# Eclipse Process Framework Project

## EPF 1.2 Release Review

## July/2007

# Introduction

- Major project milestones
  - Proposed October 2005
  - Created December 2005
  - IBM contribution January 2006
  - Infrastructure up and running February 2006
  - Version 1.0 released in Sep/2006
  - Milestone builds
    - OpenUP content - every 4 weeks
    - EPF Composer – every 6 weeks
- Continuing to expand community
  - 26 committers from 12 organizations
  - 10 face-to-face meetings with an average of 14 people each
    - 3 in Europe
    - 7 in North America

# EPF 1.2 Features

- EPF Composer 1.2 (Code and supporting documentation)
  - Plan available at: http://www.eclipse.org/epf/general/dev_plan.php
- OpenUP 1.0 (Method and Process Content)
  - Plan available at: http://www.eclipse.org/epf/general/dev_plan.php

# EPF 1.2 Features – EPF Composer 1.2

- New diagram editor
- New 'Extends and Replaces' variability type
- Element ordering in categories: order alphabetical, by type, or manually
- Rich Text Editor improvements
- Improvements for Configuration editor
- Process Editor Improvements
- Additional SCM support
  - Subversion
- New platform support
  - Vista, IE7, Mozilla/FireFox 2, Eclipse 3.3

# EPF 1.2 Features – OpenUP 1.0

- Minimal, complete and extensible software development process for small, co-located teams
- Based on 4 principles and related practices
  - Collaborate, Balance, Focus, Evolve
- Contains one lifecycle (a.k.a. delivery process)
- Three areas of concerns
  - Micro-increments, Iteration Lifecycle, Governance Lifecycle
- OpenUP family
  - Contains basic process (OpenUP)
  - And future extensions
    - First proposed is OpenUP/DSDM (see next slide)

# Other Method Content

- Contributed (approved by Eclipse Legal)
  - OpenUP/DSDM
    - Subset of DSDM (Business Stakeholders)
    - Proposed by DSDM Consortium/Xansa
    - Extends OpenUP
  - XP
    - Initial version proposed by IBM and ObjectMentor
  - Scrum
    - Initial version (French) proposed by Claude Aubry

- In progress
  - Scrum (English)
    - Translated to English by Pascal Barbier
    - Ongoing development by community, led by Lyndon Washington
  - Agile Modeling and Agile DB Refactoring
    - Based on Scott Ambler's material
  - Translation of content
    - A community effort
    - Using Wiki technology for collaboration (http://www.epfwiki.net)
    - OpenUP from English to Portuguese, Russian and Spanish
    - Scrum in French and English

# Non-code Aspects

- User Documentation
  - Using EPF Composer with a Version Control System
  - Plug-in development guideline for EPF Composer
  - Text Style Guide for EPF Composer
  - Translating Method Content Guideline

- Developer Resources
  - Change Request Management FAQ
  - EPF Composer Development Guide
  - EPF Composer API Documentation
  - EPF Composer Architecture Overview
  - EPF XML Schema
  - Release notes with each milestone build and release build

- See http://www.eclipse.org/epf/

# Non-code Aspects (cont.)

- Whitepapers/Publications/Books (sample set)
  - DeveloperWorks: The Eclipse Process Framework Project, Kroll, http://www.ibm.com/developerworks/rational/library/05/1011_kroll/
  - Embedded Computing Design: Building embedded software with the Eclipse Process Framework, Sibbald and Sand, http://www.embeddedcomputing.com/departments/eclipse/2006/07/
  - Eclipse Review: A Development Library at your Fingertips, Kroll and Sand, http://www.eclipsereview.com/retrieve/er_200609.htm
  - Rational Edge: Eclipse Process Framework Composer - Part 1: Key Concepts, Haumer, http://www.eclipse.org/epf/general/EPFComposerOverviewPart1.pdf
  - Rational Edge: Eclipse Process Framework Composer - Part 2: Authoring Method Content and Processes, Haumer, http://www.eclipse.org/epf/general/EPFComposerOverviewPart2.pdf
  - Addision-Wesley: Agility and Discipline Made Easy—Practices from OpenUP and RUP, Kroll & MacIsaac (2006)
  - Eclipse Review: Increasing Development Knowledge with EPF Composer, Haumer, http://www.eclipsereview.com/issues/eclipsereview_200606.pdf
  - IBM Systems Magazine, Open Systems Edition: An Open Source Agile and Unified Software Development Process, Ruehlin (2007)
  - Cutter IT Journal – Vol. 20, N. 3: Open Source Process Definition: Innovating the Innovation Process, Pereira (2007)

