

ActiveBPEL Engine and ActiveBPEL Designer



P. Contreras, D. Zervas, F. Murtagh
Royal Holloway, University of London

ActiveBPEL

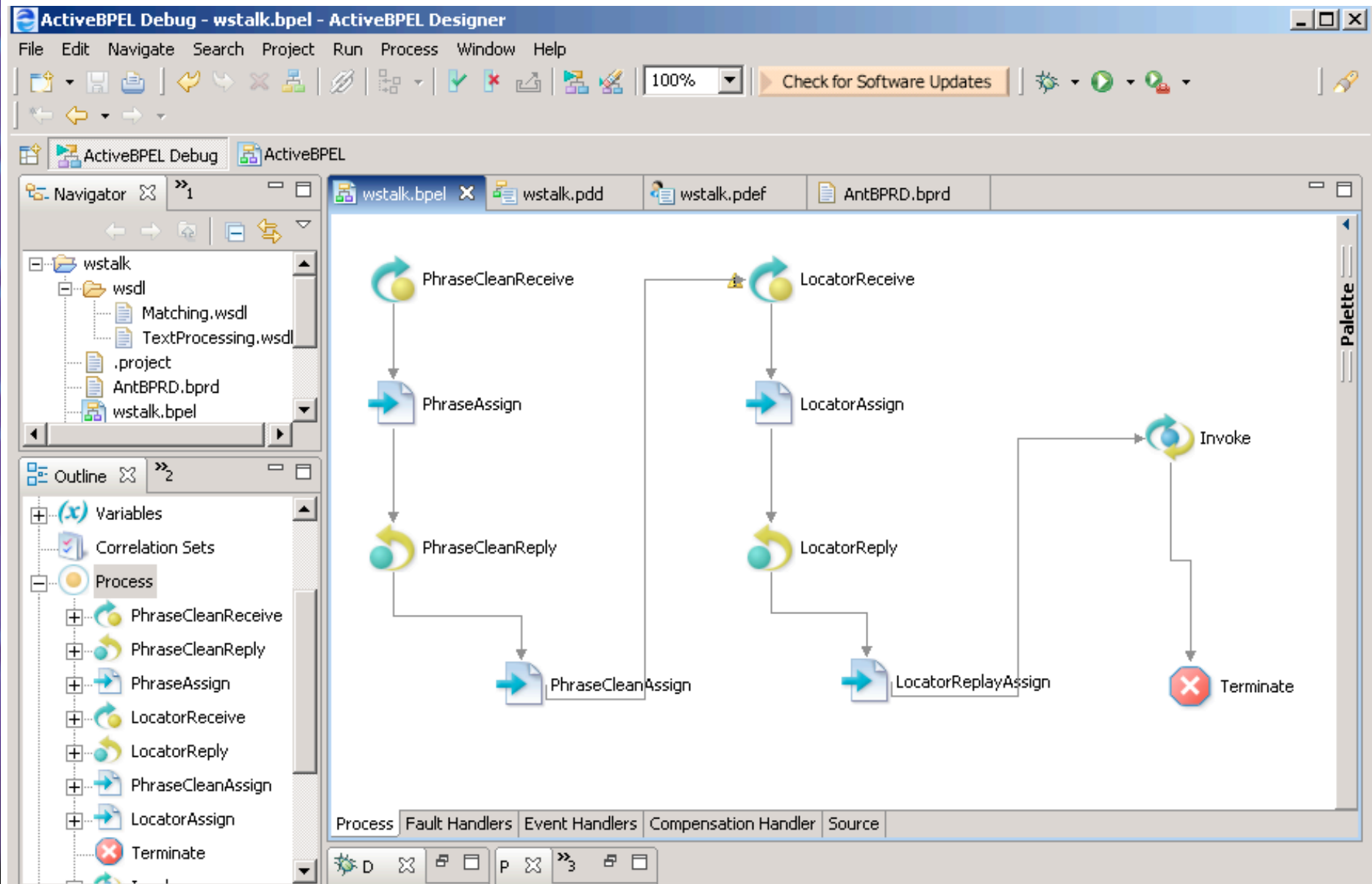
ActiveBPEL is a family of products

- **ActiveBPEL Engine**, core workflow engine, free and open source
- **ActiveBPEL Designer**, GUI designer, free and windows support only, based in Eclipse framework
- **ActiveBPEL Enterprise Server**, licensed only.
Different distributions Available for: Tomcat, .NET, Jboss, WebLogic, WebSphere

