



# Strategic Developer Report

IBM

December 2008  
San Francisco

December 2008

# Leveraging Eclipse



- **IBM Rational Jazz Project**
  - IBM Rational Team Concert, IBM Rational Requirements Composer, IBM Rational Quality Manager
  - There will be others
  - Open Services
- **IBM Software Development Platform (SDP)**
  - Leverages Eclipse as an integration framework
  - Offerings across WebSphere, Lotus, Rational, Tivoli and Information Management
- **IBM Lotus Expeditor/Notes/Sametime/...**
  - Equinox based RCP for open, collaborative, cross platform desktop and embedded applications
  - Base for Lotus Notes and Lotus Sametime
- **IBM WebSphere Application Server**
  - J2EE tools, J2EE Deploy
  - Equinox as a base for WAS implementation
- **On-line documentation**
  - On-line documentation standardized on the Eclipse help system
- **Base for “Ready for Rational” partner program**
- **Many Research and AlphaWorks projects**
  - Contribution to Eclipse Open Healthcare Framework
- **Many internal IBM applications**

# Eclipse Usage in IBM



- IBM products using Eclipse
  - Eclipse 3.4 Ganymede → 54 IBM Products and Components, to date and growing
  - Eclipse 3.3 Europa → 78 IBM Products and Components
  - Eclipse 3.2 Callisto → 137 IBM Products and Components
  - Eclipse 3.1.x & prior → 280 IBM Products and Components
- To date, over 350 unique IBM products or components use Eclipse

# IBM Major Products using Eclipse technology



## • Rational Tools

- IBM Rational Web Developer / WebSphere Studio Site Developer
- IBM Rational Application Developer / WebSphere Studio Application Dev.
- IBM Rational Software Modeler
- IBM Rational Software Architect
- IBM Rational Team Concert
- IBM Rational Quality Manager
- IBM Rational Functional Tester
- IBM Rational Performance Tester
- IBM Rational Manual Tester
- Rational ClearCase
- Rational ClearQuest
- Rational Problem Determination
- Rational Method Manager
- Rational Data Architect
- Rational Systems Developer
- IBM Debugger
- Rational Enterprise Suite

## • WebSphere and Foundation Tools

- WebSphere Developer for zSeries / WebSphere Studio Enterprise Developer
- WebSphere Studio Device Developer
- WebSphere Application Server (various editions, including Express, Embedded)
- Rules Designer Toolkit for IBM WebSphere Studio
- Autonomic Computing Tools (including Solution Installation)
- Integrated Solutions Console (AC)
- Generic Maintenance Installer (AC)
- Business Process Choreographer
- Visual Configuration Explorer
- WebSphere Studio Asset Analyzer

## • Core and Enterprise Tools

- WebSphere Development Studio Suite for iSeries
- WebSphere Development Studio Client for iSeries
- POWER Programming Advantage for eServer iSeries
- WebSphere Studio Performance Monitor for zOS
- WebSphere Studio Workload Simulator for zOS
- XL Fortran Enterprise
- XL C Enterprise
- Information Management System
- TXSeries for Multiplatforms
- IBM TPF Product (various editions)
- WebSphere Developer Debugger for System z

## • Integration & Middleware Tools

- IBM Crossworlds Toolset
- WebSphere MQ Integrator Toolkit
- WebSphere Host Integration
- WebSphere Host Access Transformation Toolkit
- CICS Transaction Server

- WBI / WebSphere Studio AD – Integration Edition (various products)
- WebSphere Business Integration Modeler
- WebSphere Enterprise Service Bus
- WebSphere Process Server

## • Lotus

- Lotus Notes
- Lotus Sametime
- Lotus Domino (various)
- Lotus Workplace (various)
- WebSphere Portal (various editions)
- Content Publisher
- Lotus Learning Management System (various editions)
- Integrated Runtime for Desktop (and Express)

