Creating Multimedia Content for Your Website:
A hands-on guide to Digital Objects

This breakout session is for clients
with technical experience
with Literatum and an
intermediate knowledge of XML

ATYPON

Creating Multimedia Content for Your Website:

A hands-on guide to Digital Objects

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December 7, 2018

Engage 2018 Europe

ATYPON USER CONFERENCE

Agenda

- All about Digital Objects
- Step 1: METS/MODS
- Step 2a: The Digital Object Instance
- Demo: Building a DO instance
- Looking forward: Digital Objects and views
- Step 2b: The Storyclass
- Demo: Building a Storyclass
- Step 2c: Views
- Demo: Building a view
- Changing existing files
- Submission files
- Recap

Garry Griffin

Web Content Team Lead, Elsevier

- 20 years’ experience in web production
- Extensive knowledge of Literatum
- Limited experience with programming
- Only recently learned to create Digital Objects

All about Digital Objects

What are Digital Objects?

AUDIO FILES
ARTICLES
BLOGS
BOOKS
CME COURSES
COMPUTER CODE
DATABASES
EXAMS
IMAGES
INTERACTIVE DATA SETS
INTERACTIVE HTML
JOURNALS
MAGAZINES
MULTIMEDIA FILES
MUSIC
ONLINE COURSES
PODCASTS
PRACTICE GUIDELINES
PROCEEDINGS
SOFTWARE
STANDARDS
TECHNICAL DOCUMENTATION
VIDEOS
WHITE PAPERS

Multimedia

GO TO ALL ITEMS

Annual Review of Virology

More than Meets the Eye: Hidden Structures in the Proteome: Video 2

A video from the 2016 review by Hal Wasserman and Erica Ollmann Saphire, "More than Meets the Eye: Hidden Structures in the Proteome," from the *Annual Review of Virology*.

View on YouTube | Read Associated Article

Change to default webcrawler configuration for PageBuilder custom pages

AUGUST 20, 2018

Currently, PageBuilder custom pages are set up to use the `"noarchive,noindex,nofollow"` configuration for webcrawlers by default. As a consequence, the HTML source of these pages will be tagged as `meta name="robots" content="noarchive,noindex,nofollow"` indicating to webcrawlers that these pages should not be crawled & indexed. In order to ensure that webcrawlers will access & index custom pages, we will change the default configuration to noarchive only. The HTML source of these pages will hence be tagged as `meta name="robots" content="noarchive"` This change will become effective

- With the major release on Tuesday, 4th September, for sites included in upgrade group 1 of the 18.2 major release;
- With the maintenance release on Wednesday, 5th September, for sites included in upgrade group 2 of the 18.2 major release as well sites not taking the 18.2 major release.

The new default configuration applies to both existing and future custom pages. If you do **not** wish for your custom pages to be accessed & indexed by webcrawlers, please use the PageBuilder *RobotsMetaTag* properties to change the default.

Digital Objects can be any type of content. They can be tagged, targeted, discounted, promoted, bundled, and sold as easily as a journal article.

How Digital Objects can be created

- By solution architects
  - Reach out to your account manager
  - Digital Objects created in the Digital Objects Editor
- By clients

Step-by-step process

1. METS/MODS (XML schema)
2. Making Digital Object components
   a. Instance
   b. Storyclass
   c. Views
3. Submission to Backstage

Handouts

- Digital Objects instance code
  - Storyclass code
- Handlebar code
  - Handlebar instance examples

Starter code will be provided at the end of this breakout session.

www.github.com/andrewcmu/digitalobjects

Step 1
METS/MODS

METS/MODS is an XML standard similar to JATS

METS

Metadata Encoding and Transmission Standard

An XML schema for describing

- Digital Object's structure hierarchy
- File names and locations
- Associated metadata (MODS)

```
<mets:xmlData>
        .....
</mets:xmlData>
```

https://www.loc.gov/standards/mets/

MODS

Metadata Object Description Schema:
An XML schema for expressing bibliographic data

```
<mods:title>Title</mods:title>
```

https://www.loc.gov/standards/mods/

Step 2a
The Digital Object Instance

Created using
METS/MODS XML

Digital Object's metadata sections

Descriptive Metadata

Defines the metadata of the DO

File Section

Defines the supplementary materials included

Structure Map

Defines where supplementary materials are used

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns="http://www.loc.gov/METS/" TYPE="software">
        <mets:dmdSec xmlns:mets="http://www.loc.gov/METS/" ID="DMD">
                <mets:mdWrap MDTYPE="MODS">
                                        <mets:xmlData>
                                         </mets:xmlData>
                        </mets:mdWrap>
         </mets:dmdSec>

