Eclipse Summit on *Runtime Technologies and Platforms*

Report to the Board of Directors

San Francisco
December 13, 2007

Goal of the Summit was to define a strategy for runtime technologies

As of today mature Eclipse Runtime technologies are adopted by a wide variety of ISVs and enterprises

Project	Users
Equinox	• IBM (e.g. Websphere, Jazz, …) • BEA Microservices, • Heiler Software • Eclipse projects (e.g. ECF, BIRT, RAP)
RAP	• CAS • Critical Software
BIRT	(large user community)
EMF	(large user community)
ECF	•TBD

Goal of the Summit:

Define a strategy for delivery of runtime technology at Eclipse

The Summit took place just before the Board Meeting on December 11

Eclipse Runtime Summit

Date: December 11, 2007

Location: Hotel Monaco, San Francisco

Agenda:

- Introduction
- Presentation of existing runtime technologies with selected short talks (5 minutes)
- Adopter feedback (what is missing, what proved to be difficult)
- Where are we heading with runtime technologies (which pieces will / should be coming)
- Relationship between tooling and runtime technologies
- Relationship to other communities (e.g., Spring, Apache, ...)
  - OSGi Enterprise working group - State and goals
- What is the community? What do they want? How to grow the community?
  - Showcases / Tutorials
- A new top level project - who may / will participate?
- Discussion on draft charter for a runtime top level project
- Delivery strategy

The level of interest from the community was very high

Organizers

- Jeff McAffer, IBM
- Jochen Krause, Innoopract
- Ricco Deutscher, SOPERA

Community Participants

- Chris Aniszczyk, IBM
- Doug Clarke, Oracle Corporation
- Philippe Ombredanne, nexB
- Eric Newcommer, IONA + Chair of OSGi Enterprise Group
- Ed Merks, IBM
- Adam Lieber, webtide
- Oliver Wolf, SOPERA
- Scott Stark, Red Hat
- Brett Wooldridge, AlterPoint Inc./ZipTie.org
- Oleg G., eBay
- Jason van Zyl, Sonatype
- Konstantin Komissarchik, BEA
- Scott Lewis, BEA

EMO Participants

- Mike Milinkovich, Eclipse Foundation
- Ian Skerrett, Eclipse Foundation
- Bjorn Freeman-Benson, Eclipse Foundation

Observer

- Michael Cote', RedMonk

Inventory of Eclipse Runtime projects

Eclipse Runtime projects

	Name	Functional area
Mature	• BIRT	• Reporting engine
	• Equinox	• OSGi
	• RAP	• AJAX platform
	• ECF	• Communication framework
	• EMF	• Model runtime
Incu-bation	• EclipseLink	• Object persistence
	• Swordfish	• SOA Runtime
Proposed	• Riena	• C/S Appl. Platform

The portfolio of Eclipse Runtime projects already reached a critical mass

Alignment of Eclipse tooling and runtime

Eclipse Runtime projects …		**… leveraging Eclipse tooling projects**
• BIRT	⟷	• BIRT
• Equinox	⟷	• PDE
• RAP	⟷	• PDE, JDT, ATF (WTP)
• EclipseLink	⟷	• JPA (WTP)
• ECF		• ?
• Riena		• ?
• Swordfish	⟷	• STP, WTP

- Few Runtime projects have their own tooling
- Most of them are leveraging existing other Eclipse tooling projects

Agreed key characteristics for Eclipse Runtime projects

- **Provide a common platform (Equinox OSGi) for different Eclipse Runtime technologies**
- **Provide extensibility through common APIs leveraging existing standards**
- **Facilitate integration between Eclipse runtime components**
- **Promote integration with Eclipse tooling technologies**

Business value for the Eclipse ecosystem

The delivery of Eclipse runtime technologies creates an additional market for the ecosystem:

- Selling commercial plug-in components on top of the open source runtime technologies enabled by Equinox
- Selling support & maintenance contracts
- Technical consulting through higher level of integration on top of the basic integration

Major concerns of the participants

Major concerns	Answers/common agreement
• Runtime functionality can stay in tools projects, there is no need to move technology	• Yes, participation should be optional
• Make sure that the tooling remains agnostic to runtimes (based on standards)	• Yes, it‘s a natural part of the community
• Integration and interoperability, e.g. JEE, standard service definition	• Standard service definitions come from standards bodies (e.g. OSGi)
• Early commoditization and competition with products of Eclipse members by delivering stacks	• It is not the explicit goal to create/deliver stacks, but it may happen. The project is subject to standard Eclipse governance.

A top-level project is proposed in order better drive Eclipse runtime technologies

Current challenges of runtime projects

- Ease of adoption
- Visibility within and outside the foundation
- Lack of coordinated governance as the runtime projects are scattered across different top-level projects
- Collaboration and integration

Proposed solution

- A top-level project will be created as a home for runtime technologies in order to achieve a high level of integration in the most effective and efficient way
  - Ease of communication
  - Establish common infrastructure (e.g. for communication, testing)
  - Establish a delivery strategy (e.g., release train participation)
- Participation should be optional for the projects

Charter – Mission

- The Equinox Top-Level Project is designed to foster, promote and house runtime frameworks in the Eclipse community. These efforts strive towards the common goal of providing a uniform component model across a wide variety of computing environments. OSGi forms the basis of this infrastructure. Equinox projects support embedded devices, desktops, and enterprise systems as well as clients and servers to provide commonly required middleware. Here the term "middleware" refers to the original definition of the term: software which is neither part of the underlying operating system nor part of the application. It is the goal of Equinox to provide those intermediate software services which enable applications to be more easily and concisely constructed.
- It is the unique vision of Equinox to support a "tier-less" programming model where developers are need not concern themselves with whether their application domain code is run on a device, a client or a server. By developing a consistent middleware architecture, Equinox effectively eliminates these tiers and enables developers to focus on the business problem at hand and still have many system architecture options available at deployment time.

