

#### October 10<sup>th</sup> - 11<sup>th</sup> Ludwigsburg, Germany

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#### The SAP Eclipse Story

Rainer Ehre (SAP) and Malte C. Kaufmann (SAP) Thursday, 11:30, 1 hour | Schubartsaal

8 · 9 · 10 · 11 · 12 · 13 · 14 · 15 · 16 · 17 · 18 · 1

This presentation explains why SAP has chosen Eclipse as THE platform for all its tools in the Java development area and outlines how SAP will expand the consumption towards a full blown modeling environment. Furthermore concrete consumption examples - means specific SAP Tools - will be introduced to sharpen the consumption picture. Eventually challenges of the Eclipse consumption strategy as the ongoing balancing of Consumption vc. Contribution and the local vs. real enterprise scope development will be presented.

Rainer Ehre, VP NetWeaver C Tools, joined SAP in 1986 with a Diploma of Computer Science of the University of Saarland, Saarbruecken. He started in ABAP programming language development which was/is SAP's main business programming language, before he overtook responsibility for the SAP tools in the Java environment. In that role, he acted as the key driver for establishing Eclipse as SAP's development tool platform in the Java environment. Today he is driving the SAP Modeling

infrastructure on top of Eclipse, to expand the Eclipse

leveraging towards a full blown modeling environment, serving SAP needs best.

After studying Physics and receiving a PhD in Applied Physics, Malte started his professional career at SAP working in application development for SAP. For several years, Malte developed BI and portal applications. Malte was one of the co-inventors and the lead development architect of the SAP Composite Application Framework. He is now lead development architect for the complete Eclipse based tools included in SAP's Composition Environment.





Malte C. Kaufmann





The fifth meeting of the Eclipse Board was held from 9:30 AM to 4:30 PM CST on Wednesday, Dec 4, 2002 at the Hyatt Regency (Airport) in Dallas, Texas.

The following are the minutes of this meeting.

#### **Stewards in Attendance**

AltoWeb	Elli Albek
Borland	Simon Thornhill
Catalyst Systems	Tracy Ragan
Flashline	Adam Wallace
Fujitsu	Ronald Alepin
HP	Mike Rank
Hitachi	Ryuji Takanuki & Koichi Yokota
IBM	Lee Nackman
Instantiations	Mike Taylor
MKS	Dave Martin
Oracle	Ted Farrell
Parasoft	Roman Salvador
QNX	Dan Dodge
Rational	Dave Bernstein
Red Hat	Michael Tiemann
SAP	Michael Bechauf
Scapa Technologies	Mike Norman
Serena Software	Boris Kapitanski
SlickEdit	Ed Hintz
SuSE	Juergen Geck
TeamStudio	Ian Smith
Telelogic	Tony Chang
TimeSys	Manas Saksena
TogetherSoft	Todd Olson

#### Stewards who voted electronically

MontaVista Software	Jim Ready
Sybase, Inc	Karl Reti

#### **Associate Members in Attendance**

Academic & ResearchBrian BarryObject Management GroupJamie Nemiah for Richard Soley

#### **Eclipse representatives in Attendance**

Eclipse Chairperson	Skip McGaughey
Eclipse Tools PMC	John Duimovich
Eclipse Platform PMC	Dave Thomson
Eclipse Platform PMC	John Wiegand
Eclipse Technology PMC	Brian Barry
Eclipse Communications	Marc Erickson

#### **Invited Guests**

QNX

Linda Campbell

#### Agenda

- 1) Introductions & Steward Update
- 2) New Member Applications & Presentations
- 3) Old Business
  - o Oracle Membership Presentation
  - Scaling Committee Report
  - Eclipse Secretary nomination and election
  - o Eclipse Status, Update, and Eclipse Minutes approval
- 4) Technology
  - o Eclipse Platform PMC
  - Eclipse Tools PMC
  - Eclipse Technology PMC
  - Web Update
  - o Demo SlickEdit
- 5) Committee Organization
  - o Marketing
  - o Legal
- 6) Eclipse 1-year evaluation and discussion

#### **Business & Organizational Section**

#### **Selection of new Eclipse Member Organizations**

The following organizations were approved as Member Companies on the Eclipse board: AltoWeb Inc, Catalysts Systems Corporation, Flashline Inc, Parasoft Corporation, SAP, TeamStudio, and TimeSys Corporation.

#### Selection of new voting members of the Eclipse Board (Stewards)

The following individuals were approved as Stewards and voting members of the Eclipse Board:

0	11
Member Organization	Steward
AltoWeb	Elli Albek
Catalysts Systems	Tracy Ragan
Flashline	Adam Wallace
Parasoft	Roman Salvador
SAP	Michael Bechauf
Teamstudio	Ian Smith
TimeSys	Manas Saksena

#### Selection of new Associate Members of the Eclipse Board

Object Management Group (OMG) was approved as an Associate Member of the Eclipse Board. Richard Mark Soley was elected to represent OMG as an associate member.