## • Tivoli

- Tivoli Monitoring
- Tivoli Enterprise Console Graphical Rule Builder
- Tivoli Storage Manager (various editions)
- Tivoli Director (various editions)
- Various Tivoli management products
- Active Correlation Technology
- Tivoli Composite Application Mgr (various products)
- Content Delivery System
- Common Event Infrastructure

## • Database Tools

- DB2 Everyplace
- DB2 (various products)
- IBM Cloudscape
- Query Management Facility
- Websphere Information Integrator OmniFind Edition

## • Reach and User Experience

- WebSphere Voice Toolkit
- WebSphere Commerce (various editions)
- WebSphere Everyplace (various editions)
- Portal Toolkit
- Multi-modal Toolkit
- Voice Portal (Fuji) Toolkit

## • Other

- AIX Toolkit
- Integrated Solutions Console
- Total Storage (various products)
- SCLM Workbench (various editions)
- Enterprise aDesigner
- LanguageWare
- Eclipse distributions through the Standalone Help System

# Leadership at Eclipse



- Of the 103 (sub)projects at Eclipse, IBM contributes to 51 and leads 47
- Of the 11 PMC's at Eclipse, IBM has 14 employees on 10 of them

## Eclipse Projects/Subprojects with IBM Contributions

### Business Intelligence and Reporting Tools (BIRT)

#### Data Tools Platform

Connectivity  
Enablement  
Model Base  
SQL Dev Tools

#### Device Software Development Platform

ERCP - Embedded Rich Client Platform  
Target Management

#### Eclipse Project

e4  
JDT - Java Development Tools  
PDE - Plugin Development Environment  
Eclipse Platform  
Eclipse Project Incubator

#### Eclipse Modeling Project

Modeling  
Eclipse Modeling Framework (EMF)  
Graphical Modeling Framework  
Model To Text (M2T)  
Model Development Tools (MDT)

#### Eclipse RT

Equinox

#### Eclipse Technology Project

Accessibility Tools Framework  
Babel  
BPEL Designer Project  
Community-driven Systems Management in Open Source Project (COSMOS)  
Dash, Tools for Committers  
Eclipse Process Framework Project  
Higgins  
The IDE Meta-tooling Platform  
Supplemental Widgets for SWT (Nebula)

### Tools Project

C/C++ Development Tooling (CDT)  
GEF - Graphical Editor Framework  
Eclipse Orbit Project  
Parallel Tools Platform (PTP)  
PHP Development Tools

### Test and Performance Tools Platform Project

TPTP Platform  
Monitoring Tools  
Testing Tools  
Tracing & Profiling Tools

### Eclipse Web Tools Platform Project

AJAX Tools Framework  
Common  
Datatools  
WTP EJB Tools  
WTP Java EE Tools  
JavaServer Faces  
Webtools Releng  
Server Tools  
Source Editing  
Web Services Tools  
Webtools Website  
WTP Incubator

- **Blue** Projects indicate IBM on PMC
- **Blue** subprojects indicate IBM Lead or Co-lead

# Investment in Eclipse



## Number of Active Committers: 169

In addition, IBM contributes:

- 1 Active Board Members of the Eclipse Foundation
- Active participants in Compensation, IP Advisory, Finance Committees
- Active participants in Requirements, Architecture, and Planning Councils
- Dedicated marketing staff and programs to promote value of Eclipse
- Actively promotes Eclipse branding through ingredient branding of IBM offerings
- Recruits and supports ISV's & business partners building Eclipse-based plug-ins
- Research and ad tech at alphaWorks and developerWorks
- 7 books about Eclipse, including Amazon top seller
- Commercial Eclipse Education through IBM Global Campus
- EclipseCon Gold sponsor, many IBM attendees, major contributor to organization, program
- Eclipse evangelism – talks, interviews, podcasts, webinars, tutorials by IBM Eclipse leaders

## Slide 6

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**JM3**

When I queried CVS on 10/8, I came up with 204 unique active IBM committers (made a change since 1/1/2007). Some committers were active on multiple projects

