A Vision of Eclipse

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Executive Director

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.

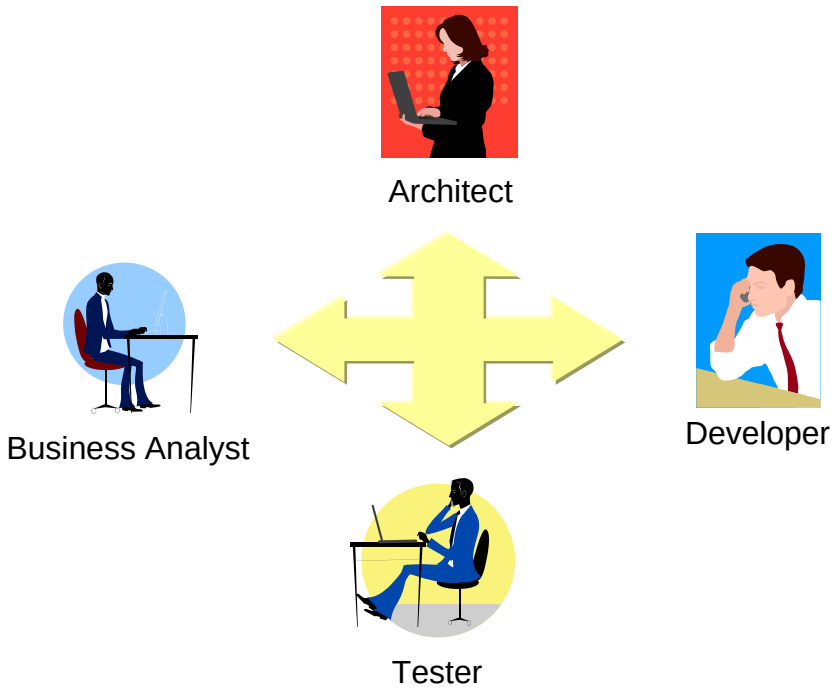
- Eclipse is a consortium of major software vendors, solution providers, corporations, educational and research institutions and individuals working together to create an **eco-system** that enhances, promotes and cultivates the Eclipse open platform with complementary products, services and capabilities.

Momentum Around Eclipse

- Initiated by IBM in 2001 and supported by a wide range of vendors.
  - Original Consortium board comprised Borland, IBM, MERANT, QNX Software Systems, Rational Software, Red Hat, SuSE, TogetherSoft and Webgain
- Eclipse Today
  - Independent not-for-profit Foundation formed in 2004
  - 95+ members, including major Java, Linux and Embedded vendors (BEA, Borland, JBoss, IBM, SAP, RedHat, Novell, Monta Vista, Wind River, Mentor, ENEA, QNX)
  - 40+ open source projects
  - 50 million download request to date

