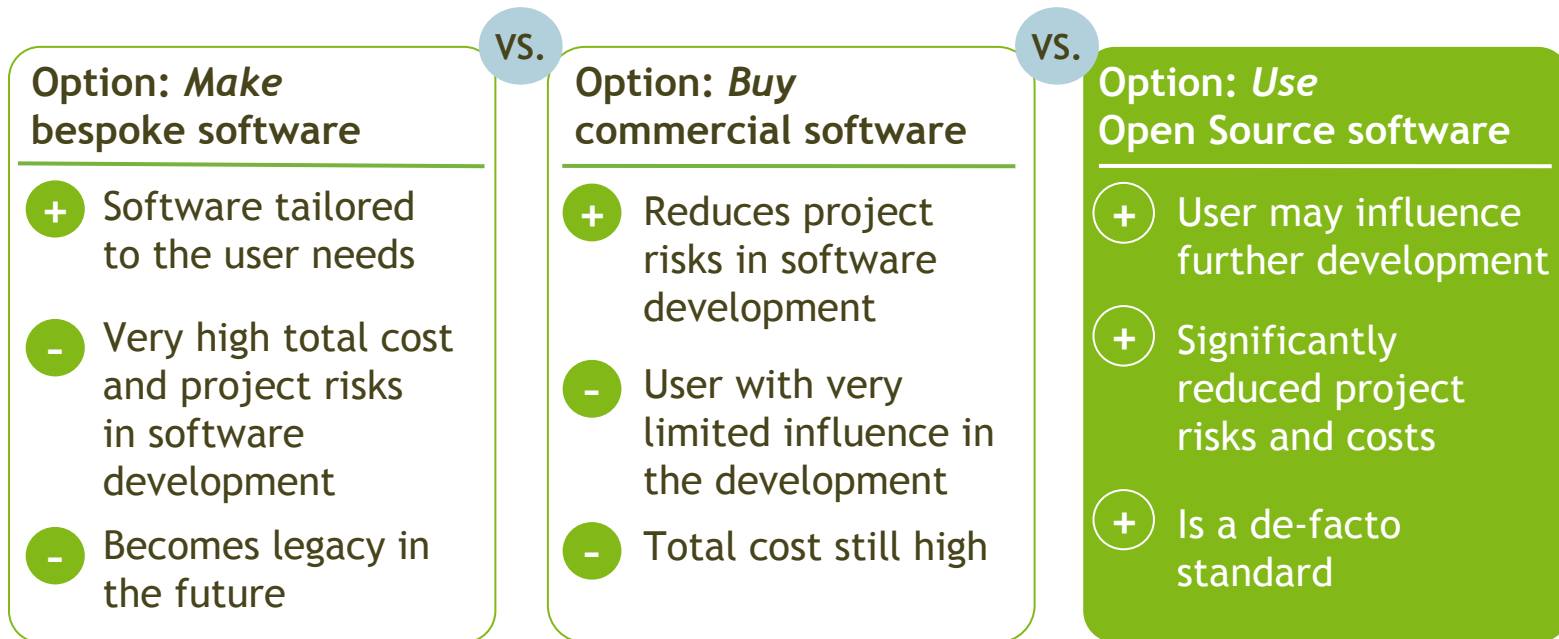


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- **The value of SOA and Open Source**
  - Past technical inhibitors of SOA
