

October 10, 2005

Creation Review: BPEL Designer

Michal Chmielewski, Oracle

michal.chmielewski@oracle.com

Kevin McGuire, IBM

Kevin_McGuire@ca.ibm.com



ORACLE

Project Goal

To add comprehensive support in Eclipse for the definition, editing, deploying, testing, and debugging of **BPEL4WS** flows.

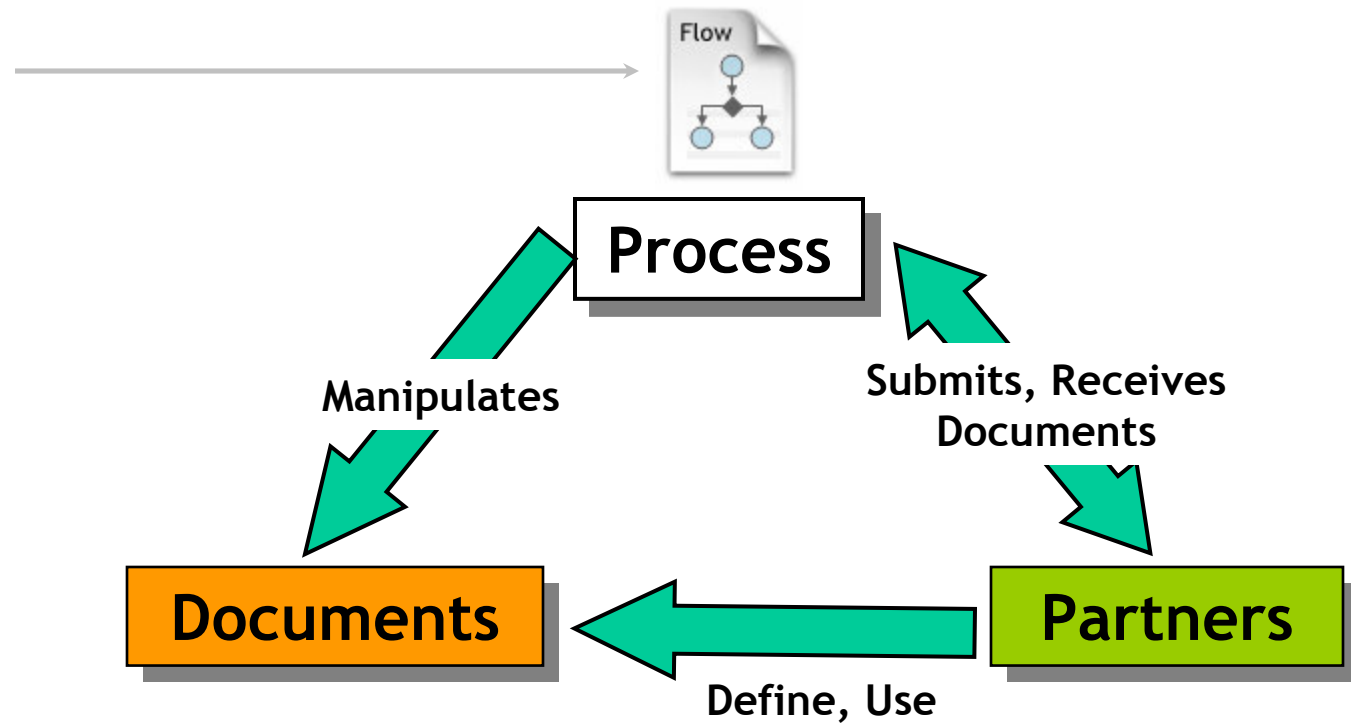
- To do it “right”.
- Use as much of the existing ecosystem as possible.
- Learn from previous attempts.

Business
Process
Execution
Language
4
Web
Services



What is BPEL4WS ?

