



Eclipse Overview

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Agenda



- Overview of Eclipse
- Governance and Process
- Technical Strategy

What Is Eclipse?



- **universal platform**

-

eco-system

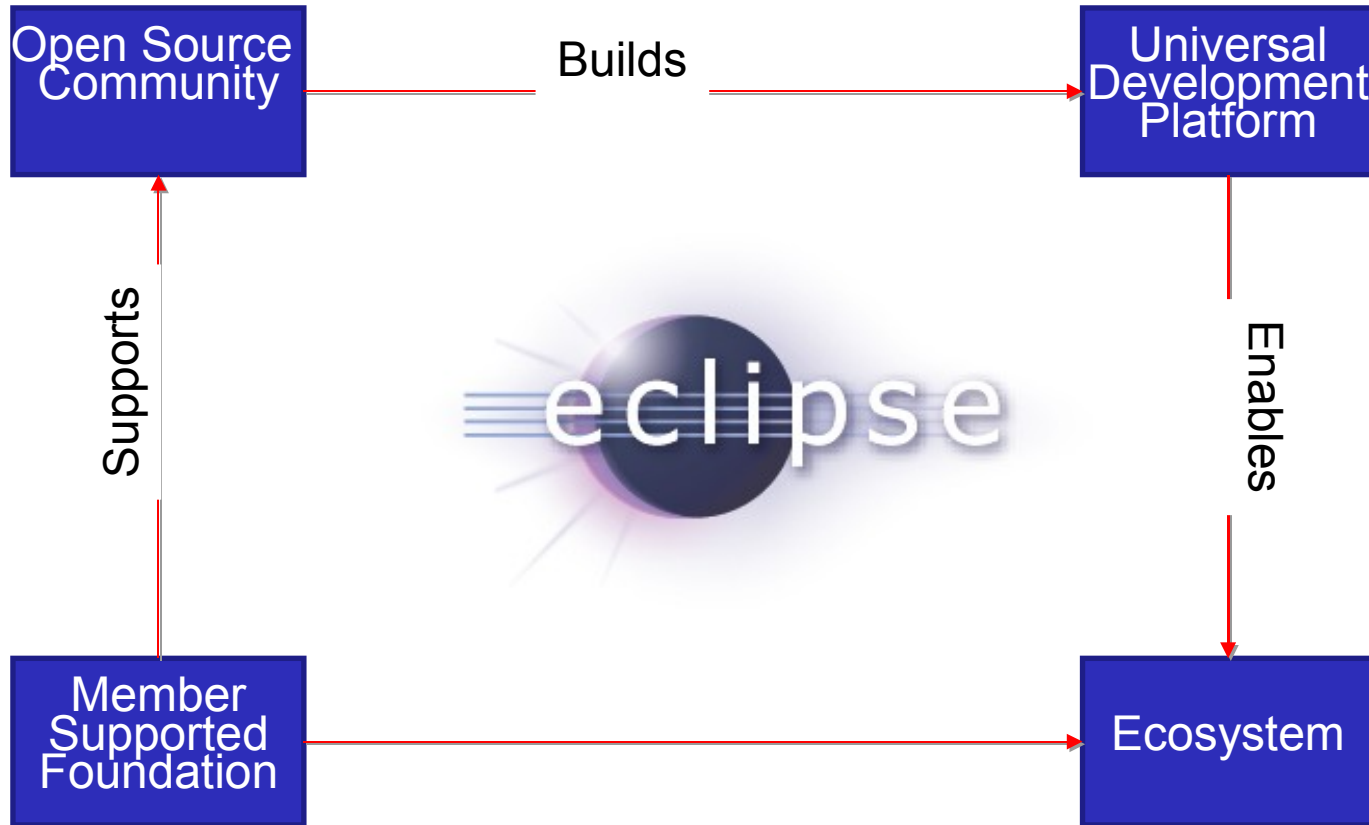


What Is Eclipse?

- Eclipse is an open source community focused on developing a **universal platform** of frameworks and exemplary tools that make it easy and cost-effective to build and deploy software in today's connected and unconnected world.
- Eclipse is a consortium of major software vendors, solution providers, corporations, educational and research institutions and individuals working together to create an **eco-system** that enhances, promotes and cultivates the Eclipse open platform with complementary products, services and capabilities.



What is Eclipse?





Eclipse Foundation Goals

- Support
- Promote
- Grow the Eclipse projects
- Foster worldwide adoption
- diverse membership.
- Be an industry leader.
- long-term viability

Eclipse Foundation Goals



- Support the evolution of the Eclipse Technology as the technically pre-eminent development platform.
- Promote the needs of the Eclipse ecosystem. In particular, provide an environment where the commercial members of the Eclipse ecosystem can profitably leverage the Eclipse Technology.
- Grow the Eclipse projects with innovative projects and technology, while maintaining quality. Provide an environment where Committers and contributors are excited about their participation in and association with Eclipse.
- Foster the worldwide adoption of the Eclipse Technology.
- Have a large and diverse membership.
- Be an industry leader.
- Ensure the long-term financial viability of the Foundation.

Eclipse Snapshot



- 800+ committers, representing 50+ organizations, working on 70+ projects
- 162 member companies
 - 21 Strategic Members
 - 118 Add-in Providers
 - 23 Associate Members (Publishers, Research Institutes, Standards Org., etc.)

