



Business Intelligence & Reporting Tools (BIRT) Introduction

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Agenda



- Brief Introduction to Eclipse
- What is BIRT?
- Target Users, Pain Points, Benefits
- Project Scope
- Release Components
- Demonstration
- Ways to participate

What Is Eclipse?



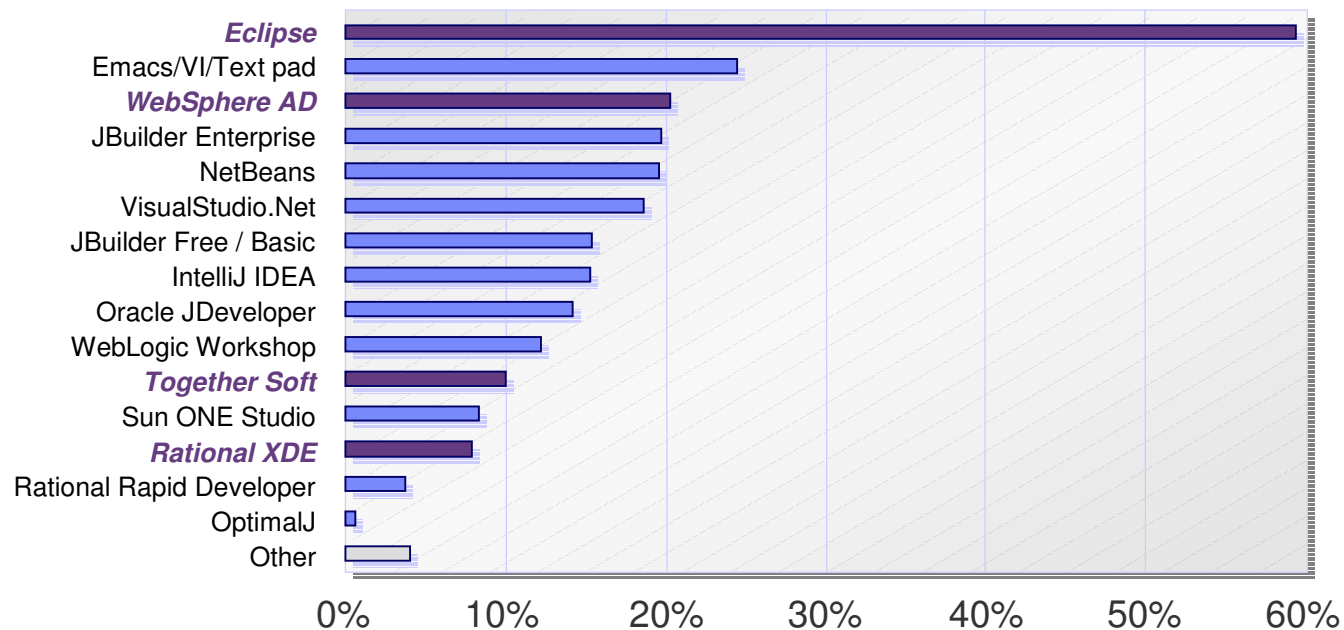
- Eclipse is an open source community focused on developing a **universal platform** of frameworks and exemplary tools that make it easy and cost-effective to build and deploy software in today's connected and unconnected world.
- Eclipse is a consortium of 13 Strategic Members, 64 Add-in Providers and 14 Associate Members (Publishers, Research Institutes, Standards Org., etc.).



Momentum Around Eclipse



- 39 million+ download request since the project initiated.



