Exhibit J:

Eclipse awarded **JPMorgan** "Best
Deployment of Eclipse technology
in an enterprise" at ECLIPSECON,
Mar. 6, 2007

≡ eclipse

http://www.fbcoverup.com/docs/eclipse/2007-03-06-JPMorgan-Eclipse-
Foundation-Community-Awards-Announcement-ECLPISECON-2007-
Mar-06-2007.pdf

□ DOWNLOAD

HOME / ABOUT US / ECLIPSE FOUNDATION COMMUNITY AWARDS...

About Us

□ Foundation

□ Governance

□ Legal Resources

□ Contact Us

Eclipse Foundation Community Awards Announcement

Press Release

Eclipse Community Awards Winners Announced

Awards Recognize Top Individuals and Technologies in the Eclipse Community

ECLIPSECON 2007, SANTA CLARA, Calif., March 06, 2007◆The Eclipse Foundation today announced the winners of its annual Eclipse Community Awards, which recognize the top individuals, products and organizations

in the Eclipse community. Recipients were honored at an awards ceremony yesterday on the opening day of EclipseCon 2007.

The Individual Awards acknowledge people that have given time and resources to make Eclipse a better community. Winners were selected by their peers in an online vote. The selection of the ◆Top Newcomer Evangelist◆ award was based on the individual that answered the most questions raised on the eclipse.newcomer newsgroup.

- **Top Ambassador**: Chris Aniszczyk. Finalists in this category are Alex Blewitt and Doug Schaefer.

- **Top Contributor**: Kimberley Peter and Tom Schindl (tie). Finalists in this category are Eugene Kuleshov and Philippe Ombredanne.

- **Top Committer**: Ed Merks. Finalists in this category are Mik Kersten and Thomas Watson.

- **Top Newcomer Evangelist**: Daniel Megert. Finalists in this category are Hendrik Maryns and Eric Rizzo.

The Technology Awards recognize both Eclipse-based open source projects and commercial products. Winners were selected by a panel of judges from the Eclipse community. Nominated RCP applications and developer tools were evaluated on their user interfaces, innovation and comprehensiveness. Organizations competing for the ◆Best Deployment of Eclipse Technology in an Enterprise Technology◆ award were evaluated based on number of Eclipse projects being used, scale of applications being deployed and the scope of deployment.

- **Best Open Source RCP application**: PSICAT (**http://portal.chronos.org/psicat-site**). The finalists are EclipseTrader (**http://eclipsetrader.sourceforge.net**) and RSSOwl (**http://www.rssowl.org**).

- **Best Commercial RCP application**: TIBCO Business Studio (**http://www.tibco.com/devnet/business_studio**). The finalist is Ivis Technologies xProcess (**http://www.ivis.com/public/products/xprocess**).

- **Best Open Source Eclipse-based Developer tool**: eclipse-cs Checkstyle Plugin (**http://eclipse-cs.sourceforge.net**).

  The finalist is EclEmma (**http://www.eclemma.org**).
- **Best Commercial Eclipse-based Developer tool**: QNX Momentics IDE (**http://www.qnx.com/products/development**)). The finalist is Adobe Flex 2.0 (**http://www.adobe.com/products/flex**).

- **Best Deployment of Eclipse technology in an enterprise**: JPMorgan Chase (**http://www.jpmchase.com**).

About the Eclipse Foundation
Eclipse is an open source community whose projects are focused on providing an extensible development platform and application frameworks for building software. Eclipse provides extensible tools and frameworks that span the software development lifecycle, including support for modeling, language development environments for Java, C/C++ and others, testing and performance, business intelligence, rich client applications and embedded development. A large, vibrant ecosystem of major technology vendors, innovative start-ups, universities and research institutions and individuals extend, complement and support the Eclipse Platform.

The Eclipse Foundation is a not-for-profit, member supported corporation that hosts the Eclipse projects. Full details of Eclipse and the Eclipse Foundation are available at **www.eclipse.org**.

# # #

Press Contact
John Moran or Lori Kroll
Schwartz Communications
781-684-0770
eclipse@schwartz-pr.com

Eclipse Foundation

About us

Contact Us

Donate

Governance

Logo and Artwork

Board of Directors

Legal

Privacy Policy

Terms of Use

Copyright Agent

Eclipse Public License

Legal Resources

Useful Links

Report a Bug

Documentation

How to Contribute

Mailing Lists

Forums

Marketplace

Other

IDE and Tools

Community of Projects

Working Groups

JPMorgan Raises the Bar for Banking Applications

JPMorgan

As one of the world's leading financial institutions, JPMorgan tracks changes in the world's financial markets 24 hours a day to bring their customers competitive retail, investment, commercial, and mergers and acquisitions banking services. With offices around the world and many highly specialized IT requirements for critical business functions such as inventory management and price forecasting, JPMorgan has built up a wide assortment of custom-built applications designed to meet specific needs.

Islands of Development

Such organic development, often at the departmental or branch level, is common in

"We wanted to develop an alternative to spreadsheets as a platform for modeling applications."

needs of its employees, it also has real drawbacks that become more significant as markets globalize and their IT environments become more complex.

For example, since many applications have been written to solve narrowly defined problems, it is often difficult to reuse their functionality to solve similar problems in new software development.

The speed with which an application can be deployed in the front office to support a new business opportunity can have a significant impact on the value of the new offering to

DateTime	Algorithm	Strang...	Tim...	CutOff...	Price...	BidRate	Offer...	MyAlgor...	MyStr...	My...	MyCut...	MyPri...	MyBid...	MyOff...
09-Jun-06...	Sabr	Broker	Linear	15:00 (...	Bid	114	114.03	Kennetron	Broker	Linear	15:00 ...	Bid	114.12	114.15

As...	Nu...	Publish Type	LastGoodReqDate	LastGoodFinishDate	LastGoodUserName	LastReqDate	LastReqUserName	Status
USD	JPY	speeds	08-Jun-06 15:58:57	08-Jun-06 15:58:57	u160432			OK
USD	JPY	volSurface	08-Jun-06 16:35:11	08-Jun-06 16:35:27	u160432			OK

Kennetron Vols | Sabr Vols | Price Spread

Rename Column
Insert new CcyPairPublishDataObject
Publish volSurface (USD, JPY)
Delete CcyPairPublish(USD, JPY)

T	Date	A	S/F	Rr25	Rr10	St25	St10	C10	C25	Atm	P25		S/F			St25
1D	12-Jun-06 [3]		S	-0.15	-0.29	0.12	0.43	6.32	6.07	6.03	6.25					0.15
1W	16-Jun-6 [7]	✓	S	-1.25	-2.70	0.15	0.54	8.81	9.14	9.62	10.40	11.51	S	-1.25	-2.70	0.15
2W	23-Jun-06 [14]		S	-0.36	-0.70	0.21	0.77	9.61	9.41	9.39	9.78	10.51	S	-1.10	-2.20	0.15
3W	30-Jun-06 [21]		S	-0.48	-0.93	0.21	0.79	9.63	9.28	9.31	9.76	10.56	S	-1.05	-2.04	0.15
1M	11-Jul-06 [32]	✓	S	-1.00	-1.89	0.15	0.54	8.68	8.73	9.08	9.73	10.57	S	-1.00	-1.89	0.15
2M	10-Aug-0 [62]		S	-0.79	-1.55	0.27	1.02	9.35	8.97	9.10	9.77	10.90	S	-0.99	-1.89	0.18
3M	11-Sep-0 [94]		S	-0.91	-1.73	0.30	1.18	9.25	8.81	8.96	9.72	11.03	S	-0.97	-1.87	0.19
6M	11-Dec-0 [185]		S	-1.23	-2.44	0.37	1.50	9.3	8.71	8.95	9.93	11.68	S	-0.96	-1.86	0.20
9M	09-Mar-07 [273]		S	-1.51	-3.04	0.40	1.70	9.09	3.56	8.92	10.07	12.14	S	-0.95	-1.86	0.20

Snapper and One Bench provide an alternative to spreadsheets for real time grid based applications.

the financial services industry, and has served JPMorgan well for many years.

But while decentralized software development gives JPMorgan valuable creative flexibility to meet the specialized

the firm. Rapidly deployed, tactical systems often result in cases where the new product offering takes off, the scaling of these systems from low volume niche

applications, into industrial strength strategic platforms can be a real challenge.

A case in point is large number of pricing applications developed as Excel spreadsheets that perform and display price calculations on the trader's desktops, the applications shortcomings were becoming more apparent as the demands on them increased. As Bruce Skingle, Distinguished Engineer with the Investment Bank Technology group at JPMorgan relates, "Spreadsheet applications are quick to deploy and can be understood and modified on the trading floor. This can be a powerful tool for a novel product, but it opens up a host of control issues. With more mature products the need for consistent pricing and risk management across regions becomes more important." It was also difficult to back up data associated with these custom copies.

Other problems noted by Skingle included general performance and reliability issues.

Throughout the bank, other groups faced similar problems. For example, building financial applications to take advantage of new market conditions involved a cumbersome combination of Excel and C++; and took too long to build. Similarly, other groups faced the challenge of maintaining the many applications for entering reference data that had been developed in isolation over the years, duplicating functionality and code. Up to ten years old and written in C++, they did not share functionality and were burdensome to maintain.

Bridging Developers

It was against this backdrop that the Investment Bank Technology group started work on a replacement for their existing systems. More than a re-write of the existing spreadsheets, they wanted to lay a solid foundation for enhanced security, auditing, scalability, interoperability and, above all, reusability. To achieve this, Skingle understood that they needed to produce a generalized platform in which this and other new applications could be extended, reused and shared. As he explains, "We wanted to develop an alternative to spreadsheets as a platform for modeling applications and at the same time allow for greater abstraction and reuse across other projects. As a tool for building a new model, a spreadsheet is an excellent tool, but by the time a product is traded the official models developed by the Quantitive Research group are delivered as libraries, and the spreadsheet is being used as little more than a .dll container and a grid based GUI." To this end Skingle envisioned that the spreadsheet-based GUI and code for common tasks like single sign-on and logging would be openly available for developers using the new environment, leaving application developers free to focus on the business problem.

The result was One Bench, a platform for developing and delivering custom banking applications, starting with Fuse, their new bond trading application.

Fuse is a perfect example of a rich client banking application. Receiving a constant

> **"We needed to know that we could recover in a hurry if an update went wrong. Having applications down for any amount of time on the trading floor is not an option."**

stream of market data on bond trading prices, the application consolidates disparate sources to traders in a familiar grid. This data can then be used to help traders identify trends and perform 'what-if' analysis. The designers knew that, as a rich client application, Fuse consumes data in streams that could be shared across other bank applications. They envisioned a GUI framework, called Snapper, as another shared component that would run in the One Bench environment and into which developers could snap applications to provide a consistent user view to similar data.

EIS is being developed on One Bench by the IB Technology Exotics & Hybrids group to consolidate the large number of systems that have been set up over the years for entering reference data. Up to ten years old and written in C++, they did not share functionality and were burdensome to maintain. As Martin Game, Vice President with the IB Technology Exotics & Hybrids group relates "Moving our first project to Eclipse and One Bench took several months, as we added shared functionality to the environment, but future work will benefit from that investment and make us far more efficient." Mr. Game expects that they will have several more EIS reference data applications ported to One Bench by the end of the year.

Similarly, QTrade was developed independently by the Exotics & Hybrids group in the bank to solve the problem of difficult and slow to write financial applications. Banks produce new applications on very short notice to take advantage of financial trends. Previously, each new application involved a combination of Excel and customized C++ coding, with a turn-around time of over two weeks.

JPMorgan evaluated several options for the development of One Bench, but the final choice came down to Java/Swing or Eclipse RCP. After careful evaluation, RCP emerged as the better alternative. RCP is designed from the ground up as a plug-in platform that will allow One Bench applications to be written as Eclipse plug-ins.

Hitting the Ground Running

Support for native windowing was also a significant advantage. Applications built for One Bench will meet users' expectations for familiarity. Taking advantage of One Bench and Eclipse, the QTrade developers were able to develop a flexible and easy-to-use UI based on SWT and XML. Users can structure new exotic financial products using simple drag-and-drop operations to add libraries to a canvas and add business logic, and development times are reduced from weeks to hours.

Graphical performance was another area where RCP excelled. Previous development of Swing based applications had involved significant efforts to get performance from the very functional table control with large data sets and rapid update rates. A Snapper based proof of concept has demonstrated that an SWT-based table is capable of maintaining a 400,000 row data set with 1000 updates per second without any special coding tricks or unusual hardware. The IB Technology Exotics & Hybrids group's EIS project saw similar benefits from RCP's performance.

Delivering Mission Critical Applications

Since the long-term plan is that One Bench will become the platform of choice for developers of desktop applications within JPMorgan, the logistics of maintenance were critical. For instance, not all users need or are entitled to the same applications, or

3

specific functionality within an application. Roll out and updates had to be automated based on a user's credentials. Equally important, when deploying multiple applications to the same Java Virtual Machine, there is always the risk that a problem with updates to one application would crash one or more critical applications. "We needed to know that we could recover in a hurry if an update went wrong. Having applications down for any amount of time on the trading floor is not an

JPMorgan's Single Sign On system was originally designed for web-based applications and they can integrate this system with One Bench so that the system knows exactly what updates to apply to each desktop. Advanced features such as the ability to roll an application back to a previous release state, are also critical. Skingle explains that "banks are very conservative about any new technology, and sharing applications on a JVM is a real concern. Automated roll-backs in the

JPMorgan used SWT and XML to develop the easy-to-use QTrade application authoring tool. Users drag components to a canvas and apply business logic to develop applications quickly and without programming.

option."

These requirements made Eclipse's Update Manager central to their strategy for One Bench and the components and applications such as Snapper, EIS and QTrade that run on it. Accessing the Update Manager's API directly, they can take complete programmatic control of the update process. For example, they by-pass end user input, performing all application updates silently.

Eclipse Update Manager reduce our risk and makes the open One Bench approach feasible." QTrade applications, for example, are saved as XML files, and these are easily deployed out to desktops using the Eclipse Update Manager. As Paul Sampat, Vice President with the IB Technology Exotics & Hybrids group explains, "The One Bench plus Update Manager combination lets us develop and deploy quickly while reducing our risk."

