

#### Eclipse BIRT 4.3 Release Review June 3, 2013

# Eclipse BIRT PMC



#### Introduction: BIRT 4.3 Release Review



- BIRT 4.3 is targeted for availability June 26, 2013
  - Based on Eclipse Platform 4.3
  - Part of Kepler Simultaneous Release
- Recent Release History
  - 2.5, Jun 2009; 2.5.1 Sep, 2009; 2.5.2, Feb 2010
  - 2.6, Jun 2010; 2.6.1 Sep, 2010; 2.6.2, Feb 2011
  - 3.7, Jun 2011; 3.7.1 Sep, 2011; 3.7.2, Feb 2012
  - 4.2, Jun 2012; 4.2.1 Sep, 2012; 4.2.2, Feb 2013
- Release alignment
  - "Major" release designation determined by feature set
  - Service Releases will be aligned with Eclipse release train

#### Features: BIRT 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
- BIRT Plan developed and published on Eclipse.org

#### Features: Summary of BIRT 4.3 Objectives & Themes



- Integrate and provide BIRT as part of the Kepler Simultaneous Release
  - Tested with and integrates components from the Simultaneous release
  - Support use of BIRT in a wide range of Eclipse 4.3 applications
  - Ensures BIRT technology is easily accessible to Eclipse 4.3 community
- Significant new features in this release are:
  - Access to MongoDB as a data source
  - Access to Apache Cassandra as a data source
  - Access to POJOs as a data source
  - Improved export to Microsoft PowerPoint
  - Improved export to Microsoft Word
  - Improved export to Microsoft Excel
- Incorporate Eclipse Themes & Priorities where applicable

#### For Details, refer to BIRT Release Plan and Bugzilla

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## Non-Code Aspects: Documentation & Examples eclipse

- BIRT download includes online documentation
  - Created by professional technical writers
- Tutorials and examples available on <u>www.eclipse.org/birt</u>
  - 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 N&N will be created for final release

#### **APIs: Overview**



- BIRT 4.3 supports BIRT 2.1 to 4.2 APIs that are in use by the community
  - No compatibility claimed for BIRT 1.0.x and 2.0.x APIs
- Any compatibility issues should be reported as defects and we will work to address them where possible
- BIRT Migration Guide is maintained with specific notes:
  - http://wiki.eclipse.org/BIRT\_Migration\_Guide

#### **APIs: Status**



| Name                                      | Status      | Doc Status  | Test<br>Cases | # of<br>Client<br>s | Backward<br>Compatible | Maturity |
|---|-------------|---|---------------|---------------------|------------------------|----------|
| BIRT Report Object Model                  | Platform    | Comprehensive document                            | Yes           | 2+                  | Indefinite             | Mature   |
| BIRT Design Engine API                    | Platform    | Overview, How To,<br>Examples and JavaDoc         | Yes           | 2+                  | 2.1.x - 4.2.x          | Mature   |
| BIRT Report Engine API                    | Platform    | Overview, How To,<br>Examples and JavaDoc         | Yes           | 3+                  | 2.1.x - 4.2.x          | Mature   |
| BIRT Report Scripting API                 | Provisional | JavaDoc , Examples                                | Yes           | N/A                 | 2.1.x – 4.2.x          | Mature   |
| BIRT Report Item Extension API            | Provisional | Overview , Examples and JavaDoc                   | Yes           | 2+                  | 2.1.x - 4.2.x          | Mature   |
| BIRT Report Rendering Extension API       | Provisional | JavaDoc   | Yes           | 2+                  | 2.1.x – 4.2.x          | Mature   |
| BIRT Chart Engine API                     | Provisional | Overview, FAQ, Model<br>Specification and JavaDoc | Yes           | 2+                  | 2.1.x - 4.2.x          | Mature   |
| BIRT Chart Type Extension API             | Provisional | JavaDoc   | Yes           | 5+                  | 2.1.x - 4.2.x          | Mature   |
| BIRT Chart Device Rendering Extension API | Provisional | JavaDoc   | Yes           | 3+                  | 2.1.x - 4.2.x          | Mature   |

API Contract Compatibility: BIRT 4.3 is upwards contract-compatible with BIRT 2.1.x, to 4.3.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 4.3 APIs will ensure compliance with BIRT 2.1.x to 4.2.x APIs. Refer to general Eclipse document on Evolving APIs for a discussion of the kinds of API changes that maintain contract compatibility.