- “Within the tools market, the options have narrowed to two front-line players: MS Visual Studio family, and the Eclipse based technologies...”
 - SD Times, August 1, 2004

Business Intelligence and Reporting Tools



Actuate Joins Eclipse Foundation as Strategic Developer and Board Member

Actuate Proposes a Business Intelligence and Reporting Tools Project to the Eclipse Open-Source Community for Review

ACTUATE INTERNATIONAL USER CONFERENCE - LOS ANGELES – August 24, 2004 – The Eclipse Foundation, a community committed to the implementation of a universal platform for tools integration, and Actuate Corporation (NASDAQ: ACTU), the world leader in Enterprise Reporting Applications, today announced

- Actuate joins Eclipse as Strategic Developer and proposes BIRT
- Initiative is part of the Eclipse Open Source community
- Focused on embedded reporting needs for Java & J2EE
- Addresses a key Java/J2EE application development pain-point

BIRT Initial Target Users



- Java developer
 - Designs reports using Eclipse-based designer
 - Embed pre-designed reports in application
 - Provide “guided” report design capabilities in application
 - Application specific report creation user interface
- Business User
 - Uses report facilities provided by developer

Embedded Java Reporting Pain Points



Reporting needs are widespread

- Most applications have some type of reporting need
- Simple reporting is easy, but users demand more
- Real-world report development is challenging
 - Non-relational data sources
 - Sorting, aggregation and calculations on data
 - Professional presentation of information
- Meeting user demand for reporting is key to application success

BIRT Benefits



- To Java Developers
 - Saves calories vs. JSP/Java
 - Fully integrated into the Eclipse environment
 - Minutes vs. days for HTML, vs. weeks for PDF
 - Minutes to modify as user requirements change
- To Application End-Users
 - Nice looking reports
 - Content as HTML and PDF
- To Application Owners
 - Minimizes Eclipse developer training
 - Iterative development gets the right reports quicker

Example: Manufacturing Defect System



Defect Tracking

- Enter a Feature Request
- Report a New Defect
- Update Information for a Defect

Reporting/Analysis

- 30 Day Trend Report
- 90 Day Trend Report
- 120 Day Trend Report
- Component Comparison Quality Analysis
- New Defects Over Last 90 Days
- Part Supplier Analysis Report
- Product Comparison Quality Analysis

Manufacturing Defect Tracking System

File Edit Navigate Project Window Help

Projects

Manufacturing Defects Over Last 90 Days
Product Line Summary

Report Date: Oct 25, 2005 Division: Major Appliances

Product Line	Severity 1	Severity 2	Severity 3 & 4
Refrigerators	3	16	28
Microwave Ovens	0	7	21
Air Conditioners	0	3	9
Stoves	0	1	3
Electric Ovens	6	28	37
Gas Ovens	2	14	18

Problems
0 errors, 0 warnings, 0 infos

Description	Resource	In Folder

Example: Financial Web Site



Site Navigation

News & Promotions

Global Asset Management Inc.
[Log Out](#) | [Help](#)

[Home](#) | [Savings & Retirement](#) | [Your Profile](#)

JOE SMITH Friday, October 1, 2004

[Savings & Retirement >](#)

Summary [Print This Page](#)

Account: ACME INC. (12345)

[View your current Contributions](#)

[Investments](#) | [Transactions](#) | [Accounts](#)

This view shows the investments that you hold within your plan. To view historical performance, click an investment.

Current Balance (%)	Investment	Current Balance (\$)
50.55%	FIDELITY AGGR GROWTH	\$3,813.86
27.88%	FIDELITY DIVD GROWTH	\$2,103.93
8.43%	SPARTAN US EQ INDEX	\$635.70
7.72%	FIDELITY BLUE CHIP	\$582.51
2.74%	FIDELITY EQ INC II	\$206.58
2.69%	FIDELITY DIVERS INTL	\$202.68
100%		\$7,545.29

Asset Allocations

	Balance	Shares or Units	NAV	Change Per Share or Unit (\$)
Stock Investments				
Large Cap				
FIDELITY BLUE CHIP	\$582.51	14.788	\$39.39	+\$0.60
FIDELITY DIVD GROWTH	\$2,103.93	78.329	\$26.86	+\$0.40
FIDELITY EQ INC II	\$206.58	9.005	\$22.94	+\$0.31
SPARTAN US EQ INDEX	\$635.70	15.778	\$40.29	+\$0.60
Mid-Cap				
FIDELITY AGGR GROWTH	\$3,813.86	249.109	\$15.31	+\$0.22
International				
FIDELITY DIVERS INTL	\$202.68	7.908	\$25.63	+\$0.30

