

# Pubhub Web Services

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## Third Party ONIX REST API Integration Guide

November 2024

v1.12

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## REVISION HISTORY

| Date       | Version | Comment  |
|------------|---------|--|
| 2017-02-20 | 1.0     | First edition  |
| 2017-08-22 | 1.1     | Audio download URL changed from <a href="ftp://ftp.pubhub.dk/[id].mp3">ftp://ftp.pubhub.dk/[id].mp3</a> to <a href="http://audiozipper.pubhub.dk/[id].zip">http://audiozipper.pubhub.dk/[id].zip</a> now containing 96kbit mp3-tracks. |
| 2020-01-20 | 1.2     | New chapter “Dataflow Description” added to this document/guide. Nothing has been changed in the API itself.   |
| 2020-02-25 | 1.3     | API version 4 added: <ul style="list-style-type: none"> <li>- “:” removed in datestamp attribute value</li> <li>- ExtentType 50, 51 and 52 removed (to comply 100% to ONIX)</li> </ul>   |
| 2020-10-12 | 1.4     | Dynamic image / cover scaling added – e.g. <a href="https://images.pubhub.dk/originals/03ab826b-9fef-45df-8136-06b680d2a0ef.jpg?width=1400">https://images.pubhub.dk/originals/03ab826b-9fef-45df-8136-06b680d2a0ef.jpg?width=1400</a> |
| 2022-03-02 | 1.6     | New field <TradeCategory>=17 added for podcasts  |
| 2022-08-18 | 1.7     | Api version 1.7 added: Now supporting Onix 1.0.7 / The New Danish Onix Subset  |
| 2022-08-18 | 1.8     | Api version 1.8 added: Now supporting Onix 1.0.8 / The New Danish Onix Subset  |
| 2023-04-04 | 1.9     | Added documentation on how to download e-books and audiobooks  |
| 2024-01-17 | 1.11    | Api v1.11 supporting Onix 1.1.1 (Danish onix subset) including new field <EpubUsageType>11</EpubUsageType> <a href="https://onix-codelists.io/codelist/145">https://onix-codelists.io/codelist/145</a> for Text and Data mining        |
| 2024-11-19 | 1.12    | Api v1.12 supporting Onix 1.1.3 (Danish onix subset) Accessibility   |

The ONIX REST API exists in two separate environments, each with their own server, code and database. Please use the web service located at **onix.qa.pubhub.dk** when developing and testing! Please request a new license key for the production environment when you're ready to go live.

Test / development environment:

<http://onix.qa.pubhub.dk/v12/>

Production environment:

<https://onix.pubhub.dk/v12/>

**Attention: Use SSL/https in production!**

The ebooks and audiobooks are available through download from <ftp://ftp.pubhub.dk> / <http://audiozipper.pubhub.dk> (see <WebsiteLink> in ONIX). Please request license key and FTP username + password from Publizon. As of Api version 1.7 besides the mp3 files a new JSON audio manifest file with information about chapter beginnings is included in the zip file if any chapters are defined for the audiobook.

The ONIX REST API returns product metadata in the ONIX format<sup>1</sup>. This metadata contains links to media files, that is e-books (epub/pdf), audiobooks (zip) and covers (jpg/png).

First you need to retrieve *all products* using the endpoint `/v[X]/products` (where [X] is the current version of the API). We call this the **alpha-pull**.

Subsequently you need to retrieve updates (that is new, changed and deleted products) regularly (we recommend 00:30 CET each day, because the API will begin refreshing its cache at 00:05 CET) using the same endpoint as described above (`/v[X]/products`) but with the parameter `fromUtc=[YYYY-MM-DDTHH:MM:SS]`. We call this the **delta-pulls**.

The following example illustrates a delta-pull:

<https://onix.pubhub.dk/v12/products/?fromUtc=2020-01-19T23:30:00>

(with your license key as a request header, see next chapter for details).

This call will return all products that have been updated since the supplied datetime-stamp (here 2020-01-19 23:30 UTC!).

When you have successfully retrieved and imported all products, we recommend that you store the date and time where you called the API. This way you know that you have all data up to this point. Next time you make a delta-pull you then use the stored datetime-stamp as `fromUtc`.

