

# Enhancing your record display

A gentle introduction to BibTemplate

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# Motivation

- Most publicly listed and visible Evergreen catalogues use the out-of-the-box defaults
- We received “constructive feedback” on our use of the default record display at launch
  - A few days (and nights) of effort resulted in a much richer record display and happier users
- Circle of sharing
  - Alexander O'Neill at UPEI built a MARC display kit
  - Mike Rylander brought us BibTemplate
  - I'll teach you the ropes today
  - You go home and make Evergreen look good!





atwood

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Keyword

All Formats

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**PINES**

Result 6 of 10 [Start](#) << >> [End](#)

**Record Summary**

|                      |                          |
|----------------------|--------------------------|
| Title                | Handmaid's tale          |
| Author               | Atwood, Margaret Eleanor |
| ISBN                 |                          |
| Edition              |                          |
| Publication Date     | c1986                    |
| Publisher            | Houghton Mifflin         |
| Physical Description | print                    |
| Format               | text                     |
| Abstract             |                          |

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[MARC Record](#)

| Library                                 | Callnumber | Actions   | Available | Checked out | In process | In transit | Reshelving | On holds shelf | On order |
|---|------------|---|-----------|-------------|------------|------------|------------|----------------|----------|
| <b>Piedmont Regional Library System</b> |            |   |           |             |            |            |            |                |          |
| Commerce Public Library                 | FIC ATW    | <a href="#">details</a><br><a href="#">browse</a> | 1         | 0           | 0          | 0          | 0          | 0              | 0        |
| Headquarters-Winder                     | FIC ATW    | <a href="#">details</a><br><a href="#">browse</a> | 0         | 1           | 0          | 0          | 0          | 0              | 0        |



Approaches to teaching Atwood's The handmaid's tale and other works / edited by Sharon R. Wilson, T

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Approaches to teaching Atwood'...

Text Size: Regular / Large | Language: English (Canada)

atwood handmaid Go! Keyword All Formats

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Relevant Subjects

- Atwood, Margaret Eleanor 1939-
- Feminism and literature
- Women and literature

Relevant Series

- Approaches to teaching world literature

Result 5 of 18 Start << >> End

Record Summary

|                          |   |
|--------------------------|---|
| Title                    | Approaches to teaching Atwood's The handmaid's tale and other works<br>Thomas B. Friedman, and Shannon Hengen.  |
| ISBN                     | 0873527356 (recycled paper)<br>0873527364 (pbk. : recycled paper)   |
| Edition                  |   |
| Publisher                | New York, NY : Modern Language Association of America, 1996.  |
| Physical Description     | print vii, 215 p.   |
| Format                   | text  |
| Subjects - personal name | <a href="#">Atwood, Margaret Eleanor, -- 1939- -- Handmaid's tale.</a><br><a href="#">Atwood, Margaret Eleanor, -- 1939-</a>                                |
| Subjects                 | <a href="#">Feminism and literature -- Canada -- History -- 20th century.</a><br><a href="#">Women and literature -- Canada -- History -- 20th century.</a> |
| Additional authors       | Wilson, Sharon Rose.<br>Friedman, Thomas B.<br>Hengen, Shannon Eileen.  |

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## Book Review

### Approaches to Teaching Atwood's "The Handmaid's Tale" and Other

by Wilson, Sharon R. (Editor); Friedman, Thomas B. (Editor); Hengen, Shannon (Editor)

# BibTemplate basics

- Introduced in Evergreen 1.6
- **Goal:** Simplify access and display of arbitrary content from the underlying bibliographic record
  - Not just MARCXML, but MODS, FGDC, whatever
- **Basic usage:** Requires knowledge of at least one metadata format offered by Evergreen
- **Advanced usage:** Familiarity with JavaScript, CSS3 selector syntax, and XML



# A few simple steps...

- Create a new skin to work with:

```
cd /openils/var/web/opac/skin/
```

```
cp -r craftsman super
```

```
cd super/xml/rdetail/
```

- All of the action is in `rdetail_summary.xml`
- Let's add MARC field 504 (bibliography note) to our display



# Adding a MARC field

1. Add a row to the table of metafield attributes:

```
<tr> </tr>
```

2. Inside the first table cell, name the attribute:

```
<td>Bibliography note</td>
```

3. Inside the second cell, include the crazy SPAN tag identifying your MARC field of choice:

```
<td>  
  <span type='opac/slot-data'  
    query='datafield[tag=504] '>  
  </span>  
</td>
```




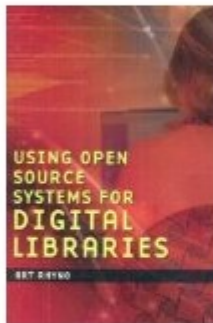
Text: [Larger](#) | [Smaller](#) | Language:


open Search Keyword All Formats Choose a different library...