4

Indeed, with the Update Manager, an application can be updated globally over a weekend. If a problem is discovered when employees start work on the following Monday in the Far East, the situation can be corrected immediately, and the rest of the global workforce will never know there was an issue.

Eclipse RCP gives JPMorgan what they need: a plug-in friendly environment that will encourage efficiency and lower costs, and the control to ensure that software can be managed effectively.

All of these development groups had independently identified Eclipse as their environment of choice. When they learned of the One Bench initiative, they each knew that it would make their tasks easier and make sense for JPMorgan. One Bench gives them a head start for their own requirements, and as they contribute components, they make it a more attractive solution for developers throughout the bank.

With One Bench in place, they expect their developers to develop the banking world's next killer-applications.

Ron Stone is a technology writer and content management consultant based in Ottawa, Canada

5

IBM Eclipse Foundation Members, page 1, prepared as of Sep. 09, 2008 and reported to the Board of Directors on Sep. 17, 2008.

See The Eclipse Foundation (Sep. 09, 2008). Membership Logos [Board minutes]; *See* also The Eclipse Foundation (Sep. 17, 2008). The Members of Eclipse, Minutes of the Eclipse Board Meeting, Sep. 17, 2008;

Board of directors

Press release

Eclipse Names Founding Board of Directors

- Board Expands to 12 Members as "Committer" and "Add-In Provider" Representatives are Elected

ASHEVILLE, NC-March 3, 2004-Four new members of the Eclipse Board of Directors, representing the organization's Open Source project community and commercial supporters, were announced today. Newly elected, Todd Williams (Genuitec, LLC), John Wiegand (Eclipse Project Lead, IBM); Rich Main (SAS), and Bjorn Freeman-Benson (University of Washington) join the board, which already includes Ronald Ingman (Ericsson), Michael J. Rank (Hewlett Packard), Dave Thomson (IBM), Jonathan Khazam (Intel), Jim Ready (MontaVista Software), Dan Dodge (QNX Software Systems Ltd.), Michael Bechauf (SAP AG) and Boris Kapitanski (Serena Software). This establishes the founding twelve-member Eclipse Board of Directors, responsible for approving Eclipse strategy, development roadmaps and release plans, and establishing organization policy.

"Genuitec is very pleased to be able to continue our strategic involvement with the Eclipse Foundation," said Todd Williams, vice president of technology for Genuitec. Through our membership in the Board of Directors, we will work to expand the Eclipse ecosystem in its current market segments (integrated development environment users, add-in providers and rich client platform adopters) while fostering its adoption in additional market segments."

Bjorn Freeman-Benson said, "I'm honored to have been elected by the committers as one of their two representatives on the Board. I look forward to working with the rest of the Board to expand the Eclipse community by encouraging low-overhead ways for people to contribute."

"The rapid and broad adoption of Eclipse technology is proof to a very strong market demand for open standards and common platforms worldwide," said Jim Ready, chief executive officer and president, MontaVista Software. "I am honored to serve on the Eclipse Board of Directors. MontaVista Software has proudly demonstrated our commitment to Eclipse, by adopting it as a strategic development framework, through its founding membership in Eclipse, and with ongoing contributions to Eclipse technology. We continue to look forward to being part of this important initiative."

"I look forward to serving on the Eclipse Foundation Board of Directors," said Rich Main, director of Java development environments at SAS. "SAS is committed to working with the Eclipse community to strengthen the growth and adoption of Eclipse. This will be a critical year for the Eclipse Foundation as we strive to move from an organization that is focused primarily on the development community to one that is an increasingly attractive option for end-user consumers, as well. We intend to work in partnership with the entire Eclipse community to make this transition as smooth and successful as possible."

Originally a consortium that formed when IBM released the Eclipse Platform into Open Source, Eclipse has now been incorporated as an independent, not-for-profit organization. Tangible support from 58 member companies enables Eclipse to host and nurture 19 Open Source projects that originated in commercial and academic contexts. In just 2 years, this community has professionally delivered the most broadly deployed and fastest growing universal tools integration platform in history. All technology and source code provided within this fast-growing ecosystem remains openly available and royalty-free.

Worldwide, Eclipse membership represents individual contributors and large and small companies with interests ranging from embedded computing and Linux through traditional enterprise class information technology.

"With constitution of our founding Board of Directors, Eclipse is now traveling on the industry-neutral path that is critical for integration technology," said Skip McGaughey, spokesperson for Eclipse. "This launches the most significant step forward in the evolution of Eclipse as an organization. For the Open Source development community we're establishing a support base that will strengthen the projects and expand a powerful reusable architecture. For commercial and academic users of Eclipse technology, this means a more open management process and improved choices in a stable and reliable environment."

About Eclipse

A vibrant open eco-system has formed around royalty-free Eclipse technology, a universal platform for tools integration. Eclipse based tools give developers freedom of choice in a multi-language, multi-platform, multi-vendor environment. Eclipse provides an award winning plug-in based framework that makes it easier to create, integrate and utilize software tools, saving time and money. By collaborating and exploiting core integration technology, tool producers can leverage platform reuse and concentrate on core competencies to create new development technology. The Eclipse Platform is written in the Java language and comes with extensive plug-in construction toolkits and examples. It has already been deployed on a range of development workstations including Linux, QNX, Mac OS X and Windows-based systems. Release distribution downloads, a full description of the Eclipse community and white papers documenting the design and use of the Eclipse Platform are available at http://www.eclipse.org.

Media contact

Barbara Stewart
Patterson and Associates
480-488-6909
barbara@patterson.com

Brand or product names are registered trademarks or trademarks of their respective holders. Java and all Java-based trademarks are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

Abridged Minutes of the Board Meeting of the Eclipse Foundation, Inc.
December 8, 2004

Attendees

Michael Bechauf (SAP)
Mark Cogins (Actuate)
Bjorn Freeman-Benson (Committer representative)
Boris Kapitanski (Serena)
Rich Main (Add-In Provider representative)
Joel Clinkenbeard representing Jonathan Khazam (Intel)
Dave Thomson (IBM)
John Wiegand (Committer representative)
Todd E. Williams (Add-In Provider representative)
Mike Milinkovich (Executive Director)

Not in attendance

Dan Dodge (QNX)
Par Emanuelsson (Ericsson)
Michael Rank (HP)
Jim Ready (MontaVista)

Location: American Airlines Admiral Club at O'Hare Airport.

Board Items:

A number of resolutions were reviewed and approved by the Board. These resolutions included:

- The minutes of the September 30th meeting and the November 17th phone call were approved.
- The Board replaced the "Legal Advisory Committee" with a new "IP Advisory Committee" chaired by Dave Thomson of IBM and including Rich Main (SAS) and Michael Bechauf (SAP).
- Mark Coggins (Actuate) will replace Dave Thomson (IBM) on the Finance Committee.
- Eclipse will issue trademarks and related usage guidelines for Eclipse Foundation Member, Built on Eclipse, Eclipse Ready.
- The CPL to EPL conversion process continues. But not unexpectedly the Foundation has been unable to locate each and every contributor to the projects over the past three years. In order to ensure the intellectual property of Eclipse is of the highest quality, the EMO will require the PMCs to re-implement any functionality which the EMO is unable to have explicitly re-contributed under the Eclipse Public License.

Eclipse Working Groups

There have been a number of requests to the EMO to create ad hoc working groups of the members. The Board authorized the EMO to support the creation of Eclipse Working Groups under the following guidelines:

- Any member can request the creation of a working group
- The EMO will facilitate the request where and as possible (e.g. we may have resource constraints)

- Upon the request of the initiating Member(s) the EMO will host the phone calls or other meetings
- Each WG must have a defined scope and purpose
- All meetings must be documented with abridged minutes and minutes are to be made available to any interested Member
- The membership of any WG must be open to all Members and their employees, etc.
- WG's are not empowered to act for the Foundation or to speak on its behalf without the permission of the EMO
- WG's must comply with the Foundation's Bylaws and policies (including IP and anti-trust)
- WG's can refer to themselves as "Eclipse Working Group for XXX" or "XXX Working Group"

Committer Community Issues and Update

Bjorn Freeman-Benson and John Wiegand raised a number of issues of interest to the Committer community at Eclipse.

- Although the infrastructure is improving, the transparency of the EMO plans is not sufficient. Although there is recognition that the EMO is making improvements in various processes (e.g. creating a project, provisioning a committer), the EMO has not provided status reports or progress reports, and the documents are not available in the newgroups and mailing lists.
- It is not sufficient for the EMO to just get these processes in place. How it gets done is just as important.
- Bjorn Freeman-Benson requested input from the committer community and has created a prioritized list of committer requests for improvement in the Eclipse infrastructure. This list can be found at http://www.eclipse.org/webtools/committers/list.html.

Committer Community
Community Infrastructure Requests

- We asked the community for a prioritized list of requests and we received responses from more than 1/3rd of the committers. The list and the results can be found at http://www.eclipse.org/webtools/committers/list.html.

- Number one on the list, by a large margin, was self management of infrastructure. Infrastructure administration channels are defined by the Eclipse development process. The committers and PMCs would like to automate these processes to streamline the interactions (and facilitate record keeping):
  - Self administration of project-specific bugzilla features including adding and removing components, changing component owners, deciding whether to use NEW or UNCONFIRMED, etc.
  - Self administration of mailing lists including creating and removing lists, enable moderation, etc.
  - Self administration of project-specific CVS including creating top-level directories.
  - Self management of project website including the removal of frames, the use of server-side dynamic content (PHPs/JSPs), wikis, and hierarchical blogs for promoting news.

S-1/A 1 d287954ds1a.htm AMENDMENT NO. 8 TO REGISTRATION STATEMENT ON FORM S-1

As filed with the Securities and Exchange Commission on May 16, 2012

Registration No. 333-179287

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 8 to
Form S-1
REGISTRATION STATEMENT

Under

The Securities Act of 1933

Facebook, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	7370	20-1665019
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(IRS Employer Identification No.)

Facebook, Inc.
1601 Willow Road
Menlo Park, California 94025
(650) 308-7300

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

David A. Ebersman
Chief Financial Officer
Facebook, Inc.
1601 Willow Road
Menlo Park, California 94025
(650) 308-7300

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all communications to:

Gordon K. Davidson, Esq.	Theodore W. Ullyot, Esq.	William H. Hinman, Jr., Esq.
Jeffrey R. Vetter, Esq.	David W. Kling, Esq.	Daniel N. Webb, Esq.
James D. Evans, Esq.	Michael L. Johnson, Esq.	Simpson Thacher & Bartlett LLP
Fenwick & West LLP	Facebook, Inc.	2550 Hanover Street
801 California Street	1601 Willow Road	Palo Alto, California 94304
Mountain View, California 94041	Menlo Park, California 94025	(650) 251-5000
(650) 988-8500	(650) 308-7300	

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box: ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐   Accelerated filer ☐

Non-accelerated filer ☒   (Do not check if a smaller reporting company)   Smaller reporting company ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee

Class A Common Stock, $0.000006 par value	388,027,654	$38.00	$14,745,050,852	$1,556,379(3)
Class A Common Stock, $0.000006 par value	96,391,003	$38.00	$ 3,662,858,114	$ 419,764(4)
Total	484,418,657	$38.00	$18,407,908,966	$1,976,143(3)(4)

(1) Estimated pursuant to Rule 457(a) under the Securities Act of 1933, as amended. Includes additional shares that the underwriters have the option to purchase to cover over-allotments, if any.

(2) Estimated solely for the purpose of calculating the registration fee.

(3) The Registrant previously paid $1,556,379 of the total registration fee in connection with prior filings of this Registration Statement.

(4) In accordance with Rule 457(a) an additional registration fee of $419,764 is being paid in connection with this amendment to the Registration Statement to register an additional 96,391,003 shares. The additional registration fee has been computed based on the proposed maximum offering price of the additional shares included in this amendment to the Registration Statement.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and neither we nor the selling stockholders are soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS (Subject to Completion)
Issued May 16, 2012

<h1 style="text-align:center">421,233,615 Shares</h1>

CLASS A COMMON STOCK

Facebook, Inc. is offering 180,000,000 shares of its Class A common stock and the selling stockholders are offering 241,233,615 shares of Class A common stock. We will not receive any proceeds from the sale of shares by the selling stockholders. This is our initial public offering and no public market currently exists for our shares of Class A common stock. We anticipate that the initial public offering price will be between $34.00 and $38.00 per share.

We have two classes of common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except voting and conversion rights. Each share of Class A common stock is entitled to one vote. Each share of Class B common stock is entitled to ten votes and is convertible at any time into one share of Class A common stock. The holders of our outstanding shares of Class B common stock will hold approximately 95.9% of the voting power of our outstanding capital stock following this offering, and our founder, Chairman, and CEO, Mark Zuckerberg, will hold or have the ability to control approximately 55.8% of the voting power of our outstanding capital stock following this offering.

Our Class A common stock has been approved for listing on the NASDAQ Global Select Market under the symbol "FB."

We are a "controlled company" under the corporate governance rules for NASDAQ-listed companies, and our board of directors has determined not to have an independent nominating function and instead to have the full board of directors be directly responsible for nominating members of our board.

Investing in our Class A common stock involves risks. See "Risk Factors" beginning on page 12.

PRICE $ A SHARE

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Facebook	Proceeds to Selling Stockholders

Per share	$	$	$	$
Total	$	$	$	$

We and the selling stockholders have granted the underwriters the right to purchase up to an additional 63,185,042 shares of Class A common stock to cover over-allotments.

The Securities and Exchange Commission and state regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of Class A common stock to purchasers on   , 2012.

MORGAN STANLEY   **J.P. MORGAN**   **GOLDMAN, SACHS & CO.**

BofA MERRILL LYNCH   BARCLAYS   ALLEN & COMPANY LLC

CITIGROUP   CREDIT SUISSE   DEUTSCHE BANK SECURITIES

RBC CAPITAL MARKETS   WELLS FARGO SECURITIES

, 2012

Table of Contents

http://www.eclipse.org/webtools/community/education/web/t320/Implementing_a_Simple_Web_Service.pdf

http://www.ibm.com/developerworks/webservices/tutorials/ws-eclipse-javase1/ws-eclipse-javase1.html

Building SOAP Web Service in Java Using Eclipse
https://www.youtube.com/watch?v=Vt97IU7xNJs

Ecosystem OData – the best way to REST, showing SAP, IBM applications using OData-bases REST services.