# Non-code Aspects (cont.)

- Presentations (sample set)
  - EclipseCon 2007: Introduction to EPF, EPF Composer and OpenUP/Basic, Balduino, http://www.eclipsecon.org/2007/index.php?page=sub/&id=3621
  - EclipseCon 2007: What's the Eclipse Process Framework, Kroll, http://www.eclipsecon.org/2007/index.php?page=sub/&id=4079
  - SDWest 2007: EPF—an Open-Source Process Initiative, Kroll
  - RSDC 2007: OpenUP - Applying Scrum Practices in the IBM Rational Unified Process, Lyons
  - OMG Process Modeling Special Interest Group, Haumer, http://www.eclipse.org/epf/community/Intro_EPF-ph.pdf
  - EclipseCon 2006: Introducing the Eclipse Process Framework, Haumer & Balduino, http://www.eclipse.org/epf/community/Intro_EPF-ph.pdf
  - EclipseCon 2006: What is the Eclipse Process Framework?, Kroll
  - RSDC 2006: "Iterative Program Management Using Practices from the Eclipse Process Framework", Vaidya
  - Agile 2006: EPF and Agile Development, Kroll
  - SD Best Practices 2006: Eclipse Process Framework – An Open Source Initiative, Kroll
  - SD Best Practices 2006: Open Unified Process (OpenUP) Distilled, Kroll & Lyons
  - Verify 2006: "How to Adopt Agile, Iterative Testing with OpenUP", Oster
- Press
  - +100 press mentions of EPF
- Google hits for "Eclipse Process Framework": +28,000

# Community Feedback

- Discussion on usage guidance in newsgroups and developers list – how to effectively leverage the technology

- Requests on CM integration and how to deal with large scale adoption

- Requests for content in different languages

- Review and feedback via the EPF Wiki

# API Status

- ## Implementation
  - The EPF 1.2 API is 100% complete.
- ## Documentation
  - The EPF 1.2 JavaDoc API will be published to http://www.eclipse.org/epf/1.2/javadoc/
  - The old EPF 1.0 JavaDoc API will be relocated to http://www.eclipse.org/epf/1.0/javadoc/
- ## Test Cases
  - Some basic test cases have been written and are being run with each EPF build.
- ## Compatibility
  - Some APIs have changed, mostly to accommodate meta model changes, improve usability, support new feature enhancements (like the new GMF based activity editors) and upgrade to Eclipse 3.3, EMF 2.3 and GEF 3.3.

# Tool Usability

- No technical or process modeling knowledge required
  - Uptake from many non-technical users
  - Proven that process modeling does not require complicated diagrams, but can be done via guided forms and wizards

- Intuitive, form-based interface
  - Observed ease of learning with contributors which became productive very quickly

- Identified issues around the parallel development usage model

- Model for using the processes in a development environment needs to evolve to become more embedded and 'fun'

- Desire to have more community based processes by leveraging e.g. Wiki technology

# Architectural Issues

- Linux Support
  - Ensuring that the rich text editor functions properly on a wide variety of Linux operating systems, default and user-installed HTML browsers remains a challenge for both development and testing. This issue will be addressed in the next release by leveraging the new XULRunner support in the SWT Browser control.

- Use of internal Eclipse APIs
  - The existing code still uses some internal Eclipse APIs. Some are unavoidable. For example, in Eclipse 3.x, org.eclipse.swt.dnd.Clipboard no longer returns the source URL of the pasted HTML content. However, it is needed by the EPF Composer rich text editor to automatically copy the images and files referenced in the HTML to the method library. To workaround the limitation, a Win32-specific HTMLTransfer class was written and it uses the org.eclipse.swt.internal.ole.* APIs.

