Interactive Reporting with Eclipse BIRT

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Product Manager, Actuate
Agenda

• Background
• The Emergence of the BIRT Project
• BIRT Architecture
• Getting to Know BIRT: Demo
• BIRT Design Gallery
• Summary
Most applications have some type of data visualization need...

And the simple problems are easy, but...

Real-world data visualization is challenging...

- **Gather the data**
- **Perform calculations, sort, group, aggregate, total**...
- **Present information professionally**

…and meeting user demand is crucial to the success of an application
Actuate Launches the BIRT Project

Actuate proposed and started **BIRT**
Business Intelligence and Reporting Tools Project
... a top-level Eclipse project

Professional open source
Primary development resources funded by Actuate

Contributions from many sources
IBM, Innovent Solutions and community

Actuate Joins Eclipse Foundation as Strategic Developer and Board Member

 Adds BI and Reporting as Open Source Project

AUGUST
2004
BIRT technology is tried and tested in many applications

“BIRT is one of the top 10 most downloaded commercially supported open source applications and has a tremendous growth curve over the last two years.”

Andrew Aitken, Managing Partner, Olliance Group

More than 6.5 million downloads through December 2008
Business Intelligence and Reporting Tools

A New Generation of Data Visualization Technology

- Makes all data-driven content development easy
- Modern, web-page design metaphor
- Open and standards-based
- Flexible with rich programmatic control
- Full support for libraries and reuse
- Foundation for a range of solutions
High-Level BIRT Architecture

BIRT Designer
- Eclipse Designer
- Eclipse DTP, WTP...
- Chart Designer

Design Engine

BIRT Engine
- Generation Services
- Charting Engine
- Data Services
- Presentation Services

XML Design

Data

Document
- HTML
- PDF
- Excel
- Word
- PowerPoint
- PostScript
- ...

Data Services
High Level BIRT Architecture: APIs

BIRT Designer
- Custom Designer UI
- Chart Designer
  - Chart UI API

BIRT Engine
- Engine API
  - Generation Services
    - Scripting API
  - Charting Engine
    - Chart Engine API
  - Data Services
    - Open Data Access
  - Presentation Services
    - Emitter API

XML Design

Data

Document
- HTML
- PDF
- Excel
- Word
- PowerPoint
- PostScript
- ...
Getting to Know BIRT
# BIRT Design Gallery

## Sales by Customer

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Order Date</th>
<th>Shipped Date</th>
<th>Customer</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Number</td>
<td>Order Date</td>
<td>Shipped Date</td>
<td>Customer</td>
<td>Payment</td>
</tr>
<tr>
<td>10123</td>
<td>May 20, 2003</td>
<td>May 22, 2003</td>
<td>Atelier graphique - 103</td>
<td>$22,314.36</td>
</tr>
<tr>
<td>Order Number</td>
<td>Order Date</td>
<td>Shipped Date</td>
<td>Customer</td>
<td>Payment</td>
</tr>
<tr>
<td>10298</td>
<td>Sep 27, 2004</td>
<td>Oct 1, 2004</td>
<td>Atelier graphique - 103</td>
<td>$22,314.36</td>
</tr>
<tr>
<td>Order Number</td>
<td>Order Date</td>
<td>Shipped Date</td>
<td>Customer</td>
<td>Payment</td>
</tr>
<tr>
<td>10345</td>
<td>Nov 25, 2004</td>
<td>Nov 26, 2004</td>
<td>Atelier graphique - 103</td>
<td>$22,314.36</td>
</tr>
</tbody>
</table>

### Product List

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Name</th>
<th>Orders</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>S18_1589</td>
<td>1965 Aston Martin DBS</td>
<td>26</td>
<td>$120.7</td>
</tr>
<tr>
<td>S18_2670</td>
<td>1999 Indy 500 Monte Carlo SS</td>
<td>46</td>
<td>$114.0</td>
</tr>
<tr>
<td>S18_3685</td>
<td>1948 Porsche Type 356 Roadster</td>
<td>34</td>
<td>$117.5</td>
</tr>
<tr>
<td>S24_1628</td>
<td>1966 Shelby Cobra 427 S/C</td>
<td>50</td>
<td>$43.2</td>
</tr>
<tr>
<td>S18_2625</td>
<td>1936 Harley Davidson El Knucklehead</td>
<td>32</td>
<td>$60.5</td>
</tr>
<tr>
<td>S24_2022</td>
<td>1938 Cadillac V-16 Presidential Limousine</td>
<td>43</td>
<td>$38.9</td>
</tr>
</tbody>
</table>

