

Requirements for Submitting Complete Books to IEEE Xplore

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1. Overview

This document explains how to submit books that will be sold as a single PDF on IEEE Xplore. IEEE supports ONIX 3.x and reference (long) tags only. All books submitted to IEEE will include (1) an ONIX XML file¹ (version 3.0.5 or later) and (2) a pointer to a cover JPEG image file.

This document describes the general requirements for the ONIX XML, cover JPEG images, and PDF requirements. [Sample ONIX, PDFs, and JPEG \(JPG\) files are available online.](#)

2. Submission Requirements

IEEE must receive the following in order to process the book(s):

1. A valid ONIX Book XML file (ONIX version 3.0.5 with reference (long) tags or later). (*See Section 4*)
2. A cover image for each book, IEEE currently supports 2 methods for doing this. (*See Section 5*)
3. PDF files that meet the [IEEE PDF Specification](#). (*See Section 6*)
4. The complete submission must be delivered in a single zip file to an IEEE designated ftp site via secured FTP. Account details will be provided. (*See Section 7*)

3. General File and Folder Naming Conventions

All files and folders will follow the conventions below unless otherwise indicated. All files must have the appropriate extension.

1. Must take the form of: [filename].[extension]
2. Valid characters for filename are: a-z, A-Z, 0-9, -, _
NOTE: The comma is a *delimiter*! It is **not** allowed in the filename.
3. May not contain any of these characters: @#%(^)
4. For PDF, XML, and JPEG files, only a single period "." separating the filename from the extension is allowed.
5. Spaces are prohibited.
6. *Maximum file name length 50 characters* (excluding the 4 character extension, e.g., ".xml").
7. File name extensions **must** be in lower-case.
8. The only allowable extensions for [filename] are "pdf" (for PDF files), "xml" (for XML files), and "jpg" (for cover images).

NOTE: Folders do not have an extension but must follow all the other rules.

4. ONIX Metadata Requirements

This section describes how IEEE extracts metadata from ONIX 3.0.5 and later files.

4.1 ONIX XML Encoding Definition and Unicode Support

If the ONIX contains non-ASCII characters, then the XML declaration must specify the UTF-8 character set as shown: `<?xml version="1.0" encoding="UTF-8"?>`.

¹ The ONIX file may reference more than 1 book.

4.2. Author Names

Author names submitted to IEEE Xplore may contain accented characters if the XML declaration specifies UTF-8 encoding. *See Section 4.1.* The author names are contained in the tags shown below:

- <PersonName>
- <NamesBeforeKey>
- <KeyNames>
- <SuffixToKey>

4.3. ONIX Table of Contents

There are two ways that the Table of Contents (TOC) may be submitted to IEEE Xplore:

1. Tag the TOC using ... and ... tags.
2. Tag the TOC as a single line between delimiters of <text>...</text>.

Or you may choose not to submit a TOC.

Option 1: Using and tags

In this option, the entire Table of Contents is contained in ... tags and each Table of Contents entry is in a ... pair as shown in the ONIX fragment below. The characters “<” and “>” must be escaped as “<” and “>.”

```
<TextContent>
  <TextType>04</TextType>
  <ContentAudience>00</ContentAudience>
  <Text textformat="06">
    &lt;ul&gt;
      &lt;li&gt;Foreword vii&lt;/li&gt;
      &lt;li&gt;Preface xv&lt;/li&gt;
      &lt;li&gt;Acknowledgements xvii&lt;/li&gt;
      &lt;li&gt;List of Figures xix&lt;/li&gt;
      &lt;li&gt;List of Tables xxix&lt;/li&gt;
      &lt;li&gt;List of Abbreviations xxxi&lt;/li&gt;
      &lt;li&gt;Glossary xxxix&lt;/li&gt;
      &lt;li&gt;Introduction 1&lt;/li&gt;
      &lt;li&gt;1 Cyber Resilience Concept 7&lt;/li&gt;
      &lt;li&gt;1.1 Cyber Security Threat Landscape 8&lt;/li&gt;
      &lt;li&gt;1.1.1 APT Attack Research Results 8&lt;/li&gt;
      &lt;li&gt;1.1.2 Known Attacker Methods 17&lt;/li&gt;
      &lt;li&gt;1.1.3 Process Control System Cyber Security Threat 32&lt;/li&gt;
      &lt;li&gt;1.2 Problem of the "Digital Bombs" Neutralization 49&lt;/li&gt;
      &lt;li&gt;1.2.1 "Digital Bombs" Detection Problem 49&lt;/li&gt;
      &lt;li&gt;1.2.2 Program Faults Detection Methods 62&lt;/li&gt;
      &lt;li&gt;More TOC entries here&lt;/li&gt;
    &lt;/ul&gt;
  </Text>
</TextContent>
```