Charter – Scope

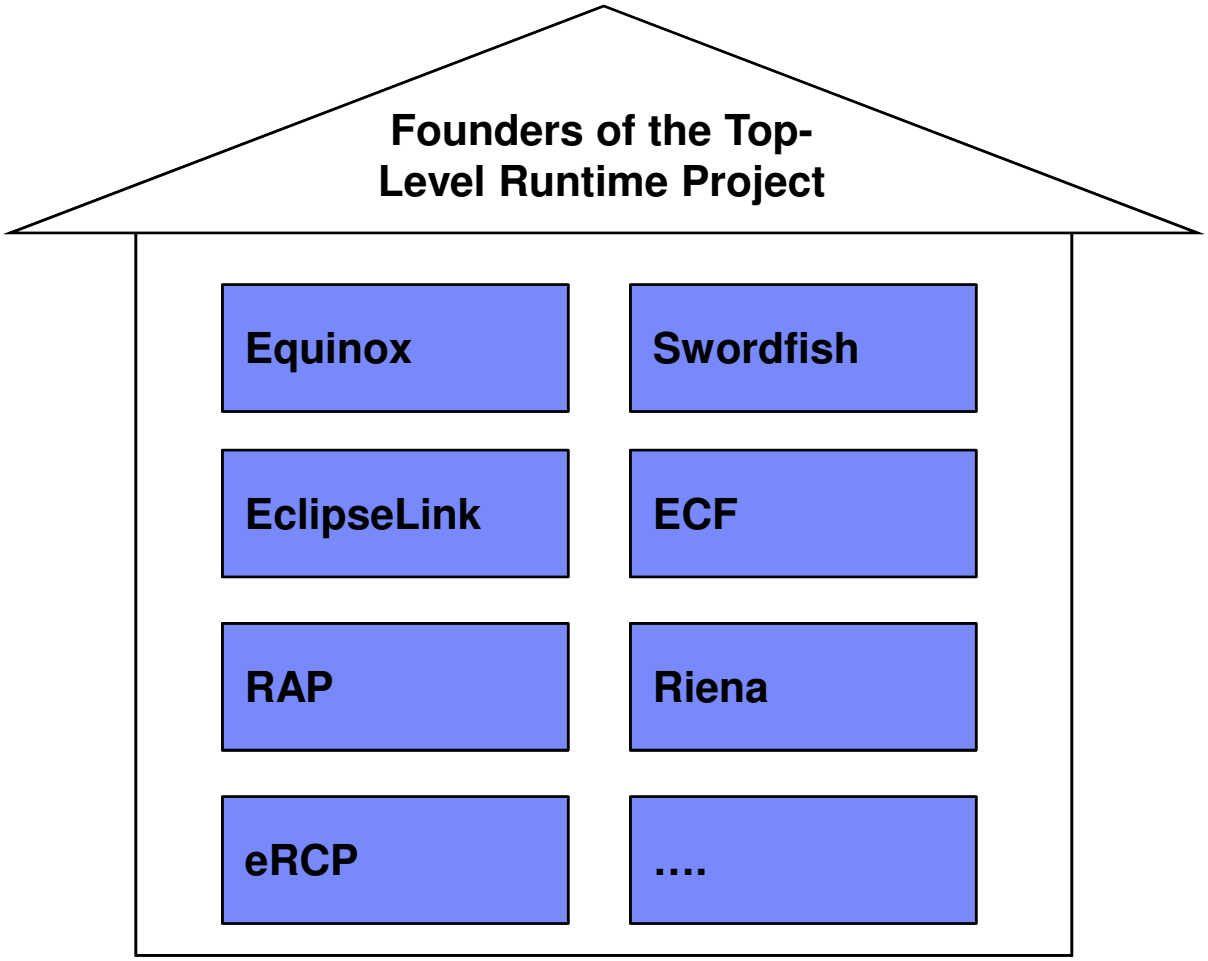
In Scope

- Developing and delivering the OSGi framework implementation used for all of Eclipse.
- Implementation of all aspects of the OSGi specification (including but not limited to the EEG, MEG and VEG work).
- Investigation and research related to future versions of OSGi specifications and related runtime issues.
- Implementation of key framework services and extensions needed for running Eclipse (e.g., the Eclipse Adaptor, Extension registry) and deemed generally useful to people using OSGi.
- All implementations must be based on OSGi and run on Equinox.
- Implementations of middleware / runtime standards from organizations such as W3C, OASIS, JCP.
- Development of non-standard infrastructure deemed to be essential to the running and management of OSGi-based systems.
- Incidental tooling efforts to enable or facilitate particular Equinox runtime functions in conjunction with (e.g., as a component of) an Equinox sub-project.

Out of Scope

- It is explicitly not the mandate to house all runtime efforts at Eclipse.
- Major tooling efforts are not in scope
- Industry-specific vertical technologies

Existing Runtime Projects are interested to join the aspired Top-level-project



Next steps

Actions	Deadlines
• Get approval of the charter by the board	Jan 08
• Find the PMC	Jan 08
• Publish the proposal, gather community	Feb 08
• Create and announce at the EclipseCON	Mar 08