

Creating applications for GlassFish and OpenESB using NetBeans IDE 6.1

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AMIS Services B.V.
May 22, 2008



- NetBeans IDE 6.1
- SOA and BPEL
- JBI
- OpenESB
- Demos
- Q & A



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- JBI
- OpenESB and JBI
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- Started as students project in 1996 (Xelfi)
- Supported Swing in 1999
- Sun acquires both Forté and NetBeans in 1999
- NetBeans renamed to Forté for Java in 1999
- NetBeans becomes Open Source again in 2000
- NetBeans 4.0 introduces projects system
- NetBeans 4.1 introduces full J2EE support
- NetBeans 5.0 introduces Matisse
- NetBeans 5.5 introduces Enterprise Pack
- NetBeans 6.0 introduces SOA support



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Email address (optional):

Language: English Platform: Linux (x86/x64)

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NetBeans IDE Download Bundles

NetBeans Packs *	Web & Java EE	Mobility	Java SE	Ruby	C/C++	Early Access for PHP	All
Base IDE	•	•	•	•	•	•	•
Java SE	•	•	•				•
Web & Java EE	•						•
Mobility		• ¹					•
UML							•
SOA							•
Ruby				•			•
C/C++					•		•
Early Access for PHP						•	
Bundled Servers							
GlassFish V2 UR2	•						•
Apache Tomcat 6.0.16	•						•

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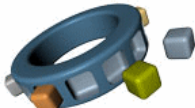
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NetBeans

Highlights

▶ Easy-To-Use Java GUI Builder

Create professional-looking Java GUIs by placing and aligning components on a canvas.

▶ Visual Web and Java EE Development

Build web applications visually using Ajax, CSS, and JavaScript. Support for frameworks incl. JSF, Struts, Spring and Hibernate. Full set of tools for EJB development.

▶ Visual Mobile Development

Create, test and debug GUI applications that run on mobile phones, set-top boxes, and PDAs.

▶ Visual UML Modeling

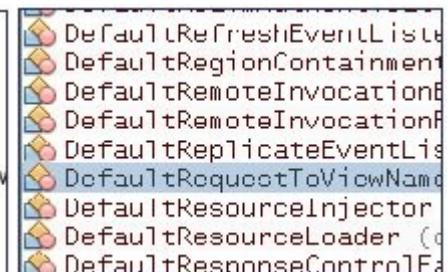
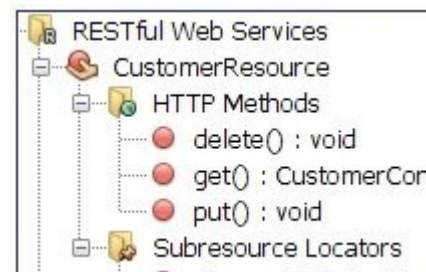
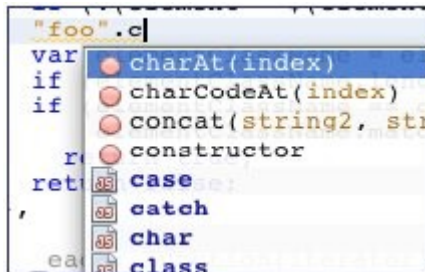
Separate software design from implementation with UML Modeling.

▶ Ruby and Rails Support

Powerful Ruby editor (with code completion), debugger, and full support for Rails. Includes the JRuby runtime.

▶ C and C++ Development

Full-featured C/C++ editor, debugger, project templates, and support for multiple project configurations



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NetBeans

Enough propaganda, let's have a look.