Exhibit 5 (Cont'd)

IBM and SOAP:

http://www.eclipse.org/webtools/iprelated/ip_log_2007.html

Ecosystem

Producers

Consumers

Live Services

Sample Code

Tutorials

Producers

OData producers are services that expose their data using the OData protocol. Below we have collected a list of key OData producers, which will continue to grow along with the OData ecosystem. You can use OData SDK (http://www.odata.org/libraries) to build your own OData producers. If you create or know of an OData producer not listed be sure to let us know via our new contribution page (http://www.odata.org/contribution). Telerik OpenAccess ORM (http://www.telerik.com/products/orm.aspx)In mid-2010 Telerik released a LINQ implementation that is simple to use and produces domain models very fast. Built on top of the enterprise-grade Telerik OpenAccess ORM the LINQ implementation allows you to easily build an OData feed via a few easy steps by using the OpenAccess Visual Designer and the Data Services Wizard. For more info, visit www.telerik.com/odata (http://www.telerik.com/odata)

| 1C: Enterprise built-in OData service (http://1c-dn.com/1c_enterprise/) | 1C:Enterprise, leading platform for business automnation in Russia and CIS (more than 1M installations and 300k developers) now provides an OData service for access its data. |

Acumatica (http://www.acumatica.com)	Acumatica is a cloud- and browser-based enterprise resource planning (ERP) solution. Business data and lists created in generic inquiries can be exposed as OData endpoints.
BrightstarDB (http://www.brightstardb.com/)	A SQL Server Integration Services script for importing OData into SQL Server.
Cloud Drivers (http://www.cdata.com/cloud/)	The CData Cloud Drivers create bidirectional OData entrypoints to SaaS & on-premise data sources. Supports the creation of OData feeds for a variety of popular data sources, including: QuickBooks, Salesforce, SharePoint, NetSuite CRM & ERP, Dynamics CRM, Twitter, MySQL, Oracle DB, SQLite, Excel Files, and more.
Databoom (https://databoom.space)	Databoom is a BaaS (Backend as a Service) that uses OData and SPARQL for graph database access.

GeoREST (http://code.google.com/p/georest/)	GeoREST is a web-centric framework for distributing geospatial data. It allows RESTful feature-based access to spatial data sources, including full editing capabilities, through a MapGuide server or directly via FDO.
Gizur OData server (https://github.com/gizur/odataserver/)	Open source OData server that exposes an OData API from any MySQL database. The server also extends the OData API with functions for managing users and privileges. In addition there is support for BLOBs. The server is currently in beta status.
IBM DB2 & Infomix (http://www.ibm.com/developerworks/data/library/techarticle/dm-1205odata/index.html)	DB2 & Informix can expose OData via Microsoft Visual Studio.
IBM WebSphere eXtreme Scale (http://www.ibm.com/developerworks/webservices/library/standards-odata/)	WebSphere eXtreme Scale can expose OData enabling access from a variety of clients.
JBoss Data Virtualization (http://www.redhat.com/en/technologies/jboss-middleware/data-virtualization)	JBoss Data Virtualization allows you to import OData services and converts them to relational objects (tables and procedures).

Lightswitch (http://msdn.com/lightswitch)	Microsoft Visual Studio LightSwitch is a development environment designed to simplify and shorten the development of data-driven businesses applications. Regardless of your development skills—whether you're a beginner or an experienced developer—LightSwitch enables you to quickly create professional-quality business applications and data services.
Microsoft Dynamics CRM 2011 (http://msdn.microsoft.com/en-us/library/gg334279.aspx)	The latest version allows you to query using OData
Microsoft Dynamics NAV 2013 (http://www.microsoft.com/dynamics/nav)	Business data in Dynamics NAV 2013 ERP solutions can be accessed as OData feeds. You can create "Self-service BI" solutions using PowerPivot for Excel to consume these feeds.
OData Server (https://rwad-tech.com/en)	Automatically generated REST server that exposes an OData above existed Microsoft SQL Server or MySQL database. The server also has access management features, such as users, roles and priviliges management and ready to use UI project to perform these tasks.

Priority Software (http://www.priority-software.com/)	Priority is an established ERP software available in the cloud or on premise and used by 7,000 customers worldwide. Priority offers a full business management package that is rich in functionality, fully integrative, simple to implement and easy to maintain. All user screens and application data in Priority are exposed as OData URLs according to the OData API specification.
Progress DataDirect Cloud (https://www.progress.com/products/datadirect-cloud)	Progress DataDirect Cloud is a data connectivity service that exposes SaaS application data (e.g. Salesforce.com), on-premise relational data (e.g. Oracle), Big Data (e.g. Hadoop), and NewSQL/NoSQL data (e.g. MongoDB) as an OData feed.
RemObjects Data Abstract	full multi-tier database application framework that supports publishing data for insert, select, update and delete via OData. Server libraries for .NET, Mono (Linux & OS X) and Delphi

SAP NetWeaver Gateway (http://www.sdn.sap.com/irj/sdn/gateway)	SAP NetWeaver Gateway (formerly called "Project Gateway") is a technology that provides a simple way to connect devices, environments and platforms to SAP software based on market standards. It offers connectivity to SAP applications using any programming language or model without the need for SAP knowledge by leveraging OData-based REST services.
SDL Tridion 2011 (http://www.sdl.com/en/wcm/products/sdltridion/)	SDL Tridion is a **Web Content Management** solution, the Content Services component now supports OData
SQL Server 2012 (http://www.microsoft.com/sqlserver/2008/en/us/reporting.aspx)	Microsoft SQL Server 2012 Reporting Services can expose data from reports as OData

Savigent Software Catalyst xM (http://savigent.com/)	The Open Data Protocol provides easy access to Catalyst xM™ workflow execution history from a variety of off-the-shelf data mining and business intelligence tools and is an ideal choice to expose manufacturing intelligence from Catalyst xM™ to browser-based and mobile clients. The Catalyst xM Server Manager provides a Data Source Builder which allows users to configure virtual tables that are created dynamically to provide data access via the Open Data Protocol.
ScanJour WorkZone Content Server (http://scanjour.com)	ScanJour WorkZone is a Case and Document Management System which implements OData API for full manipulation of all data, cases and documents.
SharePoint (http://office.microsoft.com/en-us/sharepoint/collaboration-software-sharepoint-FX103479517.aspx)	Any data you've got on SharePoint as of version 2010 can be manipulated via the OData protocol, which makes the SharePoint developer API considerably simpler.

Sitefinity CMS by Telerik (http://www.sitefinity.com/)	The Sitefinity CMS by Telerik is ready to host OData services. With the powerful API, any developer can expose any information from the CMS through a custom OData service. For more info, visit
Team Foundation Server (http://www.microsoft.com/en-us/download/details.aspx?id=36230)	An extension to Team Foundation Server Server 2010 and 2012 that allows you to browse TFS data using the OData protocol
Teiid (http://teiid.jboss.org/)	Teiid allows you to connect to and consume sources (odata services, relational data, web services, file, etc.) and deploy a single source that is available as an OData service out-of-the-box.
Telerik TeamPulse (http://www.telerik.com/team-productivity-tools.aspx)	The Telerik TeamPulse Silverlight client interacts with the database using a WCF data service, and more specifically by using the Open Data Protocol which is a popular way to expose information from a variety of sources including, but not limited to, relational databases, file systems, content management systems and traditional Web sites.

Webnodes CMS (http://www.webnodes.com/odata)	Webnodes CMS is an enterprise quality ASP.NET CMS with a unique semantic content technology. Webnodes recently added OData support. Read more about it here.
Windows Azure Table Storage (http://msdn.microsoft.com/en-us/library/azure/dd179423.aspx)	Windows Azure Table provides scalable, available, and durable structured storage in the form of tables exposed as OData endpoints.
tm2o – OData provider for Topic Maps (http://code.google.com/p/tm2o/)	TM2O – which is a generic OData provider for Topic Maps. Internally tm2o leverages OData4J

Contribute to OData Ecosystem

Want to add/update information of the OData ecosystem? You can edit and submit changes to this page on its Github repository (https://github.com/ODataOrg/odataorg.github.io).

© 2015 OData – The Protocol for REST APIs

T320 E-business technologies: foundations and practice

Block 3 Part 1 Activity 5: Implementing a simple web service

Prepared for the course team by Neil Simpkins

Introduction

In this activity you will see how to use Eclipse to create and test a very simple web service. Before I look at the service itself, however, I shall provide some background information about the different approaches that can be used to develop a web service.

WEB 00711 2   1.1

Monitoring web service messages

At the bottom of the Eclipse window, you will see that both the request put to the service and the response from the service are displayed in the TCP/IP Monitor. Eclipse displays these messages all on one line, but here is the request laid out more usefully:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soapenv:Body>
        <helloName xmlns="http://t320.open.ac.uk">
            <name>Nick</name>
        </helloName>
    </soapenv:Body>
</soapenv:Envelope>
```

You can see that this is a SOAP envelope with a fairly simple body element. The application's own namespace is constructed using the Java package of the Java class. If a proper unique Java package name was used then this is acceptable as the URI.

The Java method name 'helloName' has been used as a SOAP tag enclosing another tag 'name', which is the name of the variable argument to the 'helloName' method.

These conventions, of course, are restricted to uses of Java but other programming languages can use similar practices.

The SOAP response is very similar, with only a slightly different body element:

```
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soapenv:Body>
        <helloNameResponse xmlns="http://t320.open.ac.uk">
            <helloNameReturn>Hello there Nick</helloNameReturn>
        </helloNameResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

The web service has used a simple convention of appending 'Response' to the request tag 'helloName' and has appended 'Return' to this to label the method's returned result.

Service descriptions

Web service endpoint

You have now completed the main steps for creating the simple 'Hello' web service. Before you shut down Eclipse, I want to take a quick look at some of the items that have been generated around the 'helloName' method you have invoked.

Earlier I noted that the Methods pane in Eclipse lists three methods other than the 'helloName' method that you created (see Figure 21). The endpoint of the web service is the URL where the service resides and can be accessed. If you click on 'getEndpoint()' and then on the 'Invoke' button, the URL will be displayed in the Result pane as http://localhost:8180/Hello/services/Hello.
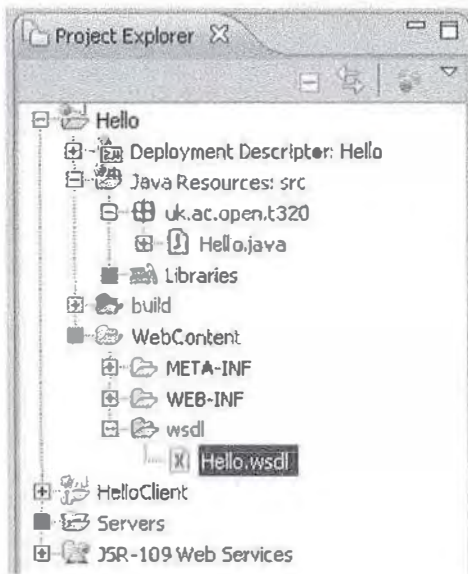
Figure 28 Location of 'Hello.wsdl' file in the 'Hello' project

Summary

In this activity you have been taken through the steps required to create, deploy (to an application server on your local machine) and test a simple web service. This is a significant step in understanding at first hand how SOA actually works. In subsequent practical activities you will deploy your web service to a server on the Internet, publish its description to a UDDI registry, test its level of interoperability and be able to access and use it on the Internet.

Appendix 1: WSDL generated for 'Hello' web service

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions
    targetNamespace="http://t320.open.ac.uk"
    xmlns:apachesoap="http://xml.apache.org/xml-soap"
    xmlns:impl="http://t320.open.ac.uk"
    xmlns:intf="http://t320.open.ac.uk"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
    xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
<!--WSDL created by Apache Axis version: 1.4
Built on Apr 22, 2006 (06:55:48 PDT)-->
    <wsdl:types>
        <schema
            elementFormDefault="qualified"
            targetNamespace="http://t320.open.ac.uk"
            xmlns="http://www.w3.org/2001/XMLSchema">
            <element name="helloName">
                <complexType>
                    <sequence>
                        <element name="name" type="xsd:string" />
                    </sequence>
                </complexType>
```