#### **Architectural Items**



- BIRT 4.3 leverages Eclipse Platform 4.3 as the primary workbench UI
  - Eclipse Platform 3.8 continues to supported as a secondary UI
- API compatibility with previous BIRT releases

## **Tool Usability**



- BIRT follows OS and Eclipse UI standards and capabilities
- BIRT 4.3 includes UI enhancements in response to community feedback on usability

End of Life Issues



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

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## **Bugzilla Statistics**



- Dedicated professional QA team testing BIRT
- Strong participation in testing from Community
- All bugs are tracked through Bugzilla
- All automated tests/JUnit tests are in CVS

#### **Bugzilla Statistics for BIRT 4.3**



|             | 4.3.0 M6 | 4.3.0 RC1 | 4.3.0 RC2 | 4.3.0 RC3 | 4.3.0 | 4.3 Total | Future |
|-------------|----------|-----------|-----------|-----------|-------|-----------|--------|
| blocker     |          |           |           |           | 1     | 1         | 3      |
| critical    |          |           |           |           |       |           | 13     |
| enhancement |          |           |           | 1         | 2     | 3         | 500    |
| major       |          | 5         |           |           | 1     | 6         | 34     |
| minor       | 1        | 3         |           |           | 2     | 6         | 23     |
| normal      |          | 12        | 13        | 1         | 11    | 37        | 586    |
| trivial     |          |           |           |           | 1     | 1         | 2      |
| Total       |          | 20        | 13        | 2         | 18    | 54        | 1161   |

Bug statistics as of May 28, 2013

#### **Standards**



- 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: <u>http://www.mozilla.org/js/</u>
- BIRT Leverages other open source in the project where possible
  - Examples: Flute; Tomcat; Derby

## **UI Usability**



- 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 24 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, Turkish and Thai
    - Group Bidi languages Arabic and Hebrew
- Accessibility
  - BIRT follows standard Eclipse Accessibility capabilities

#### Schedule



#### BIRT 4.3 adopted Eclipse Kepler Simultaneous Release Schedule:

<u>http://wiki.eclipse.org/Kepler/Simultaneous\_Release\_Plan</u>

## **Community: Process**



- Open and inclusive release planning and tracking processes
  - Bugzilla used to request and track defects and enhancements
- For Kepler development cycle, some contributions are checked into Eclipse GIT directly and other contributions are first tested in a local GIT build before being pushed to the Eclipse GIT system
- For post-Kepler development, all contributions will be checked into Eclipse GIT directly
- 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 conference call

## **Community: Activity**



- 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
  - BIRT Committers also work on DTP project; DTP is key component of BIRT
  - Other Eclipse projects utilize BIRT

## **Community: Activity**



- Articles and Technical Content Placement on BIRT Exchange
  - http://www.birt-exchange.org/devshare/
- Conferences and User Groups
  - EclipseCon Europe 2012
  - EclipseCon 2013
  - Presented on BIRT at other conferences and events during last 12 moths
- Blogging
  - BIRT World: <u>http://birtworld.blogspot.com</u>
  - Promoting BIRT on other sites
- Six books available:
  - BIRT: A Field Guide to Reporting (Addison-Wesley)
  - Integrating and Extending BIRT (Addison-Wesley)
  - Practical Data Analysis and Reporting with BIRT (Packt Publishing)
  - Eclipse BIRT: Business Intelligence und Reporting Tool (Xpert.press) (German)
  - BIRT for Beginners (lulu.com)
  - BIRT Best Practices

#### **Intellectual Property**



- Accepting Contributions (In-Bound Licensing)
  - All BIRT code provided under <u>Eclipse Public License (EPL)</u>
  - BIRT downloads include only 3<sup>rd</sup> party (non-EPL) components approved by EMO
- Licensing Contributions (Out-Bound Licensing)
  - BIRT 4.3 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
  - 3<sup>rd</sup> party components completed IP review process and approval by EMO
- Project Log maintained by the PMC
  - Project log is being updated and will be complete by release date
  - IP Log: <u>http://www.eclipse.org/birt/project-info/BIRTProjectLog4.3.html</u>

Eclipse Foundation IP Policy: http://www.eclipse.org/org/documents/Eclipse\_IP\_Policy.pdf

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#### **Project Plan**



- BIRT 4.3 scheduled for June 26, 2013
  - Based on and supports Eclipse 4.3
  - Also provides support for Eclipse 3.8
  - Part of Eclipse Kepler Simultaneous Release
- BIRT 4.3.1 scheduled for Q4 2013
  - Maintenance release
  - Synchronized and tested with Eclipse SR1 Release
  - Exact date pending on planned date for Eclipse SR1 Release
- Next major BIRT release targeted for June 2014
  - Part of Eclipse Simultaneous Release
  - 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 <u>https://bugs.eclipse.org/bugs/enter\_bug.cgi?product=BIRT</u>
- Submit questions / issues in the BIRT Newsgroup: <u>news://news.eclipse.org/eclipse.birt</u>
- Engage with the PMC to contribute: <u>birt-pmc@eclipse.org</u> or individual PMC members (see <u>http://www.eclipse.org/birt/phoenix/project/pmc.php</u>)