



Eclipse BIRT Engine and Java APIs

The BIRT Engine and Java API's are a part of the BIRT (Business Intelligence and Reporting Tools) project, an Eclipse Foundation open source project initiated and co-led by Actuate. BIRT is licensed under the Eclipse Public License (EPL). The BIRT technology brings powerful report generation capabilities to applications without having to build the functionality from lower level Java components.

Additional deployment options

In addition to the Eclipse BIRT Engine and Java API's itself, there are three architectural options built on the Eclipse BIRT Engine and Java API's for report execution and generation on an ongoing basis:

- *BIRT Deployment Kit* - a lightweight J2EE report repository with a web front-end for users to browse, select, and run BIRT reports on demand. It embeds the Eclipse BIRT Engine and its APIs and can be used either stand alone as an End User Reporting Portal or embedded in an application
- *BIRT iServer Express* - a report server that deploys, manages, schedules, secures, runs and distributes BIRT reports. It embeds the Eclipse BIRT Engine and Java APIs and can be implemented stand-alone or as a reporting service for other applications
- *BIRT iServer Enterprise* - a report server that includes all the features of BIRT iServer Express, with additional facilities for high availability and scalability to meet the needs of large numbers of concurrent users in a mission critical application environment

All BIRT deployment options provide the following capabilities:

- *Execution Services*: That read an XML BIRT report design, gather report parameters, access and process report data and create the corresponding report, including tables, charts and graphics.
- *Output Generation Services*: That output a generated BIRT report in HTML, Adobe PDF, Word DOC, Excel XLS, PostScript, and PowerPoint PPT.
- *Sample Viewer*: That leverages the viewing APIs to render an HTML report for viewing online, page-by-page.

	Eclipse BIRT Engine & Java APIs	BIRT Deployment Kit	BIRT iServer Express	BIRT iServer Enterprise
A collection of Java classes and API's used to execute BIRT reports and generate them in a variety of formats.	√			
A lightweight JAVA EE report repository with a web front-end for users to browse, select, and run BIRT reports on-demand.		√		
A single-purpose report server that deploys, manages, schedules, secures, runs and distributes BIRT reports			√	
An enterprise class report server that scales to 100,000s of users and supports multiple applications and departments inside and outside the firewall.				√
Web 2.0 Style Reports and Formatting				
Flash-ready BIRT Report Engine extension		√	√	√
JavaScript API for easy integration of content into applications		√	√	√
Report Generation				
On-demand transient report generation	√	√	√	√
On-demand persistent report generation			√	√
Scheduled background report generation			√	√
Built-in temporary files/transient store management		√	√	√
Database connection pooling for RDBMS		√	√	√
Parameterization				
Data and report structure parameter selection	√	√	√	√
Cascading parameters	√	√	√	√
Automatic Parameter Page Generation		√	√	√
Scheduling & Distribution				
Date and Time scheduling			√	√
Event, Business Rule Sequenced and Group scheduling			√	√
Email notification and delivery			√	√
Conditional notification			√	√
Subscriptions			√	√
Document Access and Management				
File system based repository to store and manage reports		√		
Database repository to store and manage reports			√	√
Report and Design browsing and filtering		√	√	√
Report searching			√	√
Shared report folders		1 only	√	√

	Eclipse BIRT Engine & Java APIs	BIRT Deployment Kit	BIRT iServer Express	BIRT iServer Enterprise
Report versioning			√	√
Automated report deletion			√	√
Dynamically created document, names, headlines and descriptions			√	√
Security				
Security system integration APIs		√	√	√
Single sign-on support APIs		√	√	√
User-based security		API	√	√
Role-based security, both functional and hierarchical			√	√
User and role-based access to reports			√	√
User and role-based access to components of reports, data, functionality			Optional	Optional
Integration and Customization				
URL-based API for report generation & viewing		√	√	√
Web services-based API for report generation & viewing			√	√
Web services API for repository management			√	√
Archival integration APIs and extension points			√	√
Usage logging integration APIs and extension points			√	√
Data Access				
Compatible with Eclipse BIRT Designer data sources	√	√	√	√
Database connection profiles	API	API	√	√
Compatible with BIRT Designer data sources		√	√	√
Metadata layer (Information Objects)			√	√
Data Integration (EII)			Optional	Optional
Information Object caching				Optional
Administration				
Enterprise Repository Console			√	√
Monitor and cancel jobs			√	√
Usage logging			√	√
Online backup and Recovery			√	√
Localization and i18n				
Eclipse Language Pack Report localization	√	√	√	√
UI localization		√	√	√

	Eclipse BIRT Engine & Java APIs	BIRT Deployment Kit	BIRT iServer Express	BIRT iServer Enterprise
Scalability and High Availability				
Configurable caching of report generation & viewing		√	√	√
Linear Scalability and Performance				√
Multi-threaded				√
Advanced tuning and configuration				√
Resource groups				√
Homogeneous clustering support				√
Heterogeneous clustering support				√
High Availability and Failover				√
Multiple Document Repositories per server				Optional
Platform Support				
Windows / Linux x86 (Red Hat and SUSE)	√	√	√	√
Solaris / AIX / HP-UX				√

About Actuate Corporation

Actuate initiated and co-leads Eclipse BIRT (Business Intelligence and Reporting Tools), an Eclipse Foundation open source project. Actuate delivers support and training for BIRT, a product line that builds on BIRT, and products that support spreadsheets in Java.