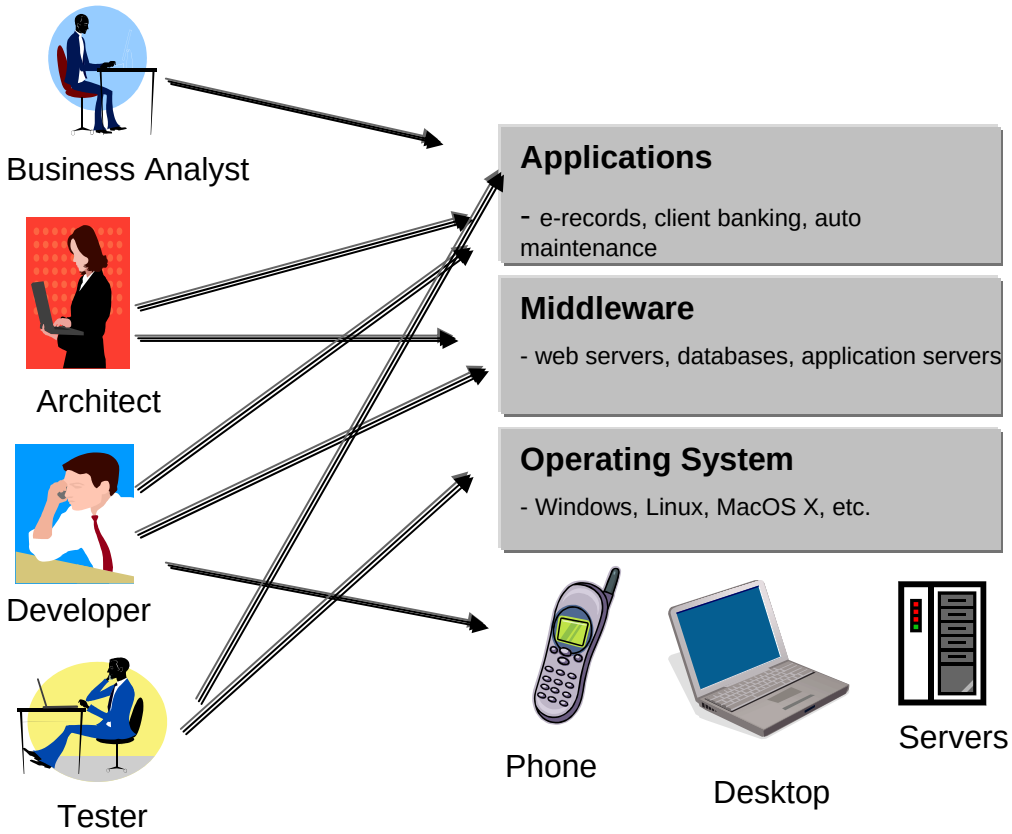
The Challenge of Software Development

- Collaboration and communication amongst team members is critical.
- XP Programming and Agile Programming encourage one person to assume many roles
- Application Lifecycle Management brings the team members closer together.



The Challenge of Software Development

- Software deployment environment is becoming more complex.
- The same software needs to target multiple environments.
- Each environment requires specialized tooling.
- Application standards require specialized tooling.



Tools Integration is a Barrier

Vendor A

Architect

Vendor D

Business Analyst

- Integration between vendors is problematic.
- End user can not customize or add in-house tools

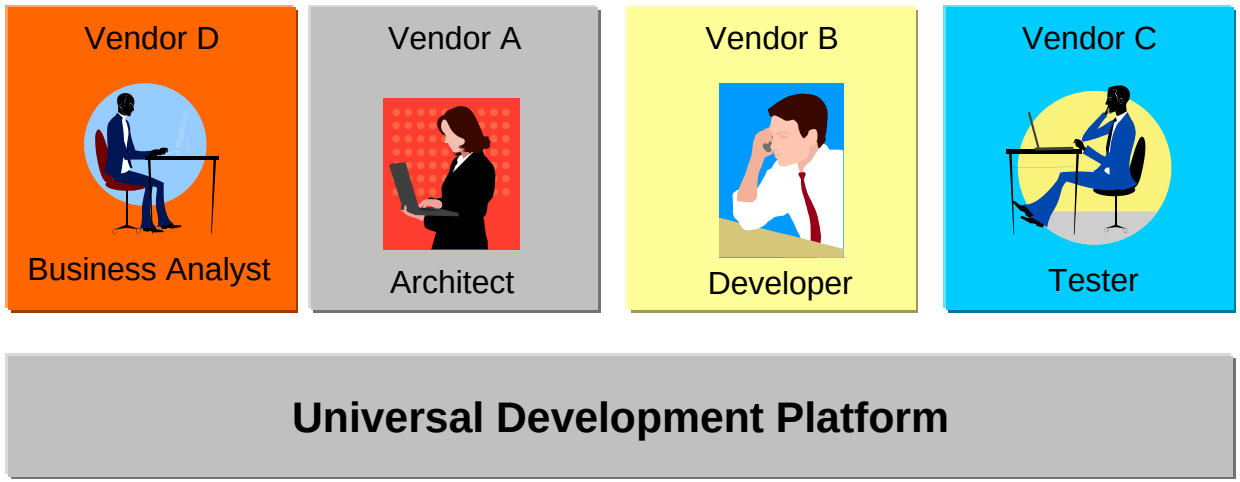
Vendor B

Developer

Vendor C

Tester

A Universal Development Platform



- Common platform for integrating and extending tools from different vendors.
- Promotes interoperability in the software development lifecycle
- Allows for enterprise IT to add custom extensions

A Universal Platform?

- Criteria for success
  - Strong vibrant ecosystem of vendor community support, including competing vendors
  - Critical mass of deployment and adoption by enterprise organizations.
  - Continues to grow, innovate and respond to market pressures.
- Required Features
  - Flexible, extensible component model
  - Complete lifecycle support
  - Support for multiple platforms

Examples of a Universal Platform

- Single Vendor Solutions have not been successful
  - Very difficult for a single vendor to convince other vendors to support their platform.
  - Very costly for one vendors to provide everything
- Examples of Successful Infrastructure Platforms
  - Internet
  - Linux
  - Windows

Methods of Managing an Infrastructure Resource

Government Regulation

- Highways, cable, telephone

Private Organizations

- Windows, e-Bay, Google

Open Source

- Eclipse, Linux, Apache

Why an Open Source Development Platform?