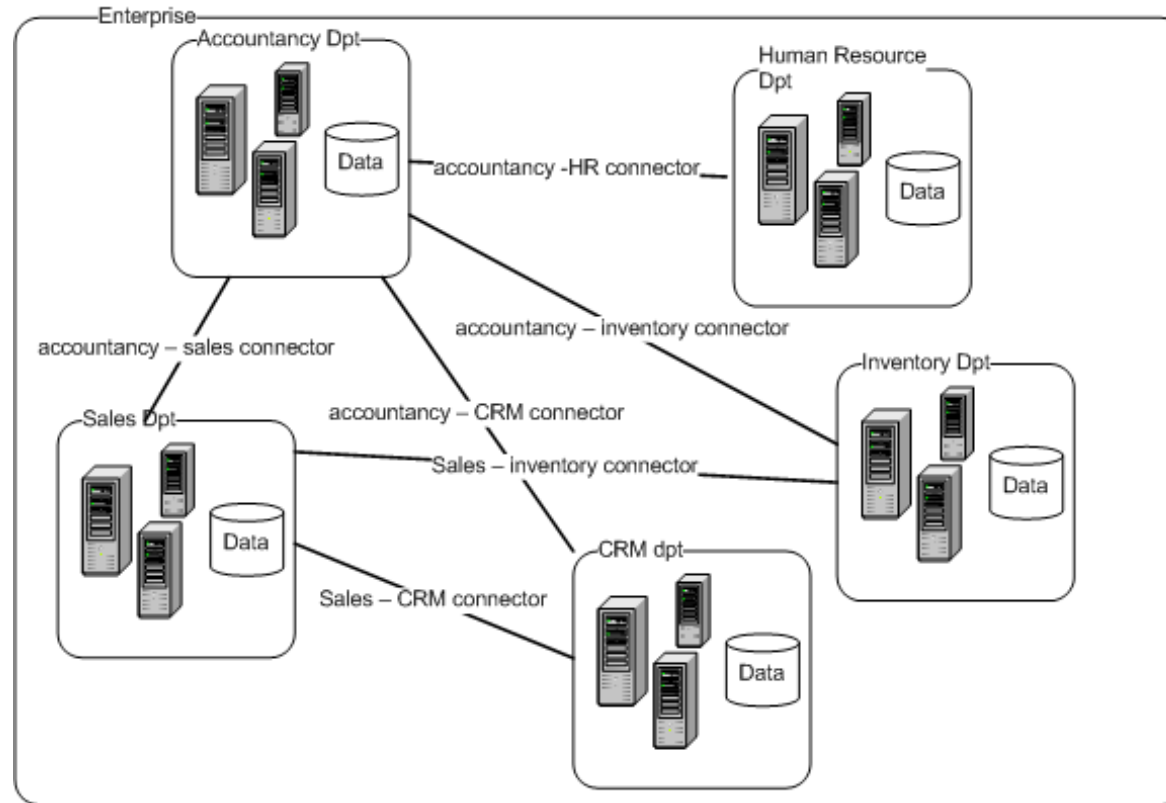


- NetBeans IDE 6.1
- SOA and BPEL
- JBI
- OpenESB
- Demos
- Q & A



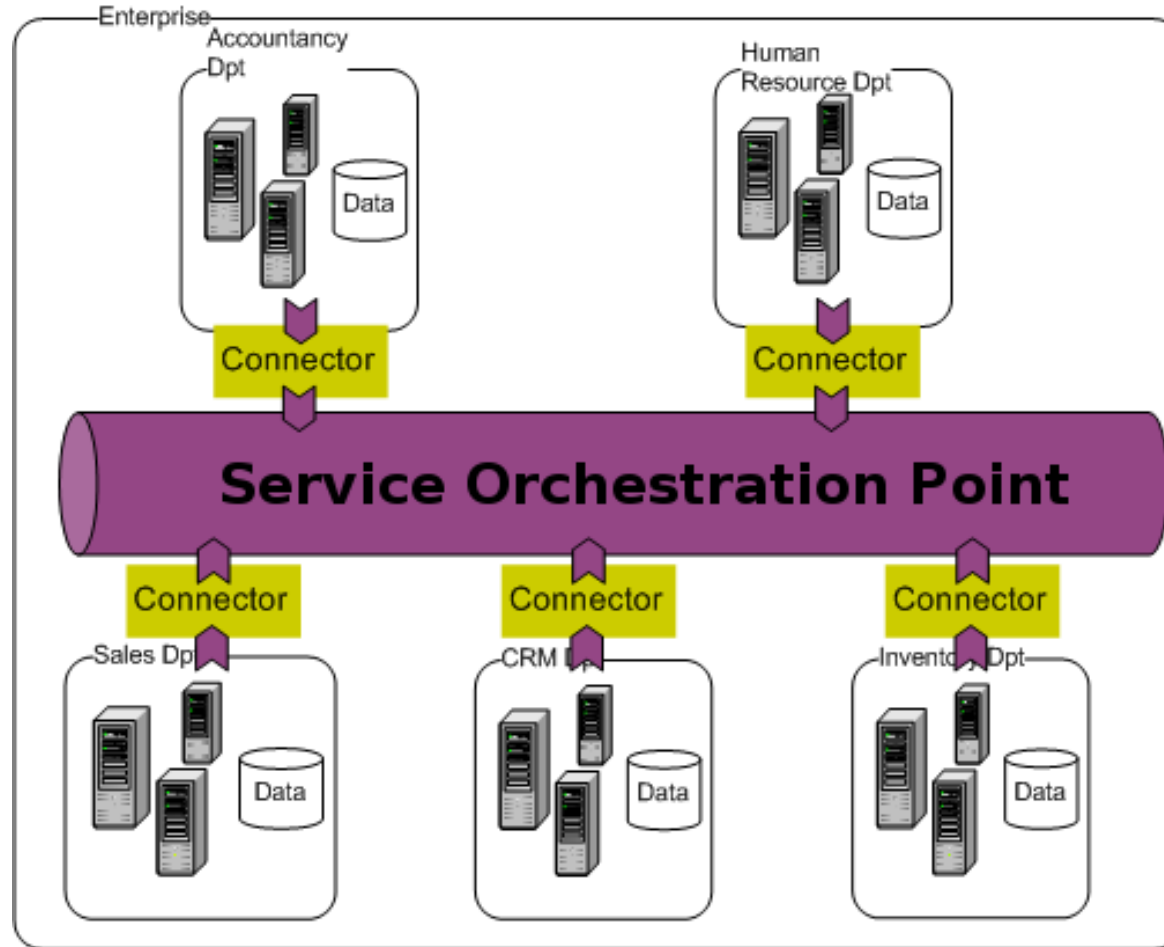
- Service Oriented Architectures (SOAs) are HOT!
- Why?
 - Open Standard
 - Logical reaction to internet
 - Makes legacy apps work together
 - Business process oriented
 - Loosely coupled