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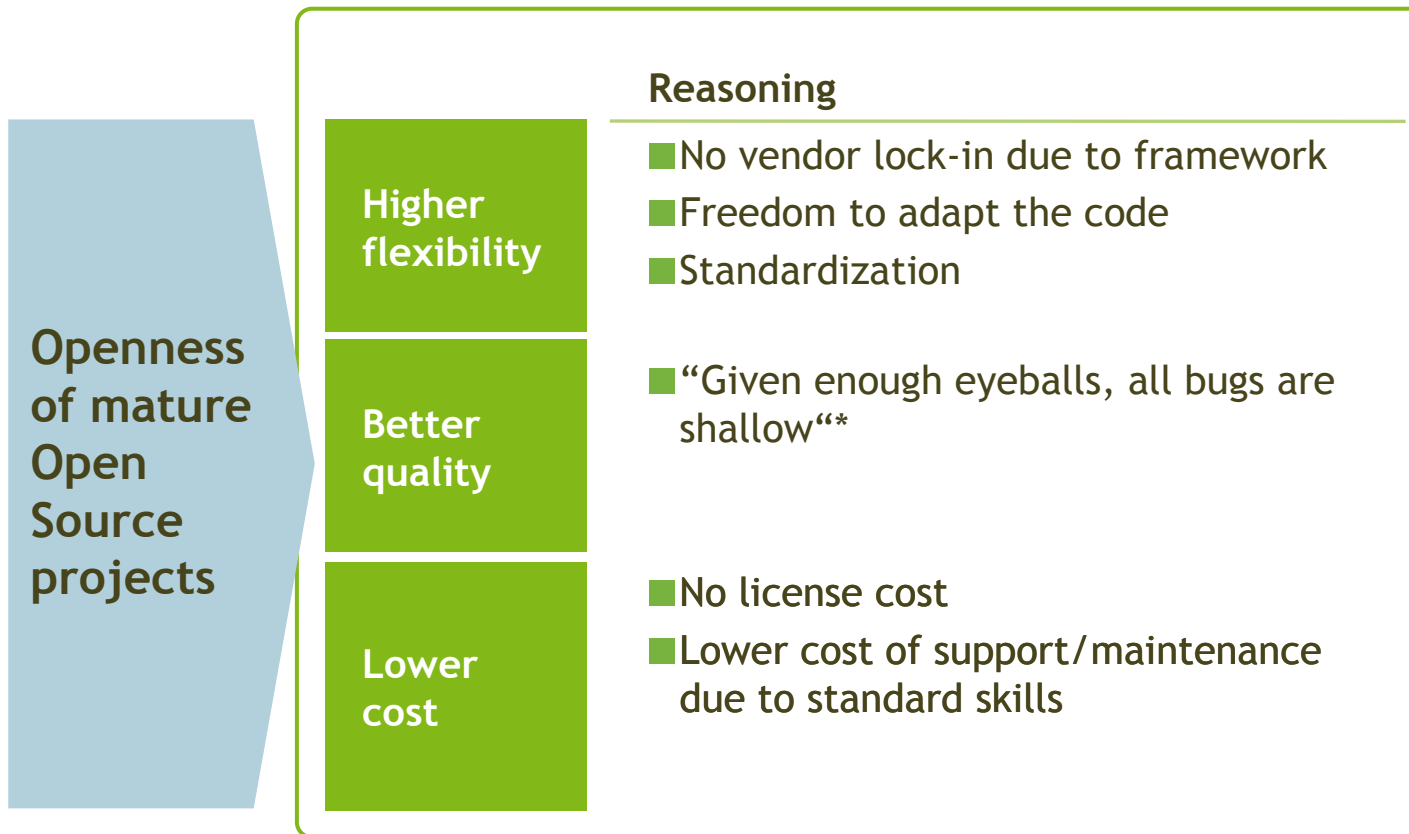
# SOA is a management discipline and offers high business value to enterprises