- Open Source development model encourages open innovation
  - Openness, Transparency, Meritocracy
  - Anyone 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

The Members of Eclipse

- 13 Strategic Members
- 68 Add-in Providers
- 15 Associate Members (Publishers, Research Institutes, Standards Org., etc.)
- Large community of open source developers

Eclipse Eco-System – Community of Add-in Providers

- 68 Add-in Provider members;
- 780+ available Eclipse add-ins
- 500+ Eclipse based projects on SourceForge

Eclipse Eco-System – Add-in Providers (68)

Agitar Software
Acucorp
Aldon
Aonix
AvantSoft
Catalyst Systems Corporation
CollabNet, Inc.
Compuware
Discovery Machine, Inc
DataMirror
Embarcardero Technologies
ENEA Embedded Technology AB
Ericsson
ETRI (Electronics & Telecommunications Research Institute)
Exadel
Fujitsu Limited
Genuitec, LLC
Hitachi, Ltd., Software Division
ILOG
INNOOPRACT
Inpriva
Instantiations, Inc.
ITG
JBoss, Inc.
Kinzan, Inc
Klocwork
Logic Library
Lombardi Software
M1 Global Solutions
M7 Corporation
Mentor Graphics
Mercury Interactive
Meta-1 GmbH
Micro Focus
MKS Inc.
Motorola
mValent
Novell
NTT Comware
OC Systems
Omondo
Optena Corp
Oracle
Pegasystems
PalmSource, Inc.
Panscopic
Parasoft Corporation
PureEdge
QNX Software
Real-Time Innovations
Red Hat, Inc.
SAS
Secure Software
SlickEdit Inc.
Soft Landing Systems
Symbian
Teamstudio Inc.
Telelogic
Tensilica Inc.
THALES
Texas Instruments
TimeSys Corporation
Unisys
VA Software
Wasabi Systems, Inc.
webMethods
Wind River