Business
Process
Execution
Language
4
Web
Services

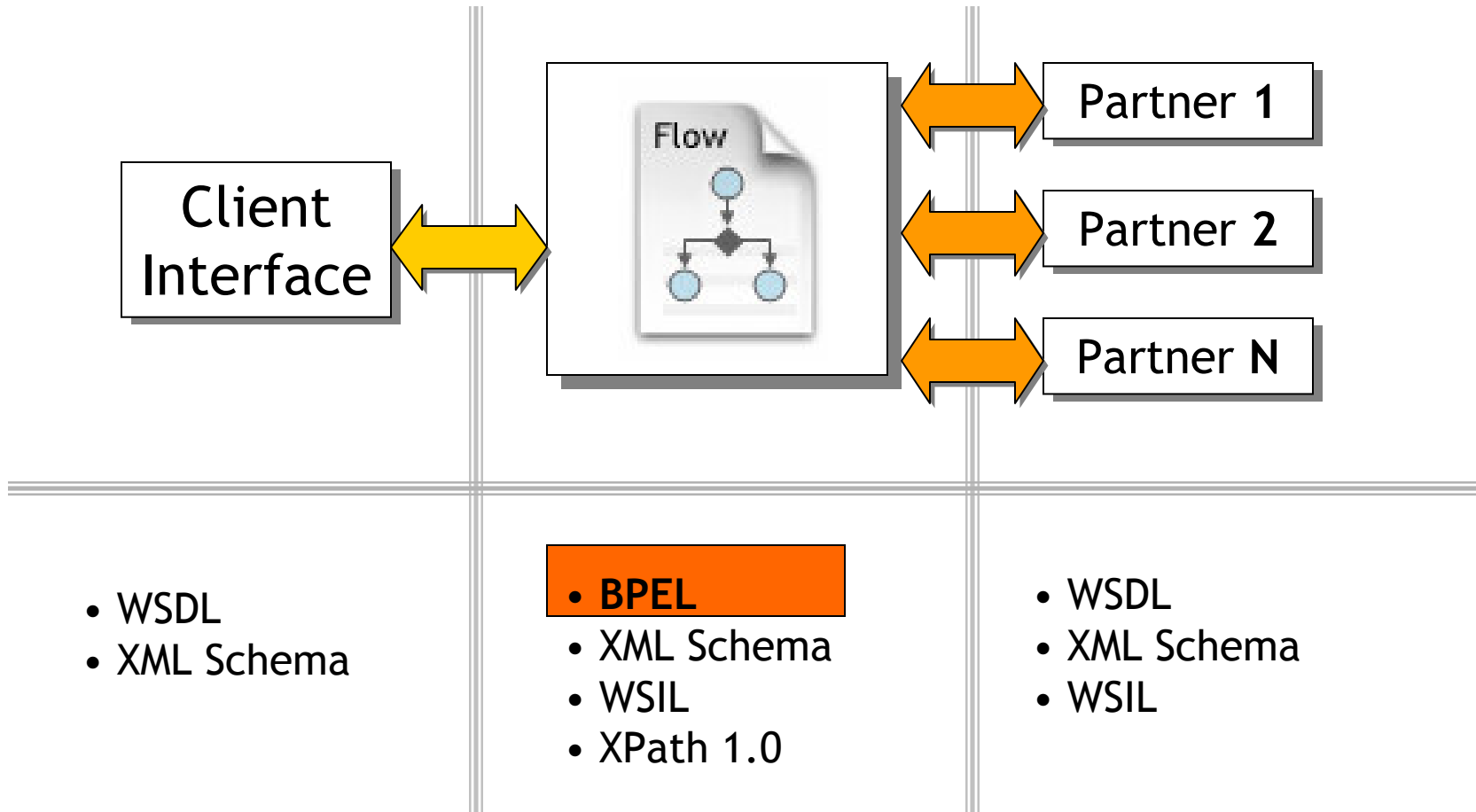


BPEL Facts

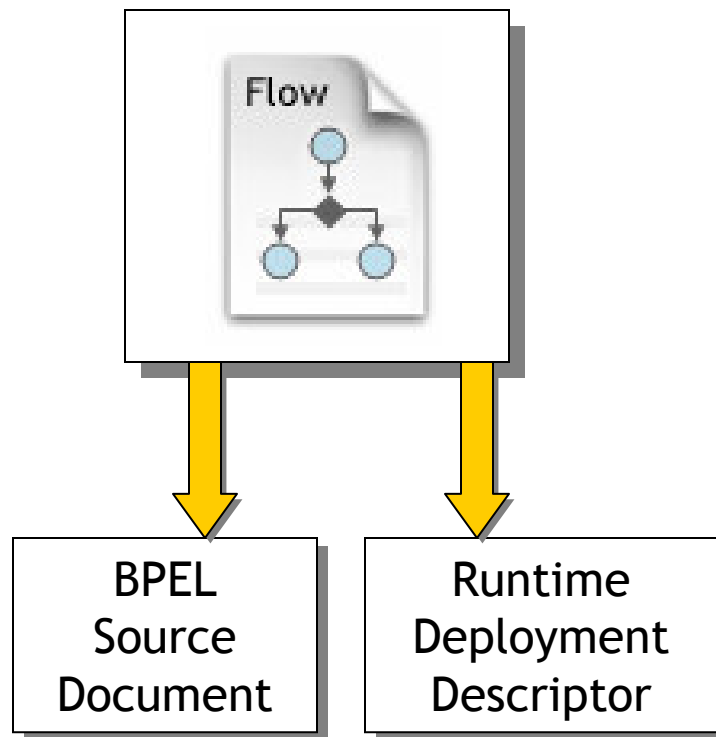
- BPEL is expressed in XML syntax
- Interacts with Web Services
- Exposes itself as a Web Service
- Handles documents in XML format
- Depends on: WSDL 1.1, XML Schema, Xpath 1.0, WS-Addressing.
- Is extensible (custom activities: vendors & integrators)
- Is changing (OASIS: evolving standards)



BPEL Technologies



Key Points



- Focus on design time experience of BPEL processes.
- World class visual & source editor.
- Vendor neutrality (runtime)
- Extensibility (editor, runtime)
- Use existing components for key functionality (Schema design, WSDL design, WSIL, UDDI).
- No runtime implementation provided.

Eclipse touch points

- [WST \(Web Standard Tools\)](#)
 - WSDL editing
 - XML Schema editing
 - SSE integration
 - UDDI browsing
- [GEF \(Graphical Editing Framework\)](#)
 - Graph drawing and manipulation
 - Palette
 - Drag and Drop support
- [EMF \(Eclipse Modeling Framework\)](#)
 - Models for the editor
 - Validation framework



Extension Points

- Runtime environment pairing
 - Validation, Compilation - execution map creation
 - Deployment - interaction with "administrative" API for installing process at runtime