Strategic Members



All Members





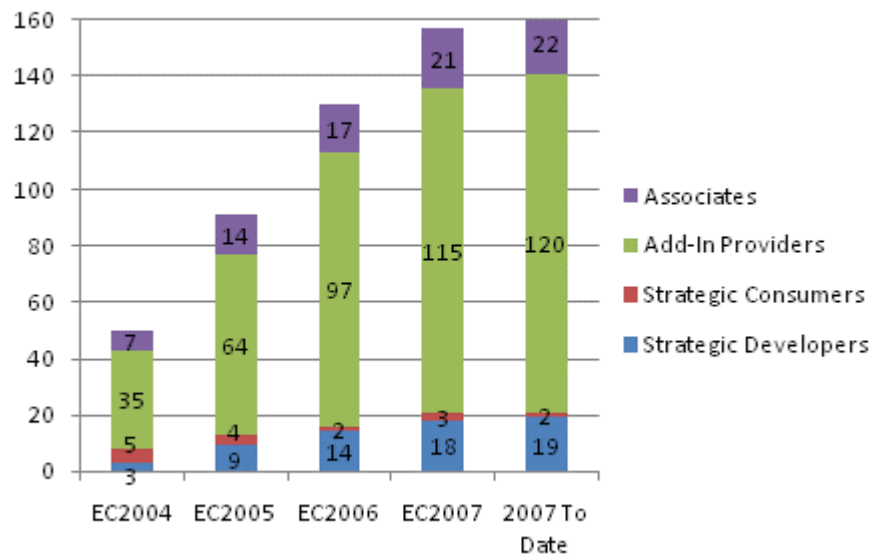
Role of The Eclipse Foundation Staff

Implement the strategy set forth by the Eclipse Foundation Board of Directors in the areas of:

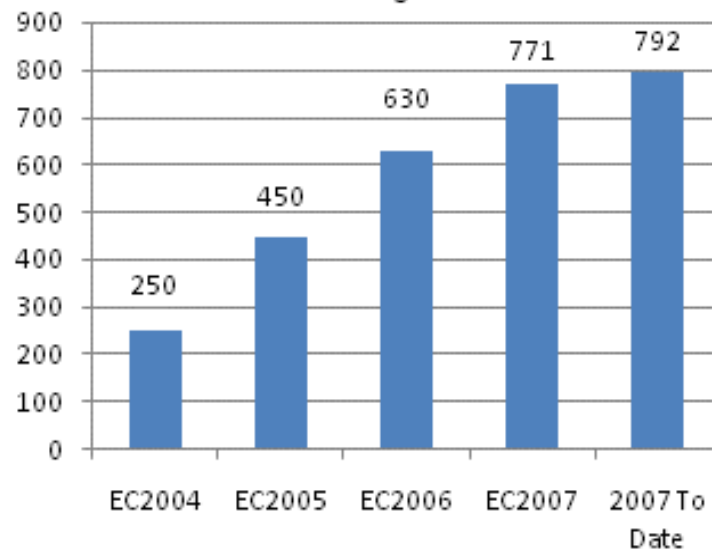
- IT Infrastructure
- IP Policy and Implementation
- Development Community Support (Marketing)
- Ecosystem Development and Governance

