

How to implement Service Oriented Integration using the JBI standard

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OpenESB: JBI-based, SOA runtime infrastructure and tooling

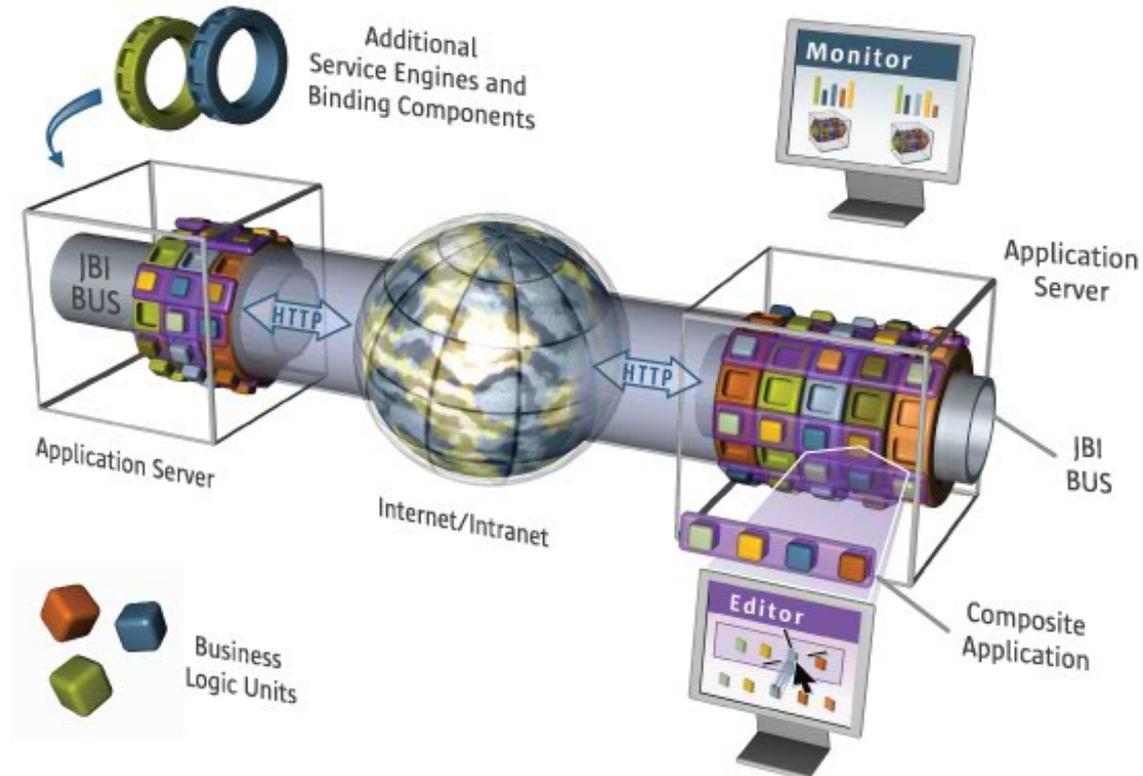
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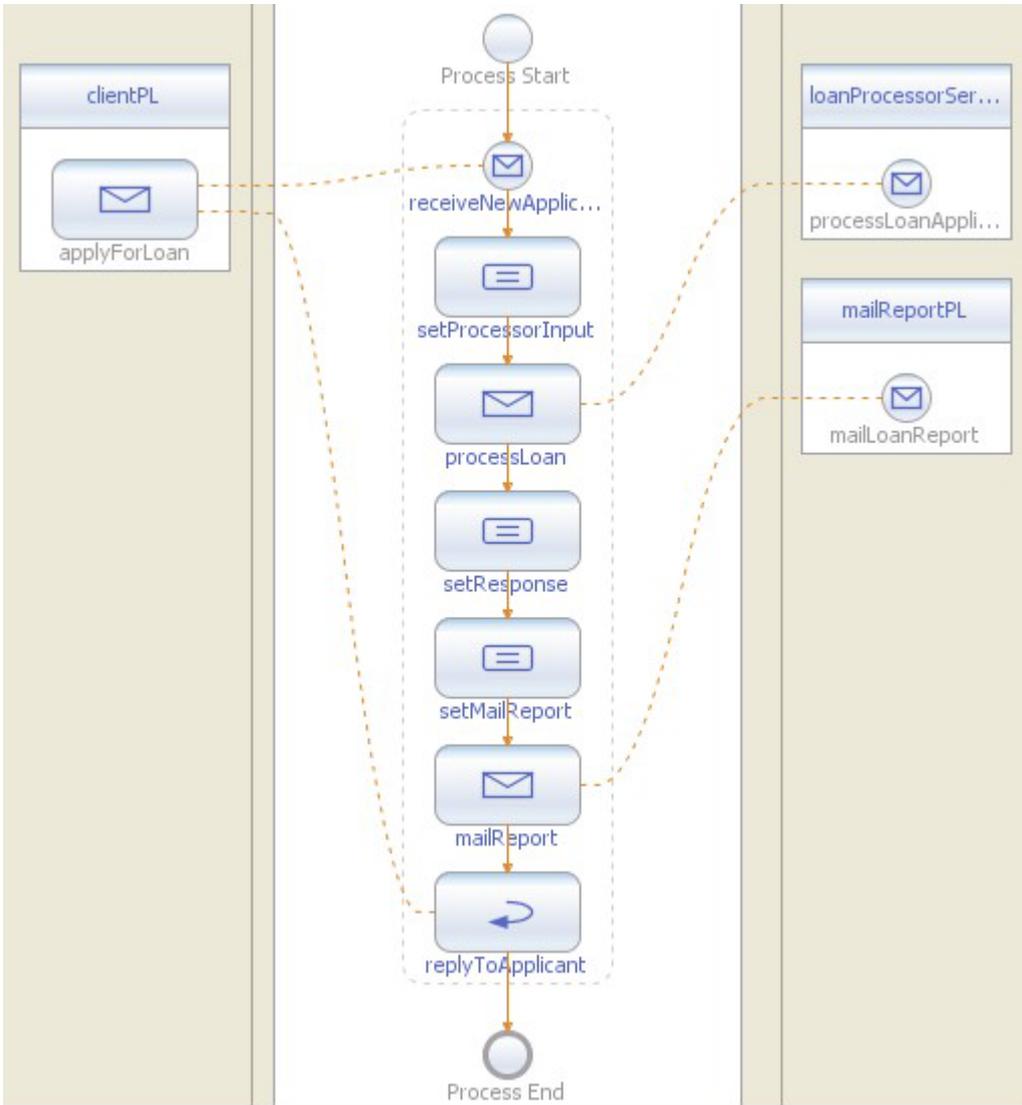