Here's an example of the flow:

| API call datetime       | Endpoint   | Type       |
|-------------------------|--|------------|
| 2020-01-19 23:30:00 UTC | <code>/v[X]/products</code>                              | Alpha-pull |
| 2020-01-20 23:30:00 UTC | <code>/v[X]/products/?fromUtc=2020-01-19T23:30:00</code> | Delta-pull |
| 2020-01-21 23:30:00 UTC | <code>/v[X]/products/?fromUtc=2020-01-20T23:30:00</code> | Delta-pull |
| 2020-01-22 23:30:00 UTC | <code>/v[X]/products/?fromUtc=2020-01-21T23:30:00</code> | Delta-pull |

Please notice:

- Currently it's not possible to see if a media file (referenced by a link) has changed. So please always download the media files.
- The value of the timestamp attribute on the Product element in the ONIX output is the date and time where either metadata or files was last updated – it is NOT the date and time where it was added to or removed from you as a receiver so please do not use this timestamp to determine if you should create/update/remove the product in your end! If for instance the API returns 5 products when calling the API with a given `fromUtc` date you should create/update/remove all 5 products in your end even though a timestamp value is prior to the `fromUtc` date and time.

<sup>1</sup>See <https://www.editeur.org/83/Overview/>

## ENDPOINT DESCRIPTIONS

### /PRODUCTS

Returns all products in the ONIX format.

Test: GET <http://onix.qa.pubhub.dk/v11/products>

Prod: GET <https://onix.pubhub.dk/v11/products>

#### Request headers

| Parameter name | Type   | Description  |
|----------------|--------|--|
| x-service-key  | String | Client's license key (please request this from Publizon) |

#### Response

Below is an example of ONIX output. Please see <http://danskonix.dk> for detailed information about the individual ONIX fields and supported code list codes.

```
<ONIXMessage release="3.0" xmlns="http://ns.editeur.org/onix/3.0/reference">
  <Header>
    <Sender>
      <SenderName>Publizon</SenderName>
      <ContactName>Steffen Soerensen</ContactName>
      <EmailAddress>scs@publizon.dk</EmailAddress>
    </Sender>
    <SentDateTime>20170220</SentDateTime>
  </Header>
  <Product datestamp="20120203T151325Z">
    <RecordReference>824e6287-2518-47e2-8e83-862faa5d</RecordReference>
    <NotificationType>05</NotificationType>
    <ProductIdentifier>
      <ProductIDType>15</ProductIDType>
      <IDValue>9788792211286</IDValue>
    </ProductIdentifier>
    <DescriptiveDetail>
      <ProductComposition>00</ProductComposition>
      <ProductForm>ED</ProductForm>
      <PrimaryContentType>10</PrimaryContentType>
      <EpubTechnicalProtection>02</EpubTechnicalProtection>