Eclipse Momentum

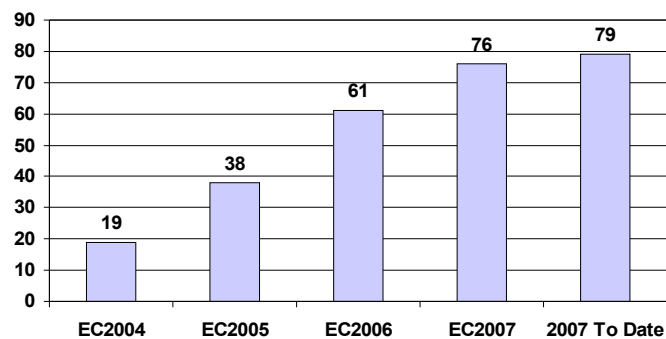
Eclipse Membership through June 2007



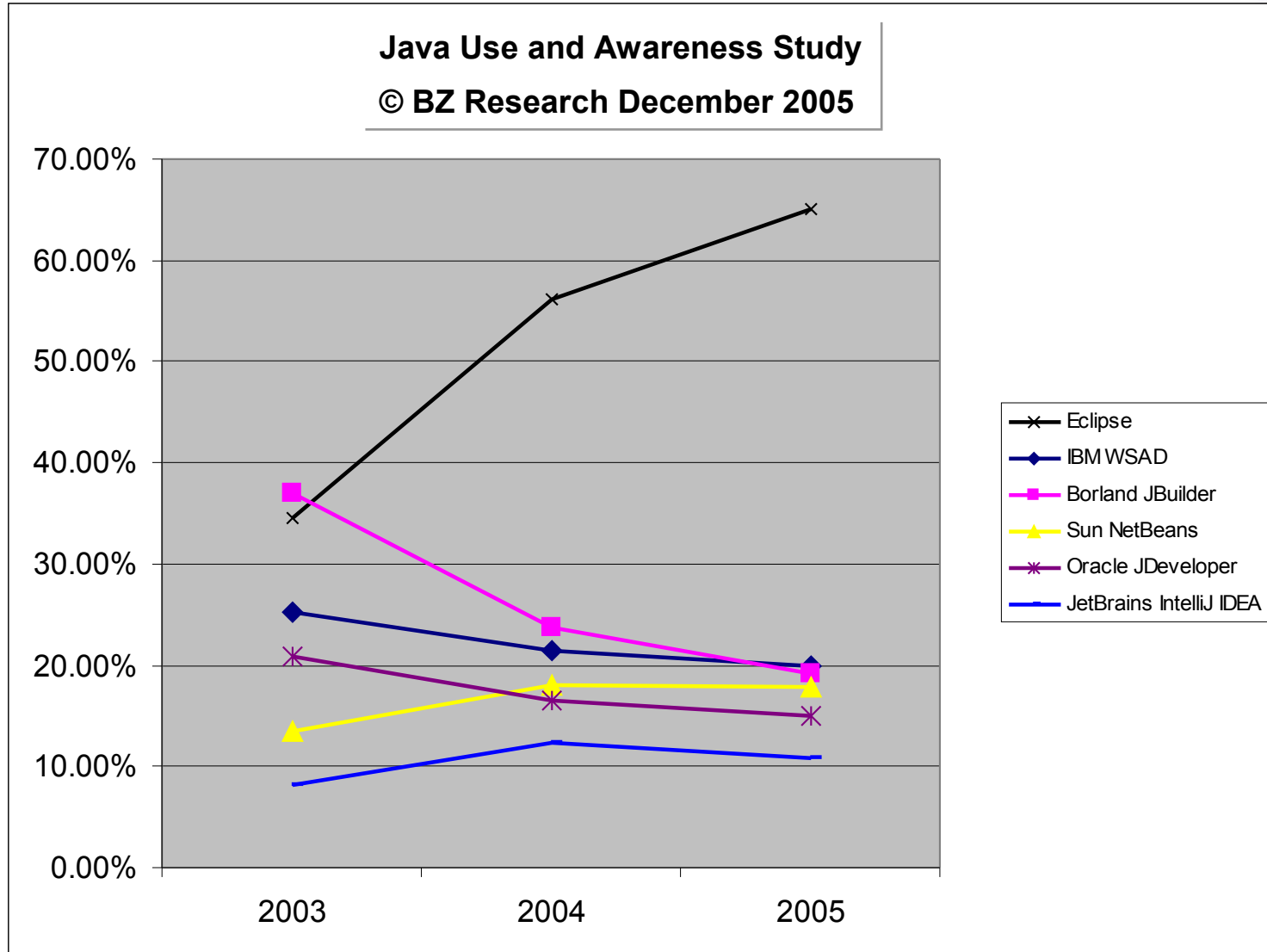
Committers through June 2007



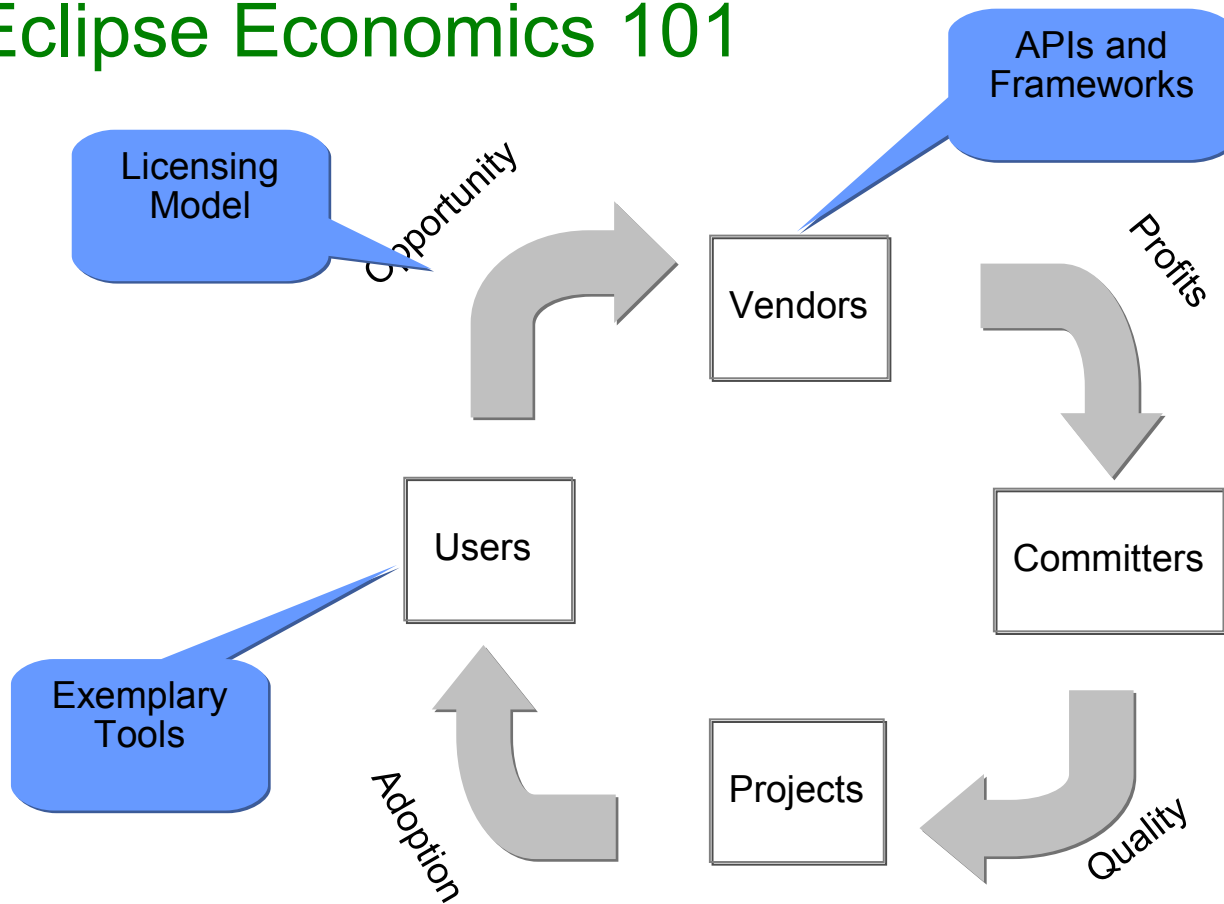
Projects Through June 2007



IDE Usage



Eclipse Economics 101



The Eclipse Experience – Architecture of Participation

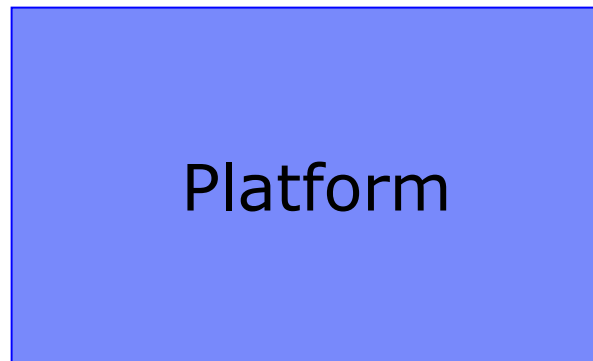


Traditional Product
Architectures

API and Extensions



'Public'



'Protected'

The Eclipse Experience – Architecture of Participation



'Private' Extensions

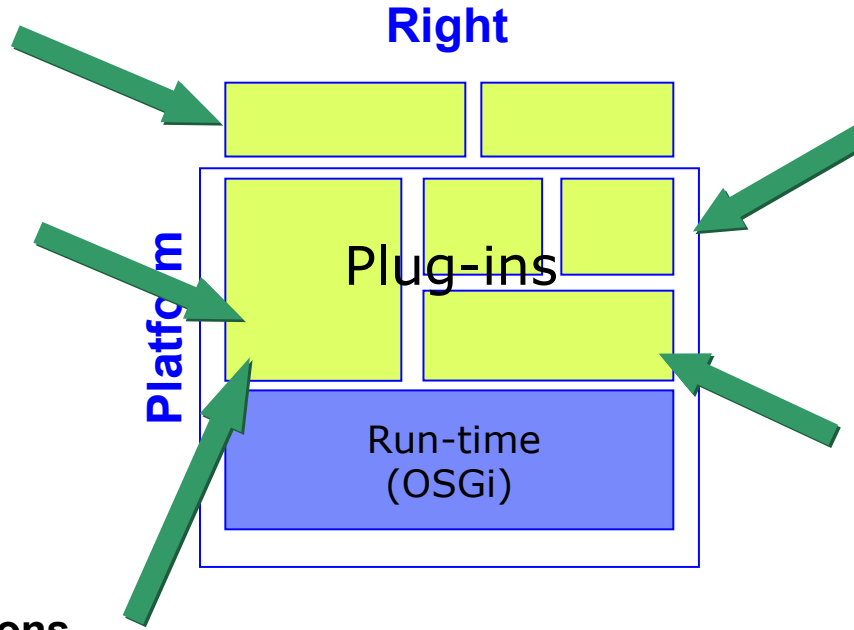
Right

Ease of Integration and Extensibility Spurs Innovation

New Plug-ins are First Class Citizens – same footing for everyone

Competition can take place on implementations – users decide winners

Open API and commercially friendly licensing – Low barriers to Entry



Successful Ecosystems are built on this model!

Example of Eclipse Based Commercial Tools



Enterprise IT

- Borland Together Edition for Eclipse
- HP OCMP OClet Development Env.
- IBM Rational Application Developer
- Oracle Collaxa BPEL Designer
- SAP NetWeaver Studio
- Remain Diamond Ring Release

Embedded

- PalmOS Dev Suite
- Monta Vista DevRocket
- Wind River Workbench
- QNX Momentics
- TimeSys TimeStorm IDE
- Tensilica Xtensa Xplorer IDE
- Mentor Graphics Nucleus Edge

