Updating Digital Measures Activity Insight Using MS Office

David Onder

SAIR 2011
• 9352 students
• Master’s Comprehensive
• Mountain location
• Residential and Distance
• Microsoft campus-wide
• SunGard
2,000+ colleges and schools across the globe use Activity Insight to manage critical information pertaining to faculty productivity, assessment, and accreditation. It's the most reliable, versatile and secure web-based solution available for bringing out your university's full potential.

http://www.digitalmeasures.com/ActivityInsight/
General Information

- Personal and Contact Information
- Administrative Data - Permanent Data | Yearly Data
- Academic, Government, Military and Professional Positions
- Administrative Assignments
- Awards and Honors
- Consulting
- Education
- External Connections and Partnerships
- Faculty Development Activities Attended
- Licensures and Certifications
- Media Contributions
- Professional Memberships
- Workload Information
Teaching

- Academic Advising
- Directed Student Learning (e.g., theses, dissertations)
- Non-Credit Instruction Taught
- Scheduled Teaching
Scholarship/Research

- Artistic Works and Performances
- Contracts, Grants and Sponsored Research
- Intellectual Contributions
- Intellectual Property (e.g., copyrights, patents)
- Presentations
- Research Currently in Progress
- Other Scholarly Activity
Service

- Department
- College
- University
- Professional
- Public
- School Services
- Other Service
THE BEGINNING

Create data from SQL commands

Upload file to Digital Measures

Wait!
The Database

Queries for DMAI screens
WHAT WE WANTED

Simplify updates of Digital Measures Activity Insight

- Scheduled updates
- Require nothing but standard software
- Easy to use
Web Services

Hard to decipher manual

Need to transform data to XML

How do I send XML?
WHERE TO START?

Have programming background

Reviewed sample code in manual

Found Excel to XML code
www.meadinkent.co.uk/myxml/XL_to_XML.txt
Why Microsoft Office?

Already have it
And most campuses do, too

Easy to program in VBA
STARTED WITH EXCEL

Already had data export process

Found Excel to XML code
www.meadinkent.co.uk/myxml/XL_to_XML.txt
VERSION 1

Build XML in String variable

Problems
How do I represent attributes?
How do I represent subtags?
<table>
<thead>
<tr>
<th>username</th>
<th>AC_YEAR</th>
<th>TENURE</th>
<th>RANK</th>
<th>COLLEGE</th>
<th>DEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>johndoe</td>
<td>2007-2008</td>
<td>Tenured</td>
<td>Professor</td>
<td>Arts</td>
<td>English</td>
</tr>
</tbody>
</table>

XML Representation:

```
<Data>
  <Record username="johndoe">
    <ADMIN>
      <AC_YEAR>2007-2008</AC_YEAR>
      <TENURE>Tenured</TENURE>
      <RANK>Professor</RANK>
      <ADMIN_DEP>
        <COLLEGE>Arts</COLLEGE>
        <DEP>English</DEP>
      </ADMIN_DEP>
    </ADMIN>
  </Record>
</Data>
```
USE ENCODED TRIGGERS

% Attributes

$ or : Subtags

@ True/False flag

# or ^ Comments
<table>
<thead>
<tr>
<th>%username</th>
<th>AC_YEAR</th>
<th>TENURE</th>
<th>RANK</th>
<th>ADMIN_DEP$COLLEGE</th>
<th>ADMIN_DEP$DEP</th>
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**XML Representation:**

```xml
<Data>
<Record username="johndoe">
<ADMIN>
<AC_YEAR>2007-2008</AC_YEAR>
<TENURE>Tenured</TENURE>
<RANK>Professor</RANK>
<ADMIN_DEP>
<COLLEGE>Arts</COLLEGE>
<DEP>English</DEP>
</ADMIN_DEP>
</ADMIN>
</Record>
</Data>
```
WHICH SCREEN TO UPDATE?

Sheet name
## Configuring Instruments

![Excel Spreadsheet]

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instrument</td>
<td>Path</td>
<td>UserName</td>
</tr>
<tr>
<td>2</td>
<td>University</td>
<td>INDIVIDUAL-ACTIVITIES-University</td>
<td>wcu/fac_reports</td>
</tr>
<tr>
<td>3</td>
<td>Business</td>
<td>INDIVIDUAL-ACTIVITIES-Business</td>
<td>wcu/fac_reports_bus</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td><strong>Config</strong></td>
<td><strong>Instructions</strong></td>
</tr>
</tbody>
</table>
BEGINNING THE TRANSFER

Instrument: University
UserID: wcu/fac_reports
Screen: ADMIN 2011-03
Beta: checked
Validate: unchecked
DIGITAL MEASURE RESPONSE

Raw response:

```
<html><head><title>Apache Tomcat/6.0.29 - Error report</title><style>h1 {font-family: Tahoma, Arial, sans-serif; color: white; background-color: #525D76; font-size: 22px;}
h2 {font-family: Tahoma, Arial, sans-serif; color: white; background-color: #525D76; font-size: 16px;}
h3 {font-family: Tahoma, Arial, sans-serif; color: white; background-color: #525D76; font-size: 14px;}
body {font-family: Tahoma, Arial, sans-serif; color: black; background-color: white;}
b {font-family: Tahoma, Arial, sans-serif; color: white; background-color: #525D76;}
p {font-family: Tahoma, Arial, sans-serif; color: white; background-color: black; font-size: 12px;}
A {color: black;}
A.name {color: black;}
hr {color: #525D76;}
</style></head><body><h1>HTTP Status</h1><p>OK</p></body></html>
```
VERSION 2

Write XML to file

Load XML file

Save response to file
FILES NAMING SCHEME

SheetName_YYYY-MM-YY_HH.MM{__beta}{__Validate}{__Response}.xml

Includes comment at beginning of file

<!-- From sheet [SheetName] in file [FileName] -->
<!-- URL: [https://{www|beta}.URL], Validate: [True] -->
DID WE ACCOMPLISH WHAT WE WANTED

Simplify updates of Digital Measures Activity Insight

- Scheduled updates [NOT YET]
- Require nothing but standard software [YES]
- Easy to use [I DON’T THINK SO]
PROBLEMS?

Fields must be in order (username first)

Encoded triggers not intuitive

Lack of time to program
VERSION 3

Eliminate Excel or both

Looking at C# only solution

• Easy to convert ADO.NET recordset to XML
  • How to convert XML to DMAI format?

Help from CIS student
Resources

- Excel to XML
  (www.meadinkent.co.uk/myxml/XL_to_XML.txt)

- Querying Banner/Oracle tables from MS Access
  (http://betwinx.com/ms_access_logon.htm)
  [Access DB no longer available]
Contact Information

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