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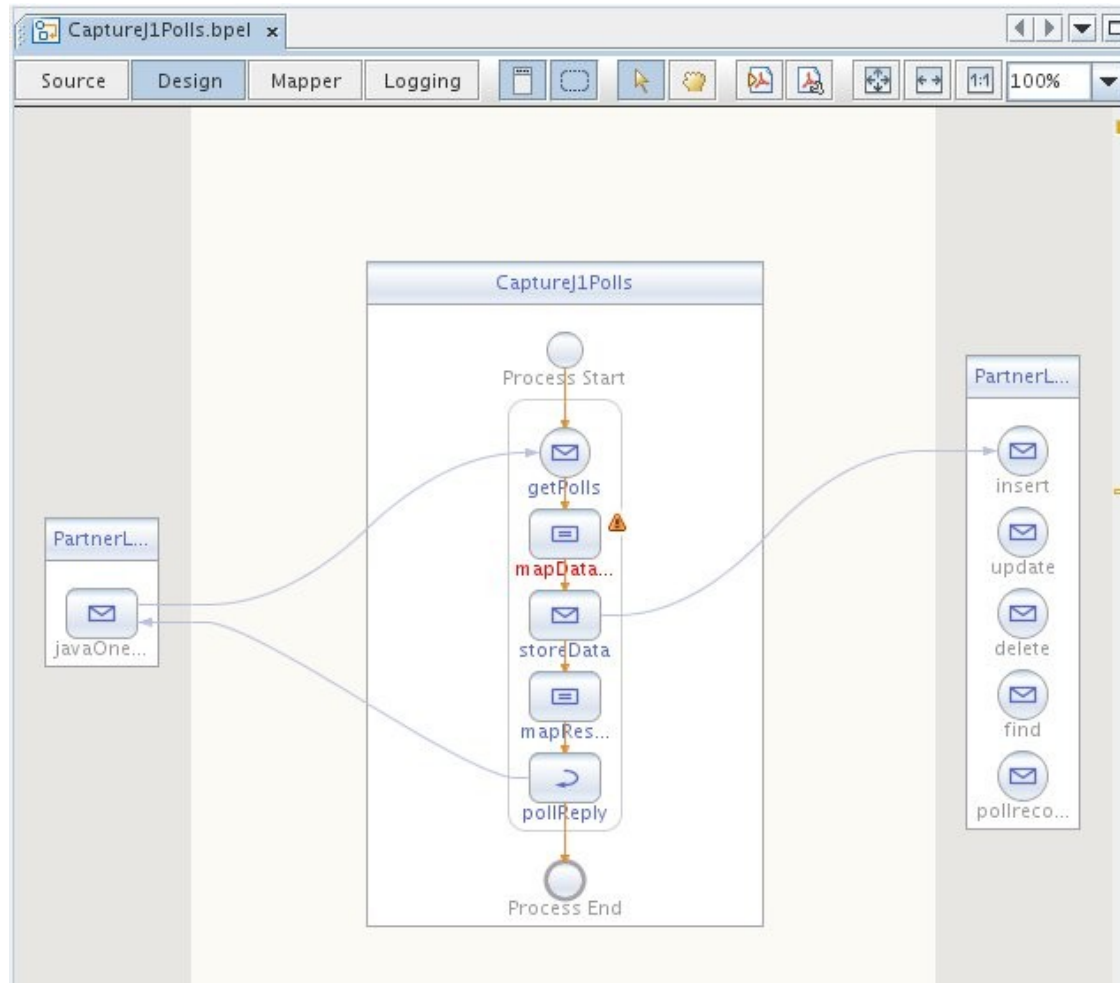
NetBeans

- Web Services Business Process Execution Language (WS-BPEL or BPEL)
 - language for specifying business process behavior based on Web Services
 - orchestration language
 - partner services
 - activities



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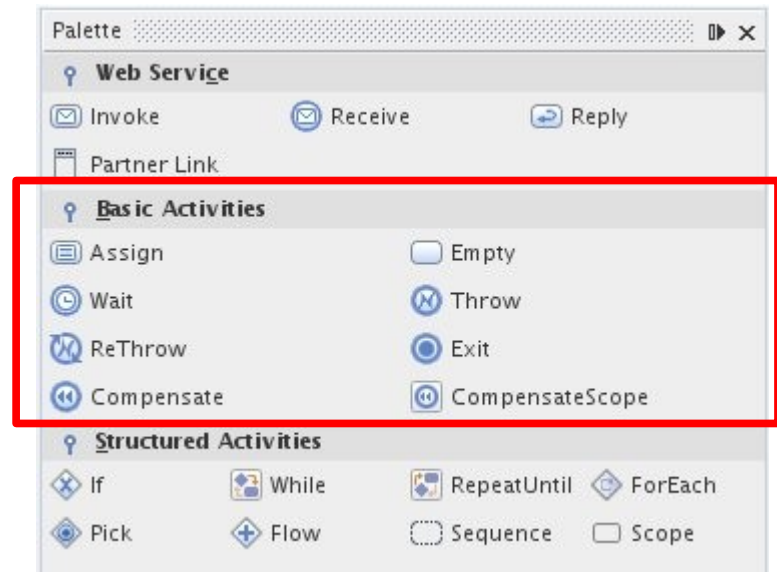
NetBeans