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

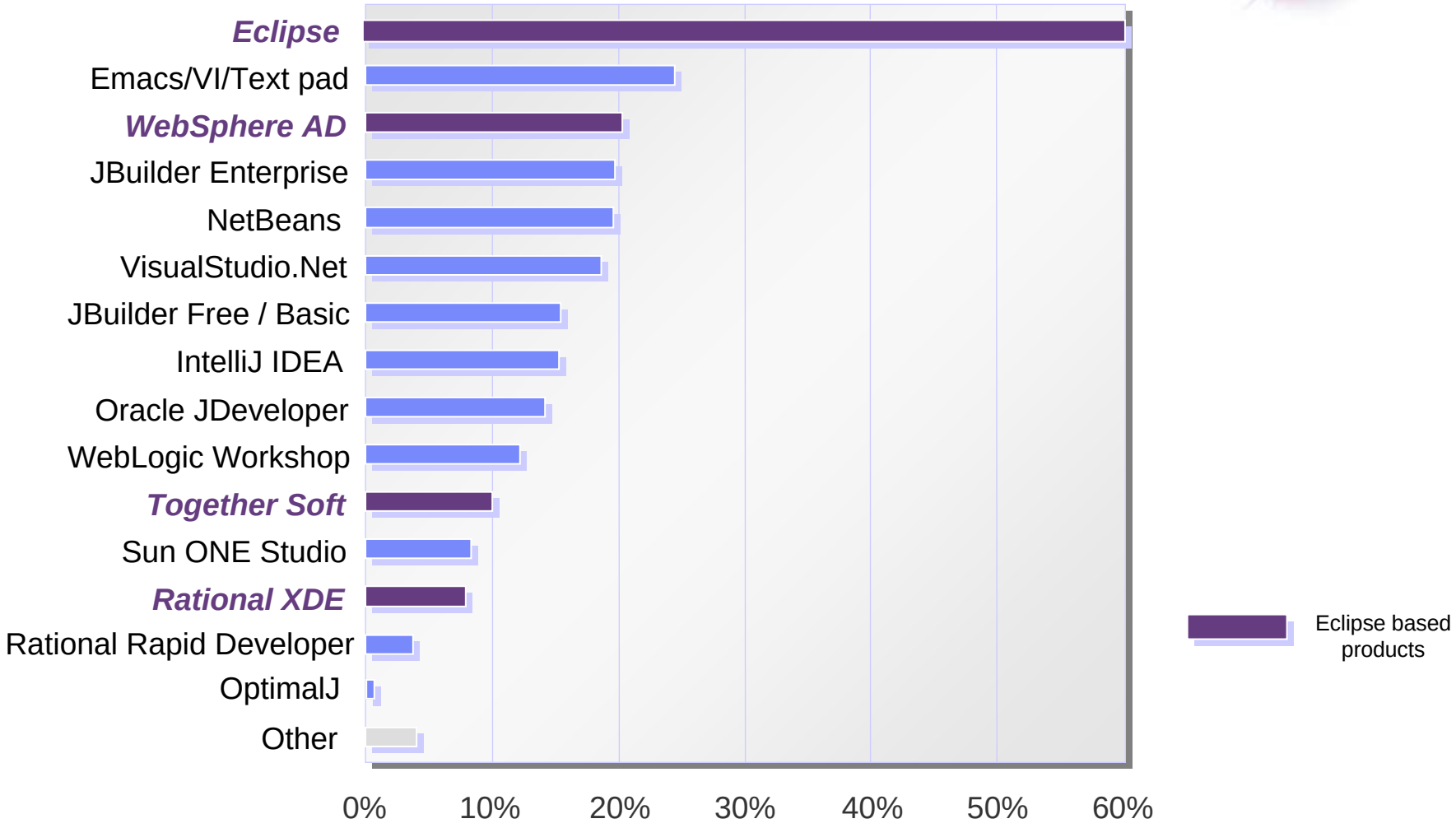
Embedded

- 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

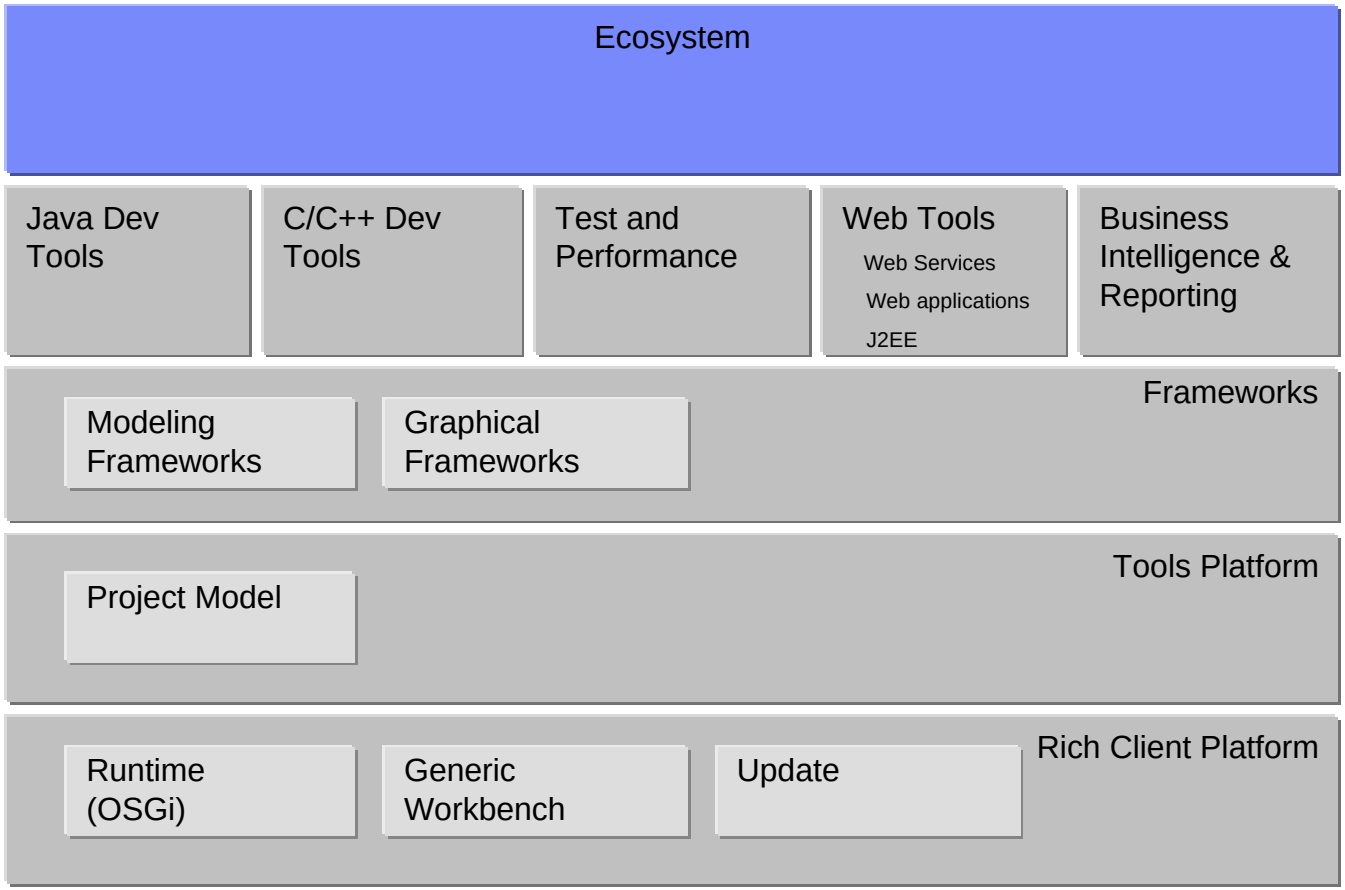
Eclipse – The leading Java IDE



SD Times, January 1, 2005

Projects

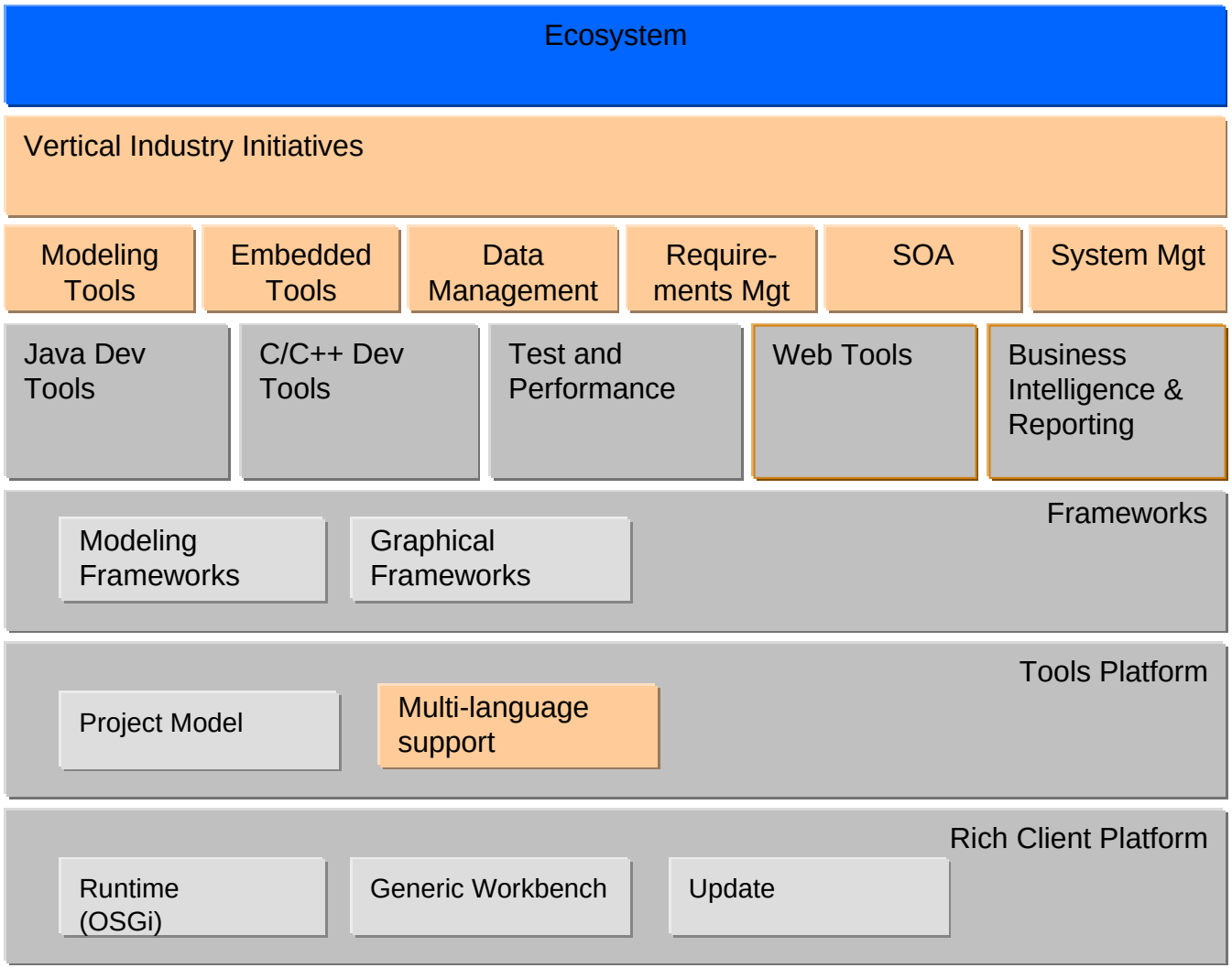
Current Eclipse Architecture



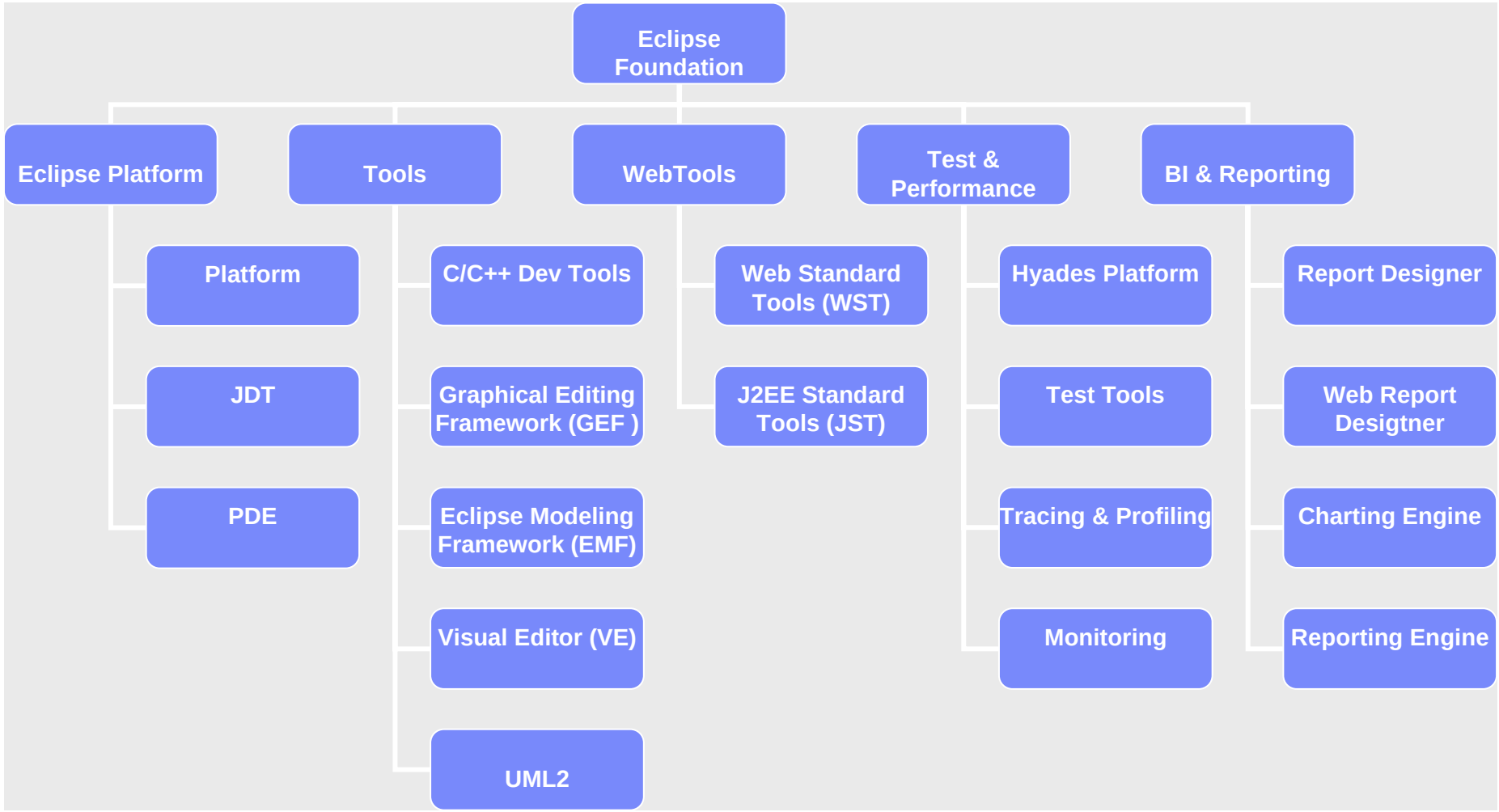
The Eclipse Platform – The Future