# The Open Source approach offers a new option by combining the best of “Make” and “Buy”



# Mature Open Source software creates high business value in enterprises

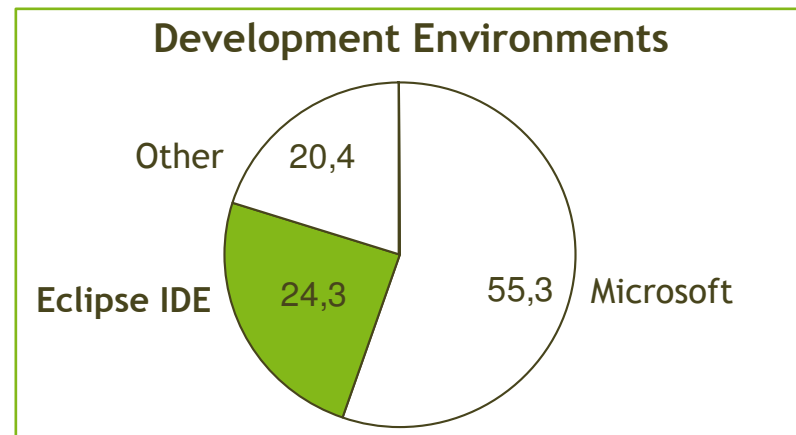
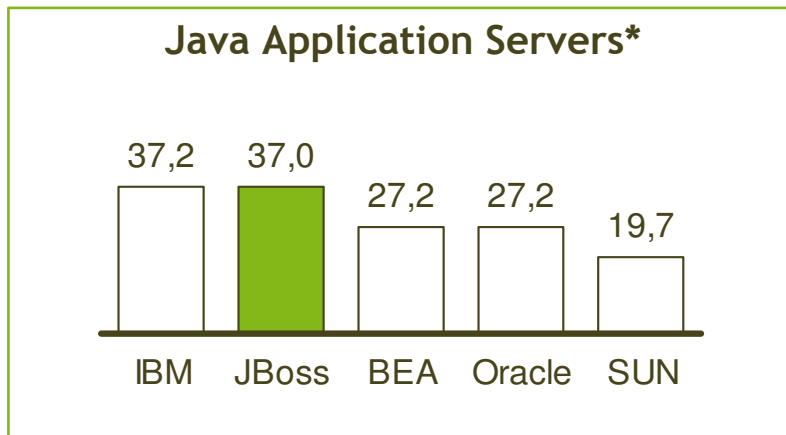
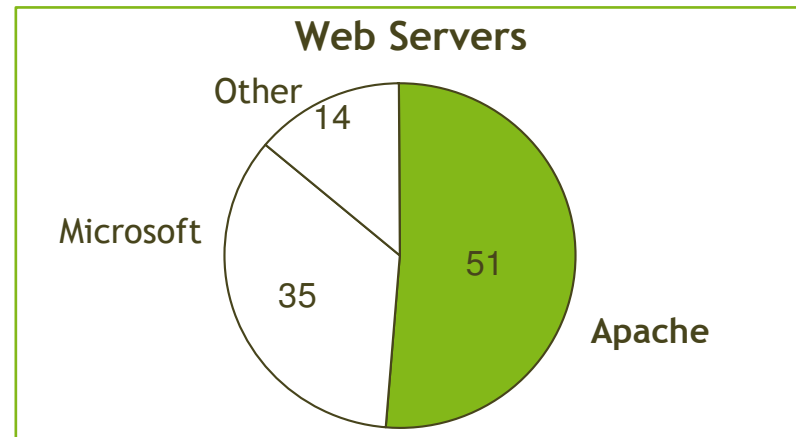
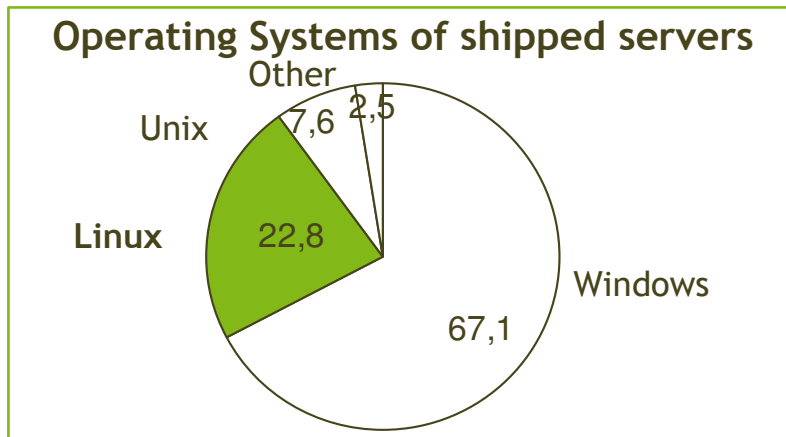


\* Linus's Law according to Eric S. Raymond "The Cathedral and the Bazaar"

# The market share of Open Source enterprise software is significant and increasing

## MARKET SHARE OF OPEN SOURCE SOFTWARE

■ Open Source



\* Including multiple usage within the organization

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## In the past there were two major technical inhibitors for a coherent SOA platform

### Technical inhibitor

### Description

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#### Split of relevant standards

- JBI and SCA were seen as competing standards
- No platform implementing both was available