ActiveBPEL Designer Activities

- **Receive**, accepts message data from a service partner
- **Invoke**, it directs a Web Service to perform an operation
- **Reply**, It matches a receive activity
- **Assign**, it updates the content of a variable
- Other components: Throw, Terminate, Wait, Compensate, Break, Continue

ActiveBPEL Designer



Deployment

- ActiveBPEL Designer contains all the necessities tools to automatically deploy a process.
- A number of files need to be produce.

Deployment package (.bpr)

- **BPEL file**
- **WSDL file(s)**
- **PDD (file)**

- **PDEF file**

ActiveBPEL Engine



[Home](#)

Engine

[Configuration](#)

[Storage](#)

[Version Detail](#)

Deployment Status

[Deployment Log](#)

[Deployed Processes](#)

[Partner Definitions](#)

[WSDL Catalog](#)

Process Status

[Active Processes](#)

[Alarm Queue](#)

[Receive Queue](#)

Process ID

[Go](#)

[Help](#)

Engine Properties

URN Mappings

Property	Value
Auto create target path for Copy/To:	<input type="checkbox"/>
Disable bpws:selectionFailure fault:	<input type="checkbox"/>
Logging Enabled:	<input type="checkbox"/>
Replace Existing WSDL:	<input checked="" type="checkbox"/>
Validate Input/Output messages against schema:	<input checked="" type="checkbox"/>
Unmatched Correlated Receive Timeout:	<input type="text" value="300"/>
Work Manager Thread Pool Min:	<input type="text" value="10"/>
Work Manager Thread Pool Max:	<input type="text" value="50"/>
WSDL Cache Size:	<input type="text" value="100"/>

[Update](#)

BPEL Text Mining Example

Taking the *Interpreter* we can have the following sequence :

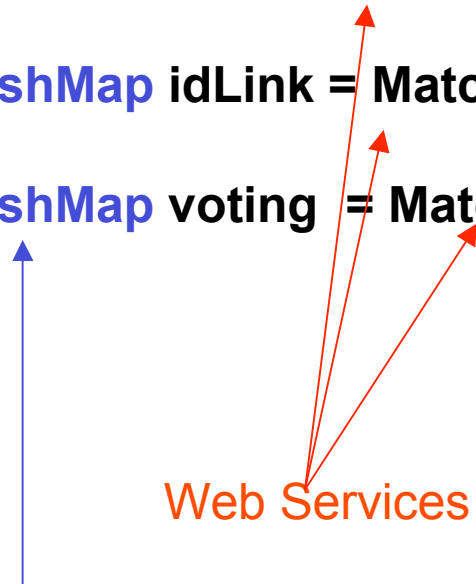
String phrase = TextProcessing.phraseClean (**String** language, **String** phrase)

HashMap idLink = Matching.locator (**String** phrase)

HashMap voting = Matching.voting(**HashMap** idLink)

Web Services

Variable type



BPEL Deployed Process

ActiveBPEL™ Administration - Deployed Process Detail View - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://localhost:8080/BpelAdmin/deployedprocess/processview_ Go

activeBPEL™ engine Deployed Process Detail: wstalk (ID 0) Help | Close

wstalk

- partnerLinks
- partners
- variables
 - phraseCleanReque
 - phraseCleanRespo
 - locatorRequest
 - locatorResponse
 - votingRequest
 - votingResponse
- flow
 - PhraseCleanReceiv
 - PhraseCleanReply
 - PhraseAssign
 - LocatorReceive
 - LocatorReply
 - PhraseCleanAssign
 - LocatorAssign
- terminate
- invoke
- assign