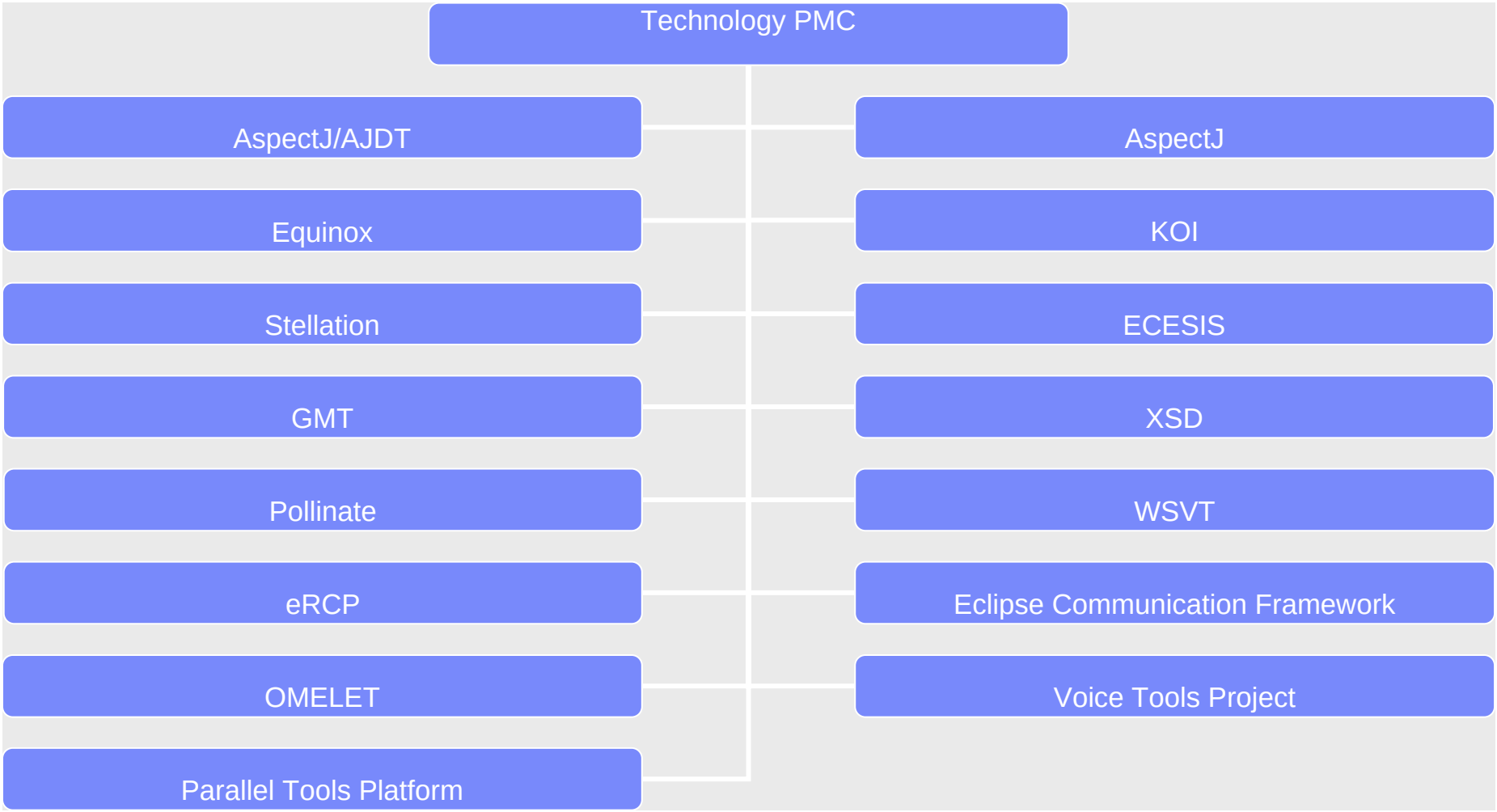
- Enhance and evolve the Eclipse Tools
  - WebTools
  - Support for Service Oriented Architecture
- Target RCP for additional operating environments
  - Ex. embedded constrained devices
  - Additional application frameworks based on the RCP
- Extend coverage of the development life-cycle
  - Evolve Eclipse modeling tools
  - Deployment, management
  - Business intelligence and reporting tools
- Enhance embedded tooling support
  - Multiple language support
  - Multiple target support
- Investigate vertical market technology frameworks
  - Aerospace, Automotive, Health Care

Future Eclipse Architecture



Eclipse Project Structure Today




Technology PMC
AspectJ/AJDT
Equinox
Stellation
GMT
Pollinate
eRCP
OMELET
Parallel Tools Platform
AspectJ
KOI
ECESIS
XSD
WSVT
Eclipse Communication Framework
Voice Tools Project

Eclipse Development Roadmap

- Communicate the direction and timetable of the Eclipse projects
  - Solicits for input from key stakeholders
- Create an open predictable environment to enable planning for commercial adoption
  - Predictable schedule of new releases
  - Understand technology direction
- Eclipse Roadmap consists of:
  - Themes and Priorities
  - Schedules
  - Architecture Plan
- Will be update every 6 months
  - First iteration is due end of February