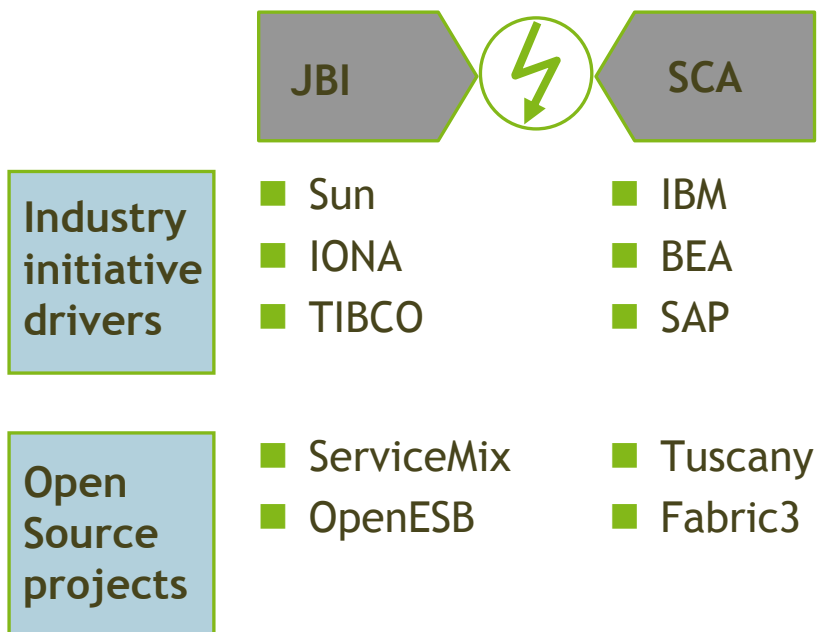
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#### Gaps in the component models

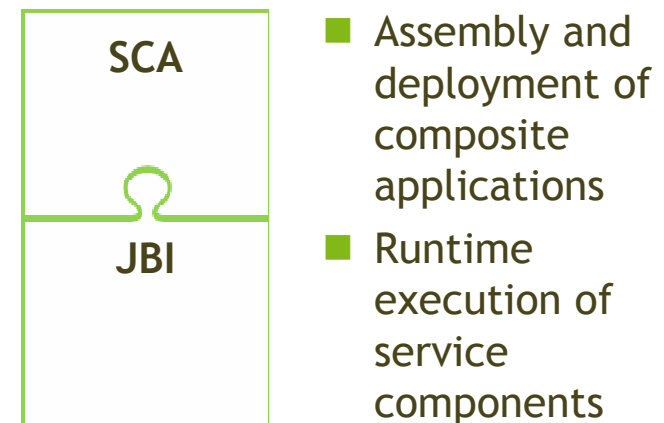
- Popular component models (e.g. JEE) were lacking important capabilities
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# 1 The SOA community was split due to political reasons

Past political view:  
„JBI and SCA compete”



Today's technical view:  
„JBI and SCA are complementary“



## 2 The past component models show gaps for a coherent SOA platform

Past component model	Description of gaps
<b>JEE</b>	<ul style="list-style-type: none"><li>■ Too heavy-weight and complex</li><li>■ Static deployment descriptors</li></ul>
<b>Spring</b>	<ul style="list-style-type: none"><li>■ No dynamic deployment or reconfiguration</li><li>■ No support for true modularization</li></ul>

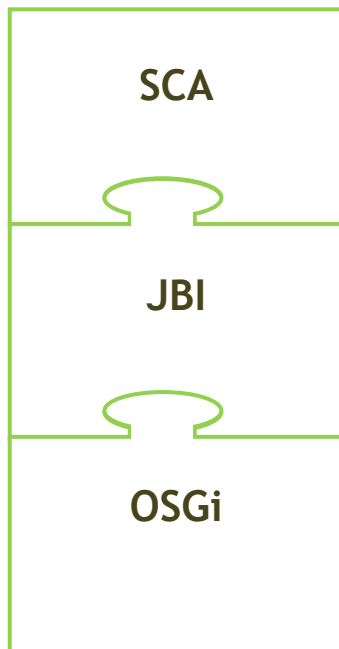
2 OSGi is the winning component model for the next innovation cycle

	Dynamic	Easy-to-use	Small footprint	Mature
JEE	○	○	○	●
Spring	○	●	●	○
Enterprise OSGi	●	●	●	●

The vast majority of vendors agree that enterprise OSGi is the winning component model for the next innovation cycle

A major Open Source SOA initiative is needed to overcome the two major inhibitors

SOA Runtime platform



Role of the technology

- common programming model
- common assembly description format
- common messaging model
- common deployment model
- common runtime component model

- Who drives this initiative?
- Who hosts this initiative?