                <mets:fileSec xmlns:mets="http://www.loc.gov/METS/">
                </mets:fileSec>

                 <mets:structMap xmlns:mets="http://www.loc.gov/METS/">
                </mets:structMap>
</mets>
```

Descriptive metadata sample

```
<mets:xmlData>
        <mods xmlns="http://www.loc.gov/mods/v3" xsi:schemaLocation="http://www.loc.gov/mods/v3”>
        <mods:identifier xmlns:mods="http://www.loc.gov/mods/v3" type="doi">10.123/ABC</mods:identifier>

        <mods:titleInfo xmlns:mods="http://www.loc.gov/mods/v3" ID="title">
                <mods:title>Online Review of 8.3 Release Notes</mods:title>
    </mods:titleInfo>

        <mods:extension xmlns:mods="http://www.loc.gov/mods/v3">
       <atpn:do-extensions xmlns:atpn="http://www.atypon.com/digital-objects">
          <atpn:pubdate encoding="iso8601">2008-11-18T23:27:30+00:00</atpn:pubdate>
          <atpn:abstract><![CDATA[My apology for this late notice a…..]]></atpn:abstract>
          <atpn:body><![CDATA[My apology for this late notice about the f …..]]></atpn:body>
       </atpn:do-extensions>
     </mods:extension>

        </mods>
</mets:xmlData>
```

Demo:
Building a DO instance

Advantages of not having a DTD

Articles and books require DTD validation like NLM/JATS

Digital Objects have no DTD

Custom elements are allowed

```
<mods:extension xmlns:mods="http://www.loc.gov/mods/v3">
        <atpn:do-extensions xmlns:atpn="http://www.atypon.com/digital-objects"
xsi:schemaLocation="http://www.atypon.com/digital-objects http://www.atypon.com/digital-
objects/digital-objects.xsd">

                <atpn:date>2018-08-23T00:00:00.000+01:00</atpn:date>
                <atpn:customfield2></atpn:customfield2>
      <atpn:file alt="[language]”>download.dmg</atpn:file>