Open ESB

- Open Source Enterprise Service Bus runtime implemented atop the Java Business Integration foundation
 - > <http://open-esb.org/>
- Runs within Glassfish/Sun App Server
 - > AS independence
 - > JavaSE runtime
- Support through JavaCAPS.next

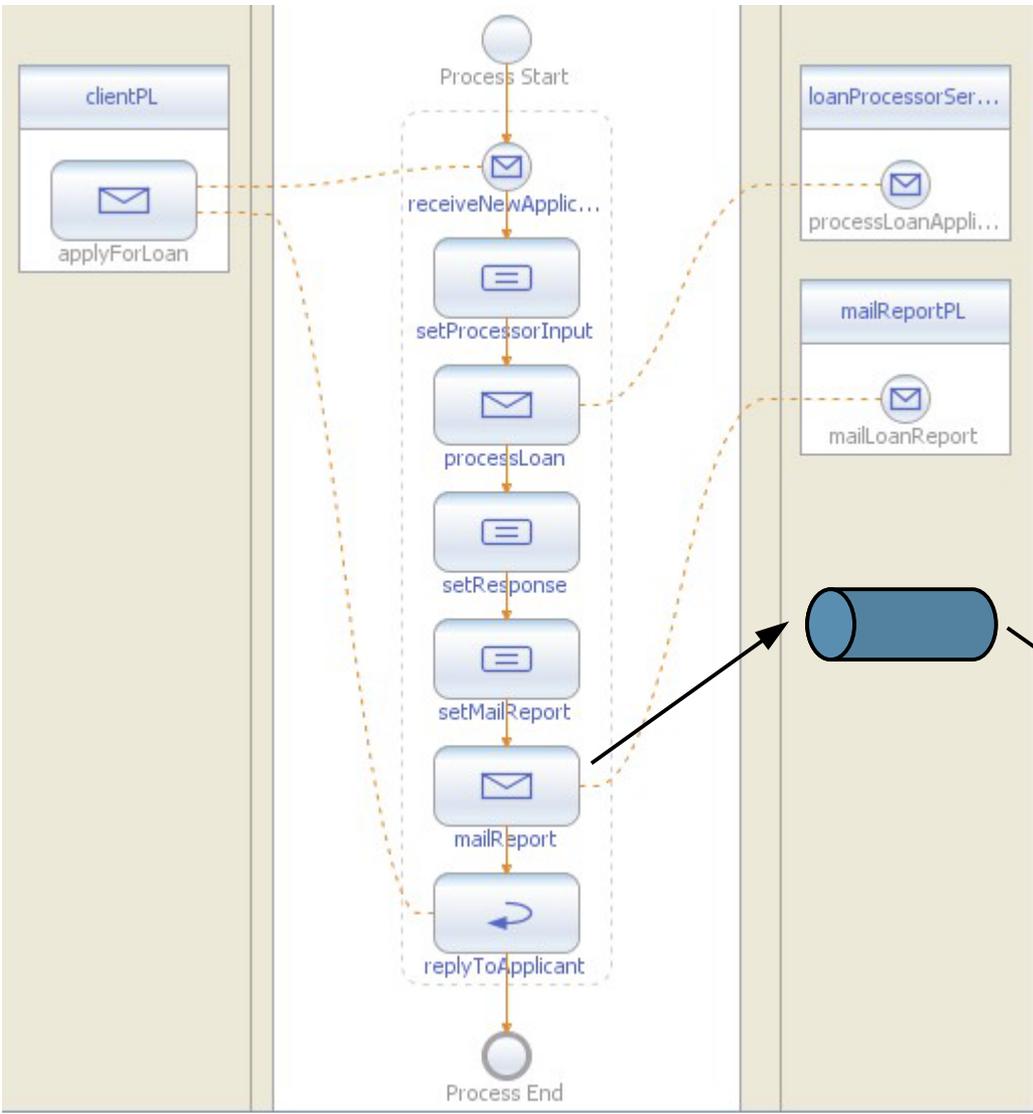


Demo Scenario: Loan Processing



- Loan Processing Design:
 - > Loan Request Process
 - > Loan Processor