```
                </element>
                <element name="helloNameResponse">
                    <complexType>
                        <sequence>
                            <element name="helloNameReturn" type="xsd:string" />
                        </sequence>
                    </complexType>
                </element>
            </schema>
        </wsdl:types>
        <wsdl:message name="helloNameResponse">
            <wsdl:part element="impl:helloNameResponse" name="parameters" />
        </wsdl:message>
        <wsdl:message name="helloNameRequest">
            <wsdl:part element="impl:helloName" name="parameters" />
        </wsdl:message>
        <wsdl:portType name="Hello">
            <wsdl:operation name="helloName">
                <wsdl:input message="impl:helloNameRequest" name="helloNameRequest" />
                <wsdl:output message="impl:helloNameResponse" name="helloNameResponse" />
            </wsdl:operation>
        </wsdl:portType>
        <wsdl:binding name="HelloSoapBinding" type="impl:Hello">
            <wsdlsoap:binding
                style="document" transport="http://schemas.xmlsoap.org/soap/http" />
            <wsdl:operation name="helloName">
                <wsdlsoap:operation soapAction="" />
                <wsdl:input name="helloNameRequest">
                    <wsdlsoap:body use="literal" />
                </wsdl:input>
                <wsdl:output name="helloNameResponse">
                    <wsdlsoap:body use="literal" />
                </wsdl:output>
            </wsdl:operation>
        </wsdl:binding>
        <wsdl:service name="HelloService">
            <wsdl:port binding="impl:HelloSoapBinding" name="Hello">
                <wsdlsoap:address
                    location="http://localhost:8180/Hello/services/Hello" />
            </wsdl:port>
        </wsdl:service>
    </wsdl:definitions>
```

SECTION 2: Developing Mobile Apps

APP ENHANCEMENTS WITH SDKS

Third-party Software Development Kits (SDKs) make a good app great by enabling features and functions that are difficult to develop internally. The following SDKs have proven track records and greatly improve the user experience.

Augmented reality: Metaio and Vuforia are frameworks that allow an app to present contextual information, augmenting what the user can see using either location, image. or pattern detection.

Immersion: Developers can add an immersive experience by adding a panorama or 3D element to the app. Apps developed with kroano have a 360-degrees panorama, coupled with live video feeds (from onsite cameras) that gives the user a real-time overview of a given field of view and the ability to interact with it dynamically. Unity3d immerses users in a full 3D environment and lets them interact with different points of view.

Communication: Developers can enhance the communication experience with SDKs such as OpenTok, which enables a live video chat functionality within the app. Bump supports data exchanges between phones across platforms.

These SDKs, and others, provide much of the consumer-grade functionality and rich user experience that end-users want in their apps for both work or personal use.

ADDING VALUE WITH DATA INTEGRATION

Mobile apps become more valuable when they access data stored in back-end systems. Proprietary interfaces and XML-based Web services expose this data for the apps, but neither is very mobile friendly.

When planning data integration, you must determine what data should be exposed to clients. Finding the right balance is tricky. Exposing more data than is needed degrades the UI performance and battery; when not enough data is available. the app is less useful to the user.

A host of interfaces. such as Web services, JDBS, REST. and OData, are available to connect the back-end system and mobile app. As mobile app development matures. OData is expected to become the leading protocol for connecting apps to the data in back-end systems.

THE CASE FOR USING ODATA FOR DATA INTEGRATION

Web Services architectures have evolved rapidly in the recent past. Early web Service Oriented Architectures (SOA) were based on SOAP. More recently, RESTful web services gained acceptance as a lighter-weight approach: REST has the reputation of being more easily consumed by mobile and dynamic web applications. Today, OData is an emerging web services standard. It was originally proposed by Microsoft and has been embraced by industry leaders, including SAP.

OData defines an access layer atop a REST protocol and adds the following key capabilities to conventional REST services:

- Defines a formal query language to dynamically select the best data set for a given task
- Supplies integrated metadata descriptions of the data structures it exposes
- Supports dynamic combining of related objects in a single result set
- Supports paging for larger result sets
- Allows for server-side searching of data content without constructing complex queries
- Returns results in the developer's choice of XML or JSON data formats
- Works with well-known mobile protocols including REST, HTTP, and HTTP-based security/authentication protocols

The key strengths of OData lie in its dynamic nature. Data exposed via OData can be optimized directly by the application developer without requiring back-end services modifications. This saves on development time and cost by reducing the back-and-forth interactions between application and server development teams. An OData services approach also cuts testing costs by reducing the need for hand-crafted server code.

Visit OData.org for the latest news and updates on OData.

http://www.sap.com/bin/sapcom/en_us/downloadasset.2014-06-jun-03-17.app-development-in-a-mobile-world-a-cio-handbook-pdf.bypassReg.html

Eclipse Project Release Notes

Release 2.0.1
August 26, 2002

This software is OSI Certified Open Source Software.
OSI Certified is a certification mark of the Open Source Initiative.

1. Target Operating Environments

Most of the Eclipse SDK is "pure" Java™ code and has no direct dependence on the underlying operating system. The chief dependence is therefore on the Java 2 Platform itself. The 2.0 release of the Eclipse Project is written and compiled against version 1.3 of the Java 2 Platform APIs, and targeted to run on either version 1.3 or 1.4 of the Java 2 Runtime Environment, Standard Edition.

Eclipse SDK 2.0 has been tested and validated on the following Java 2 Platform implementations:

Operating system	Processor architecture	Java 2 Platforms
Microsoft® Windows®	Intel x86	Sun Java 2 SDK, Standard Edition, version 1.3.1 for Microsoft Windows
		IBM Developer Kit for Windows, Java 2 Technology Edition, version 1.3.0
		Sun Java 2 SDK, Standard Edition, version 1.4 for Microsoft Windows
Linux	Intel x86	Sun Java 2 SDK, Standard Edition, version 1.3.1 for Linux x86
		IBM Developer Kit for Linux, Java 2 Technology Edition, version 1.3.0
		Sun Java 2 SDK, Standard Edition, version 1.4 for Linux x86
Sun Solaris	SPARC	Sun Java 2 SDK, Standard Edition, version 1.3.1 for Solaris SPARC
		Sun Java 2 SDK, Standard Edition, version 1.4 for Solaris SPARC
HP HP-UX	hp9000 PA-RISC	HP-UX SDK for the Java 2 platform, version 1.3.1 for hp9000 PA-RISC
IBM® AIX	PowerPC	IBM Developer Kit for AIX, Java 2 Technology Edition, version 1.3.0

The following table describes the combinations of operating system and Java 2 Platform used when testing the Eclipse SDK configurations. The status column indicates the level of testing: "Primary" means a full tested configuration; "Secondary" means a configuration which is only lightly tested; "Untested" means a configuration that has received no testing, but which should work. Note that the Linux GTK configuration is considered early access for the 2.0 release; it has been tested, but is not product quality in this release.

Window system	Java 2 Platform (see above table)	Operating Environment	Testing Status
Win32	Windows on Intel x86	Windows 2000	Primary
		Windows XP	Primary
		Windows ME	Secondary
		Windows 98SE	Secondary
		Windows NT	Secondary
Motif	Linux on Intel x86	RedHat Linux 7.2 x86	Primary
		SuSE Linux 7.3 x86	Primary
		Other Linux; kernel version 2.4.7, and XFree86 version 4.1.0	Untested
	Solaris on SPARC	Sun Solaris 8 SPARC	Primary
	HP-UX on hp9000 PA-RISC	HP-UX 11i hp9000	Primary
	AIX on PowerPC	IBM AIX 5.1 on PowerPC	Primary
GTK	Linux on Intel x86	RedHat Linux 7.2 x86 GTK 2.0	*Early access*
		SuSE Linux 7.3 x86 GTK 2.0	*Early access*
		Other Linux; kernel version 2.4.7, and GTK 2.0	*Early access; untested*

Internationalization

The Eclipse Platform is designed as the basis for internationalized products. The user interface elements provided by the Eclipse SDK components, including dialogs and error messages, are externalized. The English strings are provided as the default resource bundles.

Latin-1 locales are supported by the Eclipse SDK on all of the above operating environments; DBCS and BIDI locales are supported by the Eclipse SDK only on Windows operating environments.

The Eclipse SDK supports GB 18030, the new Chinese code page standard, on Windows 2000 and XP only. Note that GB 18030 also requires locale and character encoding support from the Java 2 Runtime Environment; this support is standard in version 1.4, and also available in some 1.3 JREs.

German and Japanese locales have been tested.

BIDI support

The Eclipse SDK 2.0 is a development environment targeted at technical professionals - not an end user

application. However, the Eclipse SDK 2.0 tools will permit technical professionals who are working in English to build Hebrew/Arabic end user Java programs which are themselves not based on the Eclipse SDK. The BIDI support in the Eclipse SDK 2.0 allows a Java programmer to work with BIDI strings, code comments, etc. but the Eclipse SDK itself is not designed to be localized for BIDI locales and its widget orientation can not be changed.

IMPORTANT: The above BIDI support is available only on Windows platforms.

2. Compatibility with Previous Release

The Eclipse SDK 2.0 is upwards compatible with the Eclipse SDK 1.0 to the greatest extent possible. We have made exceptions in areas where slavishly maintaining compatibility would not be in the best interests of the Platform or its clients. These exceptions are noted below, so that clients can assess the impact of these changes on their plug-ins and products.

API Contract Compatibility: The Eclipse SDK 2.0 is upwards contract-compatible with the Eclipse SDK 1.0 unless noted. This means that programs in full compliance with contracts specified in the Eclipse SDK 1.0 APIs will automatically be in full compliance with the Eclipse SDK 2.0 APIs. (API is construed broadly to include such things as plug-in extension points.) Downward contract compatibility is not supported. There is no guarantee that compliance with the Eclipse SDK 2.0 APIs would ensure compliance with the Eclipse SDK 1.0 APIs.

Binary (plug-in) Compatibility: The Eclipse SDK 2.0 is upwards binary-compatible with the Eclipse SDK 1.0 unless noted. This means that plug-ins built for the Eclipse SDK 1.0 will continue to work correctly in the Eclipse SDK 2.0 without change. Downward plug-in compatibility is not supported. Plug-ins for the Eclipse SDK 2.0 are unlikely to be usable in the Eclipse SDK 1.0. Plug-ins with hard-coded references in their plug-in manifest file to 1.0 versions of prerequisite Eclipse Project plug-ins will not work in 2.0 as the plug-in version numbers will be incompatible.

Source Compatibility: The Eclipse SDK 2.0 is upwards source-compatible with the Eclipse SDK 1.0 unless noted. This means that source files written to use the Eclipse SDK 1.0 APIs can be successfully compiled and run against the Eclipse SDK 2.0 APIs. Since source incompatibilities are easy to deal with, maintaining source compatibility is considered much less important than maintaining contract and binary compatibility. Downward source compatibility is not supported. If source files use new Eclipse SDK APIs, they will not be usable with an earlier version of the Eclipse SDK.

Workspace Compatibility: Eclipse SDK 2.0 is upwards workspace-compatible with Eclipse SDK 1.0 unless noted. This means that workspaces and projects created with Eclipse SDK 1.0 can be successfully opened by Eclipse SDK 2.0 and upgraded to a 2.0 workspace. Individual plug-ins developed for Eclipse SDK 1.0 should provide similar upwards compatibility for their workspace metadata; plug-in developers are responsible for ensuring that their plug-ins recognize 1.0 metadata and process it appropriately. Note: the interim Eclipse SDK 1.0 plug-ins (ones with provisional APIs) are unlikely to automatically upgrade their metadata to 2.0. User interface session state may be discarded when a workspace is upgraded. Downward workspace compatibility is not supported. A workspace created (or opened) by Eclipse SDK 2.0 will be unusable with an earlier version of Eclipse SDK.

Note on non-compliant usage: All non-API methods and classes, and certainly everything in a package with "internal" in its name, are considered implementation details which may vary between operating environment and are subject to change without notice. Client plug-ins that directly depend on anything other than what is specified in the Eclipse SDK API are inherently unsupportable and receive no

guarantees about compatibility within a single release much less with an earlier release. Refer to *How to Use the Eclipse API* for information about how to write compliant plug-ins.

Platform - UI

The public client API has been kept stable with the exception of `ITextViewer` interface which changed in an incompatible way:

- Added method `ITextViewer.invalidateTextPresentation()`
- Added method `ITextViewer.setDefaultPrefixes(String[] defaultPrefixes, String contentType)`
- Removed method `ITextViewer.setDefaultPrefix(String defaultPrefix, String contentType)`

Platform - Debug

The debug API has been completely reworked for 2.0. The new APIs are not compatible with the 1.0 APIs, which were all considered "interim".

The high level API differences between the new and old debug platforms are:

- Breakpoints - In 1.0, breakpoints were implemented as markers. In 2.0, breakpoints are implemented as objects (interface `IBreakpoint`), with an associated marker used for presentation in editors, and persistence of attributes. There is a new extension point for registering types of breakpoints: `org.eclipse.debug.core.breakpoints`.
- Launch Configurations - In 1.0, an `ILauncher` was used to launch applications. In 2.0, the concept of a "launcher" has been replaced with a launch configuration. There are new extension points to register launch configuration types, and for comparing launch configurations (`org.eclipse.debug.core.launchConfigurationTypes`, `org.eclipse.debug.core.launchConfigurationComparators`). The associated interfaces are `ILaunchConfigurationType`, `ILaunchConfiguration`, `ILaunchConfigurationWorkingCopy`, and `ILaunchConfigurationDelegate`.
- Launch Configuration Tab Groups - In 1.0, wizards were registered with launchers for launch related UI. In 2.0, the launch configuration dialog and launch shortcuts replace launch wizards. The associated extension points are `org.eclipse.debug.ui.launchConfigurationTabGroups`, `org.eclipse.debug.ui.launchConfigurationTypeImages`, and `org.eclipse.debug.ui.launchShortcuts`. The associated interfaces are `ILaunchConfigurationTabGroup`, `ILaunchConfigurationTab`, and `ILaunchShortcut`.
- Debug model API changes - Interfaces defining the debug model elements have been modified, and new debug elements have been added to support procedural debug and expression management.

As well, the Java debug model API has been enhanced and changed to reflect changes in the debug platform.

Platform - Core

Eclipse 1.0 Core Target Management was provisional. For 2.0, Core Target Management has been withdrawn and replaced by team target management providers. These new target management facilities are early access, and are contained in the Eclipse FTP and WebDAV Support feature (separately installable).

Platform - Help

Help APIs and extension points were marked as interim in Eclipse 1.0. Based on the initial feedback, the Help APIs and extension points have changed significantly in Eclipse 2.0 and are not compatible with those in Eclipse 1.0.

Platform - Scripting

Eclipse 1.0 Scripting support was provisional and incomplete. For 2.0, the Scripting component has been withdrawn completely from the Eclipse Platform.

Platform - Install/Update

The Install/Update component API has been completely reworked for 2.0. The 1.0 notion of component has been replaced in 2.0 by the notion of a feature. The new APIs are not compatible with the 1.0 APIs, which were all considered "interim".

Platform - Team

Workspace compatibility from VCM CVS 1.0 to Team CVS 2.0: the meta information for CVS providers has considerably changed from 1.0 to 2.0, and the meta information is not being preserved. To ease migration, some automation of migrating CVS repository locations is provided, and some helpful steps have been included. These are described in the Team CVS FAQ.

PDE

Extension point schema file extension changed

Extension point schema file extension has been changed from *.xsd to *.exsd to avoid conflicts with XML schema editors and/or non-PDE schema files. PDE will still detect files with the old extension and will issue a warning about the change.

Support for components removed

Eclipse 2.0 Install/Update has discontinued the use of components in favor of features. Consequently, PDE 2.0 supports feature-related development while component support has been removed. Features are described in the Eclipse Platform Plug-in Developer Guide.

3. Known Issues

Note: Bug numbers refer to the Eclipse project bug database at http://dev.eclipse.org/bugs/

3.1 Platform

Eclipse process does not exit (HP-UX only)

On HP-UX, the HP JVM process that runs the Eclipse Workbench does not terminate upon closing the workbench. The remedy is to always pass the -XdoCloseWithReadPending to the VM via the Eclipse launcher command line; that is, launch Eclipse with the command line:

```
eclipse -vmargs -XdoCloseWithReadPending
```

(bug 18321)

3.1.1 Platform - Core

Invalid characters in install directory prevents Eclipse from starting

Eclipse will fail to launch if installed in a directory whose path contains certain invalid characters, including :%#<>"!. The workaround is to install Eclipse in a directory whose path does contain invalid characters. (bugs 3109, 17281)

Problems with classloaders in created threads

There is a known issue with trying to load classes from a newly created thread using a class loader different from the plug-in class loader. The result will be a ClassNotFoundException. As a workaround, do the following:

1. Create a thread in which to run your code.
2. Send yourThread.setContextClassLoader(yourClassLoader); // you can find your classloader by grabbing a class it loaded (YourPluginClass.class.getClassLoader())
3. Run your code in the newly created thread.

If you set the context class loader for the current thread, you are competing with other users of the thread (all of Eclipse), so the results will be unpredictable. (bug 8907)

Deadlock creating executable extension in Plugin.startup

If Plugin.startup code is too complex and performs tasks such as creating an executable extension, a deadlock situation can be created. Only simple bookkeeping tasks should be performed in Plugin.startup code. (bugs 12827, 5875, 16141)

3.1.2 Platform - Ant

System.exit() in Ant task causes Eclipse to crash

If an Ant script is run as an external tool or using the **Run Ant** pop-up menu, it runs on the same Java VM as Eclipse. If the running script execute any Ant task that calls System.exit(int), Eclipse exits and any unsaved work is lost. A workaround for these Ant tasks is to configure Ant as an external tool. The following steps show how this is done:

1. Download and install the binary version of Ant from http://jakarta.apache.org/ant
2. Click **Run > External Tools > Configure**.
3. Click **New**.
4. Enter a name for your external tool (for example, "External Ant").
5. Click **Browse File System**.
6. Find and select a file called ant.bat (it should be in the bin/ folder of your Ant installation).
7. In the **Tool Arguments** field enter the arguments for your script that would normally enter for running the script outside of the Workbench.
8. In the **Working directory** field enter the directory of your script.
9. Click **OK** to exit the wizard.
10. To run the script, click **Run > External Tools > External Ant**.

(bug 17487)

3.1.3 Platform - Help

Help documents not displayed in a browser or very slow document loading (Windows only)

If your LAN settings are not properly configured for local host access, your Help browser might open to a blank page or display an HTTP error instead of a help page, or you may experience long delays when loading help documents. Your system administrator can configure your LAN settings so that help documents can be accessed from the local help server.

1. In the Control Panel, open **Internet Options**, select the **Connections** tab and choose **LAN Settings**.
2. If your host was configured to use DHCP for IP assignment, make sure that the "Automatically detect settings" check box is cleared.
3. If you use proxy server, ensure that the "Bypass proxy server for local addresses" is selected.
4. In "Advanced" settings for proxies, add "127.0.0.1;localhost" to the "Exceptions" if these addresses are not listed.
5. If you are using an automatic configuration script for proxy settings, and are not sure that the script is correct, clear the "Use automatic configuration script" check box.

If the above steps do not fix your problem, try changing the port and host properties in org.eclipse.tomcat\preferences.ini. In general, setting host=localhost or host=127.0.0.1 should work. Also, especially when running a firewall, you may want to set port=80 or some other firewall-friendly value. (bugs 7036, 9418, 11394)

Working disconnected from the network (Windows only)

If you are experiencing problems when not connected to the network you must install the loopback adapter from the Windows installation CD. (bug 831)

Using Internet Explorer in offline mode (Windows only)

If you have been using Internet Explorer in Offline mode, when you access the help system, you will get a message indicating that the web page you requested is not available offline. Click **Connect** to return the system behavior to normal.

Opening and navigating Help produces clicking sound (Windows only)

Internet Explorer has a sound event associated with navigate events. To turn this sound off, go to **Control Panel -> Sounds ->Windows Explorer** and change the sound for "Start Navigation" to "none" in the menu box. (bug 16081)

Keyboard navigation in help using Mozilla

Accessibility support is limited in pre-1.0 releases of the Mozilla browser. If you need to navigate help using the keyboard, you must upgrade to Mozilla version 1.0. (bug 15018)

Searching help produces unexpected results and highlights incomplete words

For some languages, a stemming algorithm is used to enhance the chance of a search hit. For these languages, the word roots are searched for; exact searches are not supported. As such, the result set contains documents with variations of the search query words, and only the common roots are highlighted in the document. Stemming and stop word removal also applies to search query terms enclosed in quotation marks ("), so the search results will not be an exact match of the quoted string. (bug 17030)

3.1.4 Platform - UI

Manual refresh required when files modified outside Eclipse

When files within a project are added or removed outside of Eclipse, or when an external editor is used to modify a file within a project, a manual refresh must be done in order for the changes to show up in the Workbench. To do this, select the project in the Navigator view and choose **Refresh** from the pop-up menu. This refreshes only the selected project. Alternatively, activate the Navigator view and press F5, which refreshes all projects.

Dirty state not tracked properly for OLE documents (Windows only)

The dirty state for an OLE document is not updated properly. This causes it to prompt to save the contents when the document is closed, even if the contents have already been saved.

OLE document crashes can cause Eclipse to also crash (Windows only)

If an OLE document crashes, this can cause Eclipse to either crash, or to have workbench menus become inconsistent.

Minimum display resolution

A number of dialogs in Eclipse, such as the Preferences dialog, require a minimum display resolution of at least 800 x 600. (bug 5549)

External Tools will automatically quote path variables containing spaces

When an external tool is launched, expanded path variables that contain spaces will be enclosed in double quotes ("). While it is typical for Windows executables to expect paths containing spaces to be quoted, this is known to cause problems on platforms such as Linux which do not expect these quotes. A workaround is to make the external tool a script which strips off the quotes before launching the executable with those parameters. (bug 20599)

Default text file encoding may be detected incorrectly (Windows XP/2000 only)

The "Text file encoding" value displayed in the Preferences dialog under "Editors" may be wrong on platforms running Windows XP (or 2000) when the user locale and system locale differ.

Example of the manifestation of the bug: A Japanese user using Japanese Windows 2000 works in New York, United States. The user has selected English (United States) as the user locale. The "Text file encoding" value displayed by Eclipse is incorrect: "Cp1252" (English). It should display the system locale "MS932" (Japanese).

Workaround: The user can modify the user locale so that user locale and system locale are identical. In the example above, this means the user should set Japanese as the user locale. Then restart Eclipse. The "Text file encoding" value will then be correct: "MS932" (Japanese).

For Windows XP:

- To check the system locale: Open the Control Panel. Go to Regional and Language Options. Switch to the Advanced tab. The system locale is specified in "Language for non-Unicode programs".
- To change the user locale: Open the Control Panel. Go to Regional and Language Options. The user locale can be modified by changing the language in "Standards and formats".

For Windows 2000:

- To check the system locale: Open the Control Panel. Go to Regional Options. Look up the items in the General tab, inside the "Language settings for the system" group. The system locale is the item marked as (Default).
- To change the user locale: Open the Control Panel. Go to Regional Options. The user locale can be modified by changing the location in "Settings for the current user".

(bug 20641)

Preferred Output Level on External Tools preferences page has no effect

In **Window > Preferences > External Tools,** there is a group of radio buttons under the heading "Preferred Output Level" with possible options of "Information", "Verbose" and "Debug". Changing these values does not affect Eclipse in any way. Workaround: when running an Ant script, use the Ant

command line arguments -verbose or -debug to get an output level other than the default ("Information"). (bug 20817)

Updating the toolbar in multi-page editors

Clients of action bars may create a number of SubToolBarManagers on their IToolBarManager (e.g., multipage editor). The client will typically make one SubToolBarManager visible, the rest invisible, and call updateActionBars. The visibility of the items may not update correctly.

A workaround is for the client to explicitly update the toolbar:

```
actionBars.updateActionBars();
actionBars.getToolBarManager().update(false);
```

(bug 20988)

3.1.5 Platform - SWT

Available colors on 8-bit Linux (Linux only)

Typically, in Gnome Linux installs running with 8-bit visuals (i.e. 256 color mode), before the Eclipse application is started you already do not have any free colors. This may mean that Eclipse is unable to allocate the default widget background color, causing it to display a white background. The functionality, however, is otherwise unaffected.

Printing support (Linux only)

The X printing extension implementation on Linux is currently disabled because it can take up to 7 seconds to determine that the X print server is not running. Until this is rectified, Printer.getPrinterList() will always return an empty array on Linux. (bug 8821)

Disposing in a focus event

Applications should not dispose widgets in focus changing events. Doing so on Motif may cause Eclipse to terminate, since Motif accesses the disposed widget within their internal focus change event handler. A similar (but less serious) issue exists on Windows and occasionally results in an SWT exception being thrown.

List and ComboBox on Windows NT (Windows NT only)

On Windows NT only, you should avoid creating items in a List or ComboBox with strings longer than 1000 characters. Doing so may result in a General Protection Fault. This has been fixed in more recent versions of Windows.

BiDi support

The StyledText widget provides bidirectional language support for Hebrew and Arabic locales. Currently this support is available only on Windows and has several known problems.

Cursor constructor arguments

In the constructor Cursor(Device device, ImageData source, ImageData mask, int hotspotX, int

hotspotY), when both a source and mask argument are specified (that is, the mask is not null), the meaning of the two arguments is reversed. That is, the "mask" argument should be the source image and the "source" argument should be the mask image. (bug 4809)

Using IBM J9 VM (Photon and AIX)

On QNX Photon and IBM AIX, the SWT library will not be found when running with an IBM J9 1.5 VM. This is a bug in the IBM J9 class library in version 1.5. You can workaround this problem by adding the SWT library directory to your LD_LIBRARY_PATH environment variable.

Missing permissions for SWT native libraries in workspace (HP-UX only)

When retrieving the SWT Motif fragment into an Eclipse workspace, the permissions of the native libraries are reset. This creates a problem on HP-UX because shared libraries need to have execute permission. Attempting to self-host with this fragment throws an UnsatisfiedLinkError...Permission Denied error. You must manually change the permissions to make these libraries accessible (assume the workspace is at /workspace):

