



# Eclipse BIRT 2.3 Release Review

June 2, 2008

## Eclipse BIRT PMC



# Introduction: BIRT 2.3 Release Review



- BIRT 2.3 is targeted for availability June 25, 2008
  - Based on Eclipse Platform 3.4
  - Part of Ganymede Simultaneous Release
- Major Milestone History
  - 1.0, Jun 2005; 1.0.1, Jul 2005
  - 2.0, Jan 2006; 2.0.1, Feb 2006
  - 2.1, Jun 2006; 2.1.1 Sep, 2006; 2.1.2, Feb 2007; 2.1.3, Jul 2007
  - 2.2, Jun 2007; 2.2.1 Oct 2007; 2.2.2, Feb 2008
- Release alignment
  - “Major” release designation determined by feature set
  - Summer releases will be aligned with Eclipse release train

## Features: BIRT 2.3 Requirements Process



- Requirements gathered from multiple sources:
  - Enhancement requests already entered in Bugzilla
  - Discussions in BIRT newsgroup
  - Innovation/experience from within the BIRT project team
- Requirements captured in Bugzilla
  - Community encouraged to enter all enhancements into Bugzilla for planning and tracking
- Candidate projects identified and listed on BIRT Wiki
- BIRT Project Specifications (BPS) created to define scope and encourage discussion and feedback
- BIRT 2.3 Plan developed and published on Eclipse.org

# Features: Summary of BIRT 2.3 Objectives & Themes



- Integrate and provide BIRT as part of the Ganymede Simultaneous Release
  - Support use of BIRT in a wide range of Eclipse 3.4 applications
  - Ensures BIRT technology is easily accessible to Eclipse 3.4 community
- Specific additional features can be grouped into broad categories
  - Support for Eclipse 3.4 (tested with Ganymede components)
  - Prototype Integration of Eclipse DTP Project's Graphical Query Builder
  - BIRT JavaScript Debugger to debug scripting with JavaScript
  - JavaScript validation within Expression Builder
  - Usability Improvements (e.g. easier formatting, Prototype Integration of DTP Graphical Query Builder, crosstab improvements)
  - Crosstab Enhancements (e.g. scripting, computed measures)
  - Chart Enhancements (e.g. better layout, consume cube data)
  - Crosstab & Chart Integration (e.g. chart view of measure data)
  - Inclusion of External JavaScript files (e.g. references to external .js files)
  - Generate Report Document directly from BIRT Workbench
  - Extension point to create custom data extracts from Report
  - Bidirectional language support (Bidi) for Hebrew and Arabic
  - Bi-Directional enhancements for core API and BIRT runtime (e.g. rendering right-to-left reports in HTML and alternate formats such as Excel, PDF, WPML).
- Incorporate Eclipse Themes & Priorities where applicable

For Details, refer to BIRT 2.3 Release Plan and Bugzilla

# Non-Code Aspects: Documentation & Examples

- BIRT 2.3 download includes online documentation
  - Created by professional technical writers
- Tutorials and examples available on [www.eclipse.org/birt](http://www.eclipse.org/birt)
  - How-To recorded demos
  - Articles on common BIRT usage scenarios
  - Examples of common reports, code snippets
- BIRT includes an embedded Derby sample database
  - Easy to learn how to use BIRT with tutorials and examples
  - Standard SQL data that can easily be loaded into other DBs
- New & Noteworthy documents
  - Have been created for Milestone releases
  - Comprehensive BIRT 2.3 N&N will be created for final 2.3 release

## Non-Code Aspects: Internationalization & Localization



- BIRT uses Eclipse and Java localization/internationalization infrastructure
- Report architecture enables easy localization of labels/text in actual reports
- BIRT is tested for 23 locales:
  - Group 1 languages - German, Spanish, French, Italian, Japanese, Korean, Brazilian Portuguese, Traditional Chinese and Simplified Chinese
  - Group 2 CEMA languages - Czech, Hungarian, Polish and Russian
  - Group 2a additional languages - Danish, Dutch, Finnish, Greek, Norwegian, Portuguese, Swedish and Turkish
  - Group Bidi languages - Arabic and Hebrew
- Currently right to left (bi-directional) support in PDF output is limited