Please make sure that <TextType>04</TextType> appears as shown. The value 04 means the text in <TextContent> is for the Table of Contents.

Option 2: Provide the TOC as a Single Line of Text

In this option, the TOC is provided as a long line of text with the following delimiters, Arabic numerals or upper-case letters followed by either a period (.) or a colon (:). This is shown in the ONIX fragment on the following page:

<Text textformat="06">1: Introduction 2: Background 3: Early Results 4: Modern Foundations 5: Essential Cryptographic Constructions 6: Advanced Constructions 7: Open Questions</Text>

If the TOC information is not readily available, or Options 1 or 2 are not practical then do not provide the TOC. In this case, no TOC will appear in IEEE Xplore.

5. Technical Requirements for the Cover JPEG Image

Each book submission must include a cover image as described in this section. This image format must be JPEG. The size of the image should be 120x160 pixels. If a JPEG size is larger, IEEE's production system will automatically reduce it to the desired size. If the cover is not available, a generic cover will appear in IEEE Xplore.

IEEE supports **two ways** of submitting cover images. The *first* is including the cover (the preferred way) in the zip file. In this, case the cover is tagged:

```
<SupportingResource>
  <ResourceContentType>01</ResourceContentType>
  <ContentAudience>00</ContentAudience>
  <ResourceMode>03</ResourceMode>
  <ResourceVersion>
    <ResourceForm>01</ResourceForm>
    <ResourceLink>frontcover.jpg</ResourceLink>
  </ResourceVersion>
</SupportingResource>
```

The <ResourceLink> tag just contains the name of the cover jpg image. The value of <ResourceContentType> must be 01.

The *second* is using a URL in the ONIX file which links to the cover image. In this case, the cover is tagged as shown below:

```
<SupportingResource>
  <ResourceContentType>01</ResourceContentType>
  <ContentAudience>00</ContentAudience>
  <ResourceMode>03</ResourceMode>
  <ResourceVersion>
    <ResourceForm>01</ResourceForm>
    <ResourceLink>http://abc.com/images/frontcover.jpg</ResourceLink>
  </ResourceVersion>
</SupportingResource>
```

The <ResourceLink> tag contains a URL that *points directly to the cover image*. URLs that redirect to another location are **not** allowed. Remember, if a URL is used **do not include** the jpg file(s) as described in the first option of this section. The value of <ResourceContentType> must always be 01.

6. Technical Requirements for PDFs

All PDF files must be IEEE Xplore compatible. Please follow the [IEEE PDF specification](#). If there is a back file being loaded then IEEE waives the requirements that:

1. The files are Acrobat 5-8 only. (Instead, the files must be Acrobat 8 or earlier),
2. All fonts are embedded and subset.

However, *current files* must follow the *full* IEEE PDF specification referred to above.

7 Packaging Single Book PDFs for Delivery

The book must be packaged to include:

1. The top-level book folder, PDF, XML, and JPEG (if required) files and are named using (1) ASCII alphanumeric characters (2) or an underscore.
2. IEEE recommends, but does not require, using the book's ISBN as the file name.
3. Each of the files will be named with the file name followed by the appropriate extension.
4. The extension must be in lower-case.
5. There can only be a single period in the file name.

The table below is an example, where we use the book's ISBN to name the files².