```
cd /workspace/org.eclipse.swt.motif/os/hpux/PA_RISC
chmod 555 *.sl
```

(bug 20305 describes a related problem)

Javadoc not consistent across platforms

Because of a bug in the way we updated the javadoc in SWT source code, the javadoc for protected methods is not consistent across platforms. The javadoc for the Windows platform, which is used to generate the documentation that appears in the Platform Plug-in Developer guide, is the definitive source. The javadoc for the other window systems will be brought into line in a future release. (bug 20968)

JAWS requires MSAA for List Views to read checkboxes in Tables (Windows only)

In order for JAWS to detect the checkbox information in Tables, MSAA support for List Views must be activated as follows:

1. Open Eclipse and hit INSERT + F2.
2. In the Run JAWS Manager dialog select Configuration Manager.
3. In the Jaws Configuration Manager that opens up, select Set Options and then select Advanced Options.
4. Check "Rely on MSAA for List views".
5. Hit the OK button.
6. Choose **File > Save** from the menu bar.

No accelerators or mnemonics on Solaris (Solaris only)

The Solaris implementation of Motif has a long-standing bug with respect to adding and removing accelerators and mnemonics. The behavior is such that the time to do so becomes increasingly longer each time it occurs, to the point that, in Eclipse's case, it can take more than a minute to switch between editors and views! Because of this, accelerators and mnemonics are explicitly ignored on Solaris.

3.1.6 Platform - Team - CVS

Note: Additional information on how to use CVS from Eclipse can be found in the Eclipse CVS FAQ.

"extssh" is not a supported command line method

Since the "extssh" connection method is not a supported command line method, you cannot use the command line tool when a project uses this method. Instead, use the Eclipse supported "ext" method and set the appropriate environment variables so that the command line tool will work. (bug 7943)

Connection cannot be found after initially missing

If a connection initially fails due to a network problem, the connection may continue to fail even when the network problem is fixed. In order to establish the connection you must exit and restart Eclipse. (bug 9295)

CVS meta-folders appear in some cases

There are some cases where CVS folders are not hidden from the UI as the user would expect. For instance, CVS folders will appear if a user imports a CVS project into Eclipse before the CVS plug-in is loaded. To avoid this, open the CVS Repositories view (thus loading the CVS plug-in) before importing CVS projects into Eclipse. (bug 12386)

"Received broken pipe signal" error from server

Eclipse sometime performs multiple commands within a single connection to the server. This may cause problems with CVS servers that are running server scripts in response to certain commands. (bug 15490)

"Terminated with fatal signal 10" error from server

There is a bug in the CVS server related to some compression levels. If you get this error, changing the compression level on the CVS preference page may help. (bug 15724)

Team > Update does not indicate that there are outgoing changes

The **Team > Update** command will load all remote changes into your local working copy. If you are using **Team > Update** and you want to see which files have outgoing changes, open the CVS console before performing the update. The console will show the results of the update (which files had mergeable conflicts, which ones had unmergeable conflicts and which ones had outgoing changes). **Warning**: Only use **Team > Update** if you know CVS. If there are "real" conflicts (i.e., those that affect the same line of a file) then CVS will add markup to the file during the update. Resolving these conflicts in this manner is not pleasant. (bug 16750)

Synchronize view "Mark as Merged" has surprising behavior with respect to modes

When you **Mark as Merged**, if its your only incoming change and you are in the incoming mode, the sync view becomes empty. On the surface it looks like the change is gone. However, your change will appear in outgoing mode. (bug 18513)

Team > Commit on an unchanged file does not update decorator

If you perform a **Team > Commit** on a file that has been modified but whose contents match the contents of the file on the server, the file will remain on outgoing change. To correct the problem, either perform a **Team > Update** or use the Synchronize view to commit. (bug 18647)

Change ASCII/Binary Properties not available for unadded files

The **Change ASCII/Binary Properties** menu item is only enabled for files and folders that are under CVS control. If you want to set the keyword substitution mode for a new file, you will need to add it to version control first. (bug 19183)

Error updating incoming directory additions with pruning turned off

If pruning is turned off and a project has incoming nested folder additions that do not contain any files, performing an update in the Synchronize view will result in an error (cannot create folder). The workaround is to perform a **Team > Update** which will bring in the directories. (bug 19442)

"Remove from View" in Synchronize view does not exclude resources from view actions

If you remove one or more resources from the Synchronize view using the **Remove from View** menu item, these resources will no longer appear but they will still be included in any performed operations (Update, Commit, etc.) (bug 19538)

Ctrl-S does not save in Synchronize view and CVS compare views

Ctrl-S does not perform a save in the workspace resource editor in the Synchronize view. Instead, use the popup menu and choose **Save**. (bug 20327)

CVS automatically prunes empty directories

By default, empty directories will be pruned on checkout and update. This is desirable in most cases as directories on a CVS server are never deleted. However, if this causes problems, there is a CVS preference to disable auto-pruning. (bug 20463)

ClassCastException on attempt to replace directory with file

Performing the following steps will result in the above exception:

1. Create a new project & share it with a CVS repository.
2. Create a directory in the project root and a file inside this directory.
3. Synchronize the project using **Team > Synchronize with Repository**.
4. Locally delete the directory (and contained file) that was just created
5. Create a file in the project root with the same name as the directory that was just deleted.
6. Synchronize again using **Team > Synchronize with Repository**.

The workaround is to commit the folder deletion before creating the new file. (bug 20906)

Still prompted if delete unmanaged preference turned off

If the "delete unmanaged resources on replace" preference has been disabled on the **Team > CVS** preference page and a **Team > Replace With** operation is performed on a project that has one unmanaged resource and no other outgoing changes, the user is prompted to overwrite local changes even though the operation will not overwrite the unmanaged resource. (bug 18834)

Hidden CVS/ folders get copied when copying folders from one project to another

If you copy a folder that is under CVS control to a folder that is not, the CVS/ folders (usually not shown) will be copied as well. This can cause problems if the target project is under CVS control and you try to add the moved folder to CVS control. The workaround is to manually delete the CVS/ subdirectories using the file system browser, or disconnect the source project from CVS control before copying the folders. (bug 20621)

Update with incoming deletion and addition involving file with different case fails (Windows only)

On update, if there are incoming deletions for one or more files and incoming additions for files of the same name with a different case, then the operation may fail on Windows depending on what order the server sends the files in. Workaround is to update the deletions first and then the additions using the Synchronize view. (bug 21001)

3.1.7 Platform - Install/Update

Migrating 2.0 pre-release workspaces

When migrating an existing workspace that was used with a 2.0 pre-release version of Eclipse (e.g., created with development drops obtained directly from eclipse.org, or updated via the Eclipse update manager prior to 2.0 release), it is strongly recommended that you start with a fresh install of Eclipse 2.0, and delete the .config/ subdirectory of the .metadata/ directory located in the workspace you are migrating (<workspace>/.metadata/.config/) before reopening the workspace. (bug 16456)

Not enough space for temporary files

If you get the error "java.io.IOException: There is not enough space in the file system." but still have plenty of space in the selected install location, check to make sure that you also have sufficient space in the standard location where temporary files are created. (bug 17787)

Workbench non-responsive while attempting to connect

If the connection to an update site does not respond (the site does not exist or is down), the workbench becomes non-responsive until the connection request times out. Once the time out is reported, you will be able to continue. (bugs 18598, 19775)

Processing pending "downgrades"

Natively-installed feature changes are automatically detected on workbench startup. If this change is a downgrade (that is, the newly detected version of a feature is older that one already configured), you will be prompted whether you'd like the change applied; even when you say Yes, the change will not actually be applied, and the currently configured newer feature will remain configured. If the downgrade was

intentional, open **Help > Software Updates > Update Manager,** and from the Install Configuration view, choose **Show Disabled Features**, explicitly enable the lower version and explicitly disable the newer version. (bug 16502)

Local JAR files are locked

While processing update sites in the local file system (for example, by exploring My Computer), some of the feature JAR files may be left open while the workbench is active, and will not be available to other applications. Exit and restart the Eclipse to correct this condition. (bug 15594)

Wrong status being reported for unconfigured or missing features

If you select **Show Status** for a feature that is unconfigured or missing, the resulting dialog erroneously claims "The feature is configured properly". (bug 19932)

Accessing update sites through a proxy

To access an update site through a proxy, you will need to start the workbench with the following command line options:

```
eclipse -vmargs -DproxySet=true -DproxyHost=<proxy_name> -DproxyPort=<proxy_port>
```

as documented in JavaWorld Tip 42. Proxies requiring user authentication are currently not supported. (bug 19717)

URL validity checking on input

URL syntax is currently not completely checked on input. Ensure that any entered URLs use the correct separators (eg. forward slash '/') and do not contain invalid characters. (bugs 19685, 20247)

Running "headless" applications that do not handle restart

When install changes are detected, the changes are automatically processed and the workbench restarts. The executable launcher supplied with the application correctly handles the restart. However, if you have applications that directly call the platform (eg. by calling the BootLoader APIs) and do not handle restart, the startup reconciliation processing can be suppressed by specifying -noupdate command line option. In this case, the application will start with the set of features and plug-ins that were processed and configured on the previous start. If prior configuration cannot be found, the application will start with the full set of plug-ins found in the installation location.

3.2 Java Development Tools (JDT)

Running Java programs with non-Latin-1 characters in package or class names

You get a java.lang.NoClassDefFoundError when running Java programs with non-Latin characters in the package or class names. The workaround is to package the class files as a JAR file and run the program out of the JAR and not from the file system directly. (bug 4181)

Missing debug attributes

The debugger requires that class files be compiled with debug attributes if it is to be able to display line

numbers and local variables. Quite often, class libraries (for example, "rt.jar") are compiled without complete debug attributes, and thus local variables and method arguments for those classes are not visible in the debugger.

Setting breakpoints

In general the debugger will not allow you to place breakpoints on lines of code that are not executable (comments, blank lines, etc.). However, there are some cases where the debugger will allow breakpoints on lines of code that are not executable. For example, the debugger will allow a breakpoint to be placed on a variable declaration that does not contain an initializer ("int x;"). Note that enabled breakpoints which are successfully installed on an executable line in a running (debuggable) VM are displayed with a checkmark. Breakpoints that are displayed without a checkmark are not installed in a running (debuggable) VM.

Using Hot Code Replace

Hot code replace is supported on JDK 1.4.x VMs, and IBM J9 VMs. Hot code replace is limited to changes which do not effect the shape of a class. That is, changes within existing methods are supported, but the addition or removal of members is not supported.

Hot code replace and stepping on JDK 1.4.0 VMs is unreliable. This appears to be a VM issue that should be fixed in later releases of the JDK.

Scrapbook

Setting a breakpoint inside a scrapbook page is not supported.

When a snippet is run in the scrapbook which directly or indirectly calls System.exit(int), the evaluation cannot be completed, and will result in a stack trace for a com.sun.jdi.VMDisconnectedException being displayed in the scrapbook editor.

Terminating a scrapbook page while it is performing an evaluation results in a com.sun.jdi.VMDisconnectedException being displayed in the scrapbook editor.

Debugging over slow connections

A global Java debug preference specifies the debugger timeout, which is the maximum amount of time the debugger waits for a response from the target VM after making a request of that VM. Slow connections may require that this value be increased. The timeout value can be edited from the **Java > Debug** preference page. Changing the timeout value only effects subsequently launched VM, not VMs that are already running.

Updating of inspected values

When inspecting the result of an evaluated expression in the debugger, it is important to note that the result displayed is the result of that expression at the time it was evaluated. For example, when inspecting a simple integer counter (primitive data type), the value displayed in the Expressions view is the value when the expression was evaluated. As the counter is changed in the running program, the inspected result will not change (since the view is not displaying the value bound to a variable - it is displaying the

value of an expression, and the value of a primitive data type cannot change). However, if an expression results in an object, fields of that object will be updated in the inspector as they change in the running program (since the value bound to fields in an object can change).

Stepping over native methods that perform I/O

When the debugger steps over native methods that perform I/O to System.out or System.err, the output may not appear immediately unless the native performs a flush on the output buffer.

VM and process termination running on IBM 1.3 JVM on Linux (Linux only)

Terminating a launch, debug target, or system process associated with a debug target running on the IBM 1.3 JVM on the Linux platform does not work when the associated debug target has a suspended thread. To remove such debug targets from the debug UI, select **Terminate and Remove** from the debug view's pop-up menu (or use the shortcut "delete" key). Associated system processes in the OS may not be properly cleaned up. If a debug target has no suspended threads, termination works properly.

Searching for constant field references

Search does not find references to constant fields inside binaries because the Java Language Specification mandates that constant field values be inlined in the class file's bytecodes, leaving no trace of a field reference. (bug 12044)

Java compilation units outside of the build class path

When a compilation unit with compilation problems is moved outside the Java build class path, it retains its Java problems forever (its compilation problem list does not get refreshed because it will never be compiled again). Renaming a *.java file to one with another a different file extension suffix causes the same problem. (bug 13008)

Refactoring operations update references in the entire workspace

Refactoring operations always update references in the entire workspace. This can be more than what is needed and expected. For example, when you have the same project twice in your workspace and you perform a rename refactoring in one of the projects, then the references in the other project will be updated as well.

Actions to modify read-only files

Actions on the **Source** menu (e.g., **Generate Getter and Setter**) are always disabled when the file is read-only. This is currently true even when the repository provider supports automatically checking out files on modification. (bug 17600)

Java code templates

You cannot use ${CURSOR} inside of a comment in a Java code template (**Window > Preferences > Java > Templates**). (bug 19556)

Organize import and imports from default packages

Organize import does not handle imports from default packages. Note that importing from a default package is no longer supported in JDK 1.4. (bug 19487)

Add Javadoc action for fields

The **Add Javadoc** action does not work for fields. (bug 20259)

Javadoc hover in the Java editor

The Javadoc hover help shown when hovering over identifiers in the Java editor does not handle links inside of Javadoc comments properly. (bug 20644)

3.3 Plug-in Development Environment (PDE)

Comments in source pages of PDE XML editors

PDE provides a number of multi-page editors that include a raw source page. Editors that handle XML files (plug-in, fragment and feature manifests) will preserve comments in most cases. However, comments will not be preserved if added before the root XML element, or if added after the last child element contained in the parent element. (bug 8000)

Clipboard operations in the property view

Clipboard shortcuts (Ctrl+X, Ctrl+C, Ctrl+V etc.) do not work in cell editors of properties that belong to the PDE Plug-in Manifest Editor. Use pop-up menu to activate these operations. (bug 13776)

Problem while importing fragments

If a workspace contains binary projects for a plug-in and a fragment that references that plug-in, fragment libraries are added to the class path of the referenced plug-in project. When an attempt is made to overwrite the plug-in and the fragment with versions from another build, deletion of the old fragment may fail. If that happens, repeat the operation to repair the workspace. Only the affected plug-in and fragment need to be re-imported. (bug 16921)

Assumption that output is in bin/ folder

PDE assumes that all plug-in and fragment projects that contain Java code have one or more source folders and build output in the **bin/** folder. Although it is possible to change the name of the output folder in Properties dialog, the PDE run-time workbench launcher does not work correctly for those plug-ins. (bug 17444)

Preferences not working with import/export

Preferences set in PDE preference page called **Target Platform** are not preserved the same way as other preferences. Consequently, they are not subject to Import/Export operations in the Preferences dialog.

(bug 19688)

Clipboard operations do not work in the Feature Manifest Editor

GUI pages of the Feature Manifest Editor support pop-up menus that contain standard clipboard operations (**Cut, Copy, Paste**). However, none of these operations work for structural widgets (trees and lists). The only place where these operations do work is in text widgets in Information and Source page (bug 20460)

Choosing Compute Build Path causes Java project to no longer build

PDE computes the build class path of a plug-in project by looking up source mappings in the `build.properties` file. This file defines how source folders are compiled into runtime libraries. In the absence of this file, PDE will compute the class path that contains no source folders, resulting in compilation errors. The required `build.properties` file is generated by PDE when a new plug-in project is created. If the plug-in project is created in some other way, a `build.properties` file must be added manually. See the PDE Guide for details on the format of `build.properties` files. (bug 9765)

ECLIPSE_HOME produces fragile class paths due to version numbers in plug-in directory paths

Eclipse products are typically built so that plug-ins are located in the same directory and each plug-in is in the directory whose name includes both a plug-in id and a version id (e.g., "`org.eclipse.ui_2.0.0`"). If external plug-ins are used while self-hosting, these plug-in directory names show up in PDE-generated class paths. These class path are sensitive to plug-in version changes and must be recomputed if the target platform uses different version numbers. (bug 15199)

Plug-in import wizard does not allow plug-ins of different versions to be imported

The Eclipse platform allows two plug-ins with the same ID but different versions to coexist if the only thing they contribute is run-time libraries. However, PDE cannot handle these plug-ins because it creates project names using plug-in IDs during binary project import. (bug 18500)

PDE nature required for plug-in manifest syntax checking

PDE will only be able to provide syntax checking and error/warning markers for plug-in manifests if the plug-in project has the PDE plug-in nature. A plug-in project automatically gets this nature when created by a PDE wizard. This situation can only occur if a regular Java project has been used to host a plug-in. The problem can be fixed by converting it into a PDE project. (bug 19248)

PDE does not preserve original manifest file layout

When non-Source page of a PDE manifest editor is used, PDE will convert changes back into XML by regenerating the file. Although the overall content and the comments are preserved, the actual file layout is not. This may cause problems by showing false changes during file compare. If file layout is important, perform all editing in the Source page. Alternatively, avoid using Source pages altogether. Since XML files are generated in a way that respects and preserves the relative order of major elements (extensions, extension points etc.), changes made in a non-Source page of a PDE manifest editor do not result in false deltas during file compare. (bug 19251)

Go To Line in manifest editor causes Outline view to go blank

When the **Source > Go To Line** command is invoked in the Source page of a PDE manifest editor, the Outline view will become gray. Since the Source page does not have a functional outline, there is no actual loss of function. (bug 19361)

New Feature wizard does not generate build.properties file

When creating a new feature project, the PDE wizard does not automatically generate a build.properties file. As a result, building the feature will create a feature JAR without any content. To work around this, create a build.properties manually using the instructions provided in the PDE Guide. (bug 20118)

Update Classpath attaches source from the wrong Eclipse install

Java libraries are associated with source code according to source code locations specified in a PDE preference. By default, these locations are registered by plug-ins of the design-time Eclipse instance. If the target platform is not the same as the design instance, the source code provided by these plug-ins will not be in sync with the libraries. The workaround is to uncheck the default locations and define new source code locations that point to the source-bearing plug-ins in the target Eclipse installation. (bug 20578)

No way to specify plug-in library type

PDE manifest editors do not provide widgets for specifying run-time library types as being either "code" or "resource". The only way to specify this attribute is to add it manually in the source page. (bug 20757)

Run-time libraries exported through more than 2 plug-ins not in classpath

If a plug-in requires a runtime library exported through more than two plug-ins, it is not automatically added to the compile class path when generating the build.xml file. Example: Plug-in A export its libraries, plug-in B requires plug-in A and re-exports A, plug-in C requires plug-in B and re-exports B. If plug-in D requires plug-in C, when generating the build.xml file, plug-in A libraries will not be added to the compile path even though they will be available at runtime. The problem can be worked around as follows::

1. Generate a build.xml using PDE (select the plugin.xml file and click **Create Plug-in JARs**)
2. Edit the build.properties and add the following line:
   custom = true
3. Add the missing JARs to the classpath of the javac task in build.xml.

(bug 20119)

3.4 Other

3.4.1 FTP and WebDAV support

When mapped to a target, the project folder is ignored

Ignoring the project folder is by design. Normally with target management you put/get the contents of the project, not the actual project. The place you pick in the site explorer is where the project contents will go. This allows your local project to have a different name than the container in the WebDAV/FTP server. If you want to map several projects to the same site location, you create a new folder for each one. This is why "New Folder" is in the mapping page. (bug 17657)

When setting the target site of a project, reselecting the same location gives misleading warning

Using **Deploy > Target Site** on a project that is already deployed and selecting the same target site produces a scary overwrite warning. In this case, the warning can be safely ignored. (bug 17707)

FTP messages cause an exception

With some servers, the FTP client may receive messages that it did not anticipate. These will cause an exception. Trying the operation again usually works. (bug 18108)