Example Consortium

Record Summary

 Place Hold



|                      |  |
|----------------------|--|
| Title                | Using open source systems for digital libraries  |
| Author               | Rhyno, Art.  |
| ISBN                 | 159158065X   |
| Edition              |  |
| Publication Date     | c2004  |
| Publisher            | Libraries Unlimited  |
| Physical Description | print xvi, 160 p. : ill. ; 23 cm.  |
| Format               |  text |
| Abstract             |  |

Copy Summary

Shelf Browser

MARC Record

| Library                 | Callnumber | Copy Location | Actions | Available | Checked out | In process | In transit | Reshelving | On holds shelf | On order | Reserves |
|-------------------------|------------|---------------|---------|-----------|-------------|------------|------------|------------|----------------|----------|----------|
| <b>Example System 1</b> |            |               |         |           |             |            |            |            |                |          |          |
| Example                 | 7A4080.R48 | Stacks        | Copy    | 0         | 0           | 0          | 0          | 2          | 0              | 0        | 0        |






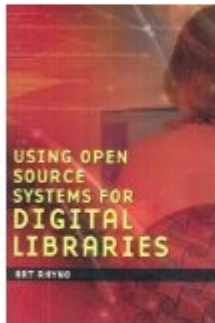
Text: [Larger](#) | [Smaller](#) | Language:


Search  All Formats  Choose a different library...

Example Consortium

Record Summary

 Place Hold



|                      |  |
|----------------------|--|
| Title                | Using open source systems for digital libraries  |
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| Publication Date     | c2004  |
| Publisher            | Libraries Unlimited  |
| Physical Description | print xvi, 160 p. : ill. ; 23 cm.  |
| Format               |  text |
| Abstract             |  |
| Bibliography note    | Includes bibliographical references (p. 123-133) and index.                              |

Copy Summary

Shelf Browser

MARC Record

| Library | Callnumber | Copy Location | Actions | Available | Checked out | In process | In transit | Reshelving | On holds shelf | On order | Reserves |
|---------|------------|---------------|---------|-----------|-------------|------------|------------|------------|----------------|----------|----------|
|---------|------------|---------------|---------|-----------|-------------|------------|------------|------------|----------------|----------|----------|

Example System 1



# marcxml in brief

```
<record>
  <leader>00706cam a2200241 a 4500</leader>
  <controlfield tag="005">20040427145408.0</controlfield>
  <controlfield tag="008">030731s2004      ctua      001 0
eng </controlfield>
...
  <datafield tag="020" ind1=" " ind2=" ">
    <subfield code="a">159158065X (alk. paper)</subfield>
  </datafield>
  <datafield tag="100" ind1="1" ind2=" ">
    <subfield code="a">Rhyno, Art.</subfield>
  </datafield>
  <datafield tag="245" ind1="1" ind2="0">
    <subfield code="a">Using open source systems for
digital libraries /</subfield>
    <subfield code="c">Art Rhyno.</subfield>
  </datafield>
...
</record>
```



# marcxml-full (holdings!) in brief

```
<record>
  <leader>00706cam a2200241 a 4500</leader>
  ""
  <volumes xmlns="http://open-ils.org/spec/holdings/v1">
    <volume lib="OWA" label="ZA4080 .R48 2004">
      <copies>
        <copy barcode="31862016946721" circ_modifier="CIRC"
holdable="t" opac_visible="t">
          <status ident="0">Available</status>
          <location ident="598">Leddy: Main Bldng</location>
          <circlib ident="109">Leddy Library</circlib>
          <circ_lib shortname="OWA" name="Leddy Library"/>
          <copy_notes/>
          <statcats/>
        </copy>
      </copies>
      <uris/>
      <owning_lib shortname="OWA" name="Leddy Library"/>
    </volume>
  </volumes>
</record>
```



# Review: a single MARC field

- This is all that we had to add to display the contents of an arbitrary MARC field:

```
<tr>
  <td>Bibliography note</td>
  <td
    type='opac/slot-data' query='datafield[tag=504] '>
  </td>
</tr>
```

- **Note:** If multiple fields match, they are displayed on consecutive lines within the same left-hand cell



# A specific MARC subfield

- To display a specific MARC subfield, add that subfield to the query attribute.
  - For example, subfield \$a is the only user-oriented subfield in field 586 (Awards Note)

```
<tr>
  <td>Awards note</td>
  <td type='opac/slot-data'
    query='datafield[tag=586] subfield[code=a] '>
  </td>
</tr>
```



# Intermediate BibTemplate usage

- Thus far, we've just been using the (quite reasonable) defaults, but we can do more!
  - 1) We tag an element with attribute `type='opac/slot-data'`
  - 2) BibTemplate runs the corresponding CSS3 selector syntax-based query from the `query` attribute for that element against the bib metadata
  - 3) BibTemplate returns an `item NodeList` to process in the contained `type='opac/slot-format'` script
  - 4) If no script, just the text content is returned