PhraseCleanReceive

PhraseAssign

PhraseCleanReply

PhraseCleanAssign

LocatorReceive

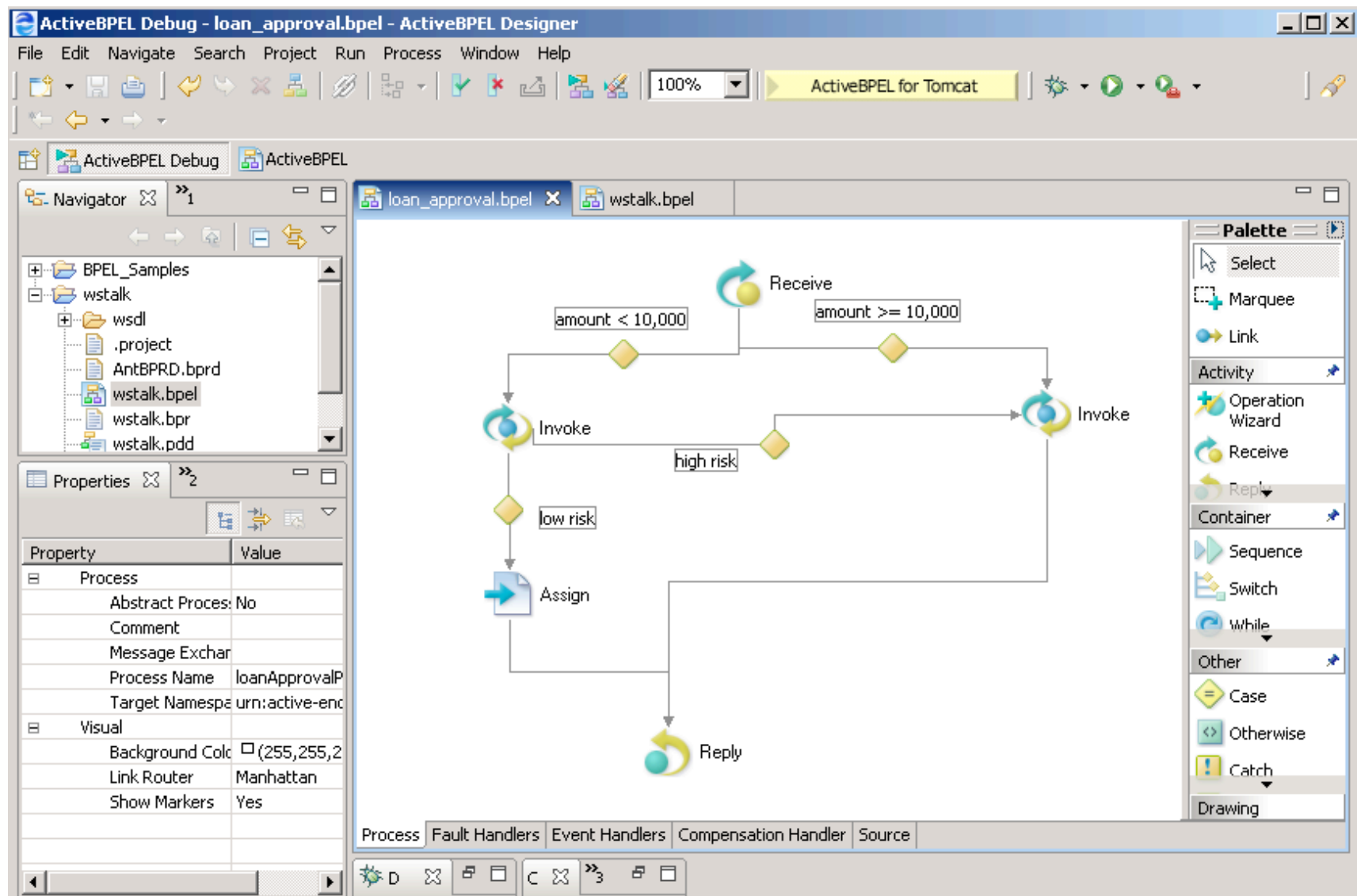
LocatorAssign

Process

Property	Value
Name	wstalk
Path	/process
Target Namespace	http://localhost
Suppress Join Failure	yes

Copyright © 2004-2006. Active Endpoints, Inc. All Rights Reserved

Load Approval example



Questions ?