        </atpn:do-extensions>
</mods:extension>
```

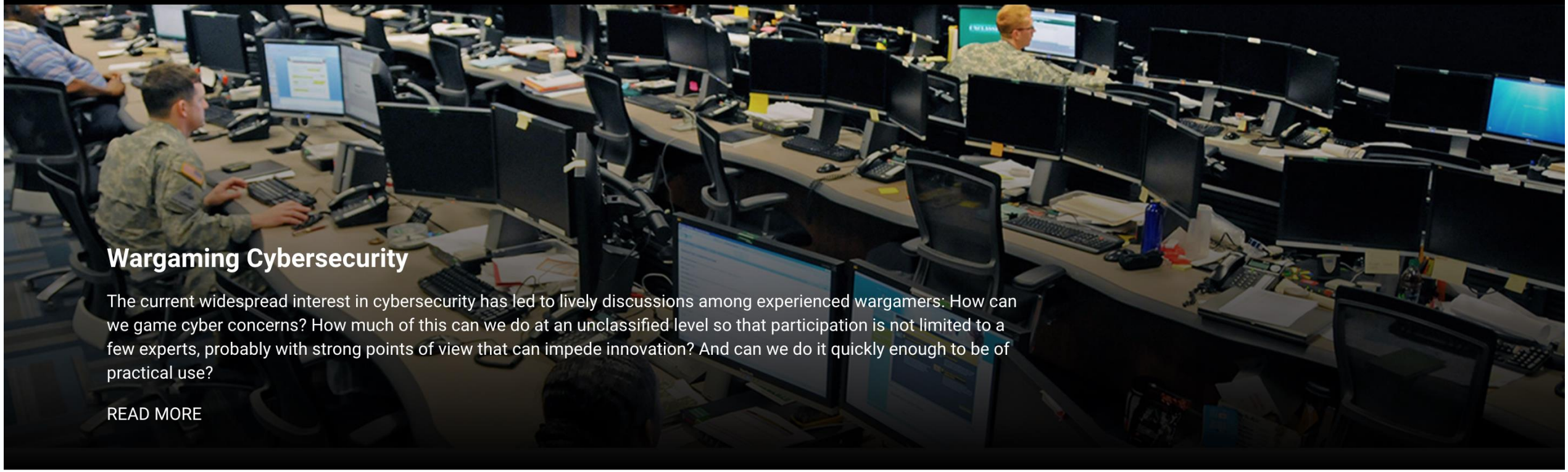
Looking forward:
Digital Objects and views

Views

- A template that renders the XML as HTML
- Digital Objects can have multiple views
  - Fulltext
  - Abstract
  - List (ToC/search)
  - Teaser

ORMS TODAY informs membership magazine

Caption here

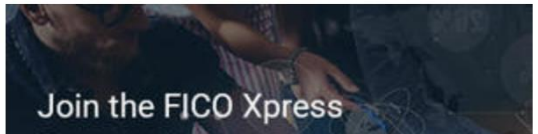


Wargaming Cybersecurity

The current widespread interest in cybersecurity has led to lively discussions among experienced wargamers: How can we game cyber concerns? How much of this can we do at an unclassified level so that participation is not limited to a few experts, probably with strong points of view that can impede innovation? And can we do it quickly enough to be of practical use?

READ MORE

LATEST NEWS



Step 2b
The Storyclass

Created using METS/MODS XML

The Storyclass

- Provides default values for elements and supplementary attachments
  - Helpful for files used for every instance *(e.g., handlebar files)*

- Syntax is identical to a Digital Objects instance
  - Instance/storyclass combine and complement each other
  - Storyclass provides general values common to all instances
  - Instances adds specific values at the item level

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.loc.gov/METS/"
xsi:schemaLocation="http://www.loc.gov/METS/ http://www.loc.gov/standards/mets/mets.xsd"
TYPE="atypon-blog/class">
    <mets:dmdSec xmlns:mets="http://www.loc.gov/METS/" ID="DMD">
        <mets:mdWrap MDTYPE="MODS">
            <mets:xmlData>
                <mods xmlns="http://www.loc.gov/mods/v3"
xsi:schemaLocation="http://www.loc.gov/mods/v3
http://www.loc.gov/standards/mods/v3/mods.xsd">
                    <mods:identifier xmlns:mods="http://www.loc.gov/mods/v3"
type="doi">10.0000/atyponblog_storyclass</mods:identifier>
                    <mods:titleInfo xmlns:mods="http://www.loc.gov/mods/v3">
                        <mods:title>Atypon Blog Storyclass</mods:title>
                    </mods:titleInfo>
                      <mods:extension xmlns:mods="http://www.loc.gov/mods/v3">
                        <atpn:do-extensions
xmlns:atpn="http://www.atypon.com/digital-objects"
xsi:schemaLocation="http://www.atypon.com/digital-objects
http://www.atypon.com/digital-objects/digital-objects.xsd">
                                <atpn:pubdate
encoding="iso8601">2018-01-01T00:00:00.000+00:00</atpn:pubdate>
                                <atpn:body><![CDATA[]]></atpn:body>
                        </atpn:do-extensions>
                    </mods:extension>
                </mods>
            </mets:xmlData>
        </mets:mdWrap>
    </mets:dmdSec>
    <mets:fileSec xmlns:mets="http://www.loc.gov/METS/" >
        <mets:fileGrp ID="simple-grp">
            <mets:file ID="abs.hbs">
                <mets:FLocat LOCTYPE="URL" xlink:href="/templates/abs.hbs"/>
            </mets:file>

        </mets:fileGrp>
    </mets:fileSec>
    <mets:structMap xmlns:mets="http://www.loc.gov/METS/">
        <mets:div>
            <mets:div ID="abs">
                <mets:div ID="abs-template" TYPE="inline-template">
                    <mets:fptr FILEID="abs.hbs"/>
                </mets:div>
            </mets:div>
        </mets:div>
    </mets:structMap>
</mets>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns="http://www.loc.gov/METS/" xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.loc.gov/METS/ http://www.loc.gov/standards/mets/mets.xsd"
TYPE="atypon-blog">
  <mets:dmdSec xmlns:mets="http://www.loc.gov/METS/" ID="DMD">
    <mets:mdWrap MDTYPE="MODS">
      <mets:xmlData>
        <mods xmlns="http://www.loc.gov/mods/v3"
xsi:schemaLocation="http://www.loc.gov/mods/v3
http://www.loc.gov/standards/mods/v3/mods.xsd">
          <mods:identifier xmlns:mods="http://www.loc.gov/mods/v3"
type="doi">10.0000/atyponblog.43.6885</mods:identifier>
          <mods:titleInfo xmlns:mods="http://www.loc.gov/mods/v3" ID="title">
            <mods:title>Online Review of 8.3 Release Notes</mods:title>
          </mods:titleInfo>
          <mods:extension xmlns:mods="http://www.loc.gov/mods/v3">
            <atpn:do-extensions xmlns:atpn="http://www.atypon.com/digital-objects"
xsi:schemaLocation="http://www.atypon.com/digital-objects
http://www.atypon.com/digital-objects/digital-objects.xsd">
              <atpn:pubdate index-full-timestamp="true"
encoding="iso8601">2008-11-18T23:27:30+00:00</atpn:pubdate>
              <atpn:abstract></atpn:abstract>
              <atpn:body><![CDATA[My apology for this late notice about the first of what
will be regular online reviews of Release Notes as part of our new online training
program. The <strong>Review of 8ts-only/documentation.php</a>. You will be reminded of
this by your Account Manager on Wednesday, Nov. 19. Your Account manager can also email
you a copy of the Release Notes.]]></atpn:body>
            </atpn:do-extensions>
          </mods:extension>
        </mods>
      </mets:xmlData>
    </mets:mdWrap>
  </mets:dmdSec>
  <mets:structMap xmlns:mets="http://www.loc.gov/METS/">
    <mets:div></mets:div>
  </mets:structMap>
</mets>
```

