



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
 - 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
Total												2440	71	741

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%
TOTAL Lines of Code:	234K	391K	467K	1,427K	1,612K	+13%
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 3rd 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

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

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 and 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 3rd 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 3rd-party (non-EPL) components used by BIRT
 - All 3rd 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

Intellectual Property Cleanliness



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

Third Party Software	License	Link to License
Rhino 1.6R7	NPL 1.1	http://www.mozilla.org/MPL/NPL-1.1.html
Apache Derby 10.3.1.4	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0.html
Jakarta Commons CLI 1.0	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0.html
JTidy R7	JTidy Project License	http://jtidy.sourceforge.net/license.html
Simple API for CSS 1.3	W3C License	http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231
Flute 1.3	W3C License	http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231
Commons codec1.3	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0.html
Xerces2 Java Parser 2.9.0	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0.html
Apache Axis 1.4	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0.html
Prototype.js 1.4.0		http://dev.rubyonrails.org/browser/spinoffs/prototype/LICENSE
Batik 1.6	Apache Batik Public License	http://xml.apache.org/batik/license.html
Commons-cli	Apache 2.0	http://www.apache.org/licenses/LICENSE-2.0
iText 1.5.4		

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
- **Submit questions / issues in the BIRT Newsgroup:**
<news://news.eclipse.org/eclipse.birt>
- **Engage with the PMC to contribute:**
birt-pmc@eclipse.org or individual PMC members (see <http://www.eclipse.org/birt/phenix/project/pmc.php>)