# Agenda



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-

# Deutsche Post is a though leader in SOA worldwide and developed its own SOA platform



Deutsche Post  World Net

*MAIL EXPRESS LOGISTICS FINANCE*

## History

1999

- Deutsche Post takes strategic decision to build an SOA

2001

- Introduction of the Service Oriented Platform (SOP), an open, modular and distributed SOA platform

2006

- Approx. 160 services are active in business-critical applications

2007

- Announcement on open sourcing of the SOA platform, SOPERA founded as an independent service provider

- Deutsche Post was enforced to introduce a SOA in order to stay competitive
- Deutsche Post is an early adaptor and thought leader of SOA worldwide
- Deutsche Post developed its own SOA platform, which is in operations for more than 6 years

# Eclipse Swordfish is a new server-side SOA project initiated by Deutsche Post and SOPERA



ARTICLE COMPUTERWOCHE - APRIL 2007

## Eclipse mischt den SOA-Markt auf

Unter dem Dach der Eclipse Foundation könnte sich das quelloffene SOA-Framework der Deutschen Post zu einer ernsthaften Alternative zu kommerziellen Produkten entwickeln.

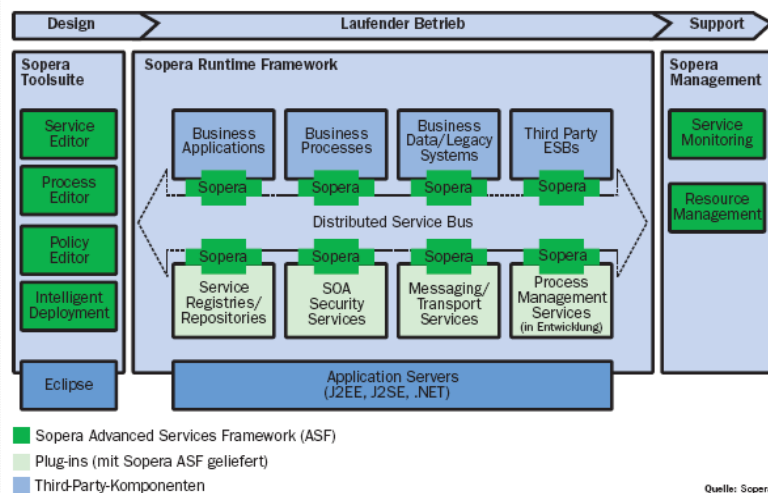
VON CW-REDAKTEUR  
WOLFGANG HERRMANN

**A**ls die Deutsche Post Ende März ankündigte, ihre selbst entwickelte SOA-Plattform unter eine Open-Source-Lizenz zu stellen, war die Überraschung in der Branche groß. Immerhin hatte der Logistikkonzern mehr als fünf Jahre Arbeit in das System gesteckt. Wartung, Support, Schulungen und Implementierungsdienste übernehme der eigens gegründete und von der Post unabhängige Dienstleister Sopera, erklärten die Bonner. Im Mai

### Hier lesen Sie ...

- ◆ was hinter der SOA-Plattform der Deutschen Post steckt;
- ◆ aus welchen Komponenten das System besteht;
- ◆ welche Techniken und Standards das Open-Source-Framework unterstützt;
- ◆ wie die Entwicklung unter dem Dach von Eclipse weitergeht.

### SOA-Framework der Post



Das Sopera Advanced Services Framework (ASF) besteht aus einem Runtime Framework für den laufenden Betrieb und einer Tool-Sammlung für die Planungs- und Designphasen einer SOA.

Ebenfalls in Form von Plug-Ins bietet das Framework Funktionen für Business-Process-Management (BPM) und Business Activity Monitoring (BAM). Sopera greift dazu auf BPM-Systeme von Drittanbietern zurück, die unter anderem eine BPEL-Engine enthalten (BPEL = Business Process Execution Language). Damit lassen sich in BPEL beschriebene Geschäftsprozesse innerhalb des Frameworks ausführen. Anwender sollen künftig zwischen einer kommerziellen und einer quelloffenen BPM-Lösung wählen können, kündigte der Dienstleister an. Die Namen der Kooperationspartner standen zum Redaktionsschluss noch nicht fest.

