Streaming Real-Time Data into Xcelsius Apps

Using the Xcelsius Connector for Adobe LiveCycle Data Services

Todd Ruhl – Adobe Solutions Architect

Business Objects User Conference
October 20-22, 2008
Dallas, Texas
AGENDA

1. Adobe/Business Objects partnership update
2. Overview of Xcelsius Connector for LCDS
   1. What is it
   2. Value proposition
   3. Demo
3. Overview of LiveCycle Data Services ES (LCDS)
4. Build an Xcelsius application with a real-time data feed
5. Q&A
Adobe/Business Objects Partnership

- October 2007 - Business Objects and Adobe announce strategic alliance agreement at Adobe MAX
- March 2008 - Xcelsius shipped with:
  - A new connector enabling access to LCDS
  - Connector enables Xcelsius applications to receive real-time data
  - A copy of LiveCycle Data Services (Express) on the media
- August 2008 - Xcelsius 2008 SP1 adds new export option: AIR
- Other integration points are in-process
- SAP is one of Adobe’s largest ISV partner
  - Merger between two large partners equals greater opportunity for both companies
OVERVIEW OF XCELSIUS CONNECTOR FOR LCDS
Introduction to the Connector

• Xcelsius 2008 shipped March 12th with:
  • A copy of LiveCycle Data Services (Express) on the media
  • A new connector enabling access to LCDS

• Connector offers new data access option
  • Stream real-time data into rich Xcelsius visualization tools
  • Create low latency, highly scalable and data consistent dashboards and widgets
New Option in Connectivity Tier

**Development Time**

- **Visualization Tier**
  - XCELSIUS® ENGAGE

- **Connectivity Tier**
  - XML
  - SOAP-BASED WEB SERVICES
  - AUTOMATIC WEB SERVICES GENERATOR
  - ADOBE® LIVECYCLE® DATA SERVICES

Delivered with Engage Server only

**Run Time**

- Publish To:
  - Crystal Reports 201
  - Microsoft Office
  - Adobe PDF & SWF
  - HTML
  - Corporate Portals
LCDS Option in Data Manager
Features and Benefits

• Xcelsius with LCDS can:
  • **Transform business processes with intelligent information**
    • Combine historical and **real-time** data in a complete BI context
    • Accelerate delivery of data to the tools your front-line staff use
  • **Deliver business performance with real-time Operational BI**
    • Monitor large amounts of transactional data in easy to use visualizations
    • Respond faster to changing business conditions via event-driven dashboards
  • **Optimize your daily IT operations**
    • Minimize load on infrastructure due to frequent data requests (updates pushed to clients only when there are changes)
    • Enable business users to create operational dashboards on their own
Demo

Call Center Performance

- Calls Waiting
- Average Wait Time
- Dropped Calls

Top 5 Longest in Queue

<table>
<thead>
<tr>
<th>Customer Name</th>
<th>Company</th>
<th>Wait Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jill Thompson</td>
<td>Acme Widgets</td>
<td>0:08:22</td>
</tr>
<tr>
<td>Larry Sanders</td>
<td>Worth Industries</td>
<td>0:06:46</td>
</tr>
<tr>
<td>James Nelson</td>
<td>Central University</td>
<td>0:05:11</td>
</tr>
<tr>
<td>Lisa Brown</td>
<td>NW Utilities</td>
<td>0:04:03</td>
</tr>
<tr>
<td>Robert Nolan</td>
<td>RealTime Solutions</td>
<td>0:02:52</td>
</tr>
</tbody>
</table>

Average Call Processing Time

- Wyland
- Landry
- Williams
- Lee
- Baxter
- Brown
- Wilder

Max Wait Time: 0:08:22
LiveCycle Data Services Overview

- Platform and services for Flex clients talking to Java/JEE servers
- Brings rich data to rich internet applications
  - More control
  - More efficient
  - Easier to code and maintain
Data Connectivity Challenges

• The evolution to more engaging rich Internet applications (RIAs) has created the need for better data connectivity options
• Performance is not sufficient with XML/SOAP over HTTP for rich clients
• Inability to easily reuse existing server-side business logic
• No standard way to push data from server to client
• No real messaging model to exchange data between RIA clients and servers
LiveCycle Data Services is a set of Java EE components and APIs used to:

- Create data-intensive RIAs with less code, less risk, and accelerated time to market due to innovative client-server programming model
- Integrate RIAs with existing applications, back-end data, and JEE infrastructure
- Easily integrate RIAs with LiveCycle document and process services
- Enable collaboration, offline AIR and real-time data streaming applications to be built in a scalable and reliable manner with robust publish and subscribe messaging
- Generate PDF documents from RIAs that include graphical assets
Real-time data applications

Example applications:

- Real-time stock monitor
- Real-time news feed applications

Customers looking to integrate real-time third-party data feeds with no screen refresh and no client/server polling
Real-time Xcelsius Applications

App Server

Presentation Tier
LiveCycle Data Services

Integration Tier
Business and Transaction Logic (Java)
Connectors to Data and Legacy Systems

Resource Tier
DBMS
LDAP
CRM/ERP/CM
Web Svcs.
How the Xcelsius Connector Works – Component View

- Xcelsius Application
  - LCDS Connector
  - Consumer Component

- LiveCycle Data Services ES
  - Xcelsius Servlet
  - Endpoint
  - Message Services
    - JMS Adapter
    - Adapter Y

- Messaging System X
- JMS Provider
- Messaging System Y

- Publisher
- Subscriber
Configuring LCDS for Xcelsius

1. Install LCDS
2. Add XLCDSServlet
3. Declare servlet in web.xml
4. Add Xcelsius-config files
5. Define destination in Xcelsius-config.xml

File List:
- Xcelsius-config.xml
- Xcelsius-config.xsd
- messaging-config.xml
- XLCDSServlet
- web.xml
BUILD XCELSIUS APPLICATION WITH A REAL-TIME DATA FEED
Additional Resources

• LCDS overview
  • http://www.adobe.com/products/livecycle/dataservices/

• LCDS Test Drive
  • Eight concise sample apps installed with LCDS
  • http://localhost:8700/samples/testdrive/

• LCDS full documentation:
  • http://www.adobe.com/support/documentation/en/livecycle/

• LCDS 2-day training:
  • http://www.adobe.com/support/training/instructor_led_curriculum/flex2_data_com.html

• Xcelsius Connector for LCDS Walk-thru
Summary

• The new release of Crystal Xcelsius has added new features and functionality with LC DS that should excite customers

• Customers can now create rich, dynamic and real-time dashboards that help them move towards operational BI

• Setting up a data stream is not complex and can be accomplished without the need for intensive IT-support

• Xcelsius with LCDS creates a more compelling reason for customers to purchase or upgrade to the newest version of Xcelsius
Contacts

• **Business Objects**
  - Annie Lem          Annie.Lem@sap.com
  - Kiet Trang         kiet.trang@sap.com
  - Saskia Battersby   saskia.battersby@sap.com

• **Adobe**
  - Inder Narang       inarang@adobe.com
  - Steve Gerety       sgerety@adobe.com
  - Todd Ruhl          truhl@adobe.com