

# Package Delivery - Need for a standard?

Exeter Premedia Services

## Requirement?

Publishers need to submit finalised manuscripts and/or publication-ready content to multiple third-party entities

**Hosting platforms such as HighWire, Atypen, Ingenta, Silverchair, etc.**

**Content aggregators like PubMed, CrossRef, Thomson, Ovid, etc.**



ATYPON

ingenta  
CONNECT



Ovid<sup>®</sup>



THOMSON REUTERS<sup>®</sup>



## Differing requirements: leading to repetitive effort

- Each of these entities has their own requirements regarding the manner and format in which content is to be deposited with them
- These requirements - around which their systems are built - include the DTD, package structure, naming convention of assets (figures, videos, etc.), format of those assets, file types and file sizes.

## Lack validation mechanisms: leading to delays

- Service providers, if any, need to be evaluated and certified by hosting solution providers
- If an error is discovered post-submission, then the removal/replacement of content by the host incurs a penalty
- Know-how, once acquired, may be lost due to staff turnover

## New repository requirements: leading to extra cost

- Each time a new repository is added, publishers need to understand the requirements of the new entity and set-up a process to ensure the package meets the criteria defined by the provider
- Understanding various formats is a challenge for publishers and it involves **time, effort and cost**

## Lack of a standard is the underlying cause

Despite having XML-converted output, depositing to different entities involves manual effort due to lack of a standard.

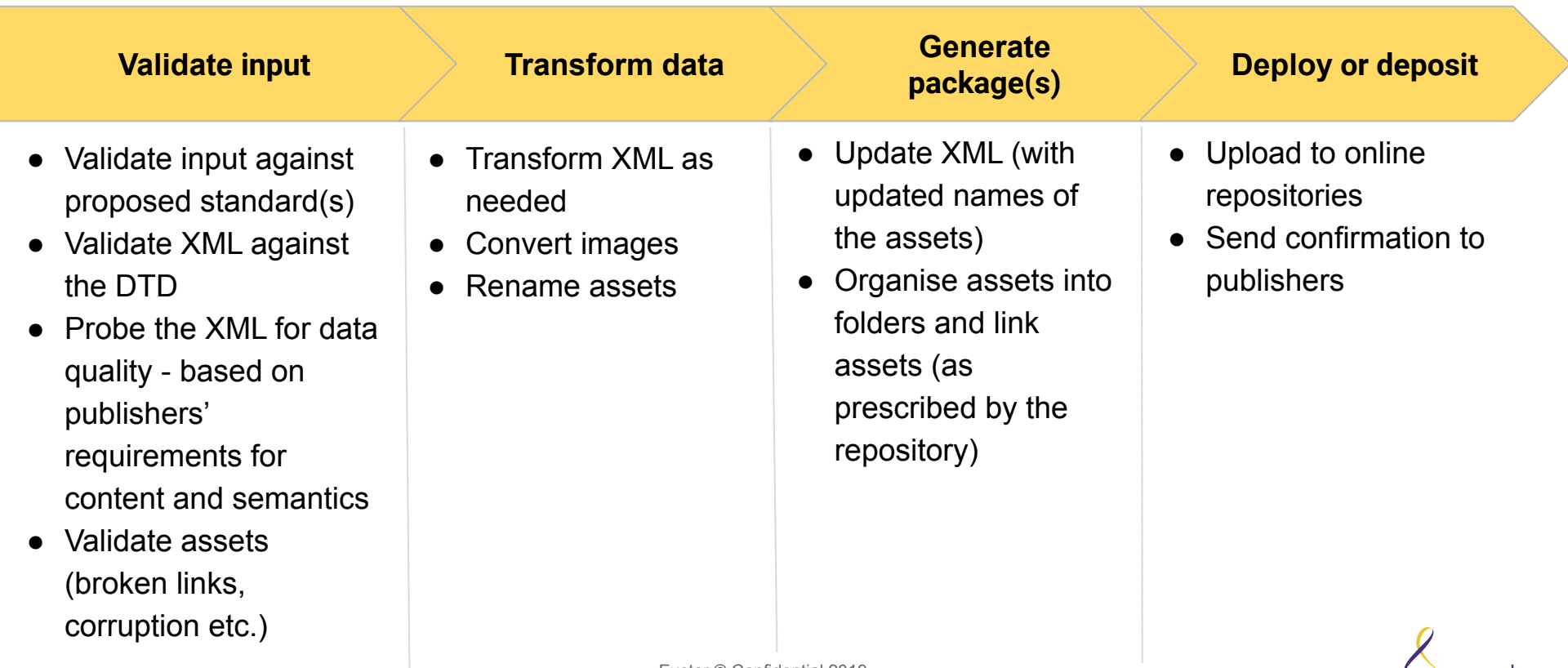
This also results in a largely manual process with resources on both sides working to ensure high-quality submission.