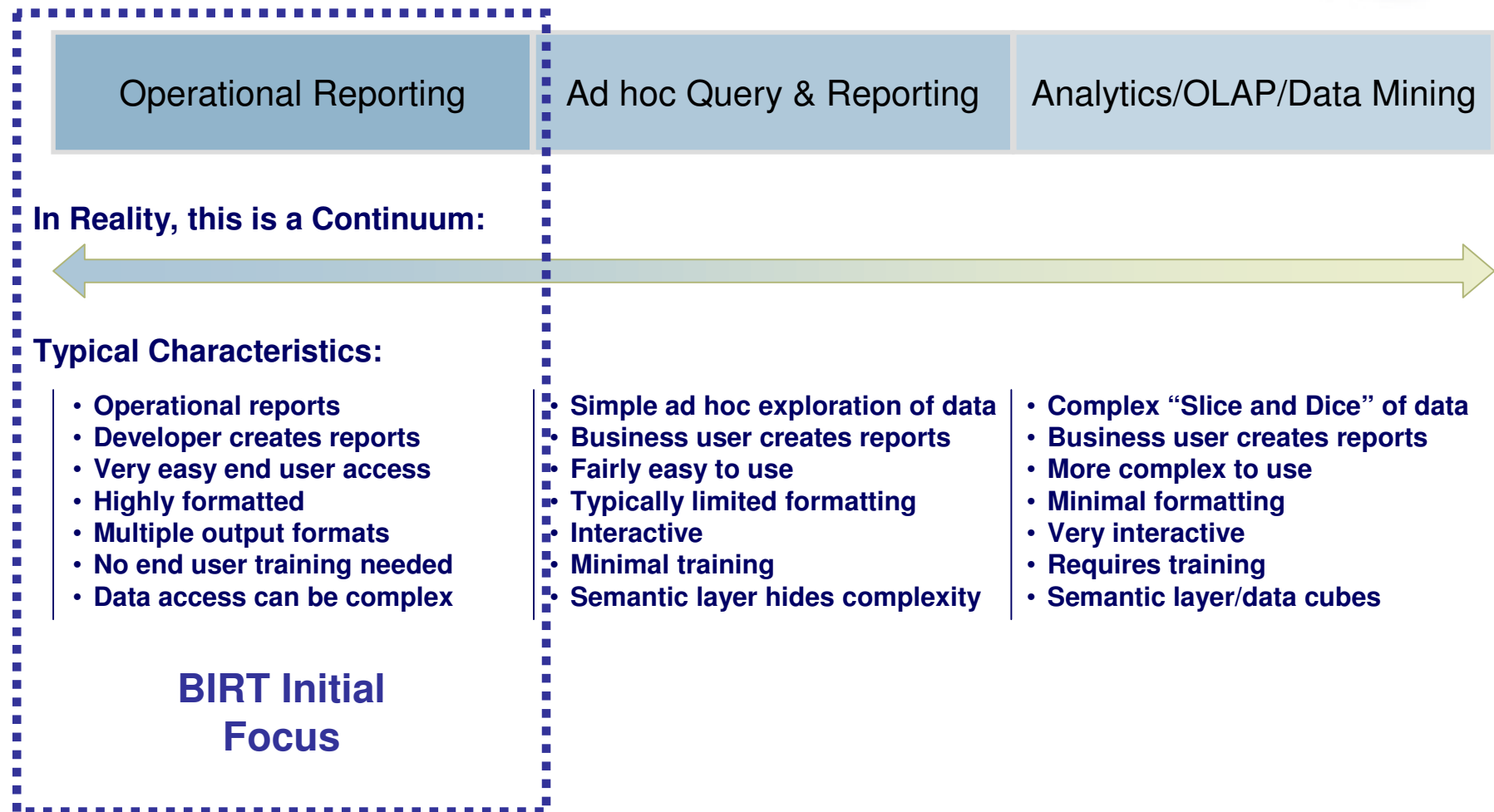
Tools & Learning

Current Balance \$7,545.29
Vested Balance \$7,545.29

Print Report

Investment Report

BIRT Top-Level Project Scope



Code Contributions and Collaboration



- Ground-up initiative targeting Java developer needs
- Actuate R&D project in this area since Q1, 2004
 - Actuate has donated most of the work for this project
 - IBM, Innovent Solutions have contributed as well
- Project aims to leverage other open source
 - Example: Mozilla Rhino (JavaScript engine)
- Active collaboration with other Eclipse projects
 - TPTP, DTP, etc.