Jim Mickelson, 09/11/2007

# Dash Reports (as of 11/21/08)



IBM 169 (28.55%) 153 (36.52%) 322 (31.85%) 52.48% 489,916 (41.99%) 14,198,495 (38.49%) 29

IBM: LOC & Committer Count for 51 Projects

[x]

Project	Committers			Commits	LOC
datatools	4	5	9	1,607	307,625
datatools.connectivity	2	2	4	458	10,532
datatools.enablement	2	1	3	242	3,555
datatools.modelbase	3	2	5	544	249,113
datatools.sqltools	2	2	4	165	43,935
dsdp.ercp	6	8	14	1,466	127,477
dsdp.tm	4	0	4	2,300	49,204
eclipse	2	1	3	11	32
eclipse.jdt	17	31	48	15,840	880,418
eclipse.pde	10	18	28	3,585	125,414
eclipse.platform	45	69	114	38,945	1,492,638
modeling	1	0	1	6	17
modeling.emf	2	2	4	673	33,367
modeling.emft	1	0	1	671	0
modeling.gmf	4	2	6	2,129	54,246
modeling.m2t	1	0	1	587	8,227
modeling.mdt	4	3	7	378	52,188
rt	14	5	19	14,131	286,049
technology.actf	6	0	6	11,259	152,976
technology.aperi	3	9	12	456	5,343
technology.babel	1	0	1	63	1,337
technology.bpel	1	1	2	294	5,258
technology.cosmos	10	1	11	21,142	408,062
technology.dash	2	0	2	10	212
technology.epf	11	4	15	20,674	234,282
technology.higgins	5	1	6	1,603	1,603
technology.imp	2	0	2	1,867	1,867
technology.nebula	1	0	1	23	489
technology.ohf	13	1	14	211,267	3,874,235
tools.cdt	2	1	3	184	708
tools.gef	3	8	11	416	11,038
tools.orbit	6	1	7	27,785	3,417,205
tools.pdt	1	0	1	190	5,112
tools.ptp	4	1	5	9,870	285,995
tptp	11	28	39	18,343	365,927
tptp.monitoring	6	9	15	4,980	34,690
tptp.performance	5	4	9	502	8,917
tptp.platform	8	27	35	6,491	101,754
tptp.test	6	6	12	2,286	33,352
webtools.atf	1	5	6	5	112
webtools.common	9	14	23	1,973	30,289
webtools.datatools	1	12	13	95	2,386
webtools.ejbtools	5	8	13	275	6,800
webtools.jeetools	5	15	20	1,539	28,910
webtools.jsf	1	0	1	14	56
webtools.releng	19	9	28	8,117	420,124
webtools.servertools	4	9	13	1,688	17,278
webtools.sourceediting	9	14	23	26,048	600,453
webtools.webservices	7	10	17	2,957	33,227



