

Eclipse Architecture Council Meeting
September 2, 2004
Scottsdale, AZ

Attendees

Mike Milinkovich, Eclipse EMO
John Wiegand, IBM, Platform Project
Tyler Thessin, Intel, Strategic Developer
Thomas Fletcher, QNX, Strategic Developer
Boris Kapitanski, Serena, Strategic Consumer
Par Emanuelsson, Ericsson, Strategic Consumer
David Williams, IBM, WTP Project
Harm Sluiman, IBM, T&P Project
Wenfeng Li, Actuate, BIRT Project
John Duimovich, IBM, Tools Project

Absent

Brian Barry, Bedarra Research, Technology Project

Meeting Objectives:

Here is a sampling of what the Eclipse Development Process document says about the purpose of the Architecture Council.

*The Architecture Council is responsible for development, articulation and maintenance of the Eclipse Platform Architecture. This Council is responsible for providing an explicit description of the architecture and syndicating this description among the Development Teams, thereby protecting the architecture from inadvertent corruption. The Architecture Council is also responsible for plotting the evolution of the Architecture in response to the Purposes and Roadmap, which is captured in an **Architecture Plan**. Policies established by the Architecture Council are limited to the domain of architecture, e.g. the identification of immutable interfaces; while the Architecture Council may provide input to the Platform Release planning process, it is generally not involved in strategy.*

The Architecture Council produces an Architecture Plan that describes the architecture changes required to achieve these themes and priorities, or required to maintain long-term architectural viability.

The Architecture Plan describes

- Changes to architectural interfaces, the impact of these changes, and*

the order in which these changes should be implemented • *New Subsystems that should be created*

- *Subsystems that should be combined*
- *Conformance with industry standards*

It is important that the Architecture Council becomes the driving force behind a collective process for capturing and organizing an overall architecture for Eclipse. Its quarterly meetings must be part of an overall process, not simply the one-time events where members get together and examine architectures.

The Architecture Council does not work in isolation. It works in conjunction with the Requirements and Planning Councils and provides input to them. Therefore the communications with these other groups will be key to the successful functioning of the Eclipse open source project as a whole.

History and Motivation of Councils

John Wiegand presented some background information on how and why the councils were created as part of the development process.

How architecture has been done in Platform Project

John Wiegand presented the approach the Platform project takes to architecture. He outlined their guiding principles:

- practical extensibility
- compatible – define api's for stability
- light weight specifications – develop implementation and client in parallel
- review all API – complete review as early in the cycle as possible
- naming guidelines
- technical excellence
- innovation

There was a discussion if all projects should implement formal reviews of their APIs. Probably need to focus on a core subset of APIs.

Need to establish a process for naming space guidelines to ensure high-level consistency. The guidelines should also include the C/C++ code in Eclipse. John Wiegand has agreed to bring forward a proposal.

Discuss the need to establish a user interface working group. QNX, Actuate, IBM and Ericsson are interested in participating.

Discuss the need to establish an API review working group. Decide to postpone establishing such a group until the Architecture Council is better established.

The Architecture Council recommends that all projects identify a process for reviewing the project APIs.

It was suggested that Eclipse have a common build infrastructure to allow builds for all projects at the same time. This would allow a better understanding of what APIs are being used and what might be broken. Decided to postpone this initiative until the open source projects have migrated to the new Eclipse web infrastructure.

Discussion on how to synchronize the platform project with the other projects. The 3.0 projects present a number of challenges for other projects to synchronize with each milestone. This made it very hard for people to synchronize with each platform milestones. This was partly due to the large amount of changes due to the RCP work. We will look to articulate the specific milestones with stable APIs. Once the release has been frozen, more specific communication on API changes will made.

Individual Project Architectures

Harm Sluiman presented Test and Performance Tools Platform (TPTP) project.

Discussed the need to have a project/framework that enables the launching of an external program. Currently, different projects have their own.

David Williams presented Web Tools Platform (WTP) project

Wenfeng Li presented Business Intelligence and Reporting (BIRT) project

It was noted that the EMO intends to recruit resources to help with analytics.

John Wiegand presented the Platform project

John Duimovich presented Tools project

Architecture principle: If you have an extension point, it should be tested against at least two open source projects. Ideally projects should identify known limitations supporting various platforms, servers, etc. For a project to claim "support" for a platform, server, etc., requires that the project did specific tests to ensure it works correctly.

Architecture Process

Inputs

- Individual PMC Project architecture and inter-dependencies.
- Themes and Priorities from the Requirements Council
- Platform Release Plan from the Planning Council

Process:

- Monthly status calls. The first will be in late September.
- Review input status call in Oct.
- Next face to face meeting on December 2nd review the draft architecture document. Begin developing the architecture plan.
- Provide a draft of the architecture plan by January available for community feedback.
- Objective is to have a finalized Roadmap approved by the Board in time for EclipseCon 2005.

Outputs

Architecture Plan Content

- 1 page block diagram that can be expanded for each subsystems
- Map dependencies between components
- At leaf node include
 - Description
 - Manifest of plugins
 - Mailing list for more info
- The diagram should reflect the logical architecture of components, not projects.
- Goal of plan:
 - Educate new developers how to use the Eclipse architecture
 - Express forward looking statements of where Eclipse will go

ACTION: Each PMC top-level project needs to provide by end of October the following:

Project

Subsystem

Components

- Description (1 paragraph)
- mailing list/ newsgroup
- dependencies
- manifest of plug-ins (?)
- link to documentation/web site/project links

ACTION: EMO will consolidate PMC content into an architecture document. Due at the next meeting of Architecture Council.