Eclipse Communications Framework

Project Proposal Review November 9, 2004

> John Beatty Scott Lewis Pete Mackie Peter Nehrer Rhett Savage Paul Trevithick

Project Goals

- Simple/Consistent API for Communications
 - User-to-User(s)
 - Plugin-to-Plugin(s)
- Security
 - Consistent interfaces for identity/authentication/authorization
- Extensibility
 - Bundles/Plugins implement ECF-defined extension points
 - 'Pluggable' identity, transport, api layers
 - Support legacy and new protocols with abstract API (e.g. Team API)

Architectural Approach

- Extensible lightweight container
 - ISharedObjectContainer
 - Consistent semantics for authentication
 - Consistent API for managing components
 - Consistent failure handling and message ordering
 - Environment for arbitrary components that require interprocess communications
 - Extends Eclipse as container for plugins **across processes**
 - ISharedObject
 - Local and/or distributed code and state
 - Uses container-provided communcations services

Reference Application

- SW Dev Team Collaboration
 - Secure Team IM/Chat, App Sharing, File Sharing, URL Co-Browsing, etc
 - Integration with Version Control, Content Creation/Management
 - Distributed, Real-time Team Debugging
- Also Support Asynch protocols/services
 - Weblog/Wiki/RSS
 - Email, Discussion Lists, Threaded Discussion Groups
 - SOAP, XML-RPC
- Balance of 'Real-Time' and 'Asynchronous svcs

ECF Team

- John Beatty
 - Senior Principal Technologist in Office of CTO, BEA Systems
 - Participant in Numerous Java Standards Efforts including Liberty Alliance and SAML
 - Sun Microsystems
 - Associate Director, Cambridge Technology Partners
- Scott Lewis
 - 15+ years professional arch/design/implementation experience in comm systems
 - Designer and Developer of Composent Plugins for Real-Time Collaboration
 - CTO and Founder, ShareThis, Inc.
 - Bell Labs, Intel Arch Labs, R&D and Lead Architect
 - Published author/research

ECF Team (cont)

- Pete Mackie
 - 44 years software development and mgmt experience
 - Founder, Software Association of Oregon
 - Founder and President, Interactive Technologies
 - President, Seaquest Software
 - Organizer of Eclipse Code Camp: Portland, OR
- Peter Nehrer
 - Senior Developer, S1 Corporation
 - Senior Developer, Intelligent Learning Corporation
 - Designer and Author of RSS plugin for Eclipse
 - Winner of International Challenge for Eclipse Contest

ECF Team (cont)

- Paul Trevithick
 - Serial entrepreneur/technologist
 - Co-founder of social physics.org
 - Led three software startups
 - Parity Communications, Bitstream-Pageflex (NASDAQ-BITS), Lightspeed (MIT Media Lab spin off)
 - Contributed to XML standards at W3C and other groups
- Rhett Savage
 - Senior Developer, Cayuse, Inc.
 - Senior Developer, Quando
 - Expert in web technologies: Php, Servlet Technologies, Web Services, J2EE

ECF Milestones

- M1: Feb 1, 2005
 - Release API Plugins
 - SharedObjectContainer API
 - Asynch Messaging API
 - Identity API
 - Release Team Collaboration Application
 - IM/Chat
 - App Sharing, File Sharing, URL Sharing
 - Integration with RSS

ECF Milestones

- M2: May 1, 2005
 - Revise APIs
 - Based Upon Developer Feedback
 - Integrate with Equinox/OSGI Security
 - Release Team Collaboration Application
 - Support for Multiple IM/Chat Protocols
 - Integrate Other Communications Features
 - e.g. Distributed Team Debugging
 - e.g. EMF Model Sharing
 - e.g. Integration w/ Ecesis, Haydes

- Deploy to Eclipse.org for Use by Distributed Teams