Linux

- Novell/SuSE Linux SDK
- Red Hat Developer Studio
- Intel Compiler for Linux

Agenda



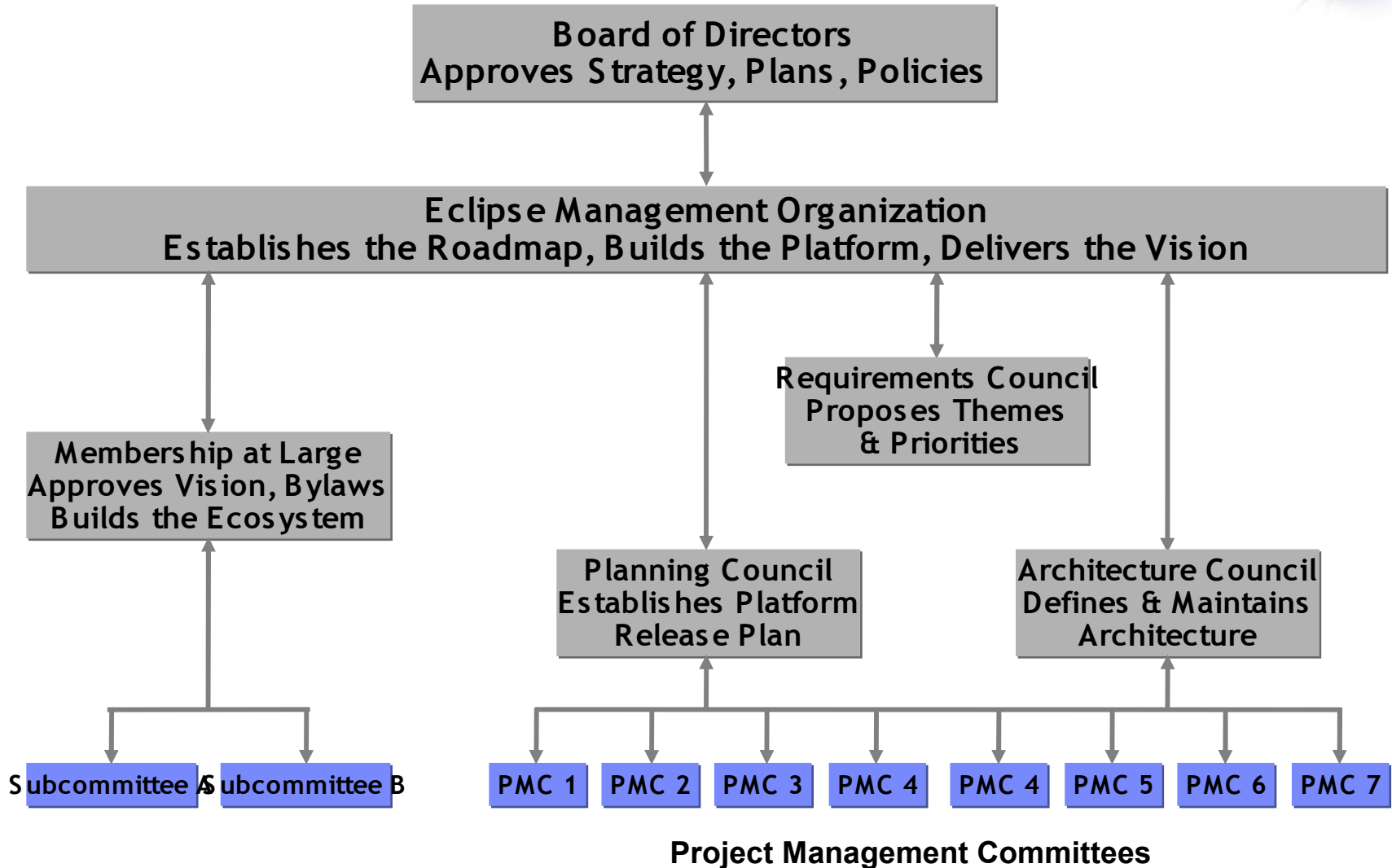
- Overview of Eclipse
- **Governance and Process**
- Technical Strategy

Open Source Development Platform



- Open Source development model encourages open innovation
 - Openness, Transparency, Meritocracy
 - Everybody can participate
- Open Source licensing allows competing vendors to collaborate on the infrastructure technology
 - No requirement for royalties.
 - No single control point of intellectual property
- Open Source business model encourages rapid adoption of technology
 - It is free and easy to access

Eclipse Governance Structure





Eclipse IP Management

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Eclipse Public License (EPL)

-

committer agreement

-

Eclipse Foundation IP approval process



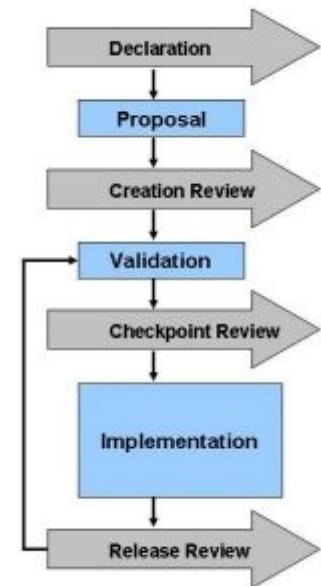
Eclipse IP Management

- We consciously promote and encourage software vendors to use Eclipse technology for building their commercial software products and services. This is made possible by the fact that all Eclipse projects are licensed under the Eclipse Public License (EPL), a commercial friendly OSI approved licensed
- All committers are required to sign a committer agreement that stipulates all of their contributions are their original work and are being contributed under the EPL.
- Source code related to all contributions which are developed outside of the Eclipse development process are processed through the Eclipse Foundation IP approval process. This process includes analyzing selected code contributions to try to ascertain the provenance of the code, and license compatibility with the EPL

Project Lifecycle

- **Pre-proposal**
- **Proposal**
- **Validation/Incubation** – establish a fully-functioning open-source project
- **Implementation/Mature**
- **Archived** – after reaching the end of their natural lifecycle