Name	Extension	Type	Number Allowed	Description
10Feb2021_02 ³		Folder	1 only	Name of the book folder containing the XML, PDF, and JPEG files.
9780262340328.xml	xml	ONIX XML file	1 only	Name of ONIX XML file is ISBN.xml ⁴
9780262340328.jpg	jpg	JPG file	0 or 1 for each book ⁵	This is the cover image file. See Page 3, Section 5
9780262340328.pdf	pdf	Book PDF file	1 for each book	PDF of the entire book

Once all the files are added to the folder, the folder is zipped. The resulting zip file is named using (1) alphanumeric characters (2) plus the underscore. For example, the zip file could be named:

1. 02102021.zip (For a zip file delivered on February 10, 2021); or
2. 02102021_001.zip and 02102021_002.zip (For 2 zip files delivered on February 10, 2021).

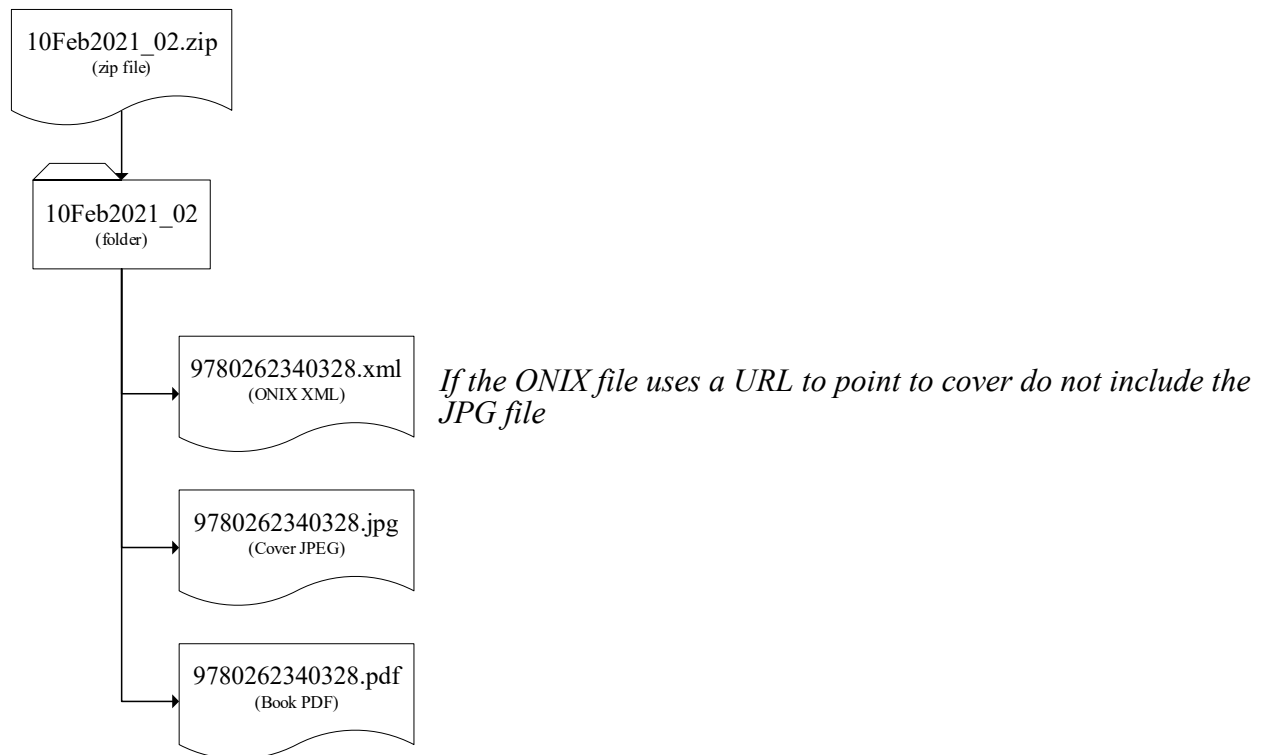
The file structure described in the table above is shown in the figure on the following page:

² Any file name can be used as long as it consists of (1) ASCII alphanumeric characters (2) the underscore, (3) a single period, and (4) a valid extension.