- Web Service
 - Receive
 - Reply
 - Invoke
 - Partner Link



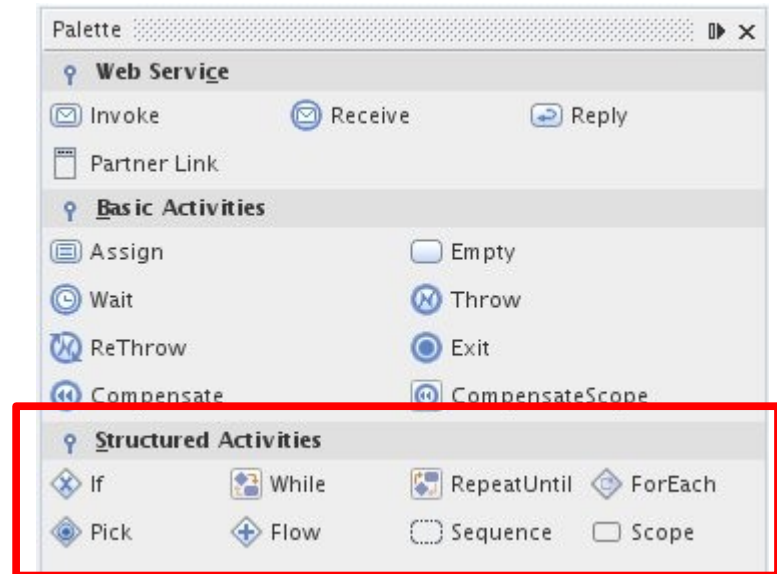
• Basic activities

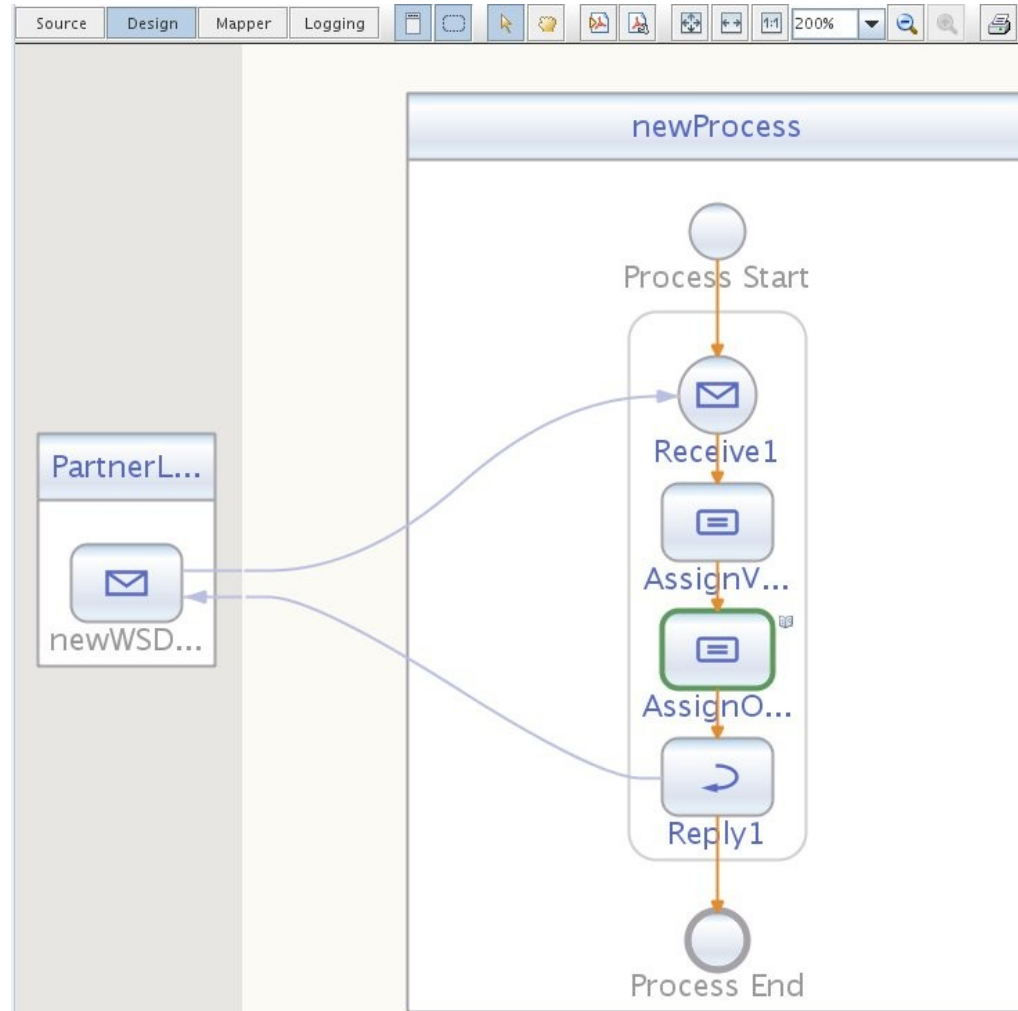
- Assign
- Empty
- Wait
- Throw
- Rethrow
- Exit
- Compensate
- CompensateScope



- Structured activities

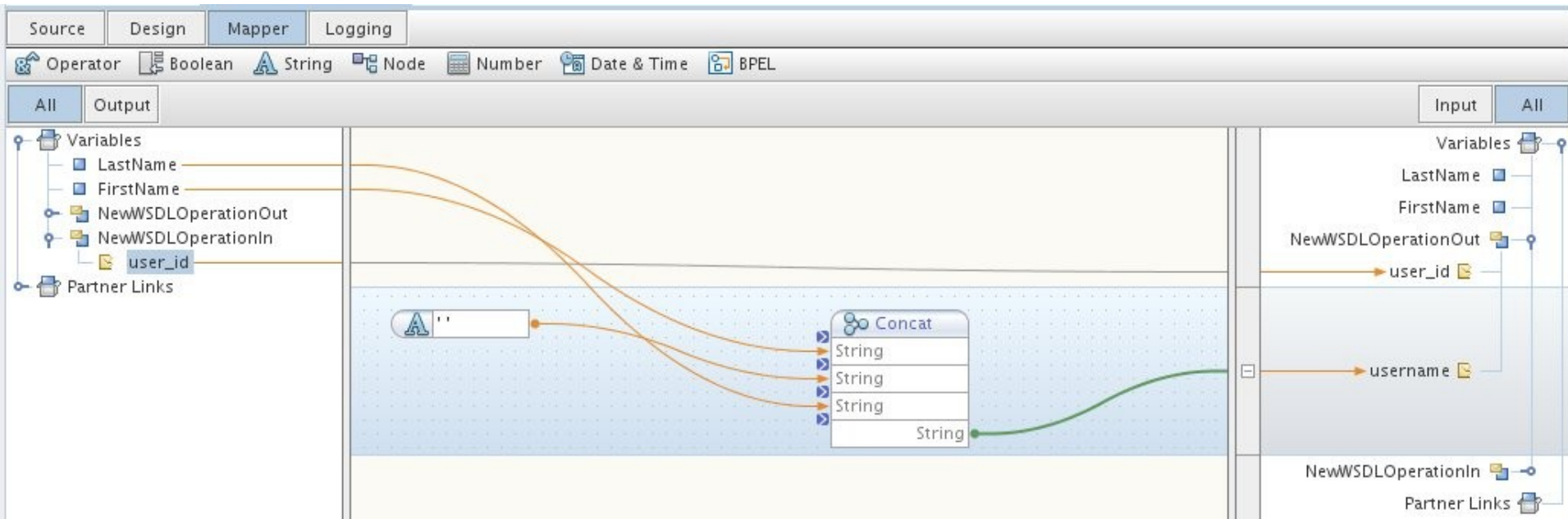
- If
- While
- RepeatUntil
- ForEach
- Pick
- Flow
- Sequence
- Scope





