



Eclipse Process Framework Project

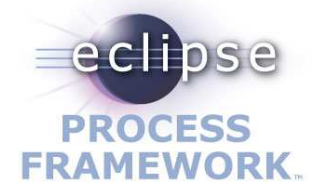
EPF 1.5 Release Review
August 13, 2008

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
 - Version 1.2 released in July/2007
 - Milestone builds
 - EPF Practices – every 4 weeks
 - 1.5M1: 4/1 – 4/30/2008
 - 1.5M2: 5/1 – 5/31/2008
 - 1.5M3: 6/1 – 6/30/2008
 - 1.5M4: 7/1 – 7/31/2008
 - 1.5M5: 8/1 – 8/22/2008
 - EPF Composer – every 6 weeks
 - 1.5M1: 1/14 - 3/07/2008
 - 1.5M2: 3/10 - 5/02/2008 (released 5/21/08)
 - 1.5M3: 5/05 - 6/27/2008 (released 7/20/08)
 - 1.5M4: 6/30 - 8/22/2008
- Continuing to expand community
 - 28 committers from 9 organizations
 - 12 face-to-face meetings with an average of 14 people each
 - 3 in Europe
 - 9 in North America

Major Themes for EPF 1.5



- Created a content architecture framework for modeling practices in EPF
 - factored all content into independent practices
 - designed modeling mechanisms to combine and integrate practices
 - provided infrastructure for a common categorization and presentation for all practices
 - created modeling guidelines for users to easily extend and modify practices
- EPF Wiki
 - Portal-like functionality as easy entry point to processes generated from EPF Composer with recent discussions and changes, top users, about page, archives
 - WYSIWYG editing of textual content
 - Harvesting support: review changes, uploads, comments
- Evolved EPF Composer's tool concepts along these practice-driven themes
 - to manage loosely coupled and alternative practices (slots)
 - to configure content in a more declarative way (declarative categories)
 - to provide more fine granular reuse concepts (supporting method plug-ins)
- Broadened content
 - English version of Scrum
 - Agile Business Rules Development (Extension of OpenUP)

EPF 1.5 Features – EPF Composer

- Slots: modeling concept for separation of concerns for practices
- Slot fulfillment concept to realize “late-binding” of i/o relationships
- Ability to attach guidance to any process element
- Extended custom categories to select elements by type
- Improved tree-browser based editing and copying of custom categories
- Configuration editor: additional message filters & performance improvements
- New optional form field: External ID
- Navigation tree for practice: publish all practices in one common look and feel
- Additional publication options to simplify navigation structures
- Additional publication options for showing Process Usage
- “Expand all” button for published Work Breakdown Structures
- Command-line publishing: start EPFC without a UI to run in batch jobs
- Made EPF’s Rich Text Editor a separate Eclipse Feature to make it reusable for other Eclipse projects

EPF 1.5 Features – EPF Wiki



- Multiple EPFC created processes can be used and managed as Wikis
- Portal-like functionality as easy entry point to processes with recent discussions and changes, top users, about page, archives
- WYSIWYG editing of textual content
- Templates
- File Attachments
- RSS feeds
- Harvesting support: review changes, uploads, comments
- Visualization of differences between versions
- Email for user registration, notifications and reports

EPF 1.5 Features – EPF Practices 1.5

- Factored all content into independent practices
 - Allows various processes to be ‘composed’ by selecting relevant practices
 - Enables practices to be shared among different processes
 - Allows different roles to be applied to practices (Do you want XP, Scrum, OpenUP or your own roles?)
- Management Practices
 - Iterative Development
 - Risk-value Lifecycle
 - Two-Level Project Planning
 - Whole Team
 - Change Management
- Technical Practices
 - Concurrent Testing
 - Continuous Integration
 - Evolutionary Architecture
 - Evolutionary Design
 - Shared Vision
 - Test-Driven Development
 - Use-Case-Driven Development

EPF 1.5 Features – OpenUP 1.5

- Refactored based on new EPF Practices
 - First process published using Practices
- Clean-up and incremental improvements
 - A number of smaller improvements relative to OpenUP 1.2
- 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