- Official Reviews between each phase

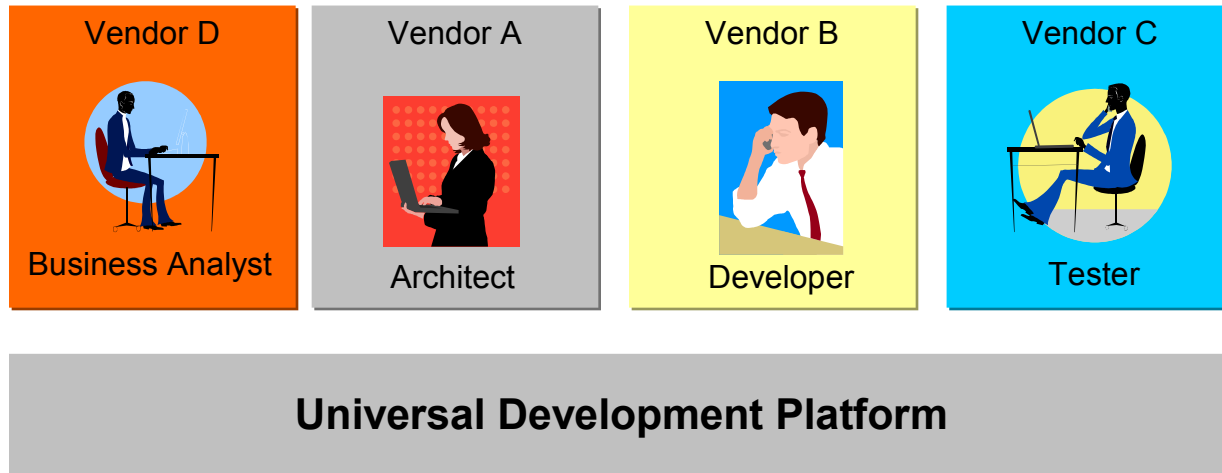


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- **Technical Strategy**

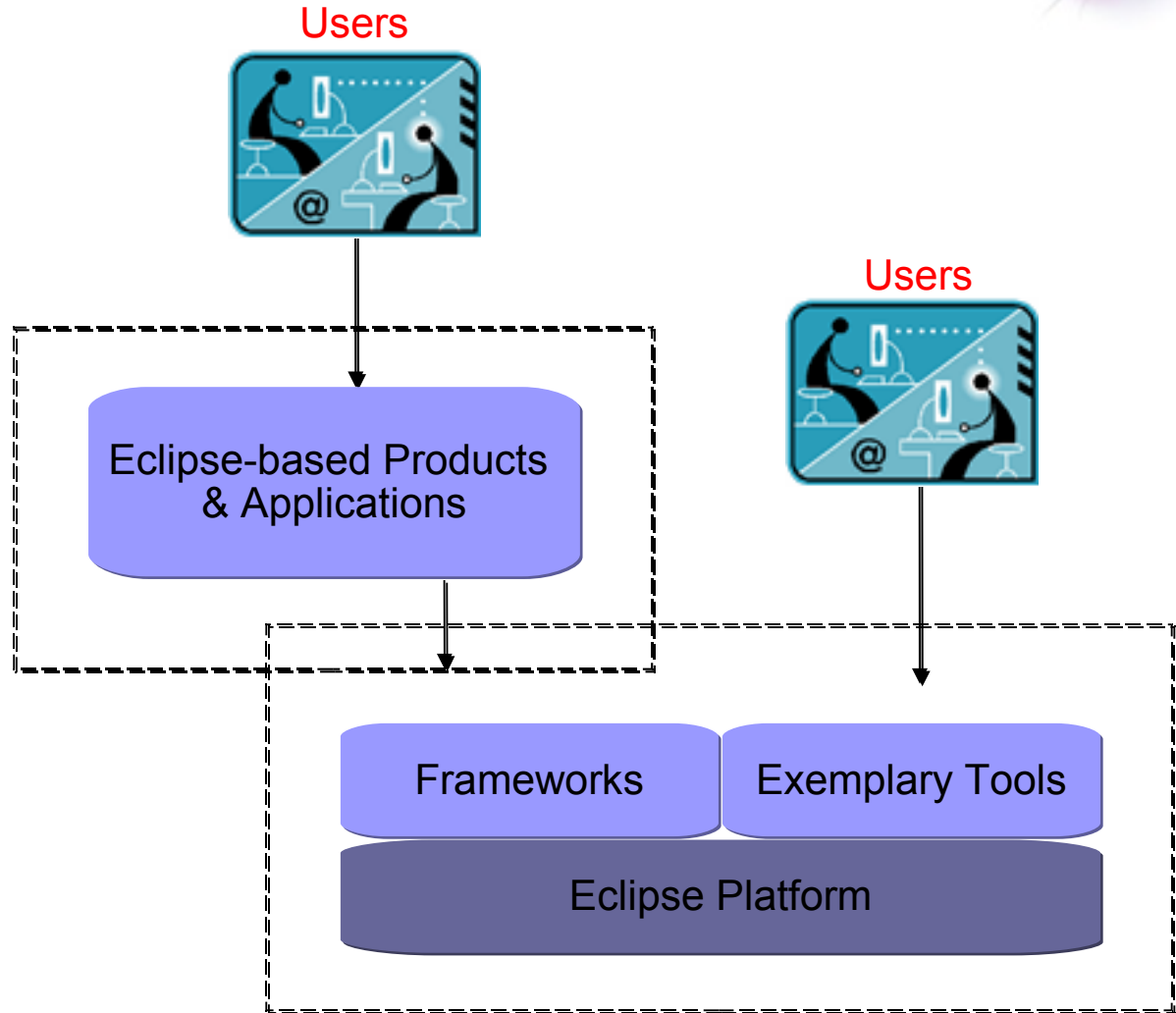
Eclipse: The Universal Development Platform



- Common platform for integrating and extending tools from different vendors.
- Promotes interoperability across the software development lifecycle
- Allows for enterprise IT to add custom extensions
- Choice of language, platform, lifecycle integration and vendor

Measuring Success for Eclipse

ISVs, Enterprise,
Open Source Projects



Reliable and Predicatable: Callisto 2006



- **Coordinated release of 10 significant Eclipse projects, including:**
 - Business Intelligence and Reporting Tools (BIRT)
 - C/C++ IDE (CDT)
 - Data Tools Platform (DTP)
 - Eclipse Modeling Framework (EMF)
 - Graphical Editor Framework (GEF)
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 - Eclipse Platform
 - Test and Performance Tools Platform (TPTP)
 - Web Tools Project (WTP)
 - Visual Editor (VE)