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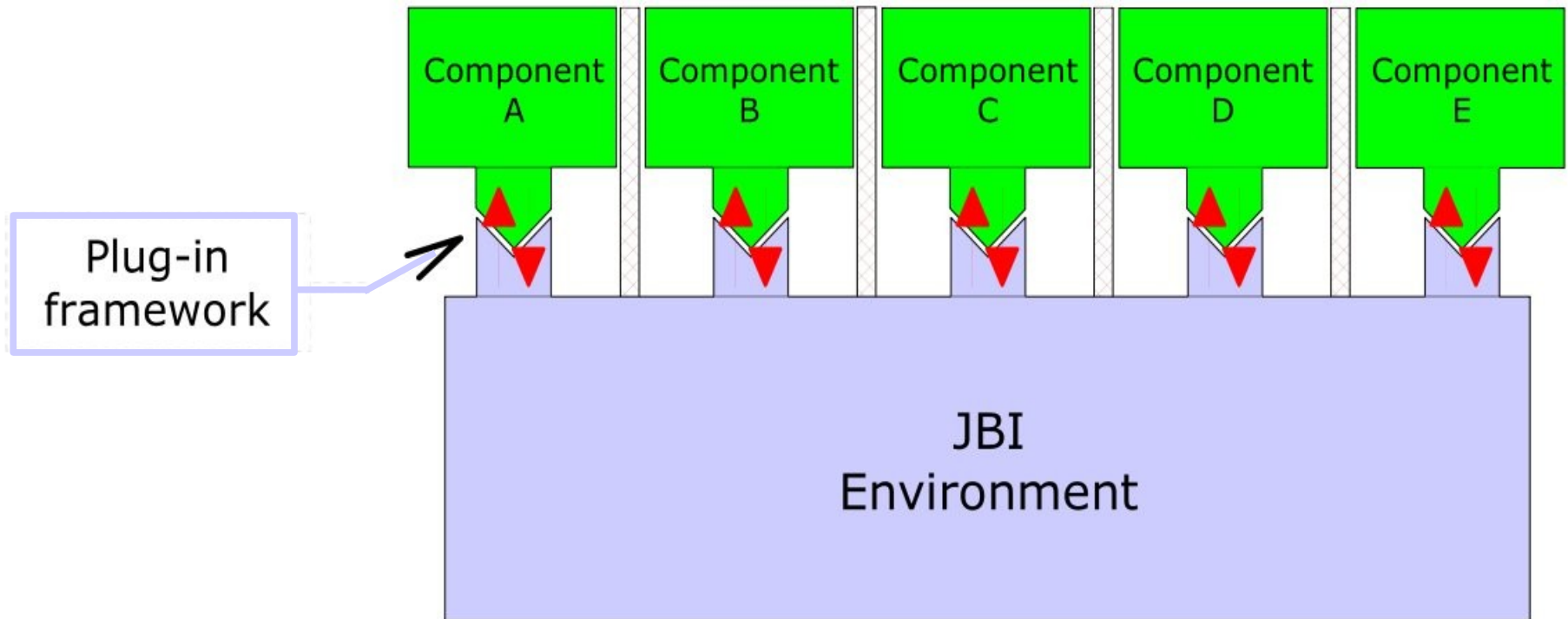


- NetBeans IDE 6.1
- SOA and BPEL
- **JB**
- OpenESB and JBI
- Demos
- Q & A

- Java Business Integration (JBI, JSR 208)
 - Java standard
 - for structuring business integration systems
 - based on WSDL 2.0
 - pluggable
- Service Engines provide business logic and transformation services to other components
- Binding Components provide protocol independent transport services to other JBI components