³ This is the folder name of the 2nd zip file sent on February 10, 2021. The corresponding zip file is 10Feb2021_02.zip.

⁴ Rather than sending each book as a single zip file, you may instead put as many books as desired in an ONIX file. When doing so, the single ONIX file must have the complete information for each book submitted. Any alphanumeric filename is acceptable.

⁵ The number of JPEG files depends on how the covers are tagged in the ONIX file.

**NOTES:**

1. IEEE only accepts files in zip format.
2. IEEE must receive all the above related files for a book to appear in IEEE Xplore.

Summary of ONIX 3.0.5 Tagging Requirements

Description	Required or Optional?	Onix 3.x	Comments
Book Description	Required, if available	/Product/CollateralDetail/TextContent/TextType=03/Text	
Book DOI	Optional	/Product/ProductIdentifier/IDValue	ProductIDType=06
Book Edition	Optional	/Product/DescriptiveDetail/EditionNumber /Product/DescriptiveDetail/NoEdition	
Book's Subtitle	Required, if available	/Product/DescriptiveDetail/TitleDetail/TitleElement/Subtitle	
Book's Title	Required	/Product/DescriptiveDetail/TitleDetail/TitleElement/TitleText	
Contributor Full Name of person (in natural order)	Optional	/Product/DescriptiveDetail/Contributor/PersonName	
Contributor Given Name	Required	/Product/DescriptiveDetail/Contributor/NamesBeforeKey	
Contributor Order	Preferred	/Product/DescriptiveDetail/Contributor/SequenceNumber	If specified, authors will display in the order provided
Contributor Role	Optional	/Product/DescriptiveDetail/Contributor/ContributorRole	Supports A01 or B09 only
Contributor Suffix-The part of the author's name containing text like Sr, Jr, III BUT NOT PhD, Esq, etc.	Required, if available	/Product/DescriptiveDetail/Contributor/SuffixToKey	
Contributor Surname	Required	/Product/DescriptiveDetail/Contributor/KeyNames	
Copyright Year	Required	/Product/PublishingDetail/CopyrightStatement/CopyrightYear	
Cover JPEG filename as sent with ONIX XML file	See Comments	SupportingResource/ResourceLink	Cover must be provided as (1) file name in ONIX XML, (2) URL in
Date Published	Optional	/Product/PublishingDetail/PublishingDate/Date	PublishingDateRole=01
ISBN-10	Optional	/Product/ProductIdentifier/IDValue	ProductIDType=02; ProductForm=EA, ED (means Electronic ISBN) ProductIDType=02; ProductForm=EC (means Online ISBN)
ISBN-13	Required	/Product/ProductIdentifier/IDValue	ProductIDType=15; ProductForm=EA, ED (means Electronic ISBN)
Name of an imprint or brand under which the product is issued	Required	/Product/PublishingDetail/Publisher/PublisherName	If there are multiple brand names or imprints please contact IEEE
ONIX Product Code	Required	/Product/DescriptiveDetail/ProductForm	Supports BA, BB, BC, EA, EC, and ED only
Organization to which a contributor to the product was affiliated at the time of its creation	Optional	/Product/DescriptiveDetail/Contributor/ProfessionalAffiliation/Affiliation	
Publisher City	Optional	/Product/PublishingDetail/CityOfPublication	
Publisher Country	Optional	/Product/PublishingDetail/CountryOfPublication	
Publisher Name	Required	/Product/PublishingDetail/Publisher/PublisherName	
Table of Contents	Optional	/Product/CollateralDetail/TextContent/TextType=04/Text	See Section 4.3 for TOC Tagging Options
URL to book cover JPG	See Comments	/Product/CollateralDetail/SupportingResource/ResourceLink	Cover must be provided as (1) file name in ONIX XML, (2) URL in ONIX XML, or blank (if BLANK, IEEE will add a generic cover)
NOTE: There can be other tags within the top-level tag that needs to be read to determine what the value of the leaf is.			
The type of ISBN is for bookkeeping use by IEEE.			