#### **Other Membership Business:**

The Eclipse Chairperson reported on the status of Sun and BEA. Both companies are still invited to participate and discussions are ongoing. No further progress at this stage.

## **Old Business**

#### **Oracle Membership Presentation:**

The Board reviewed the Oracle presentation and welcomed Ted Farrell as Oracle's Steward. Oracle was unanimously invited to join the board in the last meeting. Oracle met the same selection criteria as all other board members.

Ted Farrell described the scope of the JSR that Oracle is sponsoring. It is based upon starting with standards like Swing. The question whether the API issue has an XML solution needs to be evaluated. If there ever is an alignment of Eclipse with the Java standards something like SWT could replace AWT. (Swing is lightweight containers relying on 2 core containers). SWT could be submitted as a standard. AWT today has disadvantages because of the limitations of the components. Depends on how much effort Eclipse wants to put into the alignment. Ted reported, if we can come to the common ground, it does solve problems and we can have implementations within a year. Realistically, a lot of vendors for a multitude of reasons will not go in the Eclipse direction. Ted invited the board members to work together to find a solution, although this would require more work, this direction has high value. This generated many questions and interested debate about the importance of supporting standards and the responsibilities of standards to represent the needs of the market and the needs of the technology. There was significant discussion around the support of common API's, IDE's, and multiple platforms. There was some discussion concerning the need to have open public processes to support standards.

#### **Scaling Committee Report**

#### Scaling Committee Report on Eclipse Roles and Responsibilities:

Lee Nackman reported on the Scaling Committee recommendations for scaling the Eclipse organization. Some of the issues involve the increasing membership and how to accommodate and encourage participation from member companies without limiting the number of member companies. (Please see minutes from Sept 5, 2002 board meeting for more background details).

Eclipse is composed of two separate, complementary and sometime contentious organizations. The first is an equalitarian consortium of companies shipping or planning to ship or use eclipse-based products. The contributions are voluntary. The second is an open source project, which is based on a true open source model and exists to build and evolve the technology. Contributions are based on a meritocracy of developers and project leaders.

#### **Eclipse Objectives**

The Scaling committee over the prior 6 months synthesized the objectives of Eclipse from the input of the Stewards and Board Members.

The Eclipse Board approved the following objectives. Eclipse will:

- Enable multiple tool providers to deliver Eclipse-based products
  - Deliver reliable core platform technology
    - § Support large-scale, mission-critical, localizable development environments
    - **§** Provide transparent integration from multiple vendors
  - Provide balanced support for both platform functionality and commercial opportunities
- Build Critical mass
  - o Promote Eclipse legitimacy and ubiquity
  - Provide a highly successful tools platform for enterprise software development
  - o Develop a vibrant developer community contributing to the platform
- Enable Company contributions that enhance reputation and visibility in the enterprise software development market.

The Scaling Committee reviewed the various premises of eclipse including the roles of the consortium, the open source projects, and of the PMC leaders, as well as reviewing the relationships between the consortium, the projects and the PMCs.

#### **Role of the Consortium**

In general, the role of the Consortium is to support the open source projects by contributing to or funding open source projects and by building commercial products based on the Eclipse technology. Additionally, the Consortium is involved in promoting an ecosystem of integrated tools by publicly endorsing and promoting the technology and acknowledging its use in commercial products. The Consortium also helps to shape the direction of the eclipse technology by reviewing and approving new projects.

Specifically, the scaling committee reported, recommended and the Eclipse Board approved the role of the consortium be defined as:

- Consortium of companies shipping or planning to ship eclipse-based products
- Members support the Open Source Project through funding participation related to their needs and interests
- Members Promote Eclipse through the commercial offerings of Member Companies.
- Members leverage open source project technology for commercial activities
- Consortium is organized as a Board of Stewards
- Consortium will be supportive of the activities of the open source projects:
  - Members fund open source project participation
  - Members build commercial eclipse-based products
- Consortium promotes an eclipse ecosystem for integrated tools
  - Members publicly endorse and promote eclipse technology and acknowledge its use in their products.
  - o Foster ubiquity through marketing and evangelism
- Consortium shapes direction by reviewing and approving new projects
- Control point to approve projects according to viability and selection criteria to be established by the board (or by a Project Review Committee).

#### The Role of the Open Source Project

In general, the role of the Open Source Project is to act as a vehicle for evolving the technology to meet the needs of the contributors via a true open source model where influence is proportional to technical contributions. Discussion and decisions are conducted in the open according to open source principles. The Open Source Project is a focal point for a vibrant developer community.