## APIs: Overview

- Intention is for new APIs to go through at least one release of Provisional status to allow for feedback
- Community feedback on APIs prompted a number of enhancements and improvements in BIRT 2.3
- Goal for BIRT 2.3 is to support BIRT 2.2 APIs that are in use by the community. Known exceptions are:
  - BIRT 2.2 or earlier APIs that did not work
- Any compatibility issues should be reported as defects and we will work to address them where possible

# APIs: Status



Name	Status	Doc Status	Test Cases	# of Clients	Backward Compatible	Maturity
BIRT Report Object Model	Platform	Comprehensive document	Yes	2+	Indefinite	Platform
BIRT Design Engine API	Platform	Overview, How To, Examples and JavaDoc	Yes	2+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Mature
BIRT Report Engine API	Provisional	Overview, How To, Examples and JavaDoc	Yes	3+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Medium
BIRT Report Scripting API	Provisional	JavaDoc, Examples	Yes	N/A	2.0.x, 2.1.x, 2.2.x	Medium
BIRT Report Item Extension API	Provisional	Overview, Examples and JavaDoc	Yes	2+	1.0.x, 2.0.x, 2.1.x, 2.2.x	High
BIRT Report Rendering Extension API	Provisional	JavaDoc	Yes	2+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Medium
BIRT Chart Engine API	Provisional	Overview, FAQ, Model Specification and JavaDoc	Yes	2+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Medium
BIRT Chart Type Extension API	Provisional	JavaDoc	Yes	5+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Medium
BIRT Chart Device Rendering Extension API	Provisional	JavaDoc	Yes	3+	1.0.x, 2.0.x, 2.1.x, 2.2.x	Medium

API Contract Compatibility: BIRT 2.3 is upwards contract-compatible with BIRT 1.x; 2.0.x, 2.1.x and 2.2.x to the greatest extent possible. All incompatibility exceptions will be documented. Downward contract compatibility is not supported. There is no guarantee that compliance with BIRT 2.3 APIs will ensure compliance with BIRT 1.x; 2.0.x; 2.1.x; 2.2.x APIs. Refer to general Eclipse document on [Evolving APIs](#) for a discussion of the kinds of API changes that maintain contract compatibility.



# End of Life Issues



- No features or APIs are moving into End of Life in this release

# Architectural Items



- No changes from BIRT 2.2



## Bugzilla Statistics

- Dedicated professional QA team testing BIRT
- Strong participation in testing from Community
- All bugs are tracked through Bugzilla
- Release Exit Criteria
  - Zero outstanding Critical defects
  - Zero outstanding Major defects
  - 100% test attempt / pass
- All automated tests/JUnit tests are in CVS

# Bugzilla Statistics



Target Milestone →	2.3 Milestone Releases											Total 2.3	2.3.1	Future
	2.3.0	M1	M2	M3	M4	M5	M6	RC0	RC1	RC2	RC3			
Blocker	4	4	0	3	9	1	12	2	4	3	0	42	0	6
Critical	7	3	2	1	16	7	20	9	6	6	0	77	3	5
Major	34	8	6	3	58	32	44	21	17	9	4	236	0	18
Normal	142	70	31	50	303	256	404	214	166	99	13	1748	39	355
Minor	4	2	1	0	4	3	6	13	2	4	0	39	2	15
Trivial	3	0	0	0	0	0	1	1	1	1	0	7	0	3
Enh	58	7	9	13	56	41	42	34	16	13	2	291	27	339
<b>Total</b>												<b>2440</b>	<b>71</b>	<b>741</b>

Bug statistics as of May 25, 2008

# Code Statistics



Project Area	BIRT 1.0	BIRT 2.0	BIRT 2.1	BIRT 2.2	BIRT 2.3	% Increase (2.2 to 2.3)
Report Designer Lines of Code	61K	100K	110K	198K	300K	+51%
Charting Engine Lines of Code	60K	111K	125K	199K	210K	+5%
Report Engine Lines of Code	113K	180K	232K	659K	705K	+6%
Test and Release Engineering Tools				365K	397K	+8%
<b>TOTAL Lines of Code:</b>	<b>234K</b>	<b>391K</b>	<b>467K</b>	<b>1,427K</b>	<b>1,612K</b>	<b>+13%</b>
Number of Java Files	N/A	N/A	4,787	7,793	8,047	+3%

Statistics as of May 23, 2008

Statistics do not include 3<sup>rd</sup> party open source code and binaries.