- MAC OS Support

# Defect Statistics – EPF Composer

- Number of bugs since Oct 1,2006
  - Total: 728 (as of June 26, 2007)
    - new: 55
    - assigned: 28
    - reopened: 3
    - resolved: 20
    - verified: 18
    - closed: 604

- Link to Bugzilla report
  - https://bugs.eclipse.org/bugs/buglist.cgi?query_format=advanced&short_desc_type=allwordssubstr&short_desc=&classification=Technology&product=EPF&component=Tool&version=0.9&version=1.0&version=1.0.1&version=1.0.1.1&version=1.0.1.2&version=1.0.2&version=1.1&version=1.2&version=1.3&version=10.0&version=2.0&version=unspecified&target_milestone=---&target_milestone=1.0+M1&target_milestone=1.0+M10&target_milestone=1.0+M2&target_milestone=1.0+M3&target_milestone=1.0+M4&target_milestone=1.0+M5&target_milestone=1.0+M6&target_milestone=1.0+M7&target_milestone=1.0+M8&target_milestone=1.0+M9&target_milestone=1.0+RC1&target_milestone=1.0+RC2&target_milestone=1.0.0&target_milestone=1.0.1&target_milestone=1.0.1.1&target_milestone=1.0.2&target_milestone=1.1&target_milestone=1.2+M1&target_milestone=1.2+M2&target_milestone=1.2+M3&target_milestone=1.2+M4&target_milestone=10.0&target_milestone=2.0&long_desc_type=allwordssubstr&long_desc=&bug_file_loc_type=allwordssubstr&bug_file_loc=&status_whiteboard_type=allwordssubstr&status_whiteboard=&keywords_type=allwords&keywords=&bug_status=NEW&bug_status=ASSIGNED&bug_status=REOPENED&bug_status=RESOLVED&bug_status=VERIFIED&bug_status=CLOSED&emailtype1=substring&email1=&emailtype2=substring&email2=&bugidtype=include&bug_id=&votes=&chfieldfrom=&chfieldto=Now&chfieldvalue=&cmdtype=doit&order=Reuse+same+sort+as+last+time&query_based_on=EPF+Tool+R-V-C+1.2+ALL&field0-0-0=creation_ts&type0-0-0=greaterthan&value0-0-0=2006-09-30

# Defect Statistics (OpenUP content)

- Number of bugs since Oct 1,2006
  - Total: 427 bugs (as of June 18, 2007)
    - New: 15
    - Assigned: 55
    - Reopened: 2
    - Resolved: 11
    - Verified: 1
    - Closed: 343

- Link to Bugzilla report
  - https://bugs.eclipse.org/bugs/buglist.cgi?query_format=advanced&short_desc_type=allwordssubstr&short_desc=&classification=Technology&product=EPF&component=Content&version=0.9&long_desc_type=allwordssubstr&long_desc=&bug_file_loc_type=allwordssubstr&bug_file_loc=&status_whiteboard_type=allwordssubstr&status_whiteboard=&keywords_type=allwords&keywords=&bug_status=NEW&bug_status=ASSIGNED&bug_status=REOPENED&bug_status=RESOLVED&bug_status=VERIFIED&bug_status=CLOSED&emailtype1=substring&email1=&emailtype2=substring&email2=&bugidtype=include&bug_id=&votes=&chfieldfrom=2006-10-01&chfieldto=Now&chfieldvalue=&cmdtype=doit&order=Reuse+same+sort+as+last+time&field0-0-0=noop&type0-0-0=noop&value0-0-0=

# Standards

- OMG standard Software Process Engineering Metamodel (SPEM) 2.0 is related to current EPF metamodel
  - Expectation is to adopt SPEM 2.0 as it becomes a standard

# Committers, Contributors and Process

- 26 committers from 12 organizations
- Contributors from various organizations
- 10 face-to-face meetings
  - 3 in Europe
  - 7 in North America
- EPF Composer
  - All design documents available at http://www.eclipse.org/epf/
  - Design discussions are held via mailing list and weekly phone calls
- OpenUP
  - 5 sub-teams each have weekly phone calls
  - Status call every Wednesday
  - Iteration assessment and planning calls on end of iteration (last day of the month)
  - Active discussions on mailing lists
- Release planning
  - Conference calls used to refine releases