Digital Objects metadata sections

Descriptive metadata
Defines the Digital Object's metadata

File section
Defines the supplementary materials included

Structure map
Defines where supplementary materials are used

```
<?xml version="1.0" encoding="UTF-8"?>
<mets xmlns="http://www.loc.gov/METS/" TYPE="software">
        <mets:dmdSec xmlns:mets="http://www.loc.gov/METS/" ID="DMD">
                <mets:mdWrap MDTYPE="MODS">
                                        <mets:xmlData>
                                         </mets:xmlData>
         </mets:dmdSec>

                <mets:fileSec xmlns:mets="http://www.loc.gov/METS/">
                </mets:fileSec>

                 <mets:structMap xmlns:mets="http://www.loc.gov/METS/">
                </mets:structMap>
</mets>
```

File section

<fileSec> organizes the files in the package. The <fileSec> portion of the METS document can contain one or more file group (<fileGrp>) elements, which can be used to organize the individual file elements into sets.

```
<mets:fileSec xmlns:mets="http://www.loc.gov/METS/">
      <mets:fileGrp ID="simple-grp">
        <mets:file ID="abs.hbs">
          <mets:FLocat LOCTYPE="URL" xlink:href="/templates/abs.hbs"/>
        </mets:file>
       </mets:fileGrp>
</mets:fileSec>
```

Structure map

<structMap> provides a mapping between the file attachments and the content formats. For each content format (abstract/fulltext/listitem), attachments are mapped to their respective file section element.

```
<mets:structMap xmlns:mets="http://www.loc.gov/METS/">
    <mets:div>
      <mets:div ID="abs">
        <mets:div ID="abs-template" TYPE="inline-template">
          <mets:fptr FILEID="abs.hbs"/>
        </mets:div>
      </mets:div>
    </mets:div>
</mets:structMap>
```

Demo:
Building a Storyclass

Step 2c
Views

Created using Handlebar.js

Digital Object views

- Not METS/MODS XML
- Created as handlebar.js files using XPATHs
- No limit to amount of views created
- View displays chosen at the widget level
- Can use if/else/each logic

Sample handlebar file

```
{{#with publication.xml.meta}}
<h1>{{xml:out '//title'}}</h1>
<article class="article">
		<div class="blog-meta">
			<span>{{formatDate (xml:out '//pubdate') 'MMMM d, yyyy'}}</span>
		</div>
		<div>
			{{xml:out '//body'}}
		</div>
</article>
{{/with}}
```

Sample handlebar file (with logic)

```
{{#with publication.xml.meta}}
{{#if xml:out '//title'}}
        <h1>{{xml:out '//title'}}</h1>
{{else}}
        <h1>This blog does not have a title</h1>
{{/if}}
<article class="article">
        <div>
                {{xml:out '//body'}}
        </div>
</article>
{{/with}}
```