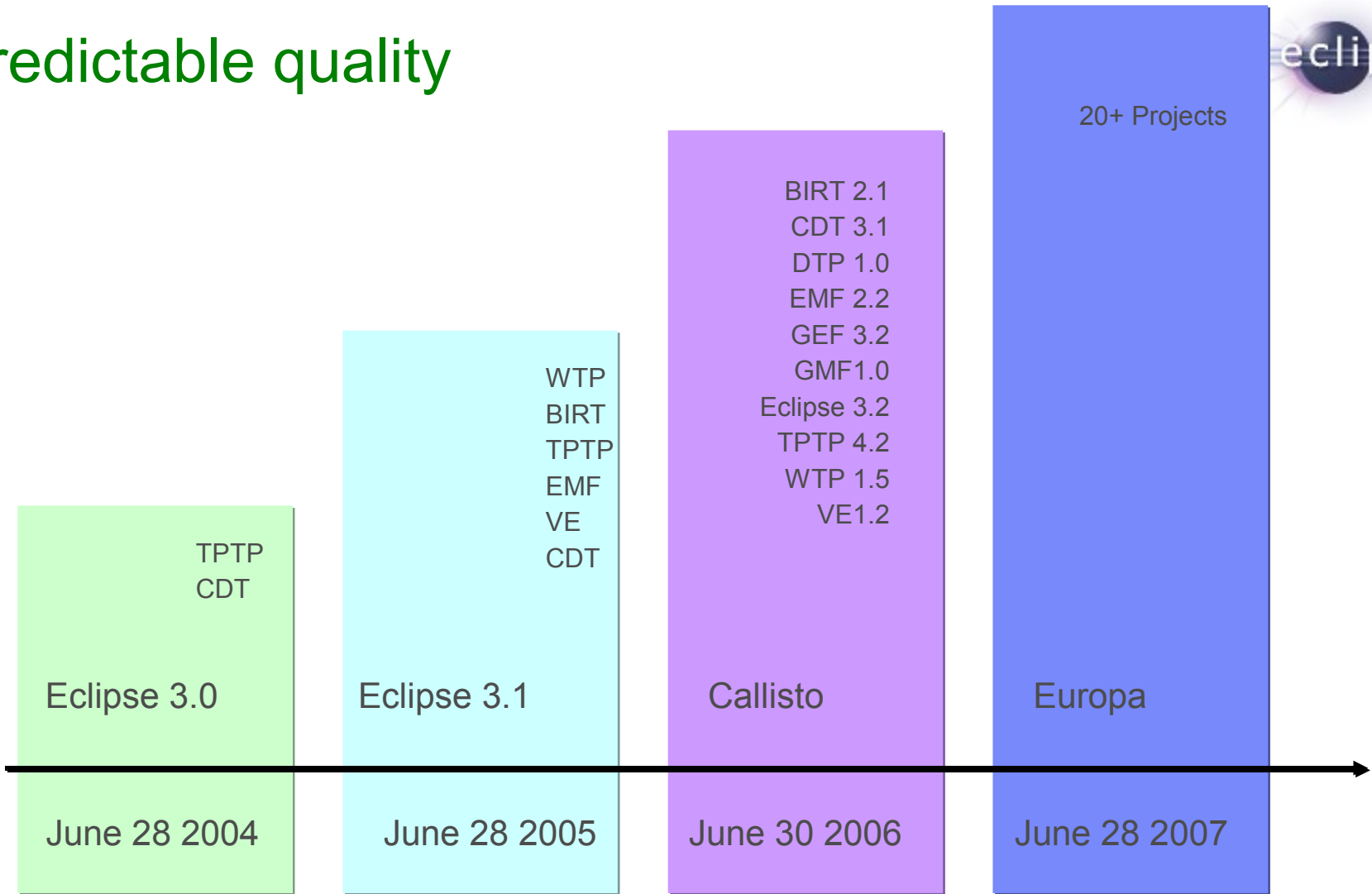


2007 Europa – Reliable, Predictable and On-time

- Eclipse Release Train for 2007
- By the numbers

2007	2006
▪ 21 projects	10
▪ 17 million LOC	7 million
▪ 25 organizations	15
▪ 19 countries*	12