FTP problems with spaces in resource names

FTP does not work properly when file or folder name contains spaces. (bug 20220)

FTP problems retrieving remote timestamps with NT server

Problems have occurred with some servers (NT server Serv-U FTP-Server v2.5k) when trying to obtain the timestamp of a newly uploaded file. This causes a "file does not exist" error. The workaround is to **Synchronize** again and continue. (bug 19715)

4. Defects fixed

4.1 Release 2.0.1 over 2.0.0

Release 2.0.1 is a maintenance release to fix serious defects present in release 2.0.0. These changes only affect some plug-ins and features. Modified plug-ins have version id "2.0.1"; plug-ins unchanged since the 2.0 release still have version id "2.0.0". Note, however, that all features now have version id "2.0.1" (even if none of their plug-ins changed).

Service release 2.0.1 fixes the following defects in release 2.0.0:

ID	Summary
12435	Usability: Cannot resize navigation frame
12463	Plugin.find(IPath path, Map override) searches wrong directo
12906	[Editor Mgmt] If file is already opened in one editor, canno
12966	Remote debugging with Sun J2ME Wireless Toolkit fails
13926	JFace Text Editor Leaves a Black Rectangle on Content Assist

15229	View errors when launching with out the plugins needed to cr
15559	JAWS reads the parent window for dialog shells
15984	Activating help does not bring help window to front
17112	[External Tools] Should be able to run external tools asynch
17944	Sync info on source of project move lost
18253	Coolbar - disposing items not honoring setRedraw = false
18318	Empty folders created when ugrading Eclipse
18585	Search stops if fail to contact site
18927	Copied scrapbook page uses some "old" information
18994	Typos
19502	Accessibility: sometimes focus is now drawn around the topic
19686	hover help stops working after mousing over end of file
19702	Feature: Have comment/uncomment actions in context menu [cod
19780	Table columns not distributing correctly in properties page
19964	Coolbar - can "lose" items when platform widget wraps
20067	Revert/ Restore are "instant"
20153	Export into JAR incorrectly references old description file.
20260	TVT2: corrupted characters in java prefs page
20412	TVT2: Mnemonic characters displayed in error message
20430	[Cell Editors] DialogCellEditor in the PropertySheet bases i
20480	Optimize writing of the registry cache file
20679	TARGET: FTP download fails with deep directory structure
20686	Install handlers are not being called on revert operations
20725	JavaBuilder.toString can throw NPE
20752	TVT2: Mnemonic showing in Runtime tab of Manifest editor
20753	Update manager does not preserve file permissions
20797	[External Tools] Need to fix up quoting of variables contain
20811	Refresh does not work in Update Manager
20819	[External Tools] Ant ui does not handle ENTITY entries in al
20865	nullPointerException being thrown by Class Type.resolveBindi
20866	Feature without license cannot be disabled.
20879	TVT2: clashing mnemonics in JUnit launcher
20887	Topic tree collapse behavior
20927	ProgressMonitorDialog truncates message
20947	[External Tools] Cannot run shell script file with a space

21010	Use getAdapter when converting IJavaThread to JDIThread
21021	F1 fix made too late
21033	TVT2: Clashing mnemonics in Java -> Editor panel
21036	RepositoryProvider.project stale if project renamed/moved
21040	[Update] Need a way for a user to set default editor when n
21041	[Update] Force welcome page first time a new feature is inst
21082	Cannot save in Compare with Revision editor
21088	TVT2: CannotSync displayed in help instead of proper dialog
21116	Can't compile because eclipse says that the method is not vi
21118	no mnemonics for Replace, Replace Selected
21170	NPE in RuntimeClasspathEntry if internal source archive remo
21171	Spelling error in "New Java Project" dialog box
21173	Can't create new Project because empty string in "New Projec
21192	UnsatisfiedLinkError thrown when pressing a hardware key
21197	Don't hard code the editor id names for the ManageBreakpoint
21198	On JavaEditor dont use == in the isActivePart() method but i
21203	Compile time NullPointerException in catch blocks
21210	Packages view Infopop message is not helpful [package explor
21230	Rebuilding project fails with ContextStackOverflow (Compilat
21268	StyledText - Ctrl+Shift+J inserts line
21291	Team Examples require missing plugin org.eclipse.webdav
21292	Renaming (refactoring) boolean variables isX renames to getX
21294	issue more appropriate message when workbench already runnin
21305	Debug element rendering can be more robust
21306	JDI client does not tolerate null thread from events
21308	Method.isObsolete() broken for method ID 0 on JDK < 1.4
21348	duplicate eclipseurl jar in help.webapp plugin
21361	no support for optional features
21370	WordPatternRule freezes editor
21376	Takes long time for help browser to close.
21390	Breakpoint Properties: Add Class, Package missing '...'
21419	Infocenter does not work on WAS
21436	CVS Quick connect to dev.eclipse.org - only when PDE availab
21447	Wrong method invoked at runtime
21465	Plugin Resolving - reorder REQUIRES clause & different plugi

21480	Bytecode disassembler doesn't handle #invokespecial correctl
21483	Error from ClassPrepareEvent when debugging WTK
21486	Resources opened in wrong editor when changing the default
21487	Infocenter: servlet classes not found.
21488	Infocenter ClassCastException in Xerces
21501	helpwebapp assumes it is deployed under plugins directory
21518	Debugger source lookup problem when debugging against Wirele
21557	VM bug prevents valid Java code to be executed on VM < 1.3.1
21580	VerifyError in 1.4 compliant mode
21595	Need ability to get target information
21606	ImageBuilder deletes & adds rather than overwriting
21614	Keyring file cannot be read using IBM 1.4.0 JRE
21640	Show types action in Variables view is confused
21669	-listener results in ClassCastException
21672	Wrong location for the last 'return' bytecode command
21674	-kkv default keyword substitution preference is not correctl
21676	Readme tools example should not use Ctrl+R
21686	[Coolbar] Perspective minimizes its cool items
21717	Null Pointer Exception in EditorWorkbook.java
21749	Exported libraries and source folders
21750	Plugin disabled after Feature update
21754	typo in IType::getSuperInterfaceNames javadoc
21757	ast: incorrect range for Name in TypeDeclaration
21761	[Tasks] NPE refreshing the the task list view
21764	[Coolbar] Use minimumSize of preferred size for items
21768	ast: incorrect length of SimpleName in MethodDeclaration
21775	[External Tools] Allow external tool builders to run on spec
21778	ClassFileReader fails on Gnome Twain class
21781	NPE restarting after disabling feature (EditorManager.findIm
21828	Possible problem in DoStatement#accept0(...)
21829	API needed to allow CCombo to display its list at the prefer
21834	Coolbar - deleting items corrupting layout
21845	<topic> tag doesn't like labels with <xxx>
21882	[Coolbar] Cool item position should be persisted
21883	[Coolbar] Removing last cool item in row should remove row

21885	[Action sets] Support for toggle buttons and combo boxes in
21916	VariableDeclarationExpression
21917	Request for new API on AntRunner
21941	NotPresentException in TestSuite wizard [JUnit]
21953	Typo in error message "sychronized"
22055	CoolBar - setWrapIndices causes rows to collapse/expand unne
22064	Install Handlers not run with -initialize flag
22093	VerifyError due to duplicate access method
22118	[Decorators] Decorators for IResource ignores adaptable flag
22142	[Coolbar] Reset Perspective and original order bug
22144	Coolbar - setSize not being honored after setWrapIndices API
22191	When adding a new feature with the Update Manager the user g
22196	Quick Fix broken due to bug 21768 [quick fix]
22290	Running Infocenter as Web Application in WebSphere 4.0 Advan
22320	Coolbar - delete item behavior problem
22418	Should not complain about package for empty units
22422	[External Tools] NPE running external tools builder
22448	CoolBar - deleting first item in row does unnecessary collap
22556	Crash during startup.
22561	Hover Help broken in 2.0.1 I20020815
22571	Duplicate container resolution
22607	[Wizards] Wizards do not show icon for error, warning when s
22681	[Wizards] 2.0.1: regression: Bug with rendering of wizard er
22683	[Dialogs] 2.0.1 regression: Dialog borders differed (too big
22691	Verification Dialog contains non translated string
22740	Infinite prompt to close editor
22779	Eclipse linux-motif GPFs on exit on J9

Other company, product, and service names may be trademarks or service marks of others.

(c) Copyright IBM Corp. and others 2002

Technology Project

Project Name: Technology Project

PMC Members
Dr. Brian Barry - PMC Lead
John Duimovich
Dr. Bjorn Freeman-Benson

Mission
The Technology PMC hosts Research, Education and Incubator projects which have particular relevance to Eclipse. Unlike other PMCs it has no overriding technical theme or objective, rather it encompasses projects covering a broad spectrum of technologies and technical areas. For the most part, projects operate independently from one another and the PMC allows individual projects a great deal of autonomy. Current projects can however be grouped into several theme areas: Apect-Oriented Systems and Programming; Collaboration; Education; Model Driven Development; Web Tools; and Incubators.

=eclipse

TPTP: Key Dates

List of Currently Shipping Software Distributions:

Hyades 3.1.0 – Latest minor release (Tue, Oct 5, 2004)

Hyades 3.0.1 – Maintenance stream for latest major release (Wed, Sep 22, 2004)

Hyades 3.0.0 – Latest major release (Mon, Jun 21, 2004)

Key Release Dates:

3.2.0 – Dec 15

3.0.2 – Maintenance stream for Hyades 3.0 (aligned with Eclipse Platform 3.0.2 in Feb/Mar'05)

3.3.0 – Mar '05

4.0.0 – Jun '05 (aligned with Eclipse Platform 3.1 release)

4.1.0 – Sep '05

=eclipse

TPTP: Description

Project Description:

Mission: The mission of the Eclipse Test & Performance Project is to build a generic, extensible, standards-based tool platform upon which software developers can create specialized, differentiated, and interoperable offerings for world class test and performance tools.

Scope: The Eclipse Test & Performance Project will extend the family of Eclipse technologies to provide an open development platform supplying frameworks and services for test and performance tools that are used throughout the lifecycle (e.g., testing, tracing/profiling, tuning, logging, monitoring, analysis, autonomics, administration, etc., but not development tools such as optimizing compilers) and support a spectrum of standalone through highly-distributed and embedded through enterprise computing systems.

The project will also deliver exemplary tools that verify the utility of and illustrate the appropriate use of the platform, support the development and maintenance of the platform itself, and are extensible via documented programmatic interfaces.

Test and Performance Tools Platform Project

Project Name:
Eclipse Test & Performance Tools Platform (TPTP) Project

Project Leaders:
Tyler Thessin – PMC Lead, Hyades Platform Project Lead, TPTP
  Planning Group Chair
Mike Norman – PMC Member, Hyades Testing Project Lead, TPTP
  Requirements Group Chair
Harm Sluiman – PMC Member, TPTP Architecture Group Chair
Serge Lucio – PMC Member, Hyades Tracing and Profiling Project
  Lead, Hyades Monitoring Project Lead
Melanie Woods – PMC Member, TPTP Marketing Group Chair

Eclipse Community | information provided by the Eclipse Foundation

≡eclipse

WebTools Project: Executive Summary

Executive Summary:

Effectively, the project did not start until September due to the combination of vacation schedules, the commercial commitments of a major contributor, and other factors.

The first chunks of code have been evaluated, revamped, and moved from the initial contributions into the CVS repository. We expect the pace of this movement to accelerate in the next quarter. We are committed to committing [sic] as fast as the community can understand the architecture, design, and code. We are working on the pieces on the critical path to a larger framework, e.g., structured source editing which is a prerequisite for JSP editing, etc.

We have found starting this project to be harder that we anticipated given its unique situation of being (a) the first time such a diverse team has been tried from day one, and (b) the first time a project has started with a large code contribution that many contributors must become familiar with.

Eclipse Community | information provided by the Eclipse Foundation

WebTools Project

=eclipse

Project Name: Web Tools Platform Project

Project Leaders:
Bjorn Freeman-Benson (author of this plan update)
Christophe Ney
Dominique de Vito
Arthur Ryman
Naci Dai
Jochen Krause
David Williams
Mitch Sonies

Project Description: http://www.eclipse.org/webtools/project-scope.html

eclipse

Eclipse Platform Project: Key Dates

Key Release Dates:
Eclipse SDK 3.1 schedule is as follows:
Friday Aug. 13, 2004 - Milestone 1 (3.1 M1) - stable build (delivered)
Friday Sep. 24, 2004 - Milestone 2 (3.1 M2) - stable build (delivered)
Friday Nov. 5, 2004 - Milestone 3 (3.1 M3) - stable build
Friday Dec. 17, 2004 - Milestone 4 (3.1 M4) - stable build
Friday Feb. 18, 2005 - Milestone 5 (3.1 M5) - stable build
Friday Apr. 1, 2005 - Milestone 6 (3.1 M6) - stable build

The 3.1 release is targeted for 2Q2005

Eclipse Platform Project: Executive Summary

- **Executive Summary:**
  We have enabled and are delivering performance tests with Eclipse 3.1 - results are posted with each build. Currently there are more than 200 tests. The performance data is captured in a database and this will allow us to notice and remedy performance regressions more easily.

  Approximately 1000 defect fixes and enhancements have been made to the 3.1 stream so far.

  The changes to the Java tools to support J2SE 5.0 (aka 1.5) are proceeding nicely. The Eclipse Java compiler now handles generics, enhanced for loops, hexadecimal floating point literals, and varargs (at this point we're passing 96.8% of the JCK1.5 compliance tests). The other language additions - enumerations, annotations, static imports, autoboxing - are parsed, but are not yet being processed any deeper than that. Support for these other new language features will be introduced in future 3.1 milestones. Initial refactoring support for the new language constructs is also in place.

  We are enhancing PDE to help in the creation of RCP applications.

≡eclipse

Eclipse Platform Project

- **Project Name:** Eclipse Project (usually referred to as "Eclipse Platform" to reflect actual scope)

- **Project Leaders:**
  PMC: Erich Gamma, Kevin Haaland, John Wiegand (lead)

- **Project Description:**
  Charter is http://www.eclipse.org/eclipse/eclipse-charter.html

- **Projects:**
  - **Platform (includes RCP)**
  - **Plug-in Development Environment (PDE)**
  - **Java development tools (JDT)**

eclipse

Project Updates
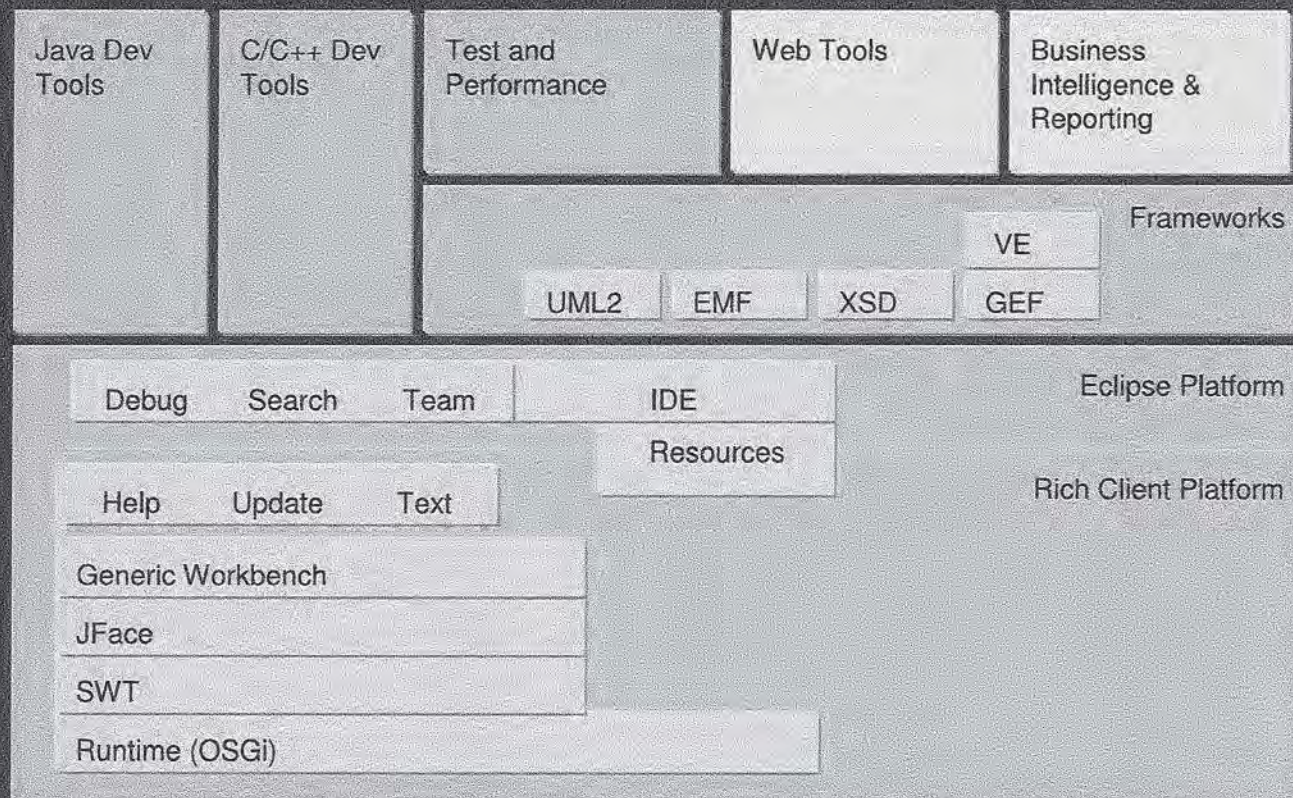
August 3, 2004

Eclipse Architecture: Future Directions
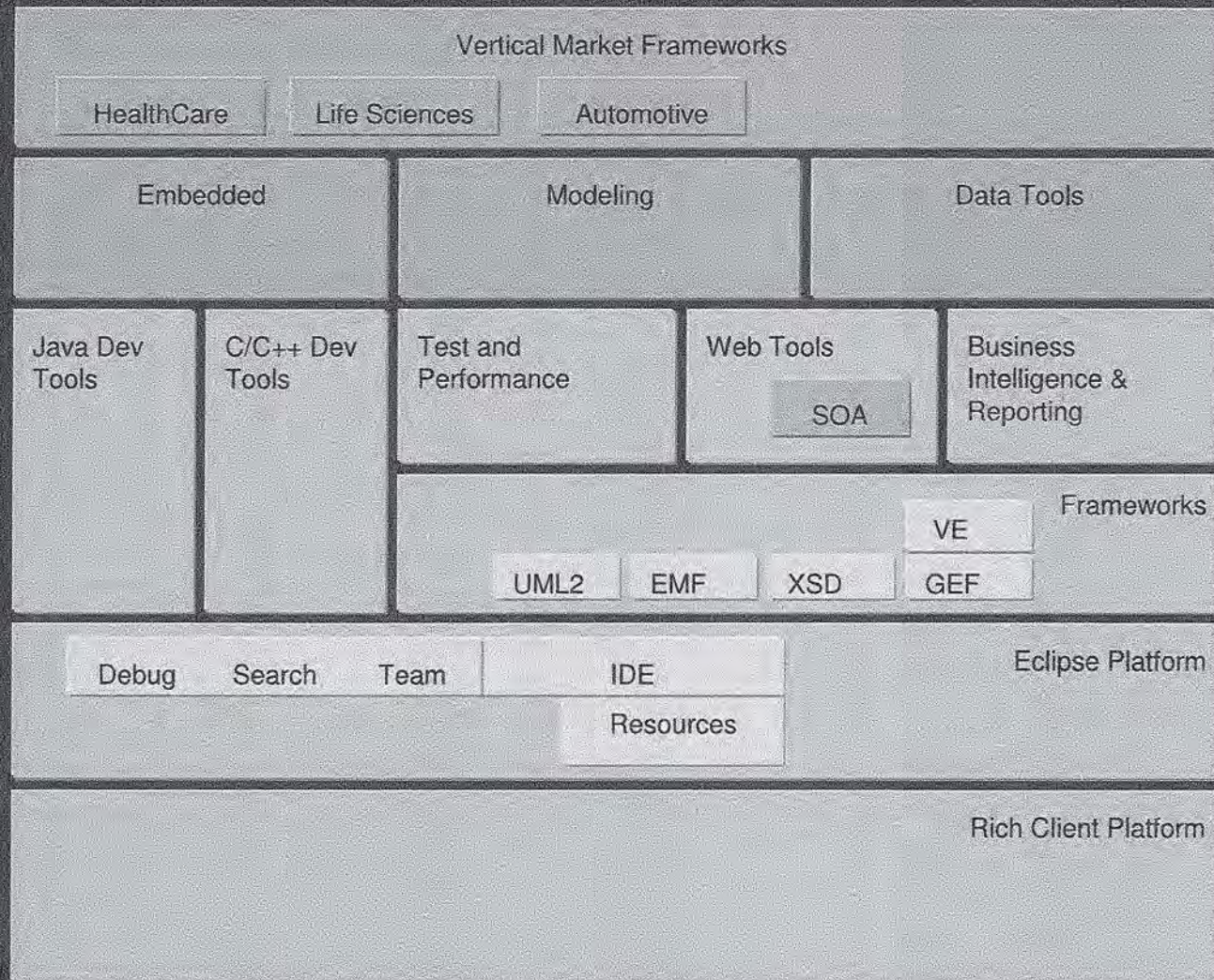
The Eclipse Platform – The Future

- 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

Eclipse Architecture

Eclipse Project Structure Today

Eclipse Community | information provided by the Eclipse Foundation
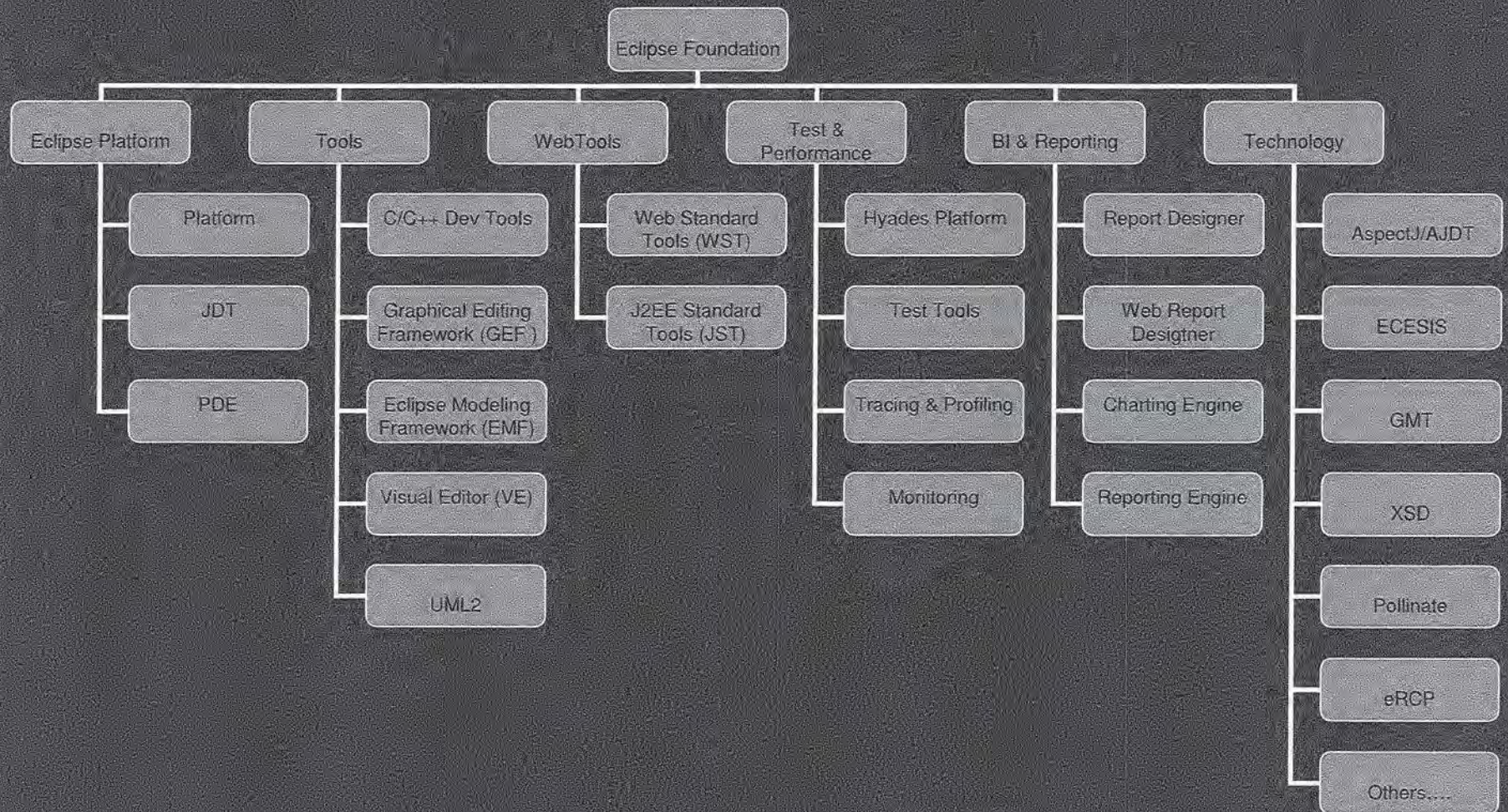
Q3 Accomplishments

≡eclipse

- Created two new top-level projects
  - WTP
  - TPTP
- Proposed a third new top-level project
  - BIRT
  - Creation review 9/22
  - Board approval meeting on 9/24
- *Lots* of activity in the Technology PMC
  - Pollinate created
  - eRCP proposed
  - Voicetools proposed
  - Ecomm proposed
  - Pipeline of additional proposals
    - Modelware (November)
    - SOA Blueprints (November)
    - SocialPhysics