      <EpubUsageConstraint>
        <EpubUsageType>11</EpubUsageType>
        <EpubUsageStatus>01</EpubUsageStatus>
      </EpubUsageConstraint>
      <TitleDetail>
        <TitleType>01</TitleType>
        <TitleElement>
          <TitleElementLevel>01</TitleElementLevel>
          <TitleText>Clavigo</TitleText>
        </TitleElement>
      </TitleDetail>
      <Contributor>
        <ContributorRole>A01</ContributorRole>
        <NamesBeforeKey>Johann Wolfgang</NamesBeforeKey>
        <KeyNames>Goethe</KeyNames>
      </Contributor>
      <Language>
        <LanguageRole>01</LanguageRole>
      </Language>
    </DescriptiveDetail>
  </Product>
</ONIXMessage>
```

```

    <LanguageCode>dan</LanguageCode>
  </Language>
  <Extent>
    <ExtentType>22</ExtentType>
    <ExtentValue>51</ExtentValue>
    <ExtentUnit>18</ExtentUnit>
  </Extent>
  <Subject>
    <SubjectSchemeIdentifier>12</SubjectSchemeIdentifier>
    <SubjectCode>DD</SubjectCode>
  </Subject>
  <Subject>
    <MainSubject />
    <SubjectSchemeIdentifier>93</SubjectSchemeIdentifier>
    <SubjectCode>DD</SubjectCode>
  </Subject>
</DescriptiveDetail>
<CollateralDetail>
  <TextContent>
    <TextType>03</TextType>
    <ContentAudience>00</ContentAudience>
    <Text><![CDATA[Sørgespil i 5 akter - Goethe skrev stykket på kun 8 dage, og det er forøvrigt det første værk som han satte sit eget navn på. Stykket blev meget dårligt modtaget, men det skal man ikke lade sig afskrække af.]]></Text>
  </TextContent>
  <SupportingResource>
    <ResourceContentType>01</ResourceContentType>
    <ContentAudience>00</ContentAudience>
    <ResourceMode>03</ResourceMode>
    <ResourceVersion>
      <ResourceForm>01</ResourceForm>
      <ResourceLink>http://images.pubhub.dk/Media/covers/originals/22f9ae8a-8fc2-4ccb-ae7f-00009faaa120.jpg</ResourceLink>
    </ResourceVersion>
  </SupportingResource>
</CollateralDetail>
<PublishingDetail>
  <Imprint>
    <ImprintName>SFA-89</ImprintName>
  </Imprint>
  <Publisher>
    <PublishingRole>01</PublishingRole>
    <PublisherName>SFA-89</PublisherName>
  </Publisher>
  <PublishingDate>
    <PublishingDateRole>01</PublishingDateRole>
    <DateFormat>00</DateFormat>
    <Date>20100507</Date>
  </PublishingDate>
</PublishingDetail>
<ProductSupply>
  <SupplyDetail>
    <Supplier>
      <SupplierRole>00</SupplierRole>
      <SupplierName>SFA-89</SupplierName>
      <Website>
        <WebsiteLink>ftp://ftp.pubhub.dk/22f9ae8a-8fc2-4ccb-ae7f-00009faaa120.epub</WebsiteLink>
      </Website>
    </Supplier>
    <ProductAvailability>20</ProductAvailability>
  </SupplyDetail>
</ProductSupply>
</Product>
<Product>
  ...