Predictable quality

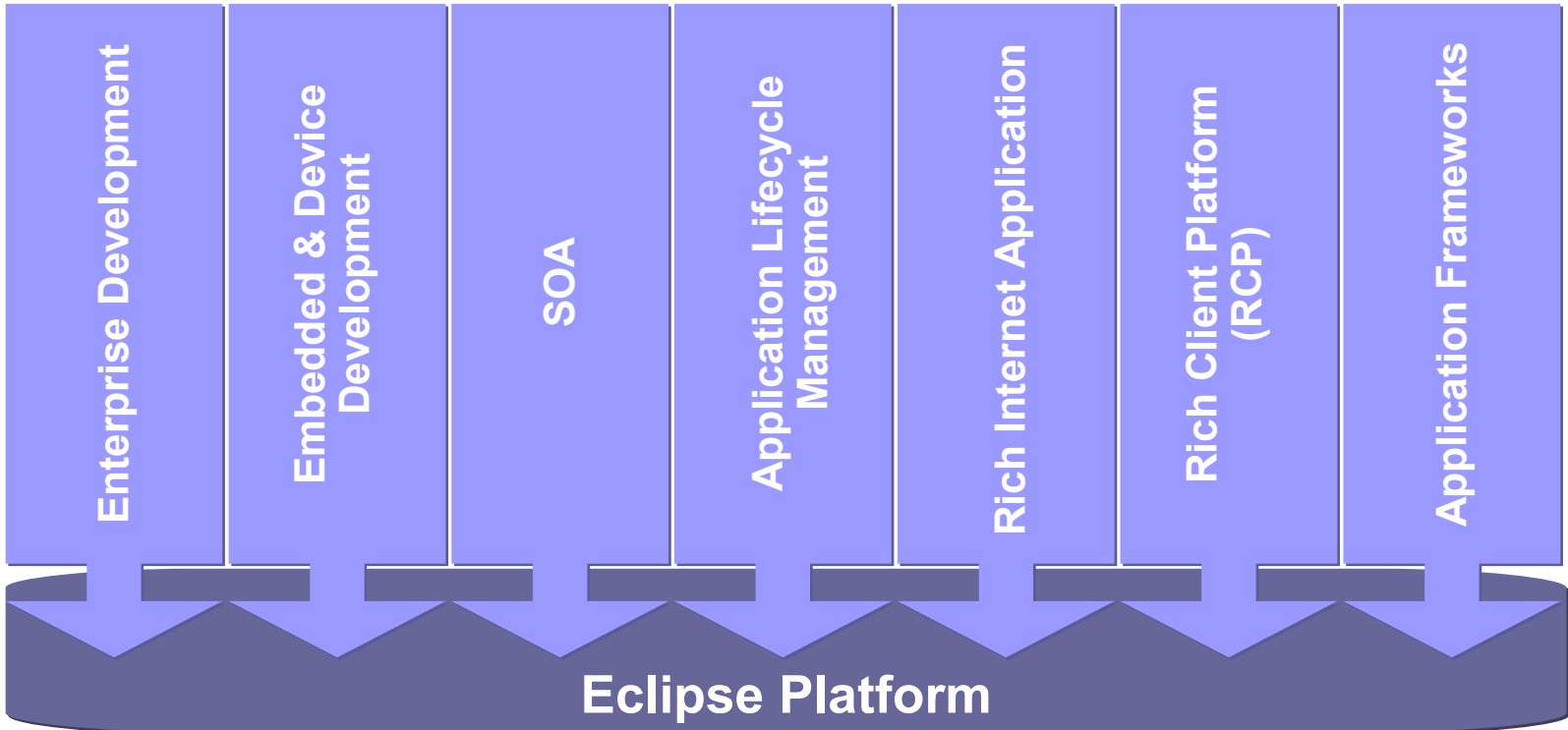




Why Simultaneous Releases

- Downstream users and consumers don't need (and cannot) to carry the burden of of cross-project planning, testing and validation
- Downstream users typically assemble their products from many Eclipse projects
- Inter-dependency between projects
 - Eclipse project teams are independent BUT the project code is inter-dependent
- Alignment of version compatibility
- Remove latency between project releases (cost and time savings)

Growth beyond the Platform: Pillars of Eclipse



The Vertical Industry Innovation Networks



Vertical Industries have started to investigate the Open Source Model

- Need for innovation
- Need for standardization
- Need for integration
- Requirement for cost efficient development, deployment and operation

But:

- Resistance from Vendors
- Cumbersome and time consuming standardization efforts
- Ownership, IP and Rights to use need to be defined
- High investment
- Dependence on few

How can Open Source (Eclipse) help?

- Stakeholders can drive transparent process (governance, development process)
- Standardization by Implementation
- Clear definitions of ownership and rights (license)
- Open Eco System
- Sharing of technology components across verticals
- Existing technology (application frameworks etc.)



Vertical Industries in Open Source

- Eclipse is still vital for the ISVs (Software Vendors)
 - Still growing strong
 - Investment in platform / languages still high
 - Extending into collaboration / life cycle
- Eclipse (as well as other open source technologies) is becoming of strategic interest for the consumers in the vertical industries (finance, systems engineering, logistics, etc.)
 - Eclipse is broadly used as in-house technology platform (tools, applications)
 - Traditionally, the resulting products would be replaced by 'products' or maintained by 3rd parties
 - For various reasons, the consumer companies are developing different strategies



Motivation and Examples (1)

- Consumer needs long-term availability of tools / applications
 - Example: Airbus is building its development tools for embedded software of A350 successor and others based on Eclipse as open source project (<http://www.topcased.org>) (link)
 - Gain the rights to maintain tool chain provided by various ISVs
- Consumer wants to share development costs and resulting app with the supply chain
 - Example: Boeing is open-sourcing its development life cycle repository as an Eclipse project (link)
 - Invite competitors to participate
- Consumer wants to share cost for commodity with others
 - Example: Deutsche Post is open sourcing SOA runtime platform at Eclipse (link)
 - Future development and service for other users outsourced to newly founded service company (Sopera)



Motivation and Examples (2)

- Consumers drive standardization through open source implementation
 - Example: Eclipse Health Care Framework ([link](#))
 - Gain the rights to maintain tool chain provided by various ISVs
- Consumer gains flexibility in build/buy decisions
 - Example: Lotus Expeditor provides a complement to RCP based in-house or other 3rd party applications on the desktop
 - Integration on the glass and on the framework functionality
 - Changing / adding components becomes possible
- System Integrator gains competitive advantage open sourcing vital infrastructure
 - Example: Riena Project
 - Example: Swordfish Project



Other New and Note Worthies

- DLTK – frameworks for vendors building tools for dynamic languages; exemplary tools for Python, Tcl, Ruby
- Maya – automated deployment and installation of OSGi based applications
- Eclipse Packaging Framework – improve download experience
- Rich Ajax Platform – enable developers to build rich, Ajax-enabled Web applications by using the Eclipse development model, plug-ins with the well known Eclipse workbench extension points and a widget toolkit with SWT API (plus Jface)
- ADT – ADA development tools
- VPP - will enable Eclipse to be used for the tasks associated with constructing, debugging, visualizing, analyzing, and using (models of) systems

Conclusions



- Eclipse continues to provide both value creation and value capture by corporations involved in the network
- The Eclipse open source community is uniquely focused on achieving both of these goals:
 - Open governance and development processes allow individuals and corporations to co-operatively develop product-ready software (*value creation*)
 - Focus on ecosystem opportunities supports use of this technology in successful products (*value capture*)
- The future of Eclipse will see this phenomenon extend from ISVs to industry collaboration in verticals such as healthcare, financial services, automotive, etc.



Thank you -

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