Specifically, the scaling committee reported, recommended and the Eclipse Board approved the role of the open source project to be defined as:

- True Open Source Model
- Everyone is welcome to participate: commercial, non-commercial, academic, companies, individuals
- Builds and evolves the technology
- Organized as a contribution-based meritocracy of developers and project leaders
- Vehicle for evolving the technology to meet the needs of the project contributors
- Influence is proportional to contribution
- All discussions and decisions to be conducted in the open according to open source principles
- Focal point for a vibrant developer community
- Active, high value interactions among developers, and between developers and users
- Source of information about the technology and how it is being used by the community and industry

#### Minutes of the Eclipse Board Meeting December 4, 2002 Role of Project Management Committee (PMC) Leader

The Eclipse Board approved the following as the role of the PMC Leader. The Project Management Committee (PMC) Leader facilitates the open source participation process, acting as a focal point for the project within the community, and reports to the board on the status and progress of the project. They also advise the board as to project creation and termination. They are ex-officio board members. They do not control or direct projects, although they do have informal influence.

The Consortium approves new projects and supports them by setting initial parameters such as scope, charter and the designation of a PMC leader. Once initiated, a project operates according to its charter under an open source model. The Consortium has no direct control over an open source project once it is set in motion. A Consortium member's influence is by contribution. There is a general and important philosophy that all contributions are based upon the same rules. If a project is dysfunctional or not successful, the Consortium may terminate it or replace the PMC Lead, which is considered a drastic action. These principles give the consortium the power to create and terminate projects, but ensure that projects operate in a true open source manner while they are active.

The Stewards are fundamentally in agreement on these roles and relationships.

#### Scaling Committee Report on Eclipse Organization

The Eclipse Board approved the following conceptual view of Committees as recommended by the Scaling Committee. Committees can be either Standing or Ad Hoc. Standing committees exist until dissolved by a board decision. They frequently have significant authority to act within their scope on behalf of the board. Ad hoc committees may be formed to handle specific issues that do not fall within the scope of a Standing committee. They are dissolved automatically upon the completion of their task. They may have authority to act on behalf of the board, but this is not assumed.

Committees are defined by Terms of Reference and are created by a vote of the board. The board as part of the committee creation vote must approve the terms of reference. A committee cannot be created without identifying the associated terms of reference.

Terms of Reference include:

- 1) The defined type of committee, Standing or Ad Hoc
- 2) The purpose of the committee (what is it expected to do?)
- 3) The authority assigned to the committee (what is it empowered to do?)
- 4) Reporting dates, particularly for Ad Hoc committees (when will the committee report back to the board?)
- 5) Composition of the committee any related rules or restrictions on its composition
- 6) Resources funds or other resources allocated to the committee, where appropriate.

Committees are chaired and the Chair reports to the board on behalf of the Committee. Therefore, the Chair is someone who is entitled by the bylaws to attend board meetings (ie. Steward, PMC lead, Associate, Consortium Chair, Consortium Secretary). A chair can be selected from existing

board members and a new Chair can be established if warranted. In selecting a Chair, a few key points need to be kept in mind:

- 1) That the Chair understands and agrees to the Terms of Reference for the Committee.
- 2) That there is an equitable opportunity to participate and
- 3) The voters are notified when voting for the Chair

The process for Chair selection is as follows:

- The Board approves the Terms of Reference for the Committee
- The Board Chair circulates the Terms of Reference to all board members with a request for nominations for the position of Committee Chair.
- The Board Chair indicates when nominations will be closed.
- Nominations are sent to the Board Chair, with short bio.
- If there is only one nominee, then they are acclaimed by the Board Chair.
- If there are multiple nominees, nominations/bios will be sent to the board with details on the election date.

The Board Chair will conduct an election, either electronically or at a meeting. Votes will be conducted so that individual votes are not known until all votes are in, at which time details of the voting will be published to the board. If the election is at the meeting, the appointment is immediately after the vote. If the election is held electronically, the election and appointment will be no later than two weeks after the nominations..

A Committee Chair is held for one year for a Standing Committee. Ad Hoc Committee Chairs serve through the completion of the Ad Hoc Committee's task. A Chair may resign at any time. The board may vote to replace a Chair. Lack of a Committee Chair will trigger an election unless the board immediately dissolves the Committee. Another Committee member can serve as Chair until an election for a replacement is completed.

There are no restrictions on Committee membership unless specified in its Terms of Reference (other than the requirement for the Chair to be a board member). Membership is open to participants from all member organizations. The number of participants per member organization may be limited (to no less than 1) at the Committee Chair's discretion. Regardless of the number of participants from a given organization, each organization only has 1 vote in the committee. Committees are working groups, and in order to be effective, they need active, committed participants. There was discussion regarding setting a limit for the number of consecutive meetings that a committee member could miss, but the board decided that this would be subject to the discretion of the Committee Chair.

#### **Existing Committees Dissolved Upon Completion of Tasks**

The Board discussed the status of the existing committees and acted. The Board:

- Dissolved the Scaling Committee upon completion of its task.
- Dissolved the CPL Issue committee upon completion of its task.

Nominations for Committee Chairs were put forth and confirmed electronically subsequent to the meeting, according to the nomination process.