### Datenintegration

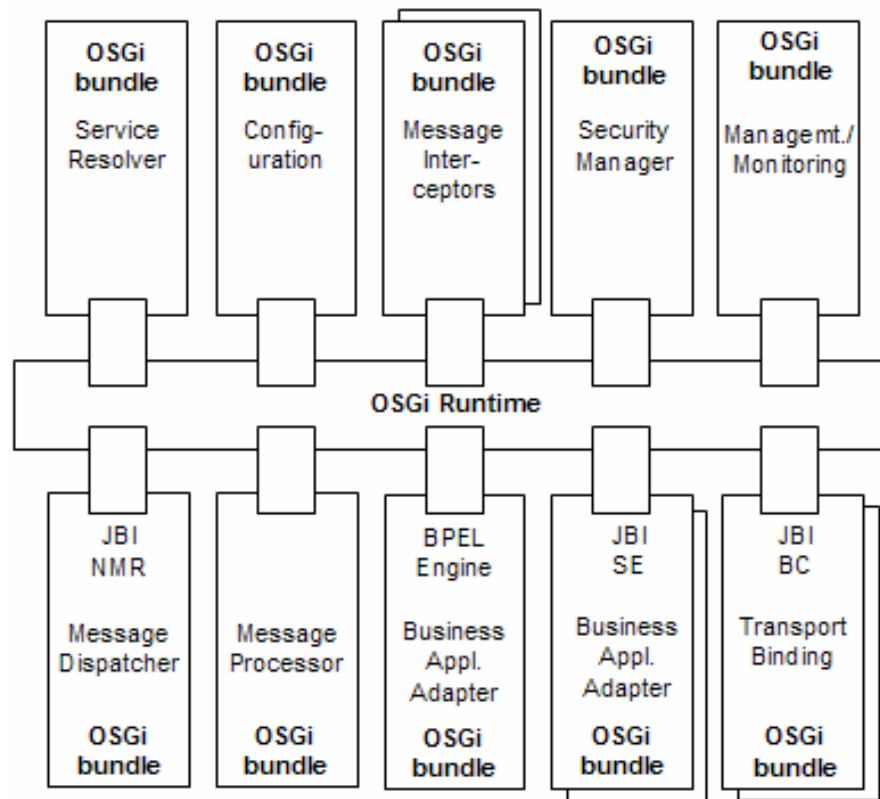
Auch das wichtige Thema Datenintegration löst Sopera über eine Anbindung von Third-Party-Produkten. In diesem Fall handelt es sich um das IBM-System „WebSphere Datastage“, das der IT-Konzern als Teil seines Information Server vermarktet. Für das Identity-Management hat die Post eine eigene Software entwi-