Business Intelligence & Reporting Tools Timeline

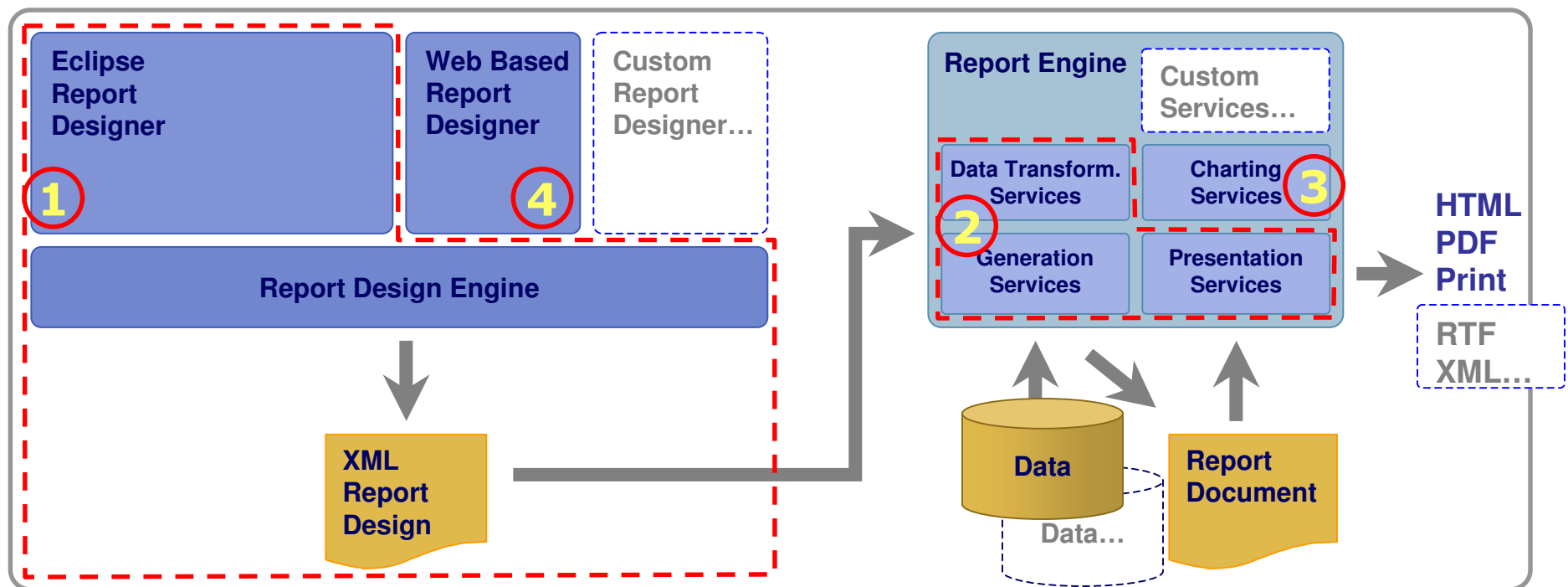
- BIRT Project Proposal posted on August 24, 2004
- BIRT Project accepted on September 30, 2004