#### **Creation of Eclipse Committees**

The Eclipse Board created the following Eclipse Committees and the associated Terms of Reference.

#### Legal Advisory Committee

The Board created a standing advisory Legal Advisory Committee. Mike Rank was subsequently elected as Chair of the Legal Advisory Committee. The Board approved the following terms of reference for the Legal Advisory Committee

- Committee Type standing, advisory
- Purpose Coordinate discussions among the legal counsel of the member organizations in order to help them to better advise their clients. Each member organization may decide whether to participate in a given topic thread. The committee itself does not provide legal advice.
- Authority no authority, coordination role only
- Reporting dates every board meeting and at least quarterly
- Composition must have (but not limited to) 2 lawyers from 2 member companies + 2 board members + committee chair.
- Resources Time and materials donated by committee participants.

#### **Project Review Committee**

The Board created a Project Review Committee. Michael Tiemann and Lee Nackman were subsequently elected Co-Chairs. The Board approved the following terms of reference for the Project Review Committee.

- Committee Type standing
- Purpose Establish a high level roadmap and associated criteria for the purposes of evaluating new projects, that can be applied without bias to new project proposals. Evaluate new project proposals in the context of the established criteria. Approve new projects. Monitor existing projects in the context of the roadmap. Make recommendations to the board for project terminations.
- Authority Represent the consortium in discussions regarding new project proposals, or in termination reviews of existing projects as identified by the board. Approve new projects.
- Reporting dates every board meeting and at least quarterly
- Composition must have (but not limited to) all PMC leads + 2 stewards + committee chair
- Resources Time and materials donated by committee participants.

#### **Marketing Committee**

The Board created a Marketing Committee. Mike Taylor was subsequently elected Chair. The Board approved the following terms of reference for the Marketing Committee.

- Committee Type standing
- Purpose to engage in the marketing activities of the Eclipse consortium and to support the Eclipse-related marketing activities of the member organizations. Specifically, helping the member companies to publicly endorse and promote the Eclipse Platform and acknowledge its use in their products.
- Authority Speak publicly on behalf of the consortium on matters relating to the promotion of the consortium, the open source community, and the use of the Eclipse Platform. In general, the Marketing Committee can speak about all matters concerning Eclipse. The Marketing Committee can not Represent the open source project.
- Reporting dates every board meeting and at least quarterly
- Composition must have (but not limited to) 2 marketing professionals from 2 member companies + 1 board members + committee chair
- Resources the Committee will accomplish its mission and tasks through the voluntary contribution of resources by Member companies and Committee participants.

#### Membership Committee

The Board created a standing Membership Committee. Skip McGaughey was subsequently elected acting chair. The Board approved the following terms of reference for the Membership Committee

- Committee Type standing
- Purpose Establish membership criteria. Recommend and recruit new members consistent with uniform application of criteria. Periodically review current membership in context of criteria. Make recommendations for membership changes.
- Authority Represent the consortium in discussions with prospective members.
- Reporting dates every board meeting and at least quarterly
- Composition must have (but not limited to) 2 board members + committee chair
- Resources Time and materials donated by committee participants.

#### **Eclipse Status, Update and Approval of Minutes**

Minutes from September 5, 2002 Meeting were approved.

#### New Business:

#### **Eclipse Secretary Nomination:**

Dan Dodge nominated Linda Campbell of QNX Software Systems as Secretary. Michael Tiemann of Red Hat seconded the motion. Linda Campbell of QNX was elected to be the Secretary of the Eclipse Board.

#### **Technical Content:**

**Eclipse Platform PMC** - John Wiegand presented development activity status/update of the Tools PMC.

John advised the Board that the Eclipse 2.x is the platform that commercial products should be delivered upon. Eclipse 2.x will move forward by evolution rather than revolution. The goal is to maintain integrity, stability and compatibility. The platform is going to be actively maintained for the next 12-18 months and continue to be supported. The Eclipse 2.1 development will be complete March 2003. Eclipse 2.x testing is a community effort. There have been many plugins built. The Platform development effort is currently done by few organizations. Eclipse 2.2 in an ongoing evolution. Eclipse 3.0 will be the next generation of Eclipse. This will enable the opportunity: to add new components to the platform; to revise architecture; and to make Eclipse useful for an even broader class of applications. It is critically for the Board Members to decide where they want to contribute.

#### Eclipse Tools PMC

- John Duimovich reported the current development activity status / update of the Tools PMC.

#### The CDT Project provides

- C/C++ Editor with basic functionality, syntax highlighting, code completion etc.
- C/C++ Debugger with APIs & Default implementation, using GDB
- C/C++ Launcher with APIs & Default implementation, launches an external application The CDT release dates are:
  - CDT 1.0 Released Nov 11, 2002
  - CDT 1.0.1 maintenance release ~ Dec 15
- The CDT contributions are:

- QNX

- Project lead
- Contributes core developers
- Red Hat
  - Contributed test resource
  - GDB/MI changes for 5.4 (Jan 2003?)
- Rational
  - Public commitment of resources (newsgroup post)
  - Gearing up, not active development

#### The GEF Project provides

• Zoom. Zoom will be implemented in draw2d. GEF will add support for interacting with Zoomed figures.