# IBM Reported Bugs/Enhancements (as of 11/5/08)



Classification	Severity							Total
	blocker	critical	major	normal	minor	trivial	enhancement	
BIRT	<a href="#">17</a>	<a href="#">20</a>	<a href="#">60</a>	<a href="#">142</a>	<a href="#">29</a>	<a href="#">13</a>	<a href="#">32</a>	<a href="#">313</a>
DSDP	<a href="#">1</a>	<a href="#">20</a>	<a href="#">69</a>	<a href="#">551</a>	<a href="#">77</a>	<a href="#">20</a>	<a href="#">74</a>	<a href="#">812</a>
DataTools	<a href="#">7</a>	<a href="#">27</a>	<a href="#">90</a>	<a href="#">311</a>	<a href="#">15</a>	<a href="#">6</a>	<a href="#">15</a>	<a href="#">471</a>
Eclipse	<a href="#">41</a>	<a href="#">134</a>	<a href="#">593</a>	<a href="#">5830</a>	<a href="#">338</a>	<a href="#">182</a>	<a href="#">983</a>	<a href="#">8101</a>
Eclipse Foundation	<a href="#">7</a>	<a href="#">11</a>	<a href="#">24</a>	<a href="#">200</a>	<a href="#">9</a>	<a href="#">3</a>	<a href="#">28</a>	<a href="#">282</a>
Modeling	<a href="#">31</a>	<a href="#">68</a>	<a href="#">284</a>	<a href="#">1330</a>	<a href="#">39</a>	<a href="#">29</a>	<a href="#">412</a>	<a href="#">2193</a>
RT	<a href="#">25</a>	<a href="#">34</a>	<a href="#">101</a>	<a href="#">1735</a>	<a href="#">39</a>	<a href="#">7</a>	<a href="#">157</a>	<a href="#">2098</a>
STP	<a href="#">.</a>	<a href="#">.</a>	<a href="#">1</a>	<a href="#">1</a>	<a href="#">.</a>	<a href="#">.</a>	<a href="#">.</a>	<a href="#">2</a>
TPTP	<a href="#">117</a>	<a href="#">204</a>	<a href="#">359</a>	<a href="#">1099</a>	<a href="#">32</a>	<a href="#">2</a>	<a href="#">348</a>	<a href="#">2161</a>
Technology	<a href="#">61</a>	<a href="#">45</a>	<a href="#">134</a>	<a href="#">1219</a>	<a href="#">97</a>	<a href="#">15</a>	<a href="#">310</a>	<a href="#">1881</a>
Tools	<a href="#">9</a>	<a href="#">13</a>	<a href="#">69</a>	<a href="#">559</a>	<a href="#">48</a>	<a href="#">22</a>	<a href="#">110</a>	<a href="#">830</a>
WebTools	<a href="#">37</a>	<a href="#">86</a>	<a href="#">475</a>	<a href="#">2045</a>	<a href="#">117</a>	<a href="#">19</a>	<a href="#">379</a>	<a href="#">3158</a>
Total	<a href="#">353</a>	<a href="#">662</a>	<a href="#">2259</a>	<a href="#">15022</a>	<a href="#">840</a>	<a href="#">318</a>	<a href="#">2848</a>	<a href="#">22302</a>

# Reports Fixed by IBM (as of 11/5/08)



Classification	Severity							Total
	blocker	critical	major	normal	minor	trivial	enhancement	
	BIRT	<u>8</u>	<u>7</u>	<u>33</u>	<u>72</u>	<u>10</u>	<u>8</u>	<u>143</u>
	DSDP	.	<u>8</u>	<u>33</u>	<u>201</u>	<u>22</u>	<u>10</u>	<u>297</u>
	DataTools	<u>3</u>	<u>17</u>	<u>56</u>	<u>179</u>	<u>7</u>	<u>2</u>	<u>268</u>
	Eclipse	<u>20</u>	<u>68</u>	<u>258</u>	<u>2496</u>	<u>123</u>	<u>127</u>	<u>3305</u>
	Eclipse Foundation	<u>4</u>	<u>9</u>	<u>14</u>	<u>85</u>	<u>3</u>	<u>3</u>	<u>126</u>
	Modeling	<u>3</u>	<u>9</u>	<u>30</u>	<u>223</u>	<u>7</u>	<u>13</u>	<u>351</u>
	RT	<u>16</u>	<u>15</u>	<u>57</u>	<u>936</u>	<u>16</u>	<u>4</u>	<u>1073</u>
	STP	.	.	<u>1</u>	.	.	.	<u>1</u>
	TPTP	<u>64</u>	<u>118</u>	<u>126</u>	<u>390</u>	<u>4</u>	<u>2</u>	<u>717</u>
	Technology	<u>59</u>	<u>38</u>	<u>94</u>	<u>831</u>	<u>46</u>	<u>6</u>	<u>1219</u>
	Tools	<u>7</u>	<u>6</u>	<u>26</u>	<u>303</u>	<u>25</u>	<u>17</u>	<u>419</u>
	WebTools	<u>31</u>	<u>59</u>	<u>277</u>	<u>974</u>	<u>39</u>	<u>5</u>	<u>1454</u>
	Total	<u>215</u>	<u>354</u>	<u>1005</u>	<u>6690</u>	<u>302</u>	<u>197</u>	<u>9373</u>

