OBILLSK

Online Based Inter-Library Loan Statistical Kit

Northwest ILL 2015
The team that brought you Occam’s Reader decided to tackle the problem of inter-institutional ILL statistics

Ryan Litsey  
Associate Librarian, Document Delivery

Scott Luker  
Programmer Analyst III

Kenny Ketner  
Programmer Analyst III

Weston Mauldin  
Programmer Analyst III
Big Data vs. Real Time Data

- Real time data is data in motion, which is important for understanding context

- Big data is stale data; real time data can help to make the right decision at the right time

- We want to see the river, the forest, the trees, and not just sit by the lake
What Is OBILLSK?

• A near real time statistical system for libraries to track ILL transactions between participating libraries.

• Composed of two parts:
  • A desktop application that accesses data from the local ILL SQL database
  • A web application to summarize and present the data

• Designed to provide decision makers with high level information.
How It’s Made

Software
• Microsoft Visual Studio
• Microsoft SQL Server

Programming Languages
• C Sharp and ASP.NET
• Python

Frameworks
• Bootstrap
• jQuery
• Shield UI
• jVectorMap
OBILLSK Desktop Application

• Installed on a local machine
• Activated by a person
• Uses the same connection as the ILLiad client
• Patron information is never accessed
Gathering ILL Data

• OBILLSK accesses information from the following tables:
  • Transactions – for citation information
  • Tracking – for times of processing and steps

• The data is added to a .csv file

• The user follows the final steps in the process
  • Step 1 – allows the user to save a copy of the data for their own verification
  • Step 2 – uploads the data to the server
Connection established.

Server: sqlhost.edu
Database: database name

Step 1

Save File To Desktop

Note: Please do not alter the saved file name.

Step 2

Upload File

File Size: 146 MB
File Location: C:\Users\[REDACTED]\Desktop\Obillsk_DPT_ILU_2015-09-02.csv

Copy File Location to Clipboard

Texas Tech University Libraries
ILL Data on the Server Calculated Nightly

6 Stored Procedures

6 Database Tables

DB
Geographical Data on the Server
Also Calculated Nightly

Python Script

DB

JSON Files
Precompiled Data Is the Foundation For a Fast & Informative Website
OBILLSK Web Application

• Uploaded data is processed nightly

• Data is displayed in attractive reports

• Responsive design ensures a good user experience on any device

• Live website preview: obillsk.lib.ttu.edu
How We Calculate Turnaround

- ILL request statuses and a little math
- Customizable if needed

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Start Time - Status</th>
<th>End Time - Status</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article Lending</td>
<td>Imported from OCLC</td>
<td>Request Finished</td>
<td>End Time - Start Time</td>
</tr>
<tr>
<td>Article Borrowing</td>
<td>Request Finished</td>
<td>Delivered to Web</td>
<td>End Time - Start Time</td>
</tr>
<tr>
<td>Article In Transit</td>
<td>Request Finished</td>
<td>In Electronic Delivery Processing</td>
<td>End Time - Start Time</td>
</tr>
<tr>
<td>Loan Lending</td>
<td>Imported from OCLC</td>
<td>Item Shipped</td>
<td>End Time - Start Time</td>
</tr>
<tr>
<td>Loan Borrowing</td>
<td>Awaiting Post Receipt Processing</td>
<td>Customer Notified via E-Mail</td>
<td>End Time - Start Time</td>
</tr>
<tr>
<td>Loan In Transit</td>
<td>Item Shipped</td>
<td>Awaiting Post Receipt Processing</td>
<td>End Time - Start Time</td>
</tr>
</tbody>
</table>
Advantages of the OBILLSK System

• Identify workflow bottlenecks

• Set and meet consortial benchmarks

• Demonstrate ILL effectiveness to administrators

• Assess courier services using in transit metrics

• Generate accurate comparisons using similar member institutions
The Future

• Shipping Tracking
  • API Integration with FedEx, UPS, USPS shipping systems

• Can we make requests before a patron knows what they want?

• Predictive Analytics: BoP
  • Borrow on Prediction

• Anticipatory Commerce: PoP
  • Purchase on Prediction
Thank you

Ryan Litsey
Ryan.Litsey@ttu.edu

Scott Luker
Scott.Luker@ttu.edu

Kenny Ketner
Kenny.Ketner@ttu.edu

Weston Mauldin
W.Mauldin@ttu.edu

Libraries.OBILLSK@ttu.edu