- Auto-scroll. Containers should automatically scroll during several interactions, including native Drop. The mechanism should be flexible enough to support other "reveal" methods, such as a tabbed pane.
- Layout Rework. Required for Palette changes, and for word-wrap text figures. Basically, width and height hints need to be passed down the parent chain during layout. Hints need to be acknowledged by all layouts.
- Word-wrap text figures. New figures which support word-wrapping. Possibly a new JFace CellEditor with multiline support for direct edit.
- Palette UI. Some if not all of the palette improvements will be implemented. See proposed items above.
- Marquee "buildup". By holding Shift or Control, the user should be able to modify the existing selection. Currently, the only supported operation is to replace the entire selection.

**GEF Releases Dates** 

- November 27th Version 1.0.1 stable build
- November 11th Tutorial: Creating an Extended EMF Model
- October 23th Another Version 1.0.1
- October 4th Version 1.0.1 stable build available for download.

The GEF Contributions are:

• All IBM committers

#### The COBOL Project:

The Cobol project proposal and web page are up. The download and source have been available since Sept. There has been minor activity (ports). The Infrastructure is coming online now. This includes committers, CVS, mailing list. The project was approved last board meeting. The progress is slow to date to start.

#### **The Hyades Project Provides:**

"Automated System Quality"

- Models and tools for integrated testing as part of development
- Promote integrated test and trace throughout lifecycle
- Models for TestCases, TestTrace, TestObjective, Verdict

Hyades Release dates:

- The Hyades project is still in the planning phase. There is significant progress, and is well organized. There are many Eclipse Members participating.
- The Schedule is due December 17, 2002.

The Hyades Contributors are:

Scapa Technology (2 committers)

- Test model design/extension
- Testability interface, possibly a TRI impl or at least based there
- Spec for agent control interface
- Spec for real time data publishing from EMF
- SWT based scrollable time chart widget

• Possible JNI testability interface

Rational (1+ committer)

- Initial draft of the use case surveys
- Data collection monitoring, .NET (similar to JVMPI), collaborate on BCI extension point
- Parameter/value tracing, stmt coverage is not in the project but is a target of the extension point
- Collaboration on JSR163 ref impl
- Reference perspective to provide smooth user workflow

IBM (2 committers)

- Initial Test/trace/statistical models, RAC, data collection FW including artifact definitions, injection framework, correlator injection, sample viewers
- Collaboration on JSR163 ref impl

Telelogic (1 committer)

- Test Design based on UML testing profile
- Testability interface based test run time implementation

Parasoft (1 contributor)

• Model extensions to support static analysis

#### Server Tooling Project Provides.

- J2EE Application Server Tooling
  - **n** App Server neutral framework (create, deploy, run)
  - **n** Plug-in "server personality"
- plug-in implementation for an open source Tomcat
- "lite" versions for each commercial vendors products
  - Vendor decides

Server Tooling Release dates

This project is at an early stage. There is overlap with member companies' current products. There are many players with code already. There might be issues of technical coordination.

Server Tooling Status:

The project is restarting with initial proposal submitted.

#### **Tools PMC Summary**

John Duimovich presented the following summary Tools PMC sub projects activity table.

Technology Scope	Subprojects
IDE for programming languages	C/C++
	Java
	C#, "Script", *ML
GUI Framework for tools and for GUI builders	GEF
	VCE, BPF, Data Flow
	Graphical layout tools: GUI Builder
Modeling	EMF
Performance Analysis & Test	Hyades
J2EE	Server Tooling – J2EE neutral launch
J2ME	???

Install	Native Installer		
	Release engineering		

#### <u>Technology PMC</u>

Brian Barry reported the current development activity status / update of the Technology PMC.

The technology PMC has a dual mission.

The first is to provide a place for innovation and technology exploration. In this role the Technology PMC will:

- sponsor incubator projects;
- foster small teams to explore new technology arenas;
- create supporting informal development processes;
- create projects that cut across several areas.

The second is an outreach to researchers, academics, educators. For educators the focus is upon courseware, simple teaching IDE's, and management tools. For Researchers, the focus is on an integration platform to support experimental computer science.

Brian Barry reported the research activity included:

- Eclipse Fellowships
  - The focus is on research in programming languages, tools
  - Universities in NA, Europe, and AP have been included
- Eclipse Innovation Grants were introduced
  - 20 awards up to 30K were granted
  - there are twin goals of this program:
    - **§** Develop academic curricula and courseware
    - **§** Broaden research agenda

The Technology PMC introduced 2 new projects

- Collaboration tool
- Smalltalk IDE

## Committee Updates:

#### **Marketing Committee**

Mike Taylor reported that the Mission of the Marketing Committee is to drive the commercial and open source success of Eclipse by developing and implementing strategies and programs that firmly establish and communicate the value of the Eclipse Platform, both in the developer communities that createsoftware-based functionality and in the consumer communities who use that functionality.