Other Method Content



- Contributed (approved by Eclipse Legal)
 - OpenUP/DSDM
 - Subset of DSDM (Business Stakeholders)
 - Proposed by DSDM Consortium/Xansa
 - Extends OpenUP
 - OpenUP/ABRD (**NEW for EPF 1.5**)
 - Agile Business Rules Development
 - Contributed by ILOG
 - Extends OpenUP
 - XP
 - Initial version proposed by IBM and ObjectMentor
 - Scrum
 - Initial version (French) proposed by Claude Aubry
 - Translated to English by Pascal Barbier (**NEW for EPF 1.5**)

- In progress
 - Scrum
 - Contribution of content by Mike Cohn (being reviewed by Eclipse legal)
 - Ongoing development by community, led by Ken Clyne
 - Translation of content
 - A community effort
 - Using Wiki technology for collaboration (<http://epf.eclipse.org/>)
 - OpenUP from English to Portuguese, Russian and Spanish
 - Scrum in French and English
 - XP from English to Portuguese

Non-code Aspects



- User Documentation
 - Not updated, yet; will be delivered as a patch
 - Webinar for using new capabilities available
- Developer Resources
 - Change Request Management FAQ
 - EPF Composer Development Guide
 - EPF Composer API Documentation and UML Models
 - EPF Composer Architecture Overview
 - EPF XML Schema
 - EPF Wiki installation Guide
 - EPF Wiki Development Guide
 - Release notes with each milestone build and release build
- See <http://www.eclipse.org/epf/>

Non-code Aspects (cont.)



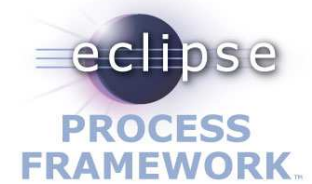
- Whitepapers/Publications/Books (sample set)
 - DeveloperWorks: The Eclipse Process Framework Project, Kroll, http://www.ibm.com/developerworks/rational/library/05/1011_kroll/
 - DeveloperWorks: OpenUP in a Nutshell, Kroll, <http://www.ibm.com/developerworks/rational/library/sep07/kroll/>
 - Embedded 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>
 - Addison-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)
 - Ana Valente Pereira, The Future of Open: Stepping into Open Innovation Practices, Cutter Benchmark Review, December 2007.
 - Feller, J., Valente Pereira, A.P. and Piccoli, G. (2008) Becoming an Open Organization: Open Source Software, Open Content, Open Functionality, and Open Innovation. Arlington, MA: Cutter Consortium.
 - Sibbald, C. “The Problem with Process”, Quality World, December 2007.

Non-code Aspects (cont.)



- Presentations (sample set)
 - EclipseCon 2008: The Eclipse Process Framework – how it can address your team’s process needs, Chinh Vo, <http://www.eclipsecon.org/2008/index.php?page=sub/&id=225>
 - An Agile Model for Open Innovation, Ana Paula Pereira , Agile Business Conference, October 2007, The Queen Elizabeth II Conference Centre, London
 - 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 2008: The Latest In Agile Processes - OpenUP, Kroll
 - 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”: +12,000

Community Feedback



- Weekly conference call for content contributors
- Bi-weekly conference call for tool contributors and interested parties
- Review and feedback of content via the EPF Wiki
- Requests for content in different languages
 - Community effort to translate content

API Status



- Implementation
 - The EPF 1.5 API is 100% complete.
- Documentation
 - The EPF 1.5 JavaDoc API will be published to <http://www.eclipse.org/epf/1.5/javadoc/>
 - The old EPF 1.2 JavaDoc API will be relocated to <http://www.eclipse.org/epf/1.2/javadoc/>
- Test Cases
 - 3,700 test cases for EPF Composer have been written and are being run with each EPF build.
- Compatibility
 - Method Library data format: minor additions (XML attributes, multiplicity relaxations), migration fully supported
 - No issue except upgrades to latest Eclipse 3.3.2 plug-ins

Tool Usability



- EPF Composer is a powerful tool for process authors, but requires some learning curve for an occasional user
 - No technical or process modeling knowledge required. Uptake from many non-technical users.
 - With some learning, contributors became productive very quickly
 - Proven that process modeling does not require complicated diagrams, but can be done via guided forms and wizards
- Wiki addresses the needs of the occasional user who do not want to download a rich client application or learn tool capabilities
 - WYSIWYG Wiki capabilities for textual documentation (not models)
 - Allows practitioners to improve the process without downloading and learning rich client app
 - Power users can manage edits and review/approve as appropriate