Demo:
Building a view

Changing existing files

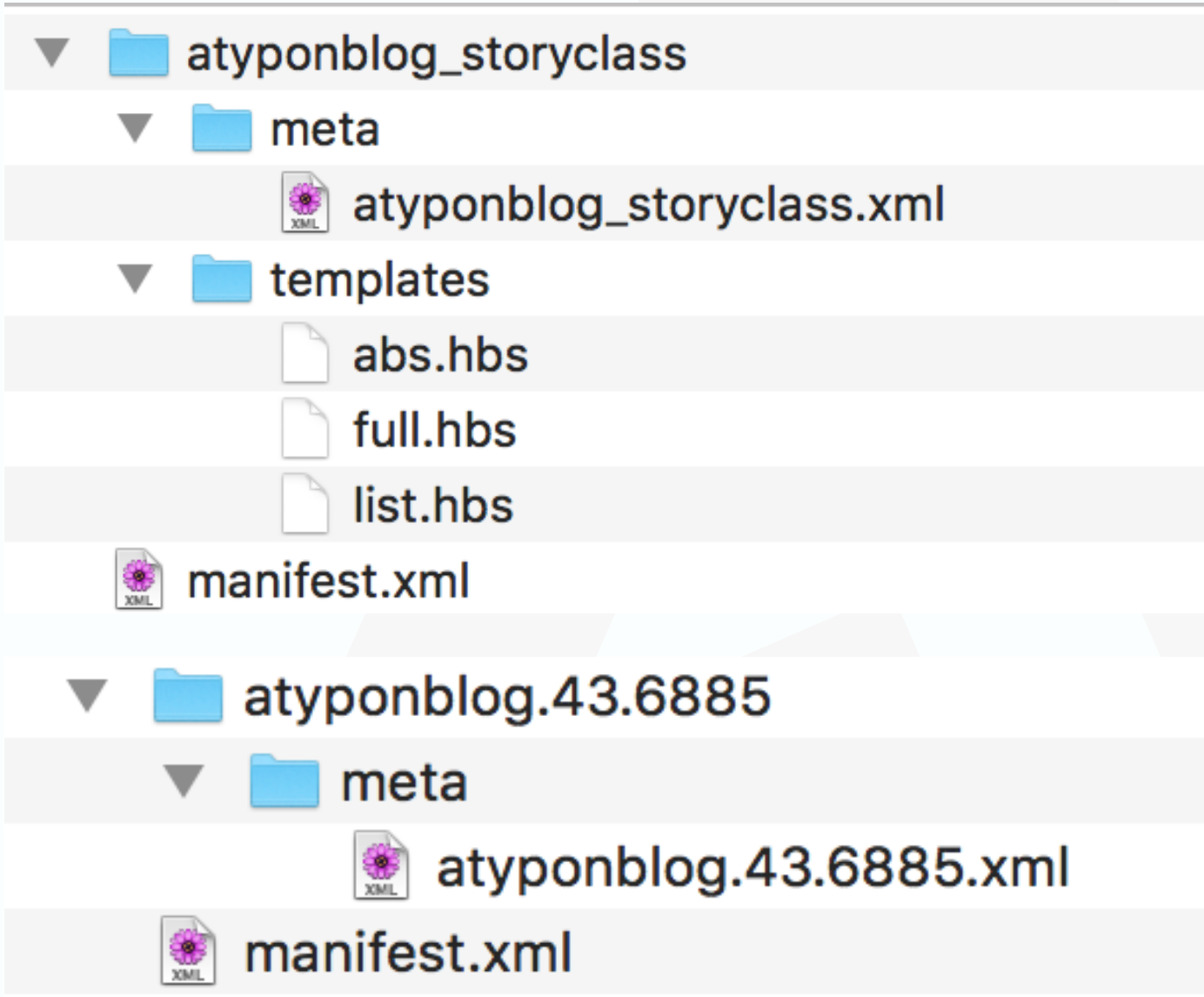
Submission files

Submission files

- Create zip using command line or Windows tool
  (not MAC OSX compress tool)
- Specific file structure needed
- Include manifest file
- Submission is the same as an article
  (upload directly to the CMS)

Submission files

- Zip submission
- Meta folder
  - Metadata fIle
- Templates folder
  - Storyclass only
- Media folder
  - If applicable
- Manifest file



Multimedia

GO TO ALL ITEMS

Annual Review of Virology

More than Meets the Eye: Hidden Structures in the Proteome: Video 2

A video from the 2016 review by Hal Wasserman and Erica Ollmann Saphire, "More than Meets the Eye: Hidden Structures in the Proteome," from the *Annual Review of Virology*.

View on YouTube | Read Associated Article

Benefits

- Digital Object created
- No support needed
- Maintenance is instant
- Unlimited instances/views

Recap

Recap

- METS/MODS:
  the Digital Object instance
- Storyclass
- Handlebar templates
- Submissions

Session 2 Overview - Creating Digital Objects

1. Page Builder
   a. Widgets
   b. URL Context
2. Admin Tool
   a. Taxonomies/tagging
   b. Offers/Licenses
3. Demo

Next steps and additional configurations

Contact your account manager for a quote to set up:

- Digital Object Editor
  - Ability to create Digital Object Instances
- Digital Objects indexed in search
- Tagging Digital Objects with your own taxonomy
- Relating Digital Objects to articles
- Deposits

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