 - > Loan Report Mailer

Demo Scenario: Loan Processing



- Loan Processing Impl:
 - > LoanRequestProcess
 - > WS-I BP
 - > BPEL Orchestration
 - > LoanProcessor
 - > JavaEE
 - > LoanReportMailer
 - > Legacy thru JMS



**JB1-based
Infrastructure**

BPEL
Loan
Request
Process

JavaEE
Loan
Processor

NMR

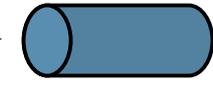
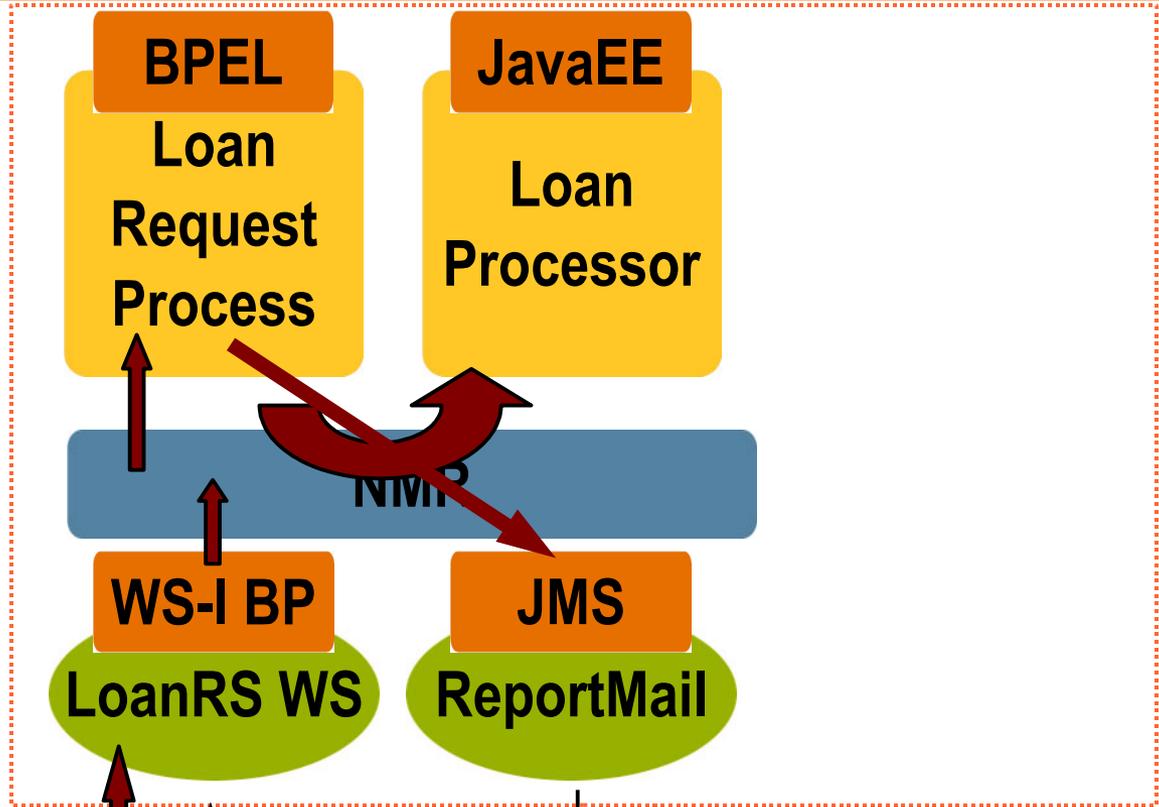
WS-I BP
LoanRS WS