Line count does not include comments and blank lines.

## Standards (same as BIRT 1.0.x – 2.2.x)



- BIRT is designed to work in a standards-based environment
  - Eclipse plug-ins for design-time activities
  - General Java class libraries for deployment
  - Ability to render reports as HTML pages for output
  - Example deployment implementation for Apache Tomcat
- BIRT uses JavaScript for scripting (Mozilla Rhino engine)
  - Conforms to ECMA-262 standard
  - Reference: <http://www.mozilla.org/js/>

# Schedule



- BIRT 2.3 adopted Eclipse Ganymede Simultaneous Release Schedule

<b>Oct 9, 2007</b>	▪ BIRT 2.3 M2 released
<b>Nov 20, 2007</b>	▪ BIRT 2.3 M3 released
<b>Jan 16, 2008</b>	▪ BIRT 2.3 M4 released
<b>Feb 26, 2008</b>	▪ BIRT 2.3 M5 released
<b>Apr 15, 2008</b>	▪ BIRT 2.3 M6 released
<b>May 13, 2008</b>	▪ BIRT 2.3 RC0 released
<b>May 27, 2008</b>	▪ BIRT 2.3 RC1 target
<b>Jun 3, 2008</b>	▪ BIRT 2.3 RC2 target
<b>Jun 10, 2008</b>	▪ BIRT 2.3 RC3 target
<b>Jun 17, 2008</b>	▪ BIRT 2.3 RC4 target
<b>Jun 25, 2008</b>	▪ BIRT 2.3 GA target
<b>Q4 2008</b>	▪ BIRT 2.3.1 Maintenance Release
<b>Summer 2009</b>	▪ BIRT 2.4/3.0 (Designation TBD)

# Process



- 50 committers for the Eclipse BIRT project
  - Committer elections and removals have followed charter principles
  - Continuing to recruit additional contributor organizations/individuals
- Open and inclusive release planning and tracking processes
  - Bugzilla used to request and track all defects and enhancements
- Leveraging other open source in the project where possible
  - Examples: Rhino; Flute; Tomcat; Derby
- All contributions made directly to Eclipse CVS
  - Nightly, stable, and release builds available to the community
- Project specific process details are posted on project web site
  - <http://www.eclipse.org/birt/phoenix/project/>
- Weekly PMC meeting with minutes posted for community access
  - [http://wiki.eclipse.org/BIRT\\_PMC\\_Minutes](http://wiki.eclipse.org/BIRT_PMC_Minutes)



# Community



- Open communications via 6 BIRT mailing lists and 1 newsgroup
  - Project activities communicated via mailing lists for PMC/general
  - One mailing list for each sub-project
  - Plus low-noise news only mailing list
- Newsgroup is very active
  - Many how-to questions and discussions
  - Typically same day responses from BIRT team
  - Have adjusted projects in response to newsgroup feedback
- Dedicated resources generating content for BIRT community at Eclipse.org
  - BIRT project pages
  - BIRT Wiki
- Coordination/cooperation between other open source projects
  - TPTP incorporates BIRT functionality
  - BIRT Committers also work on DTP project; DTP is key component of BIRT

# Community



- Articles and Technical Content Placement
  - See [http://wiki.eclipse.org/index.php/Articles\(BIRT\)](http://wiki.eclipse.org/index.php/Articles(BIRT)) for details
- Conferences and User Groups
  - EclipseCon 2008, March 2008: Many talks/tutorials on BIRT project technology
  - Presented on BIRT at various conferences during last 12 months
- Blogging
  - BIRT World: <http://birtworld.blogspot.com>
  - Promoting BIRT on many other sites such as TheServerSide, JavaLobby and EclipseZone
- Four books available:
  - BIRT: A Field Guide to Reporting (Addison-Wesley)
  - Integrating and Extending BIRT (Addison-Wesley)
  - New in 2008: Practical Data Analysis and Reporting with BIRT (Packt Publishing)
  - New in 2008: Eclipse BIRT: Business Intelligence und Reporting Tool (Xpert.press) (German)