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.
- 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 workaroud the limitation, a Win32-specific `HTMLTransfer` class was written and it uses the `org.eclipse.swt.internal.ole.*` APIs.
- MAC OS Support
 - Not supported

Defect Statistics – EPF Composer

- Number of bugs since Aug 1, 2007
 - Total: 224 (as of August 1, 2007)
 - new: 94
 - assigned: 1
 - reopened: 1
 - resolved: 31
 - verified: 23
 - closed: 74

- 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&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&known_name=EPF+Tool+R-V-C+1.2+ALL&query_based_on=EPF+Tool+R-V-C+1.2+ALL&field0-0-0=creation_ts&type0-0-0=greaterthan&value0-0-0=2007-07-31

Defect Statistics (EPF Content)

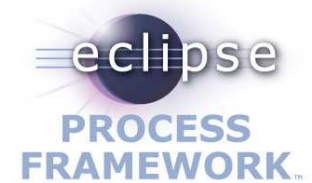
- Number of bugs since Aug 1, 2007
 - Total: 193 bugs (as of Aug 1, 2008)
 - New: 48
 - Assigned: 43
 - Reopened: 2
 - Resolved: 21
 - Verified: 3
 - Closed: 76
- Link to Bugzilla report
 - https://bugs.eclipse.org/bugs/buglist.cgi?query_format=advanced&short_desc_type=allwordssubstr&short_desc=&classification=Technology&product=EPF&component=Content&long_desc_type=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=2007-08-01&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 and Systems Process Engineering Meta-model (SPEM) 2.0 is related to current EPF meta-model (<http://www.omg.org/spec/SPEM/2.0/>)
 - EPF's UMA schema was the basis for the SPEM 2.0 submission
 - SPEM 2.0 and UMA have roughly 80% overlap
 - EPF will gradually evolve its schema to full SPEM 2.0 support
 - EPF 1.2 and 1.5 introduced first sets of changes towards SPEM (UML2 diagram support, subtracting categories from configurations, abstract work products, link guidance to breakdown elements, linking milestones to work products)
 - Plan to adopt more SPEM 2.0 in future releases

Committers, Contributors and Process



- 28 committers from 9 organizations
- Contributors from various organizations
- 12 face-to-face meetings
 - 3 in Europe
 - 9 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
- EPF Practices
 - Each sub-team has weekly phone calls
 - Status call with all contributors 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 leveraging EPF and practices to build Incremental Commitment Model, a new lifecycle commissioned by US DoD)
 - 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, 2007
 - EPF Practices library and published site: 2,800+ downloads
 - OpenUP library and published site: 18,600+ downloads
 - EPF Composer: 28,000+ downloads
- Outreach activity
 - Extensive outreach per slide 10 and 11

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



- **Advanced Technology Systems**
 - Using EPF to create a commercial User Experience plug-in to the OpenUP
 - Working on a Security plug-in.
- **Armstrong Process Group**
 - APG TOGAF Process Library (ATPL), a set of EPF Composer method plugins that describe TOGAF 8.1.1, that is commercially licensed to end user organizations -- http://www.aprocessgroup.com/products/product_02_0103.asp.
 - EPF Composer tool training -- http://www.aprocessgroup.com/training/course_01_0609.asp.
- **Aubry Conseil**
- **Capgemini**
- **Covansys**
- **European Software Institute**
- **FMISolutions**
- **GOOD Software Inc.**
 - Project Koach: <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 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>
- **Logica**
 - Has used EPF to create a framework for business intelligence (BI Framework) and has donated Wiki technology (EPF Wiki) to the EPF project.
- **Telelogic (now an IBM Company)**
 - Harmony family of processes authored using EPF Composer. Commercially available through services engagements
 - Harmony/IT written as an extension of OpenUP
- **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
- All available content contains Copyright information 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
 - Add practice for Story Writing
 - Build additional processes using the practice library
 - Scrum, XP, ABRD plug-in
 - Inclusion of other processes
 - Complete Scrum, DSDM
 - Extension of content
 - MDD, VBSE
 - USC to build Incremental Commitment Model using EPF and practice library
 - Commissioned by DoD
 - Better quality for current processes
 - Translation of content evolving
 - More processes build based on EPF Practices
- 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