Nov, 2004	<ul style="list-style-type: none">▪ Published Release 1.0 Goals/Requirements
Dec, 2004	<ul style="list-style-type: none">▪ Released Draft XML Report Design Schema documents to community▪ Eclipse infrastructure for BIRT up and running▪ Initial code release for Report Object Model component
Jan – Feb, 2005	<ul style="list-style-type: none">▪ Incremental code releases: Execution Engine, Eclipse Report Designer, Data Access components, Chart Engine
Feb, 2005	<ul style="list-style-type: none">▪ 1.0 Preview Release: Eclipse Report Designer, Report Engine, Chart Engine
Mar – May, 2005	<ul style="list-style-type: none">▪ Community feedback▪ Incremental milestone builds with additional features and responding to feedback
Jun 6, 2005	<ul style="list-style-type: none">▪ 1.0 Release Date: Eclipse Report Designer, Report Engine, Chart Engine
Aug 5, 2005	<ul style="list-style-type: none">▪ 1.0.1 Release Date: Support for Eclipse 3.1; RCP version of BIRT
Q4 2005	<ul style="list-style-type: none">▪ Release 2.0

BIRT Project Components



- Business Intelligence and Reporting Tools based on Eclipse
- Initially focused on embedded reporting for Java developers
- Proposal has 4 initial projects



BIRT Release 1.0 Components



- Report Designer plug-in for Eclipse framework
 - Graphical WYSIWYG report layout design tool
 - SQL Query editor
 - Support for common reports
 - Ability to run and preview reports
 - Output from tool is XML report design
- Java Report Engine for deployment
 - Java class libraries for generating reports from design
 - Designed to be embedded into Java applications
 - Report output is HTML, PDF
- Business Chart component
 - Java class libraries for generating SWT, Swing and PNG charts
 - Designed to be embedded into Java applications and reports

BIRT Release 1.0.1 Components



- Support for Eclipse 3.1
- Rich Client Platform based Report Designer
 - Allows Report Developers to avoid complexity
- Easily map data values
 - Map credit ranking to textual descriptions
- WAR file available for deployment

BIRT Release 2.0 Components (In planning stage at present)



- Support for more report types
- Library support
- Improve scalability
- Improved usability of chart
- XML data source
- Etc.

In planning stage – not final list

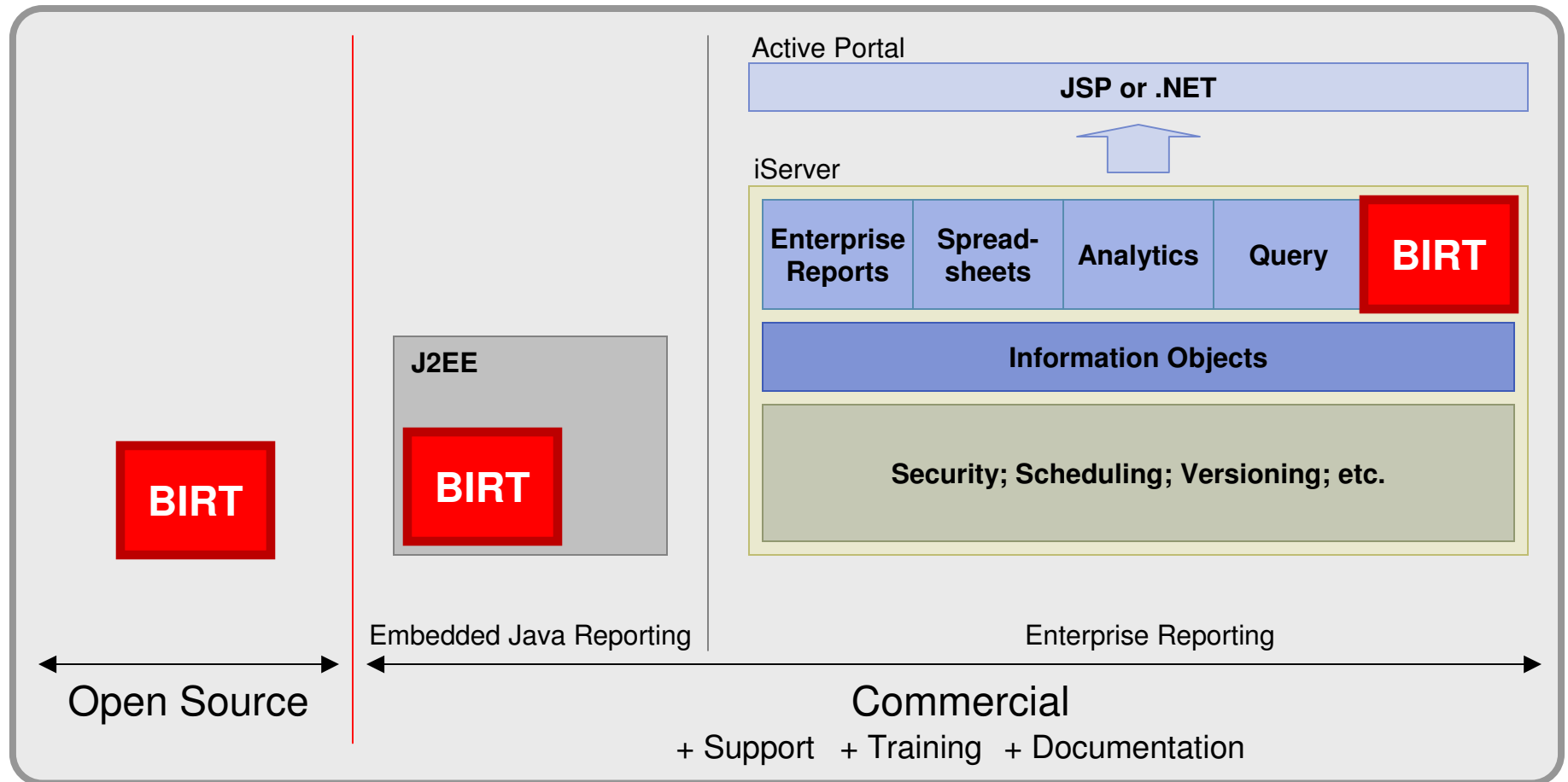
Watch <http://www.eclipse.org/birt> for BIRT 2.0 Project Plan