# Intellectual Property



- Accepting Contributions (In-Bound Licensing)
  - All BIRT code provided under [Eclipse Public License \(EPL\)](#)
  - BIRT downloads include only 3<sup>rd</sup> party (non-EPL) components approved by EMO
  
- Licensing Contributions (Out-Bound Licensing)
  - BIRT 2.3 provided under EPL
  - About files and license files are complete and correct
  
- Due Diligence and Record Keeping
  - All BIRT Committers completed Committer Agreement & approved by PMC/EMO
  - PMC maintains list of all 3<sup>rd</sup>-party (non-EPL) components used by BIRT
    - All 3<sup>rd</sup> party components completed IP review process and approval by EMO
  - Project Log maintained by the PMC

Eclipse Foundation IP Policy: [http://www.eclipse.org/org/documents/Eclipse\\_IP\\_Policy.pdf](http://www.eclipse.org/org/documents/Eclipse_IP_Policy.pdf)

# Intellectual Property Cleanliness



The following significant and third party contributions have been reviewed by Eclipse Legal:

Third Party Software	IPzilla #	License	Link to License
Rhino 1.6R7	1864	NPL 1.1	<a href="http://www.mozilla.org/MPL/NPL-1.1.html">http://www.mozilla.org/MPL/NPL-1.1.html</a>
Apache Derby 10.3.1.4	1883	Apache 2.0	<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>
Jakarta Commons CLI 1.0	218	Apache 2.0	<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>
JTidy R7	295	JTidy Project License	<a href="http://jtidy.sourceforge.net/license.html">http://jtidy.sourceforge.net/license.html</a>
Simple API for CSS 1.3	265	W3C License	<a href="http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231">http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231</a>
Flute 1.3	272	W3C License	<a href="http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231">http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231</a>
Commons codec1.3	213	Apache 2.0	<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>
Xerces2 Java Parser 2.9.0	2361	Apache 2.0	<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>
Apache Axis 1.4	2362	Apache 2.0	<a href="http://www.apache.org/licenses/LICENSE-2.0.html">http://www.apache.org/licenses/LICENSE-2.0.html</a>
Prototype.js 1.4.0	309		<a href="http://dev.rubyonrails.org/browser/spinoffs/prototype/LICENSE">http://dev.rubyonrails.org/browser/spinoffs/prototype/LICENSE</a>
Batik 1.6	209	Apache Batik Public License	<a href="http://xml.apache.org/batik/license.html">http://xml.apache.org/batik/license.html</a>
iText 1.5.4	2114	Mozilla 1.1	<a href="http://www.lowagie.com/iText/MPL-1.1.txt">http://www.lowagie.com/iText/MPL-1.1.txt</a>

Project log is being updated and will be complete by release date:

<http://www.eclipse.org/birt/project-info/ProjectLog2.3.html>

# Project Plan



- BIRT 2.3 scheduled for Jun 25, 2008
  - Based on and supports Eclipse 3.4
  - Part of Eclipse Ganymede Simultaneous Release
- BIRT 2.3.1 tentatively scheduled for Q4 2008
  - Maintenance release
  - Synchronized and tested with Eclipse Fall Release
  - Exact date pending on planned date for Eclipse Fall Release
- BIRT release tentatively targeted for Jun 2009
  - Synchronized with Eclipse Simultaneous Release
  - Feature set and planning will determine release designation
  - Detailed planning and release designation TBD

# Thanks and...



## Feedback, Feedback, Feedback!

- **Please provide us with your feedback, requirements, issues**
- **Submit enhancement requests / defects in Bugzilla**  
[https://bugs.eclipse.org/bugs/enter\\_bug.cgi?product=BIRT](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=BIRT)
- **Submit questions / issues in the BIRT Newsgroup:**  
<news://news.eclipse.org/eclipse.birt>
- **Engage with the PMC to contribute:**  
[birt-pmc@eclipse.org](mailto:birt-pmc@eclipse.org) or individual PMC members (see <http://www.eclipse.org/birt/phoenix/project/pmc.php>)