Note: This is a lower bound. Actual numbers are much higher

# Bug Comments by IBM (as of 11/5/08)



## Severity

## Classification

	blocker	critical	major	normal	minor	trivial	enhancement	Total
BIRT	<a href="#">17</a>	<a href="#">20</a>	<a href="#">62</a>	<a href="#">169</a>	<a href="#">29</a>	<a href="#">13</a>	<a href="#">36</a>	<a href="#">346</a>
DSDP	<a href="#">4</a>	<a href="#">44</a>	<a href="#">142</a>	<a href="#">887</a>	<a href="#">151</a>	<a href="#">34</a>	<a href="#">217</a>	<a href="#">1479</a>
DataTools	<a href="#">13</a>	<a href="#">34</a>	<a href="#">106</a>	<a href="#">401</a>	<a href="#">19</a>	<a href="#">8</a>	<a href="#">48</a>	<a href="#">629</a>
Eclipse	<a href="#">116</a>	<a href="#">321</a>	<a href="#">1147</a>	<a href="#">9746</a>	<a href="#">690</a>	<a href="#">289</a>	<a href="#">2521</a>	<a href="#">14830</a>
Eclipse Foundation	<a href="#">9</a>	<a href="#">14</a>	<a href="#">29</a>	<a href="#">303</a>	<a href="#">11</a>	<a href="#">4</a>	<a href="#">49</a>	<a href="#">419</a>
Modeling	<a href="#">44</a>	<a href="#">86</a>	<a href="#">349</a>	<a href="#">1678</a>	<a href="#">72</a>	<a href="#">33</a>	<a href="#">623</a>	<a href="#">2885</a>
RT	<a href="#">44</a>	<a href="#">66</a>	<a href="#">177</a>	<a href="#">2324</a>	<a href="#">61</a>	<a href="#">15</a>	<a href="#">267</a>	<a href="#">2954</a>
STP	<a href="#">.</a>	<a href="#">.</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">.</a>	<a href="#">.</a>	<a href="#">2</a>	<a href="#">5</a>
TPTP	<a href="#">148</a>	<a href="#">243</a>	<a href="#">432</a>	<a href="#">1322</a>	<a href="#">37</a>	<a href="#">4</a>	<a href="#">424</a>	<a href="#">2610</a>
Technology	<a href="#">82</a>	<a href="#">66</a>	<a href="#">173</a>	<a href="#">1564</a>	<a href="#">111</a>	<a href="#">19</a>	<a href="#">406</a>	<a href="#">2421</a>
Tools	<a href="#">14</a>	<a href="#">23</a>	<a href="#">112</a>	<a href="#">879</a>	<a href="#">76</a>	<a href="#">26</a>	<a href="#">234</a>	<a href="#">1364</a>
WebTools	<a href="#">60</a>	<a href="#">121</a>	<a href="#">746</a>	<a href="#">2992</a>	<a href="#">182</a>	<a href="#">35</a>	<a href="#">683</a>	<a href="#">4819</a>
Total	<a href="#">551</a>	<a href="#">1038</a>	<a href="#">3476</a>	<a href="#">22267</a>	<a href="#">1439</a>	<a href="#">480</a>	<a href="#">5510</a>	<a href="#">34761</a>

# Looking Ahead



- Our work on the Platform project will be primarily driven by e4 and Jazz
- We continue to seek to increase diversity in the platform
  - Eclipse Platform is the foundation of Eclipse. Benefits all members
  - Investment imbalance – IBM is still carrying too much of the load
- e4 - An opportunity to get involved
  - Incubator for the technology for Eclipse 4.0
  - Unblock the desktop evolution
  - Create opportunity for others to get involved - 25 non-IBM committers on e4 work already
- Babel
  - Need co-lead
  - Welcome participation