The purpose of the Marketing Committee is to engage in the marketing activities of the Eclipse consortium and to support the Eclipse-related marketing activities of the member organizations. Specifically, helping the member companies to publicly endorse and promote the Eclipse Platform and acknowledge its use in their products.

The Goal of the Marketing Committee is that the Eclipse Platform will be perceived as ubiquitous. This will include making Eclipse into a premier ecosystem for integrated software development. The success will be measured by the number of member and non-member companies providing products, services, or other offerings that are based around the Eclipse Platform.

The scope of the Marketing Committee includes

- 1) The Marketing Committee will have the authority to speak publicly on behalf of the Eclipse consortium on matters relating to the promotion of the consortium, the open source community, and the use of the Eclipse Platform.
- 2) The scope of the Marketing Committee will include strategic marketing, market positioning, and Marketing communications activities across both the open source community and the Consortium.
- 3) The community consists of the management, leadership and participants in open source projects. The consortium consists of Eclipse member companies and their representatives.
- 4) The Marketing Committee will promote the Eclipse Platform, including the provision of marketing assets that will help establish the Eclipse ecosystem of offerings and users. The committee will not promote the offerings of members, non-members, individuals or others.
- 5) The Committee will provide the primary interface to analysts, press, and the public.
- 6) The Committee will provide the interface to external organizations that want to engage in joint marketing with the Eclipse consortium.
- 7) The Committee will coordinate the public announcement of Eclipse Platform technology and consortium membership activities.
- 8) The Committee will coordinate the collection and publication of customer/vendor testimonials and references.

The marketing Committee will accomplish its tasks through the voluntary contributions of resources by Eclipse Member companies. With approval of the Board of Stewards, the Committee may, from time-to-time, contract with service providers to accomplish its various programs and activities. All Marketing deliverables will be subject to the terms and conditions of the CPL unless an exception is approved by the Eclipse Board of Stewards.

#### Legal CPL Issues Committee Update

Mike Rank provided update on discussions around CPL. The Objectives of the Eclipse CPL Committee were:

- 1) Evaluate and discuss any potential business or legal risk posed to Eclipse.org by current CPL 1.0 license;
- 2) Report findings and make recommendations to Stewards based on findings.

The Member Companies on the committee were HP (Chair), IBM, Monte Vista, QNX, and Rational. The question that was to be addressed by the CPL Committee was "Does Section 7 CPL pose business and legal risks to Eclipse?" The Eclipse CPL committee is scheduled to complete its work by end of December and report back to the entire Board by electronic means.

## **Eclipse 1 Year Evaluation & Discussion**

Michael Tiemann and Todd Olson led the Eclipse Board in a year end review of the successes, challenges and critical success factors.

The successes were:

- CDT project success, better code and collaboration among multiple contributing organizations
- 2.0 release

EMF as a bridge between modeling world and Eclipse world, introduction of data interoperation beyond the GUI workbench. The Challenges were:

- Eclipse 2.0 was based primarily on contributions of a single company. The Board would like to see more contributions from other companies and individuals in the community.
- There were no funds for marketing initiatives. This lack of resources and commitment to marketing initiatives needs to be addressed in the next year.
- There is significant difficulty for ISVs with software based on SWING. It is difficult to make conversion to SWT; migration should be easier; it is costly for small companies and the conversion requires large commitment and investment
- Integration with Sun/Java and JSR process, how does Eclipse participate?

The Critical Success Factors are:

By definition, a critical success factor is an item that is so significant that by not addressing the issue or solving the problem Eclipse fails.

- 1) Continue to build critical mass
- 2) Continue to deliver quality technology
- 3) SWT Swing issues including Eclipse's relationship to the Java JCP process.

## Next Board Meeting:

The next Board meeting will be March 5, 2003 in Chicago.

Meeting ended at approx 430pm.

Minutes of the Eclipse Board Meeting December 4, 2002



Rainer Ehre, NW C Tools Malte Kaufmann, NW C Tools 10/11/2007



THE BEST-RUN BUSINESSES RUN SAP



# Agenda

- 1. Eclipse Positioning in SAP's Product Strategy
- 2. SAP Eclipse History
- 3. Demo SAP NetWeaver Developer Studio
- 4. Eclipse related SAP Focus
  - 4.1. Standard Java
  - 4.2. Business Process Modeling
  - 4.3. Web UI
  - 4.4. Development Infrastructure
  - 4.5. Modeling Infrastructure
- 5. Summary

## Agenda

## 1. Eclipse Positioning in SAP's Product Strategy

- 2. SAP Eclipse History
- 3. Demo SAP NetWeaver Developer Studio
- 4. Eclipse related SAP Focus
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  - 4.5. Modeling Infrastructure
- 5. Summary