### Charts and Tables

#### Revenue History by Product Line

- **REVENUE HISTORY**
- **REVENUE DISTRIBUTION HISTORY**

#### Revenue by Customer

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Product Line</th>
<th>Customer</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 Q1</td>
<td>Classic Cars</td>
<td>Cruz &amp; Sons Co.</td>
<td>$40,232</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motor Mint Distributors Inc.</td>
<td>$25,833</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AV Stores, Co.</td>
<td>$25,306</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Euro Shopping Channel</td>
<td>$22,003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Danish Wholesale Imports</td>
<td>$10,941</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baasie Mini Imports</td>
<td>$19,549</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Volvo Model Replicas, Co.</td>
<td>$0,718</td>
</tr>
<tr>
<td></td>
<td>Motorcycles</td>
<td>Land of Toys Inc.</td>
<td>$22,293</td>
</tr>
</tbody>
</table>
# BIRT Design Gallery

## Classic Models

**Classic Models, Inc.**  
701 Gateway Boulevard  
South San Francisco, CA 94080

### Annual Sales By Product Lines

<table>
<thead>
<tr>
<th>Year</th>
<th>Classic Cars</th>
<th>Motorcycles</th>
<th>Planes</th>
<th>Ships</th>
<th>Trains</th>
<th>Trucks &amp; Buses</th>
<th>Vintage Cars</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>$452,584</td>
<td>$33,042</td>
<td>$37,136</td>
<td>$24,446</td>
<td>$7,816</td>
<td>$43,593</td>
<td></td>
<td>$701,697</td>
</tr>
<tr>
<td>O1</td>
<td>$194,291</td>
<td>$41,629</td>
<td>$56,387</td>
<td>$15,171</td>
<td>$12,441</td>
<td>$62,804</td>
<td></td>
<td>$478,162</td>
</tr>
<tr>
<td>Q2</td>
<td>$245,578</td>
<td>$79,045</td>
<td>$45,047</td>
<td>$12,472</td>
<td>$7,927</td>
<td>$73,042</td>
<td></td>
<td>$498,569</td>
</tr>
<tr>
<td>O3</td>
<td>$728,835</td>
<td>$194,372</td>
<td>$168,291</td>
<td>$102,153</td>
<td>$38,339</td>
<td>$196,116</td>
<td></td>
<td>$1,369,385</td>
</tr>
<tr>
<td>Total</td>
<td>$1,369,385</td>
<td>$348,599</td>
<td>$306,822</td>
<td>$201,044</td>
<td>$65,822</td>
<td>$376,657</td>
<td></td>
<td>$3,370,457</td>
</tr>
</tbody>
</table>

### Inventory Turn Trend

**Inventory Turn Trend**  
Jan 01, 08 to Dec 31, 08

**Report Description:** This report shows the inventory issue turn rate for each Business Unit and Facility by month.

**Inventory Turn Trend by Month for Business Unit**

**Inventory Turn Trend by Month for Facilities of BU: Biocides**

- **BU: Biocides**
  - Jan: 0, Feb: 0, Mar: 0, Apr: 0, May: 0, Jun: 0, Jul: 0, Aug: 0, Sep: 0, Oct: 0, Nov: 0, Dec: 0, Total: 0

- **BU: MFC**

- **BU: MHP**

- **BU: MSF**

- **BU: MWG**

**Total:** 36971, 1148, 6066, 1655, 6596, 8847, 12275, 41256, 58149, 66436, 4638, 2595, 248632

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**Crosstabs**

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**BIRT Exchange by ACTUATE.**
Centralized hub for BIRT developers

- Access demos, tutorials, tips and techniques, documentation…
- Enables developers to be more productive and build applications faster
- Marketplace for applications

Resources
BIRT Exchange Community Site

Welcome to the BIRT Exchange Community
The BIRT Exchange community site lets application and report developers access and share knowledge and resources relating to Eclipse BIRT (Business Intelligence and Reporting Tools) technology.

Explore
- Search/sort
- Rate, comment
- Forums

Download
- Documentation
- Software
- Examples

Contribute
- BIRT designs, code
- Technical tips
- Applications

www.birt-exchange.org
Summary

A New Generation of Data Visualization Technology

- Top-level Eclipse project
- Powerful, extensible data visualization technology
- Easy-to-use, web-centric design metaphor
- Very active community with more than 6.5 million downloads
- Actuate extends and complements BIRT with value-added technology
Interactive Reporting with Eclipse BIRT

Q & A