Eclipse Development Roadmap

- http://www.eclipse.org/org/councils/roadmap.html
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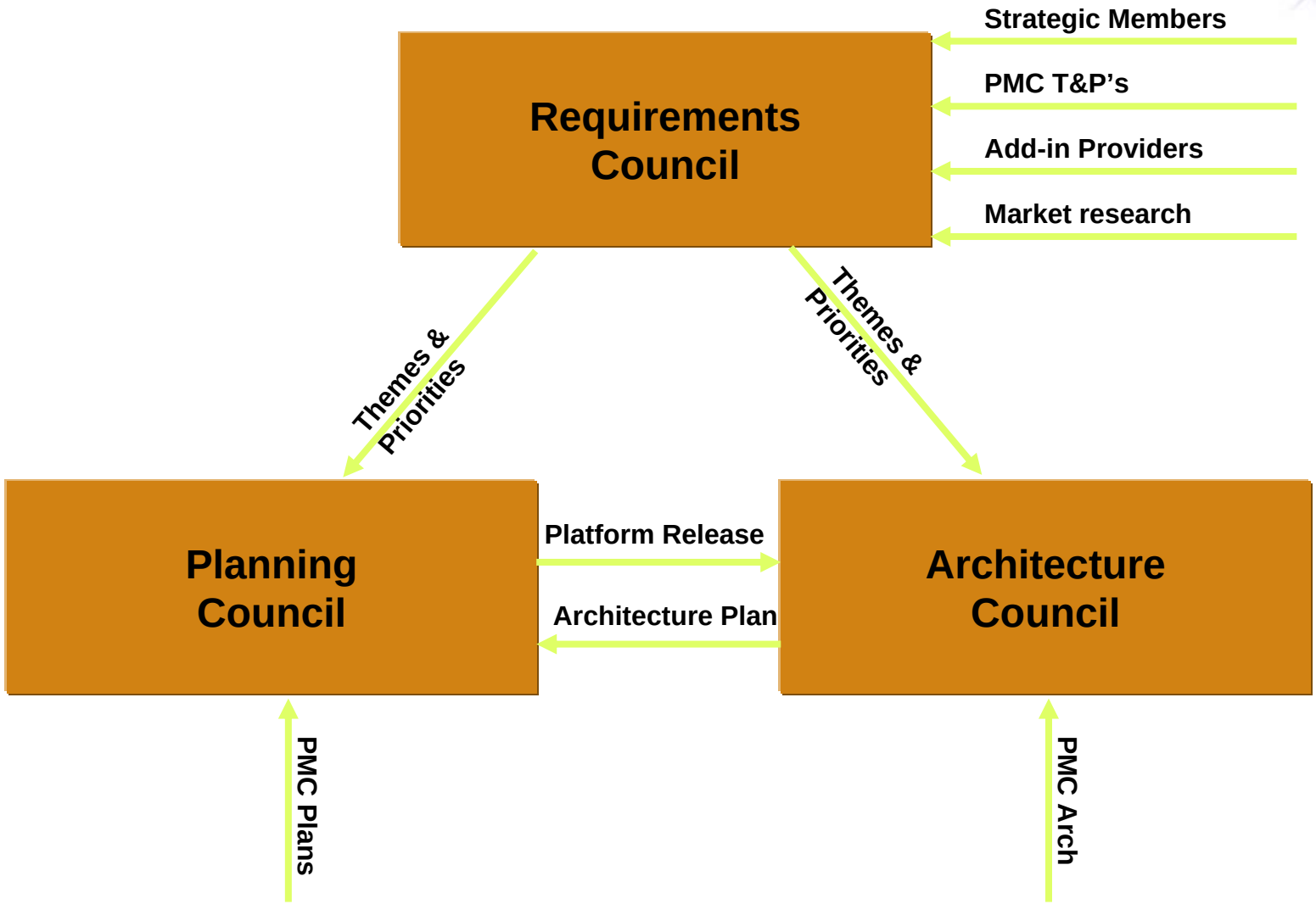
Eclipse Roadmap: Development Councils



Eclipse Roadmap Themes

- Scaling Up
- Enterprise Ready
- Design for Extensibility: Be a Better Platform
- Embedded Development
- Rich Client Platform
- Simple to Use
- Enable Consistent Multi-language Support
- Appeal to a Broader Community
  - Improve consistency among implementations on Windows and Linux
  - Swing – SWT Interoperability
  - J2SE 5 support for JDT
  - Provide basic web services tools
- Full document located at http://www.eclipse.org/org/councils/20041215EclipseTPFinalDraft.pdf

Summary: Why Eclipse?

- The Eclipse community is unique in its focus on the commercial adoption of its technologies
- Eclipse has focused on ensuring that its licensing model is well suited for commercial adoption
- The Eclipse open source community is unique in its attempt to create support many projects sharing a common vision and release roadmap
- The core values of Eclipse software development creates great communities building high quality software
  - Openness, Transparency, Meritocracy

Thank you!