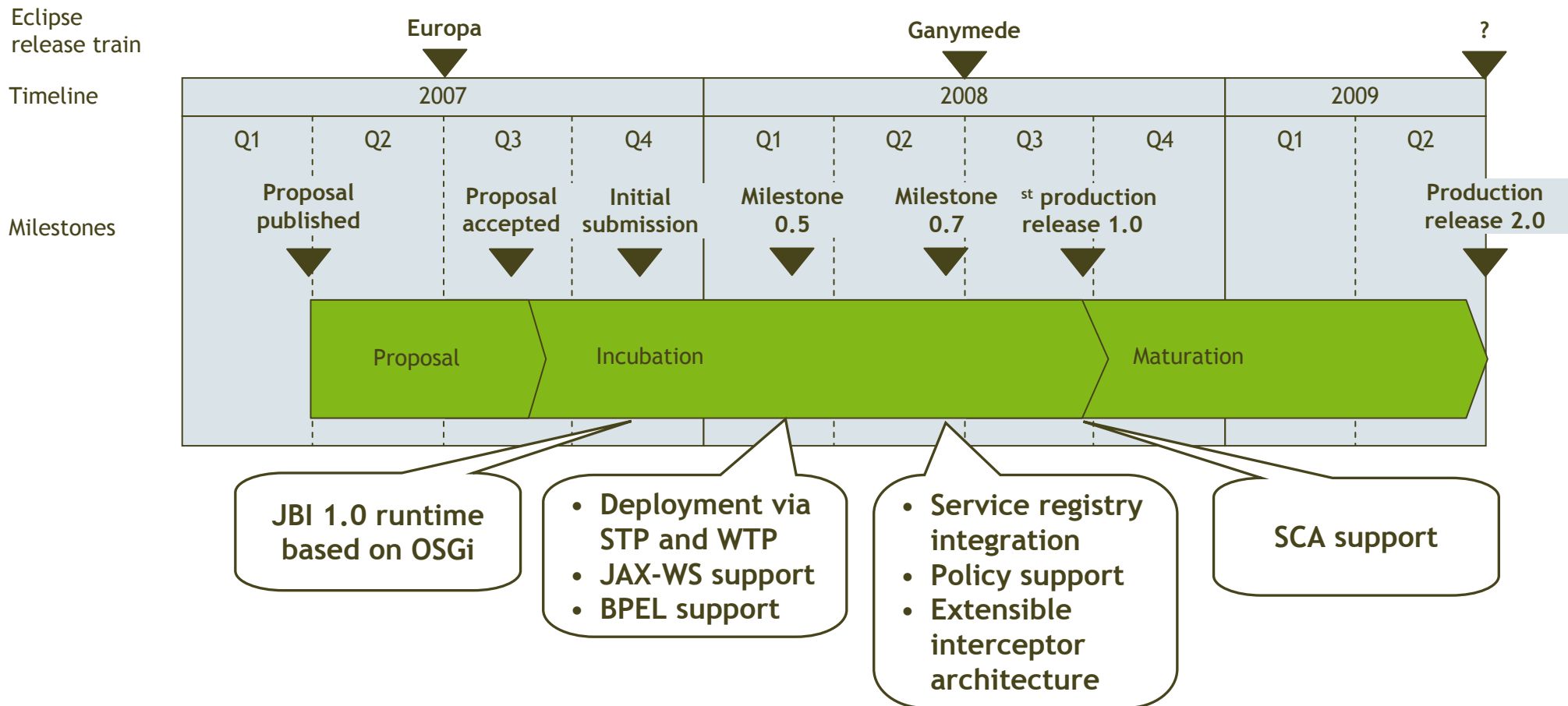
# SWORDFISH

Project start: Sep 07  
Project lead: SOPERA  
Project contributors:  
- IONA  
- Deutsche Post  
- Individuals