# Hiding empty rows

- Empty rows with no matching data are ugly. Hide them by default instead, and display them only if they have content:

```
<tr class='hide_me' id='tag504'>
  <td>Bibliographic note</td>
  <td type='opac/slot-data' query='datafield[tag=504]'>
    <script type='opac/slot-format'><![CDATA[
      dojo.query('#tag504').removeClass('hide_me');
      return '<span>' + dojox.data.dom.textContent(item) +
        '</span><br/>';
    ]]></script>
  </td></tr>
```



# CDATA and <script>

- `<![CDATA[ ... ]]>` tells Evergreen Web server to treat the contents as literal “character data” - avoids hilarity of entity substitution
- `<script type='opac/slot-format'>...</script>`, contained within an 'opac/slot-data' element, receives a variable named `item` containing the results of the query (a NodeList)
- The rest is just plain old JavaScript!





# Suppressing a subfield

- MARC data includes subfields like 650 \$2 (source of heading) not meant for exposure to humans
- The CSS3 negation operator, and a more complex script, can save us...
- ... so let's see an example.
- **Note:** you can cut and paste this example and replace '700' and '4' as desired for your own purposes.



# Subfield suppression

```
<tr class='hide_me' id='tag700'>
<td>Additional authors</td>
<td type='opac/slot-data' query='datafield[tag=700]'>
  <script type='opac/slot-format'><![CDATA[
    dojo.query('#tag700').removeClass('hide_me');
    var text = '';
    var list = dojo.query('subfield:not([code=4])', item);
    for (var i =0; i < list.length; i++) {
      text += dojox.data.dom.textContent(list[i]) + ' ';
    }
    return '<span>' + text + '</span><br/>';
  ]]></script>
</td></tr>
```



# Other metadata formats

- BibTemplate supports other Evergreen metadata formats:
  - MODS 3.3: datatype='mods33'
  - Dublin Core: datatype='rdf\_dc'
  - FGDC: datatype='fgdc'
- To use: add the corresponding datatype attribute to your type='opac/slot-data' element and adjust your query attribute accordingly
- But sadly, we just use marcxml-full...



# CSS3 selectors

- Most useful attribute match operators:
  - `datafield[tag=245]` - exact match
  - `datafield[tag^=65]` - match start of value
- Selectors always narrow, so select broadly and iterate through the NodeList
- See:
  - <http://api.dojotoolkit.org/jsdoc/1.3/dojo.query>
  - <http://www.w3.org/TR/css3-selectors/>



# Anticipated questions

- *Will a lot of record display customizations affect display performance?*
  - Not much: it's just one extra server request per bib record data type, the rest is just JavaScript.
- *Can we use this outside of record details?*
  - Yes, practically anywhere. Kevin Beswick is rewriting the search results page at Laurentian to display availability, call numbers, URLs, and basic bib record metadata via BibTemplate.
- *How's the browser compatibility?*
  - Good, if you like Internet Explorer 6-8, Firefox, Chrome/Chromium, and Safari. Opera fails, sadly.
- *What's in store for the future of BibTemplate?*



Evergreen Titles

laurentian-test.concat.ca/opac/en-CA/skin/btresult/xml/rresult.xml?rt=keyword&tp=key

Text Size: Regular / Large | Language: English (Canada)

python





































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Keyword All Formats University Libraries

Laurentian University

Limit to Available Sort Results by Relevance

Results 1 - 10 of about 20 (page 1 of 2) Start « »

|   |  |
|---|--|
| <p>Relevant Subjects</p> <ul style="list-style-type: none"> <li>Python (Computer program language)</li> <li>Science</li> <li>Computer games</li> <li>Open source software</li> <li>Web site development</li> <li>Programmation (Informatique)</li> <li>Python (langage de programmation)</li> </ul> | <p>Python cookbook / edited by Alex Martelli, Anna Martelli Ravenscr...<br/>Martelli, Alex.<br/>2nd ed.   Beijing ; Sebastopol, CA : O'Reilly, c2005.   xxxiii, 807 p.<br/>                                     </p> |
|---|--|

# Advanced BibTemplate

- Most of what we do at Laurentian is intermediate record display enhancement
- But we have made our ISSN fields work harder:
  - Populate the “ISSN” field with the value(s)
  - Check our OpenURL server to determine if we have any electronic holdings for that periodical
  - Populate the “Online resources” field with the value(s)
- We have also customized our electronic resource display



# More more more

- Laurentian University's customized record details page is available at <http://ur1.ca/tj4t> - along with lots of other stuff in the Evergreen contributions repository
- The Dojo Toolkit (<http://dojotoolkit.org>) is the JavaScript framework of choice for Evergreen – great optimized cross-browser support for DOM manipulation, asynchronous calls, etc





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