- Plug-in framework

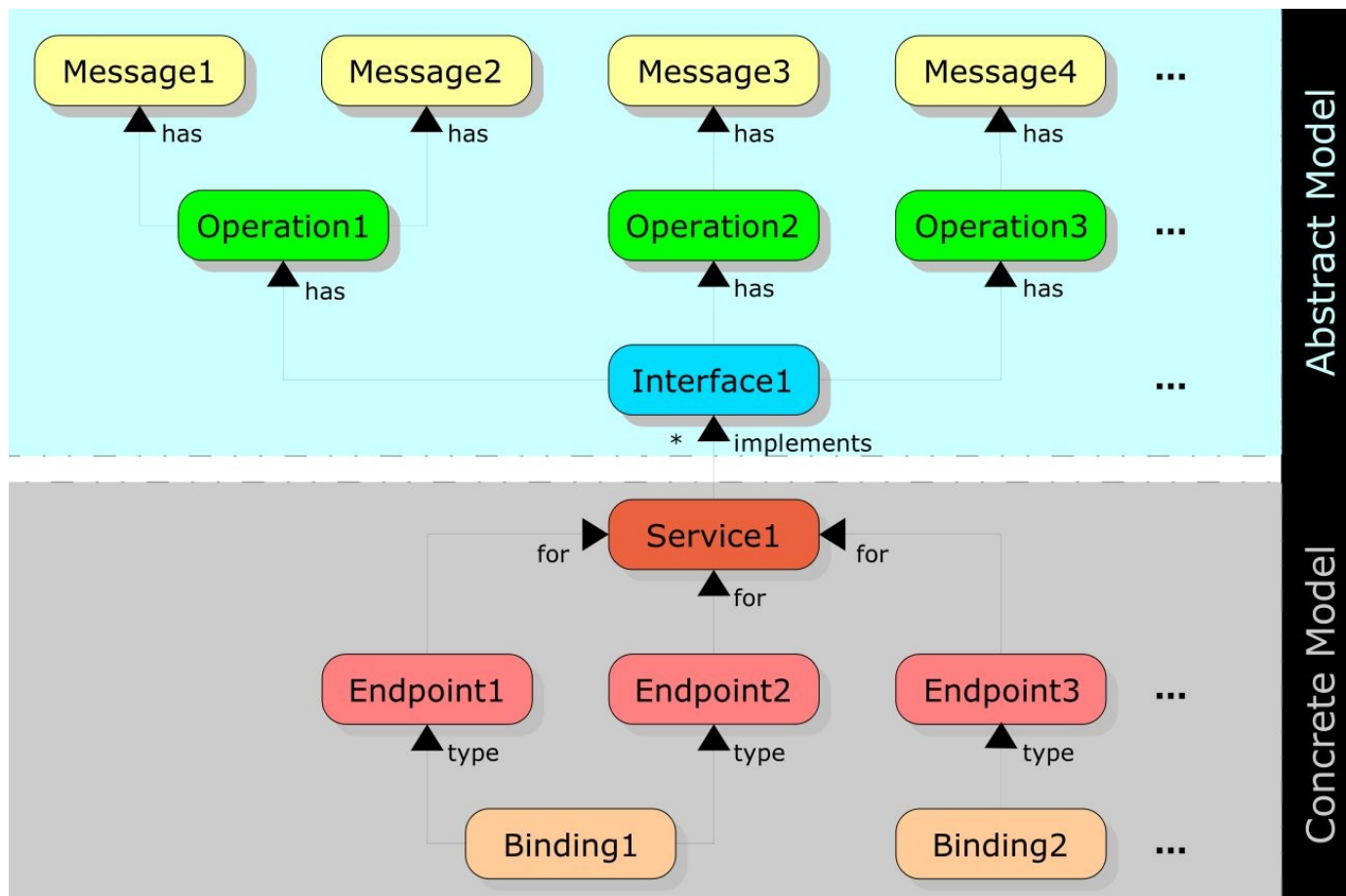


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NetBeans

WSDL component model

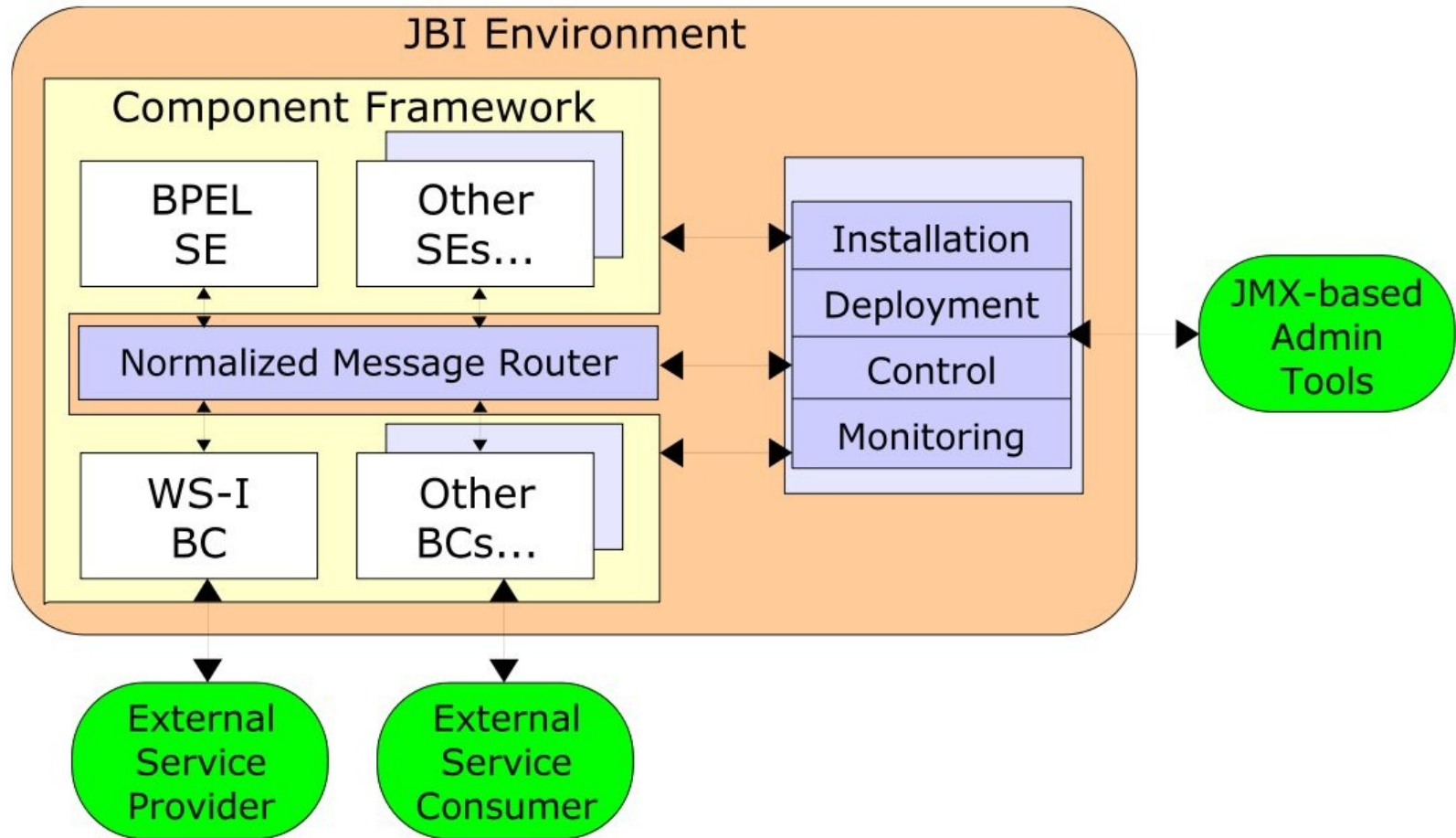


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NetBeans

JB



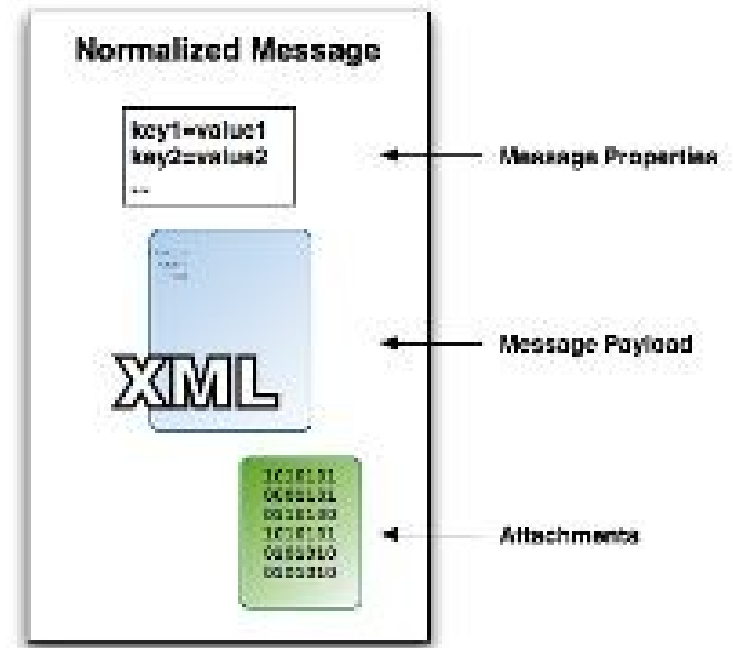
Open ESB
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NetBeans

- Normalized Messages

- Message properties (sometimes called metadata)