# SAP NetWeaver - A Strategic Platform for eSOA

## SAP NetWeaver Composition Environment 7.1 (SP3 in Nov 2007)

- Java standards based Integration Platform (JEE App Server and Eclipse)
- Model-driven development
- Lean consumption
- Loose coupling



Business Process Platform: Business Functionality via Enterprise SOA Provisioning

Collaboration

Nett

Composites

- Stable, scalable core
- Service-enabled

Reuse of SOA assets (more than 20 millions line of ABAP code) © SAP 2007 / Page 4

50A Provisioni

## **SAP NetWeaver Composition Environment 7.1**



## **SAP NetWeaver Developer Studio**

## **Eclipse is Foundation**

- SAP NW CE 7.1 SP3 (available in Nov 2007) is based on
  - Eclipse 3.3
  - WTP 2.0
- Best Class Java Development Tools (JDT)
- Plug-in concept
  - Open
  - Extensible
  - Enhancement possibility by 3rd party
  - Best Class Tool Platform
- Industry-Standard
- Excellent User Experience using the Workbench (Perspectives)
- Excellent UI Strategy (SWT, Jface)

## **SAP NetWeaver Developer Studio**



## **Productive Development and Modeling**

- Support for both
  - standard Java J2EE 1.4 and Java EE 5 –
  - SAP-specific programming models (e.g. Web Dynpro Java)
- Full benefits of WTP tool set, e.g. O/R mapping from EJB to database
- Modeling and Metadata is key (integrated code-oriented and graphical editors)

## Software Lifecycle Management

- Eclipse integrates with NetWeaver development infrastructure (NWDI) and 3rd party tools
- Possibility to package content from various meta data sources into one shippable application

## SAP NetWeaver Developer Studio – Welcome Page





## Agenda

1. Eclipse Positioning in SAP's Product Strategy

## 2. SAP Eclipse History

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SAP decides to support Java

SAP's choice: Borland's JBuilder 4

Best Java / JEE IDE with minimal SAP extensions via Borland's Open Tools API

JBuilder Licenses (1000) for SAP internal usage Borland negotiations OEM not an option for SAP

Open Tools API not sufficient, Source access needed

More SAP specific Tools push Tool Platform

First evaluations of Eclipse and NetBeans Decision to go for Eclipse

IBM negotiations J2EE Feature

Shipment SAP Web AS 6.20

Modeling Infrastr. needed

Cooperation with Togethersoft (TS) SAP NetWeaver Developer Studio with SAP Web AS 6.30

Based on → J2EE 1.3 → Eclipse 2.1

SAP Features: WebDynpro and J2EE with NWDI

Borland takes over TogetherSoft

## **Studio Architecture 2003**





## 2004 - 2007





SAP joins the new Eclipse Foundation as Strategic Consumer

Gold Sponsor at the first EclipseCon Additional SAP specific features as CAF, WS, Admin Tools ...

Eclipse is accepted Developer Tool Platform in SAP's Java offering JEE 5 Preview

WTP adoption

Composition Environment shipped

Based on → JEE 5 → Eclipse 3.1 Eclipse 3.3 with WTP 2.0 in Q4

SAP signs the Eclipse Committer Agreement

Presented on SAP Teched

## **Studio Architecture 2008**





## Eclipse for ABAP Developing and Modeling in evaluation

## Agenda

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## **Demo: SAP NetWeaver Developer Studio**



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## **Standard Java, JEE and Persistency**

- Eclipse offers with JDT a superior Java Development Environment
- WTP offers infrastructure and basic tools for Java EE
- SAP implemented its Java EE tools on top of WTP and will increase its investments to support WTP
- SAP strongly supports persistency historically and will contribute to DTP (MaxDB, DDIC)
- Eclipse with WTP, DTP and STP can become a solid foundation for Enterprise SOA tools by alignment of roadmaps and concepts and by accelerating the progress in tool support for "commoditized Java dev paradigms" beyond JDT

## **Assessment of SAP/Eclipse consolidation:**

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## **Eclipse relevant SAP Focus – SAP Tools Composition Perspective**



## **Development and Modeling Environment Enterprise SOA Applications Extending Open Standards**

- BPM and Service Composition
- Web UI
- Development Infrastructure
- Modeling Infrastructure
- Server Support



## Agenda

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## **Eclipse relevant SAP Focus – BPM (CBP)**





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## Composite Business Processes (CBP)

- Graphical modeler based on BPMN
  - Eclipse-based
  - Support key process concepts (workflow, event, task, context, roles, UI) throughout their lifecycle
  - Combine human interaction and system integration in one model
- Direct path from business view to process execution
  - Nothing 'lost in translation'
  - Dynamic role-based views
  - Single active model
  - Flexible execution
- Embedded in SAP NetWeaver CE
  - Integrated composition experience
  - Common UI technology
  - Service-based connectivity