# The Swordfish Architecture implements JBI and SCA using OSGi



# The Swordfish roadmap

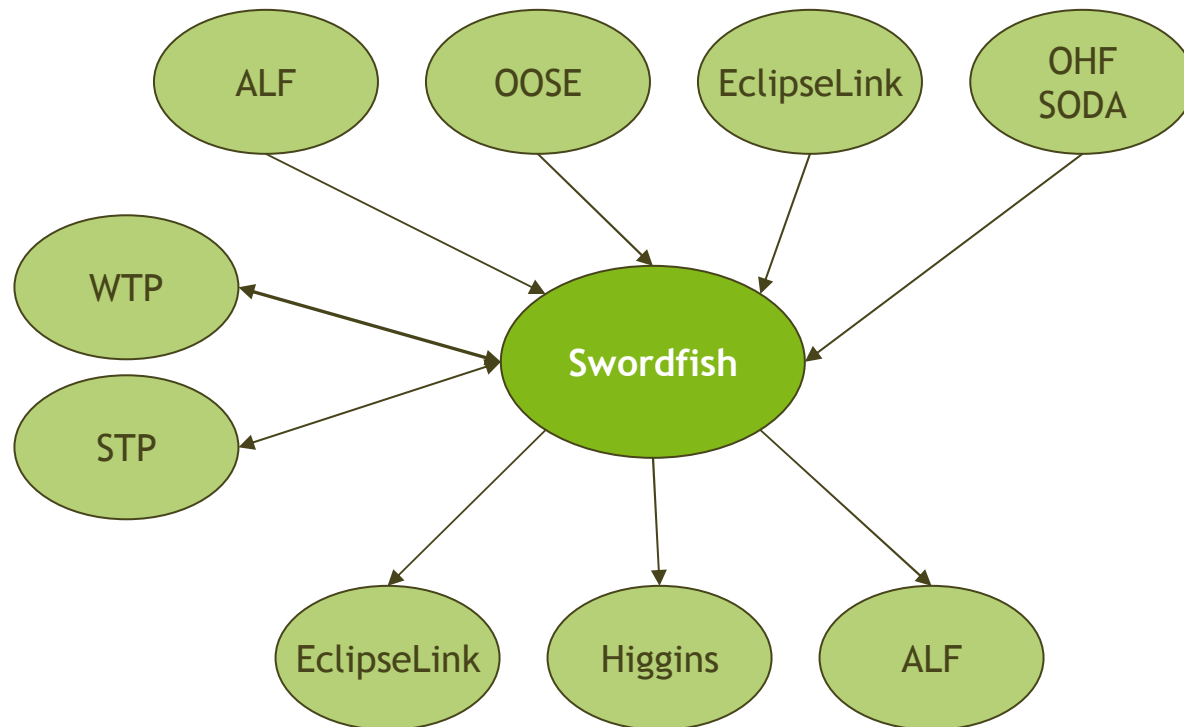


# The Swordfish user community within Eclipse

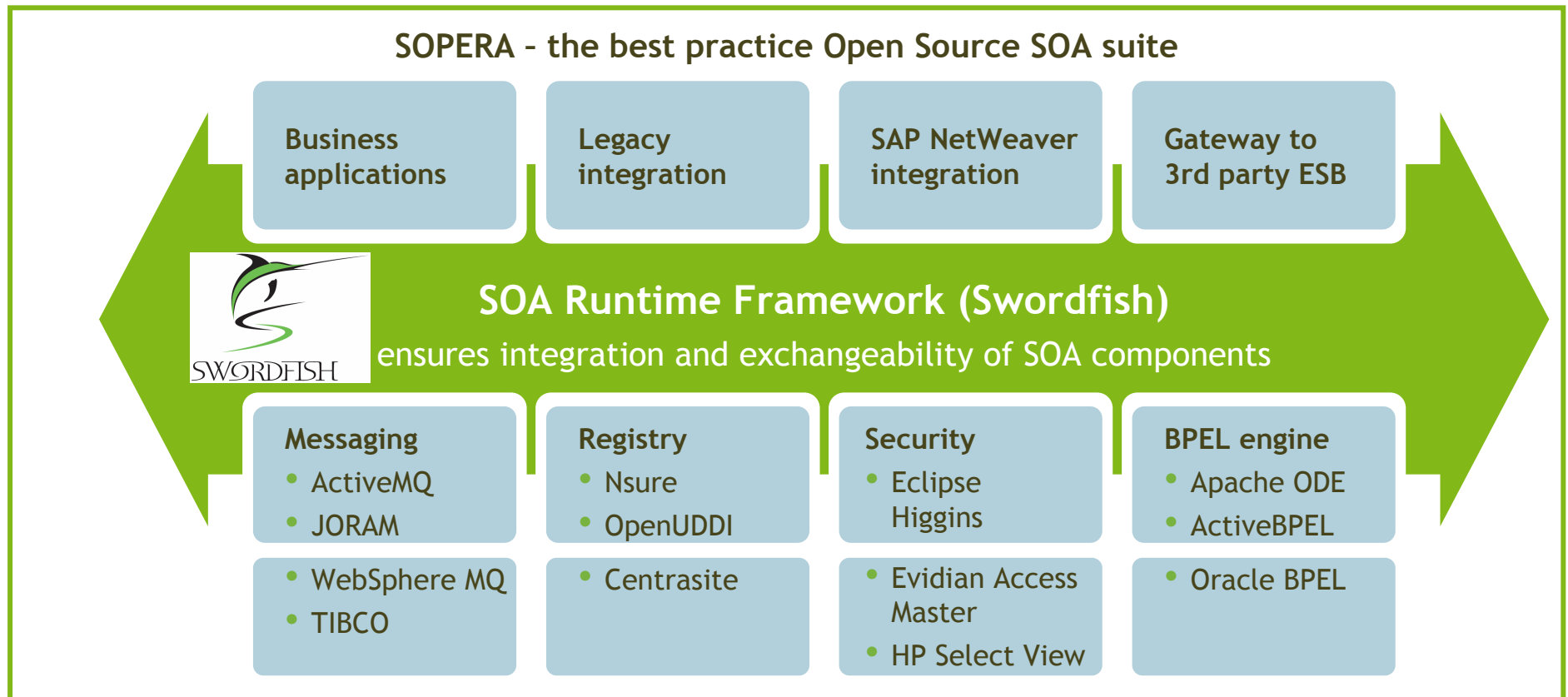
Projects that benefit from Swordfish

Tooling projects that will deploy artifacts to Swordfish

Projects that produce artifacts Swordfish intends to leverage



# SOPERA offers a complete Open Source SOA Suite based on Eclipse Swordfish



## Conclusions & recommendations

Open Source SOA offers untapped value and will increase its importance and market share as in all other maturing technology market

**Users**

Always consider open source products in your SOA projects

**ISVs**

Become contributor to the Eclipse Swordfish project in order to leverage open source components

**SIs**

Always consider open source products in the SOA projects of your client. Build up know how internally.

**Deve-  
lopers**

If you want to work with SOA technology, become contributor to the Eclipse Swordfish project

Thank you for your  
attention

# BACKUP

## 2 OSGi is going server side