- The “payload”, or bare message
- Message attachments

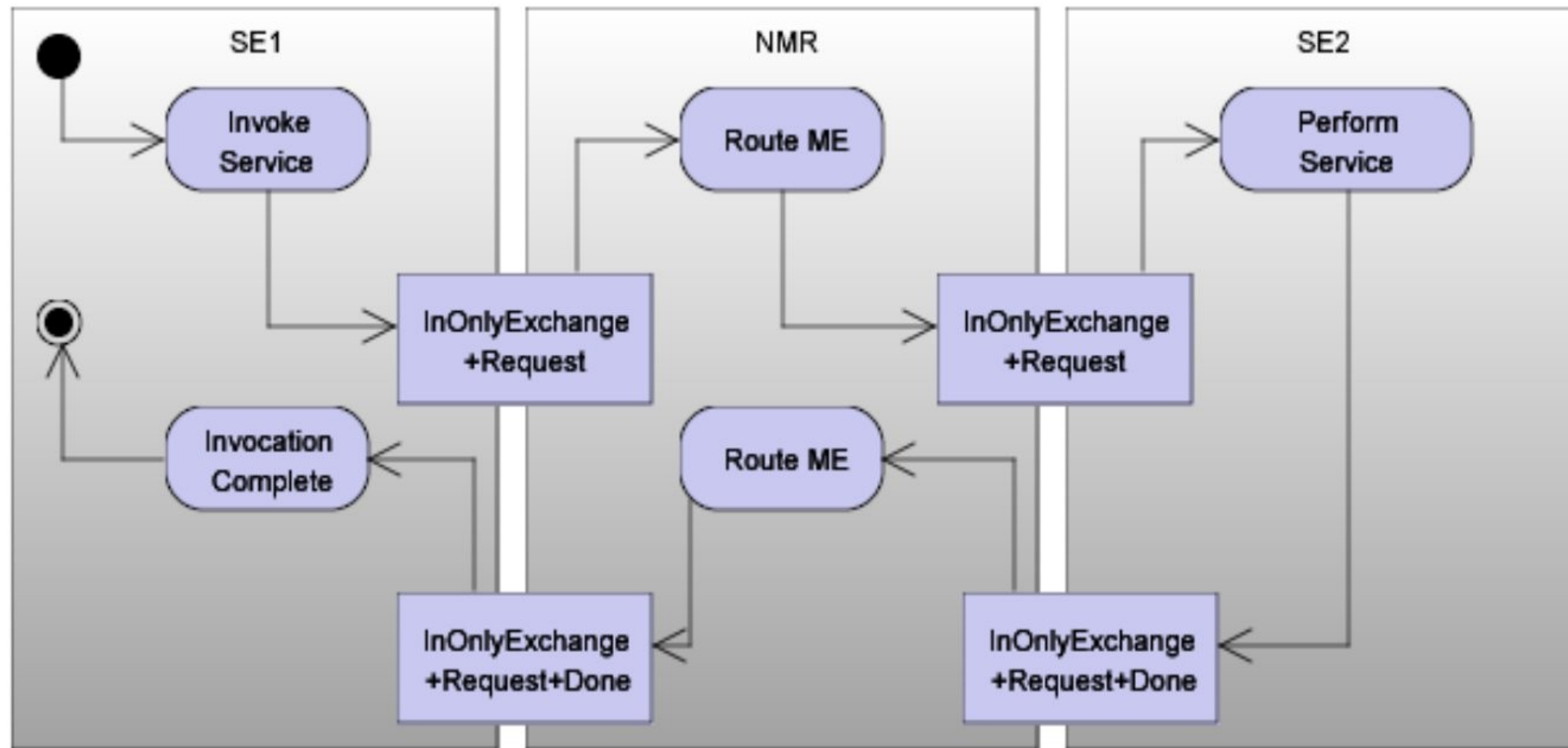


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NetBeans

• Normalized Message Router



Open ESB
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NetBeans

● Service Engines

- Provide business logic and transformation services to other components
- BPEL
- Java EE
- SQL
- Intelligent Event Processor (IEP)
- XSLT
- ...