JMS
ReportMail



**ReportMail
Application**





Architecture Refactoring

BPEL
Loan Request Process

Rules Engine
Loan Processor

NMR

File BP
LoanRS

WS-I BP
LoanRS WS

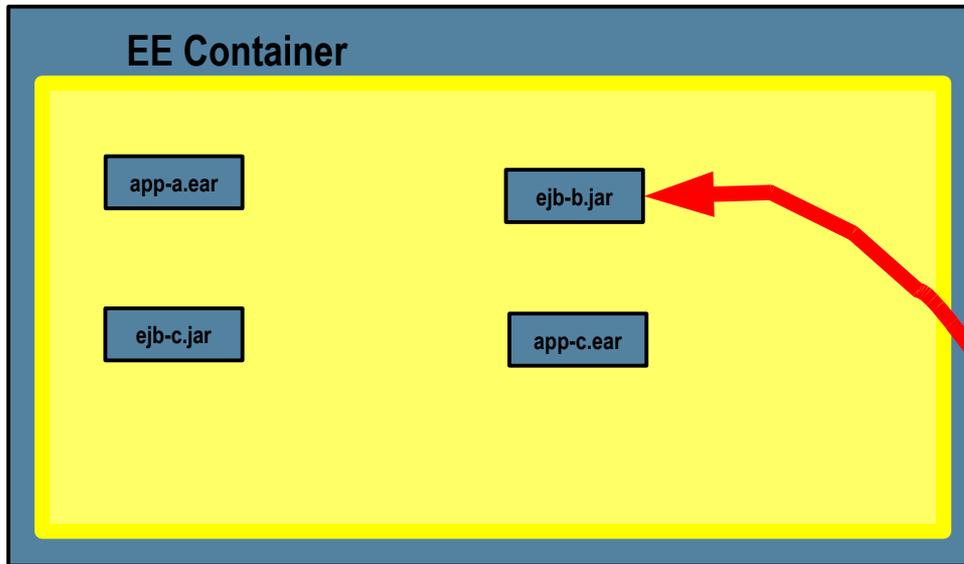
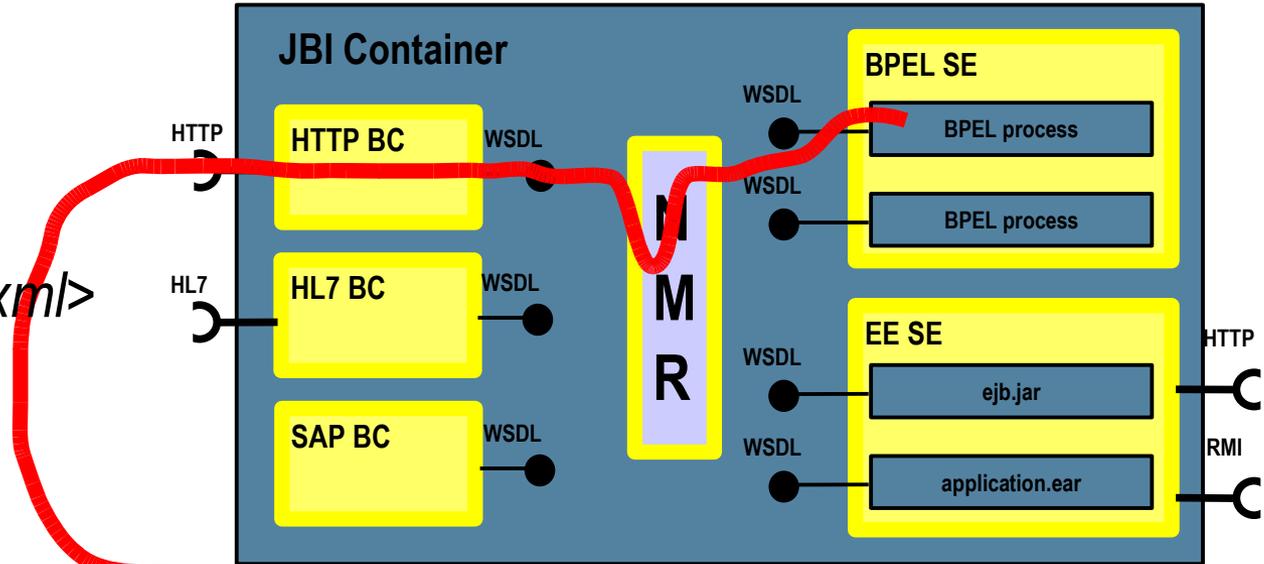
JMS
ReportMail