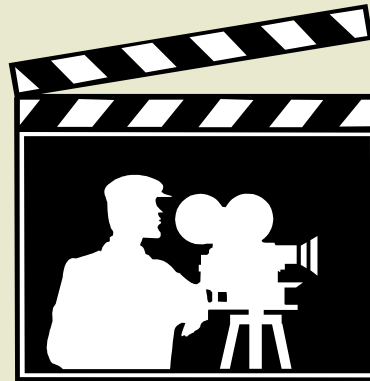
Extensible Tools and Frameworks



- Extensibility is a key principle for the BIRT project
 - Enables unpredicted usage scenarios
- Data source extensibility
 - Application specific design-time query builders
 - Custom design and run-time data access
- Custom business logic extensibility
 - Incorporate complex business logic scripting
 - Access existing and new Java code
- Visualization extensibility
 - Build new visual data presentation 'widgets'
 - Extend charting with new chart types; new output formats
- Rendering reports for output
 - Target report output for specific devices

BIRT & Actuate Products





BIRT in Action!

Ways to Get Engaged in BIRT



- As a user of BIRT technology
 - Testing BIRT and providing feedback in the process of using it
- As an active member of the BIRT community
 - Developing tutorials, examples, etc.
 - Active in the BIRT newsgroup
- As a developer of extensions
 - Extending BIRT through the standard extension points
 - Data sources; new charts; new output formats; ...
 - Could be for the open source community, could be for internal use
- As a developer in existing BIRT code
 - Need to get engaged through the Eclipse development model
- Proposing/leading a new project under the BIRT umbrella

The BIRT Community



- Project Committers
 - Actuate (<http://www.actuate.com>)
 - Innovent Solutions (<http://www.innoventsolutions.com>)
 - IBM (<http://www.ibm.com>)
- BIRT pages on Eclipse web site
 - <http://www.eclipse.org/birt>
 - Download BIRT and walk through a tutorial
- Active feedback and comments in the BIRT newsgroup
 - <news://news.eclipse.org/eclipse.birt>
- Participate through the Eclipse development process
 - See <http://www.eclipse.org> > Projects
- Contact Project Management Committee (PMC)

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