Open ESB
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● Binding Components

- Provide protocol independent transport services to other JBI components
- File
- SMTP
- SOAP
- JDBC
- JMS
- FTP
- ...



Open ESB
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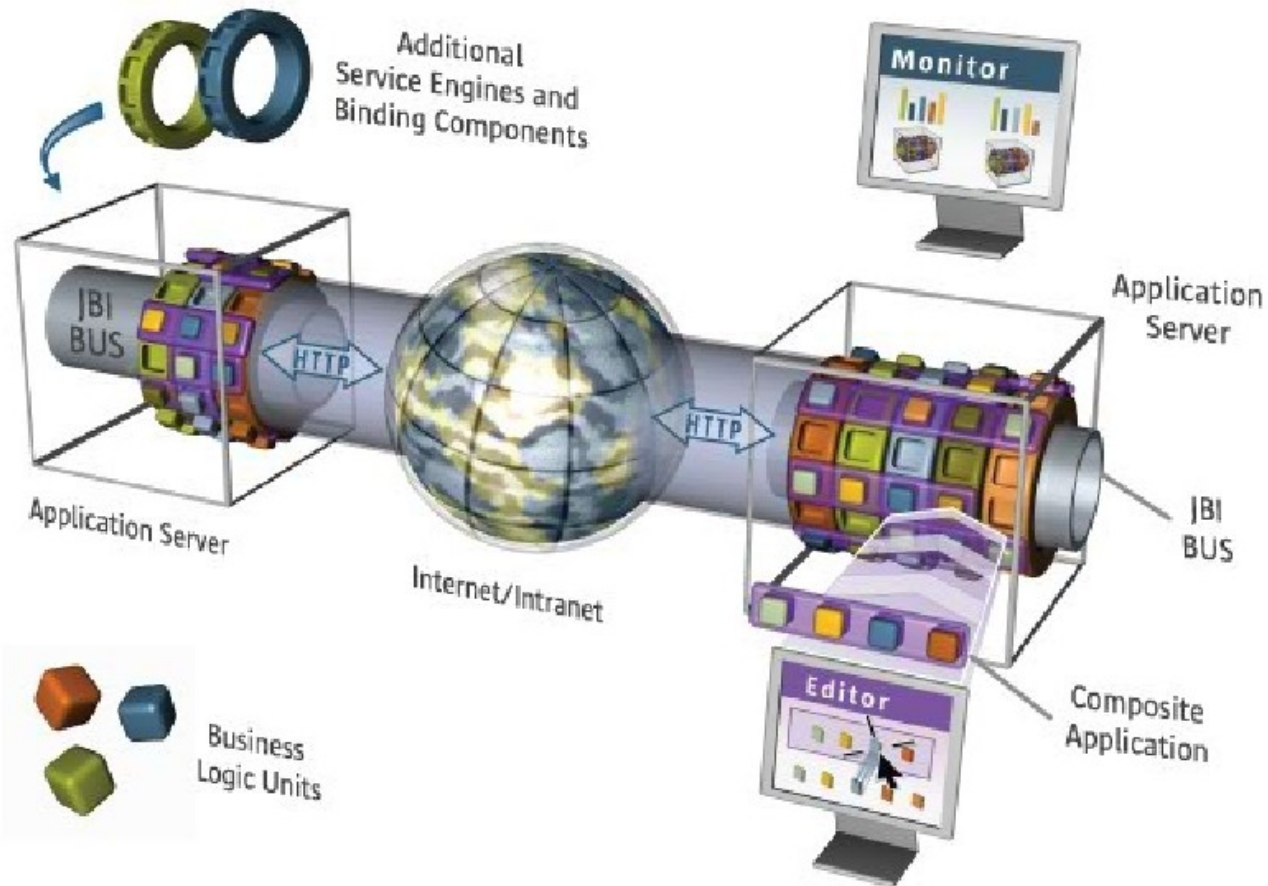


- Project Goals

Create an **open-source, world-class** set of technologies to enable organizations to create and participate in **global service collaborations**.

Participating in these collaborations are a fundamental requirement for businesses across all markets. In reality, the only reason SOA and its related technologies exist is to enable these global service collaborations.





Open ESB
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NetBeans

• Service Engines

- Provide business logic and transformation services to other components
- BPEL
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- ...

Service Engines

[Aspect SE](#)

[BPEL SE](#)

[Data Mashup](#)

[Encoding SE](#)

[ETL SE](#)

[IEP SE](#)

[Scripting SE](#)

[SQL SE](#)

[WLM SE](#)

[XSLT SE](#)



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NetBeans

● Binding Components

- Provide protocol independent transport services to other JBI components
- File
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Binding Components

[CICS BC](#)
[CORBA BC](#)
[DCOM BC](#)
[eMail BC](#)
[File BC](#)
[FTP BC](#)
[HL7 BC](#)
[HTTP BC](#)
[IMS BC](#)
[JDBC BC](#)
[JMS BC](#)
[LDAP BC](#)
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DEMOS



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Q & A



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