ReportMail Application



Internals: remote

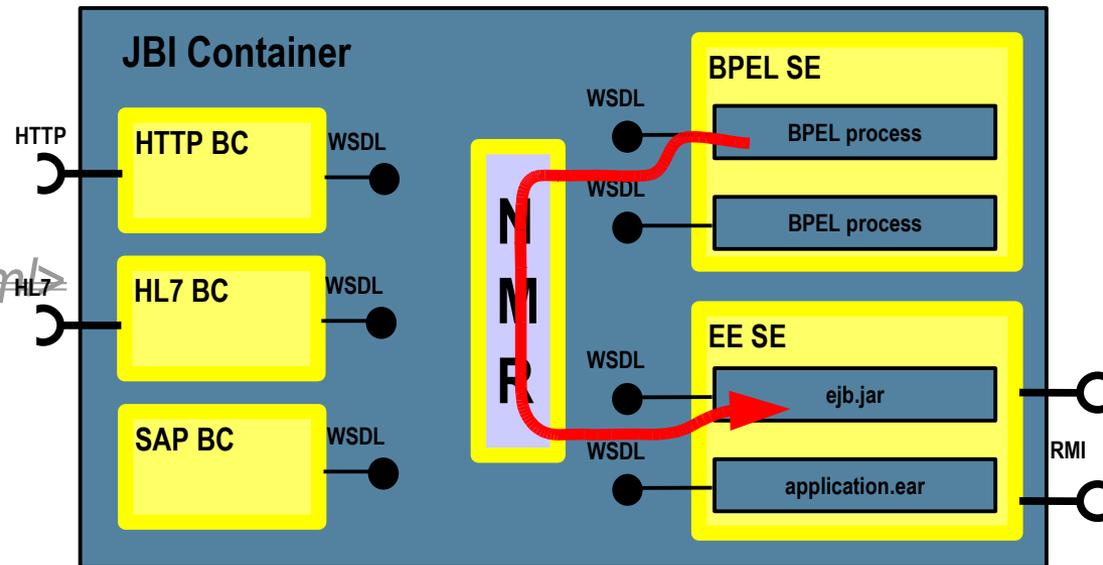
- BPEL
- NMR
- HTTP BC
- *Marshall DOM to <xml>*
- SOAP/HTTP
- Network layer



- Network layer
- SOAP/HTTP
- JAXWS
- *Unmarshal <xml>*
- *Create DOM*
- JAXB
- WS.helloWorld(name)

Internals: local

- BPEL
- NMR
- ~~HTTP BC~~
- ~~Marshall DOM to <xml>~~
- ~~SOAP/HTTP~~
- ~~Network layer~~
- ~~SOAP/HTTP~~
- JAXWS
- ~~Unmarshal <xml>~~
- ~~Create DOM~~
- JAXB
- WS.helloWorld(name)



Advantages:

- > Performance
- > Transaction propagation
- > Security context propagation

Likewise: EJB to BPEL

More Info

- JBI
 - > <http://www.jcp.org/en/jsr/detail?id=208>
 - > <http://java.sun.com/integration/>
 - > Forum: <http://forum.java.sun.com/forum.jspa?forumID=512>
- OpenESB Project
 - > <http://open-esb.org/>
 - > Forum: users@open-esb.dev.java.net
 - > <http://wiki.open-esb.java.net/>
- This Demo
 - > Screencasts:
 - > <http://wiki.open-esb.java.net/Wiki.jsp?page=OpenESBIntroductionTutorial>

Q&A

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