 - Exploration - "read" and "save" (deploy) semantics of deployed processes
 - Addition of functions callable from the BPEL process.
- Providing support for different query languages (XPath (default), XQuery, JavaScript)



Extension Points

- Extensions to BPEL palette definition
- BPEL element extensions and visual tool contributions
- Pluggable "type" system to allow 3rd parties to extend the designer visually
- Modifying existing element definitions such as adding properties or modifying visuals
- Adding new element definitions such as "custom" bpel activities.
- A set of extension points around skinability



Community Response

- Eclipse newsgroup; traffic is light, but responses are positive.
- [JWS](#) and [STP](#) evaluating interest
- Interest from:
 - [Oracle](#)
 - [IBM](#)
 - [Five Sight](#)
 - [Tibco](#)
 - Independents



Project Participants

- Michal Chmielewski, Oracle
michal.chmielewski@oracle.com
- Edwin Khodabakchian, Oracle
edwin.khodabakchian@oracle.com
- Mahadevan Lakshminarayanan, Oracle
mahadevan.lakshminarayanan@oracle.com
- Kevin McGuire, IBM
kevin_mcguire@ca.ibm.com
- James Moody, IBM
james_moody@ca.ibm.com
- Rodrigo Peretti, IBM
rodrigo_peretti@ca.ibm.com
- Tom Hillman, Tibco
hillman@tibco.com
- Paul Brown, FiveSight
paulbrown@gmail.com
- Greg Adams, IBM
greg_adams@ca.ibm.com



Project Timeline