## Eclipse relevant SAP Focus – BPM CBP Composer





## **CAF Modeler in Eclipse**





## **Eclipse relevant SAP Focus – Service Composition**



## **Service Composition**

- Composite Application Framework for modeling of Enterprise Services and Business Objects
- Java EE based framework following the Enterprise SOA programming model
- Touch points with SCA and STP. SAP invests in SCA, participates in the specification and monitors STP
- Support of enterprise standards like CCTS data types system important for SAP
- Slow "Commoditization Process" for SOA paradigms

## **Assessment of SAP/Eclipse consolidation:**

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## **Eclipse relevant SAP Focus – Web Ul**





## **Eclipse relevant SAP Focus – Web Ul**



## Web UI

- SAP invented **Web Dynpro**, an Enterprise quality Web UI framework
- MVC based convenient Web UI Modeling with best support of Reuse, Personalization and flicker free performance
- Web Dynpro overcomes many deficiencies of Java EE UI techniques. It is a key element of SAP's Java strategy and will coexist with other UI technologies like JSF and JSP
- Leverage Eclipse UI tooling for Java EE UI support and seamlessly integrate with it, e.g. JSF Editor from WTP and embedding of JSP components in Web Dynpro UIs



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## **Eclipse relevant SAP Focus Development Infrastructure**



"Software development is becoming software assembly, with components sourced from around the world and based on a wide range of implementation technologies. ...objective is to leverage and extend the Eclipse platform to make mixed-component development as efficient as plug-in development. The basic approach is to introduce a project-agnostic way of describing a development project's component structure and dependencies, and to provide a mechanism for materializing source and binary artifacts for a project of any degree of complexity."

http://wiki.eclipse.org/Buckminster\_Project\_FAQ

This quote from Eclipse Buckminster FAQ could be a quote for a FAQ of SAP Component Model.

# **Eclipse relevant SAP Focus - Development Infrastructure**



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## **Eclipse relevant SAP Focus - Development** Infrastructure



## **Development Infrastructure**

- SAP invented the SAP Component Model to support software structuring and reuse as well as software production and assembling
- SAP NetWeaver Development Infrastructure (NWDI) is built around SAP CM with full-fledged Source Code Management System, Automated Build and a Configuration and Change Management System
- SAP Tools are closely integrated with the SAP Component Model and the Development Infrastructure
- SAP is monitoring upcoming component model standards and check them for consolidation. Buckminster and STP(SCA) might be the right direction

## **Assessment of SAP/Eclipse consolidation:**

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## Eclipse relevant SAP Focus – Modeling Infrastructure



## **Modeling Infrastructure**

- SAP developed a Modeling Infrastructure (MOIN)
  - (Enterprise) design-time repository that manages modeling content
  - Based on standards like MOF, JMI, XMI, OCL
  - Platform independent, can run on Eclipse, on a JEE server, and standalone environments
- Frameworks and tools on top of MOIN
  - Graphical Framework for development of graphical modeling tools
  - Tool Generation Framework (for generation form-based Editors/Viewers)
  - Graphical tool for editing of MOF Meta-models (that also serves as showcase for MOIN and other frameworks)

## **MOIN – MOF 1.4 Editor**





## Eclipse relevant SAP Focus – Modeling Infrastructure



## **Modeling Infrastructure and Server Support**

- SAP supports an Enterprise Ready Modeling Infrastructure (MOIN) based on MOF 1.4
- Enterprise Readiness means
  - Consistency of a huge and highly-connected model network (constraints, refactoring, concurrent changes)
  - Information system on huge amounts of modeling content with efficient query capabilities (Server Scenario with DB support)
  - Eclipse, JEE Server and Standalone Build scenario to be supported

R

 Overlap with EMF, EMFT and GMF. Consolidation is of high value and SAP ready to invest in that

## Assessment of SAP/Eclipse consolidation:

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## 5. Summary

## **Summary SAP Eclipse Experience**



## **The SAP Eclipse Story - Summary**

- Excellent Java development environment and best tool platform with huge acceptance and market momentum. The right decision in 2002 ©
- SAP NetWeaver Developer Studio is based on Eclipse.
   It is THE fundamental Design Time Environment in SAP's important product SAP NetWeaver Composition Environment
- Eclipse is driver and enabler for tool consolidation in SAP's Java Development and Modeling tools area
- Current focus for SAP contribution is WTP and DTP. The SAP Memory analyzer is planned as contribution.
- Modeling and Development Infrastructure are key for SAP. SAP's challenge is to align their Eclipse specific implementations to upcoming Community Standards. EMF, EMFT, Buckminster, STP, Team API, RCP are very promising projects.
- Meritocracy is key and it is less about money and market support than about development engagement. Therefore SAP considers Strategic Consumer model as honors towards Eclipse. SAP will increase its contribution investments.
- SAP loved to see fast commoditization (e.g. JEE), but the Business model...





## Title



## First level

- Second level
  - Third level
    - Fourth level
      - Fifth level

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