# Community

- Growing adoption
  - Examples of organizations using EPF Composer to document their own processes
    - ILOG
    - Intel (Argentina Software Development Center)
  - Eclipse Plugin Central contains new category called Process, with extensions to EPF
    - http://www.eclipseplugincentral.com/Web_Links-index-req-viewcatlink-cid-878.html
  - For example of organizations that will either deliver services around, or incorporate EPF in commercial offerings, see next slide
  - Universities leveraging EPF for curricula and academic projects
    - USC (Prof. Barry Boehm is building COCOMO estimation tools on top of EPF Composer in their fall 2006 curricula)
    - Wilos, a process orchestration software, by students of Paul Sabatier University, France (http://www.wilos-project.org), open-sourced at SourceForge
    - A number of research grants have been awarded by IBM for research around EPF
- Download activity since Oct 1, 2006
  - OpenUP library and published site: +16,000 downloads
  - EPF Composer
    - +1200 downloads of milestone builds alone
    - +1400 downloads of 1.2 nightly builds
- Outreach activity
  - Extensive outreach per slide 8 and 9

# Example companies intending to deliver services around, or incorporate EPF in commercial offerings

- Armstrong Process Group
- Aubry Conseil
- Capgemini
- Covansys
- European Software Institute
- FMISolutions
- GOOD Software Inc.
  - http://www.projectkoach.com/processcorner.html
- IBM
  - Created a commercial offering in the method/process space on top of EPF named IBM Rational Method Composer, which comes with IBM Rational Unified Process: http://www-306.ibm.com/software/awdtools/rmc/index.html?S_TACT=105AGX15&S_CMP=LP
  - IBM Rational Team Concert Beta includes OpenUP as enact-able process (www.jazz.net)
- ICONIX
  - Delivering the Agile/ICONIX Process via the Eclipse Process Framework (EPF) - http://www.iconixsw.com/EPFICONIXProcessRoadmap.html
- LogicaCMG
  - Has used EPF to create a commercial offering for business intelligence named LogicaCMG's BI-Framework. LogicaCMG has proposed contribution of source code for a Wiki solution (in review by Eclipse legal) and have contributed by sponsoring http://www.epfwiki.net.
- Number Six Software
  - Using EPF to create a commercial User Experience plug-in to the OpenUP
- Telelogic
- Xansa
- Whatever Consulting Group
- WSA Consulting

# Intellectual Property – Source Code

- All contributions to date have been made under EPL 1.0
- All plug-ins contain appropriate license files
- All committers have completed Eclipse Committer Agreements and have been approved by the PMC
- Major contributions have followed due diligence process
- Project log available at
  - http://www.eclipse.org/epf/project-info/project_log.csv
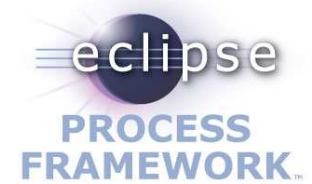
# Intellectual Property – Method Content

- Content initially contributed went through due diligence by Eclipse organization
- All the content currently available is under EPL 1.0
- Sources of inspiration for contributed content
  - RUP for Small Projects Configuration (due diligence by Eclipse done)
  - Books, articles and presentations by industry experts
    - References are appropriately made
  - Own experience of various committers and contributors
- Method Library contains copyright page
- OpenUP Copyright information is linked at the bottom of each published page and consolidated on one Copyright page available from the "About" category.
  - All committers have completed Eclipse Committer Agreements and have been approved by the PMC
- Project Log
  - http://www.eclipse.org/epf/project-info/project_log.csv

# Future Plans – Proposed Features

- Content
  - Extension of content
    - MDD, VBSE
  - Inclusion of other processes
    - XP, Scrum, DSDM, Agile Modeling, Agile Database Refactoring
  - Better quality for current processes
  - Translation of content evolving
  - Improve scalability of OpenUP
- Tool
  - SPEM 2.0 XMI import/export
  - Support for advanced SPEM 2.0 concepts
  - RACI support
  - Stereotypes for content elements and relationships
  - Modeling qualifications for roles
  - Late role assignment
  - Wiki technology support

# Comments and Votes

- Bugzilla used for comments and votes after the review
    - https://bugs.eclipse.org/bugs/show_bug.cgi?id=196720