**Publishers** have to deal with multiple online entities directly or via their **service providers** (to whom they may have outsourced this effort)

**Delay  
Effort  
Cost**

**Online repositories** have a high volume of submissions. Any deviation from their prescribed norms involves additional effort

## *Automation of the online package creation process*



## Inputs required



Article zip



Issue zip

Article zip and Issue zip with files separated into -

- **Article XML** in JATS 1.0/1/2\* - DOI.xml
- **Web PDF** of article(s) in the issue - DOI.PDF
- **Assets folder** for figures, videos, supplementary files, appendices etc. - DOI\_Assets

Specific naming conventions

Sample files will be provided

\* Higher JATS versions and NTM 2.0/higher in future

## Kriya online package creator

Validate package

Transform data

Generate package(s)

Deploy or deposit

## Outputs & Outcomes



Package (1 per entity ready for upload to respective third-party entity)

Accurate and error-free  
On-time (no delays)  
Smooth and reliable process

> Smooth hosting to **third-party content aggregators** (Atypon, Highwire, Silverchair, Ingenta, Libero etc.)

> Smooth updation of **external databases** (PMC, Thomson, Crossref, Ovid etc.)

**Eliminates need for knowledge of the different standards of the online repositories (by publishers)**

**Ensures quality of package delivered because of a reliable process**

- **First-time right, every time - for existing set of online repositories**
- **Easy and smooth onboarding - while adding a new hosting provider**

**Saves time and money by avoiding errors and delays**

DEMO



 Upload  
input XML package

☒ Upload package

☒ Unpack package

☒ Check if XML is well-formed

☒ Validate XML against DTD

☐ Validate XML against Probe

☐ Validate Assets

☐ Select Package

☐ Create Package

 Select  
package type to create

 Download  
processed package

Reset

## DTD Errors

Save and Validate

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE article
3 PUBLIC "-//NLM//DTD JATS (Z39.96) Journal Publishing DTD v1.1 20151215//EN" "JATS-journalpublishing1.dtd">
4 <article xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi
5 <front>
6 <journal-meta>
7 <journal-id journal-id-type="nlm-ta">kriya Open</journal-id>
8 <journal-id journal-id-type="hwp">kriyaopen</journal-id>
9 <journal-id journal-id-type="publisher-id">kriyaopen</journal-id>
10 <journal-title-group>
11 <journal-title>kriya Open</journal-title>
12 <abbrev-journal-title>kriya Open</abbrev-journal-title>
13 </journal-title-group>
14 <issn pub-type="epub">1111-0000</issn>
15 <publisher>
16 <publisher-name>Exeter Premedia Services</publisher-name>
17 <publisher-loc>Ascendas International Tech Park, Chennai 600113</publisher-loc>
18 </publisher>
19 </journal-meta>
20 <article-meta/>
21 <article-meta>
22 <article-id pub-id-type="publiscan-id">ascendas-2019-000100</article-id>
```

## Errors (2)

1. Element front content does not follow the DTD, expecting (journal-meta , article-meta , notes?), got (journal-meta article-meta article-meta )
2. Element article-meta content does not follow the DTD, expecting (article-id\* , article-categories? , title-group , (contrib-group | aff | aff-alternatives)\* , author-notes? , pub-date+ , volume\* , volume-id\* , volume-series? , issue\* , issue-id\* , issue-title\* , issue-sponsor\* , issue-part? , volume-issue-group\* , isbn\* , supplement? , ((fpage , lpage? , page-range?) | elocation-id)? , (email | ext-link | uri | product | supplementary-material)\* , history? , permissions? , self-uri\* , (related-article | related-object)\* , abstract\* , trans-abstract\* , kwd-group\* , funding-group\* , conference\* , counts? , custom-meta-group?) , got

Upload

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Content Aggregators

☐ Crossref

☐ PMC

☐ JISC

☐ OVID

☐ ScienceOpen

☐ Thomson


Hosting Providers


☐ Highwire PAP


☐ Ingenta

☐ SilverChair

Convert

 Upload  
input XML package

 Select  
package type to create

 Download  
processed package

Reset

☒ Upload package

☒ Unpack package

☒ Check if XML is well-formed

☒ Validate XML against DTD

☒ Validate XML against Probe

☒ Validate Assets

☐ Select Package

☐ Create Package

### Asset Errors

Asset(s) in XML	Asset(s) Provided
<code>&lt;graphic xlink:href='kriyaopen-2018-000480f01.tif'&gt;</code>	<div>Not linked</div> figure1.tif <div>Link</div>

## Alpha: May 2019

- Ability to create packages for journal articles
- Ability to create packages for journal issues
- Ability to create packages for books

## Beta: June 2019

- Dashboard & Metrics
- Connectors to content aggregators/hosting providers
  - Direct uploads
  - Status updates
  - Setting embargoes
- Connectors to printers
  - Preflight checks
  - Flat plans

## Go Live: September 2019

- Approval workflows
- Notifications & Alerts
- Ability to configure additional content aggregators/hosting providers/printers
- Support custom validation rules based on publisher requirements

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