```

```
</Product>
</ONIXMessage>
```

`/PRODUCTS/{ISBN13}`

Returns a specific product – identified by isbn13 – in the ONIX format.

Test: GET <http://onix.qa.pubhub.dk/v11/products/{isbn13}>

Prod: GET <https://onix.pubhub.dk/v11/products/{isbn13}>

### Request headers

| Parameter name | Type   | Description  |
|----------------|--------|--|
| x-service-key  | String | Client's license key (please request this from Publizon) |

### Response

Below is an example of ONIX output. Please see <http://danskonix.dk> for detailed information about the individual ONIX fields and supported code list codes.

```
<ONIXMessage release="3.0" xmlns="http://ns.editeur.org/onix/3.0/reference">
  <Header>
    <Sender>
      <SenderName>Publizon</SenderName>
      <ContactName>Steffen Soerensen</ContactName>
      <EmailAddress>scs@publizon.dk</EmailAddress>
    </Sender>
    <SentDateTime>20170220</SentDateTime>
  </Header>
  <Product datestamp="20120203T151325Z">
    <RecordReference>824e6287-2518-47e2-8e83-862faa5d</RecordReference>
    <NotificationType>05</NotificationType>
    <ProductIdentifier>
      <ProductIDType>15</ProductIDType>
      <IDValue>9788792211286</IDValue>
    </ProductIdentifier>
    <DescriptiveDetail>
      <ProductComposition>00</ProductComposition>
      <ProductForm>ED</ProductForm>
      <PrimaryContentType>10</PrimaryContentType>
      <EpubTechnicalProtection>02</EpubTechnicalProtection>
      <EpubUsageConstraint>
        <EpubUsageType>11</EpubUsageType>
        <EpubUsageStatus>01</EpubUsageStatus>
      </EpubUsageConstraint>
      <TitleDetail>
        <TitleType>01</TitleType>
        <TitleElement>
          <TitleElementLevel>01</TitleElementLevel>
          <TitleText>Clavigo</TitleText>
        </TitleElement>
      </TitleDetail>
      <Contributor>
        <ContributorRole>A01</ContributorRole>
        <NamesBeforeKey>Johann Wolfgang</NamesBeforeKey>
        <KeyNames>Goethe</KeyNames>
      </Contributor>
      <Language>
        <LanguageRole>01</LanguageRole>
      </Language>
    </Product>
  </ONIXMessage>
```



```

    <LanguageCode>dan</LanguageCode>
  </Language>
  <Extent>
    <ExtentType>22</ExtentType>
    <ExtentValue>51</ExtentValue>
    <ExtentUnit>18</ExtentUnit>
  </Extent>
  <Subject>
    <SubjectSchemeIdentifier>12</SubjectSchemeIdentifier>
    <SubjectCode>DD</SubjectCode>
  </Subject>
  <Subject>
    <MainSubject />
    <SubjectSchemeIdentifier>93</SubjectSchemeIdentifier>
    <SubjectCode>DD</SubjectCode>
  </Subject>
</DescriptiveDetail>
<CollateralDetail>
  <TextContent>
    <TextType>03</TextType>
    <ContentAudience>00</ContentAudience>
    <Text><![CDATA[Sørgespil i 5 akter - Goethe skrev stykket på kun 8 dage, og det er forøvrigt det første værk som han satte sit eget navn på. Stykket blev meget dårligt modtaget, men det skal man ikke lade sig afskrække af.]]></Text>
  </TextContent>
  <SupportingResource>
    <ResourceContentType>01</ResourceContentType>
    <ContentAudience>00</ContentAudience>
    <ResourceMode>03</ResourceMode>
    <ResourceVersion>
      <ResourceForm>01</ResourceForm>
      <ResourceLink>http://images.pubhub.dk/Media/covers/originals/22f9ae8a-8fc2-4ccb-ae7f-00009faaa120.jpg</ResourceLink>
    </ResourceVersion>
  </SupportingResource>
</CollateralDetail>
<PublishingDetail>
  <Imprint>
    <ImprintName>SFA-89</ImprintName>
  </Imprint>
  <Publisher>
    <PublishingRole>01</PublishingRole>
    <PublisherName>SFA-89</PublisherName>
  </Publisher>
  <PublishingDate>
    <PublishingDateRole>01</PublishingDateRole>
    <DateFormat>00</DateFormat>
    <Date>20100507</Date>
  </PublishingDate>
</PublishingDetail>
<ProductSupply>
  <SupplyDetail>
    <Supplier>
      <SupplierRole>00</SupplierRole>
      <SupplierName>SFA-89</SupplierName>
      <Website>
        <WebsiteLink>ftp://ftp.pubhub.dk/22f9ae8a-8fc2-4ccb-ae7f-00009faaa120.epub</WebsiteLink>
      </Website>
    </Supplier>
    <ProductAvailability>20</ProductAvailability>
  </SupplyDetail>
</ProductSupply>
</Product>
</ONIXMessage>

```

## HOW TO DOWNLOAD AUDIOBOOK

Use the HTTP URL in the xml element Product/ProductSupply/SupplyDetail/Supplier/Website/WebsiteLink to download the audiobook. Use a GET request with the header “x-service-key: [license key]” (like when you call the endpoint to retrieve the onix data).

Example:

```
GET http://audiozipper.pubhub.dk/v1/wm/11111111-2222-3333-4444-555555555555.zip  
x-service-key: AAAAAAAA-BBBB-CCCC-DDDD-EEEEEEEEEEEE
```

Attention: This URL and license key is only an example.

Most audiobooks are big (>100 MB) so it will take some time to download depending on your download speed.

## HOW TO DOWNLOAD EBOOK

Use the FTP URL in the xml element Product/ProductSupply/SupplyDetail/Supplier/Website/WebsiteLink to download the e-book. Use the FTP credentials (user + password) supplied from Publizon to download.

**Attention: You are not able to see and download files through a normal GUI-based FTP client because there is only read (and not list) access to the e-book files you have rights to.**

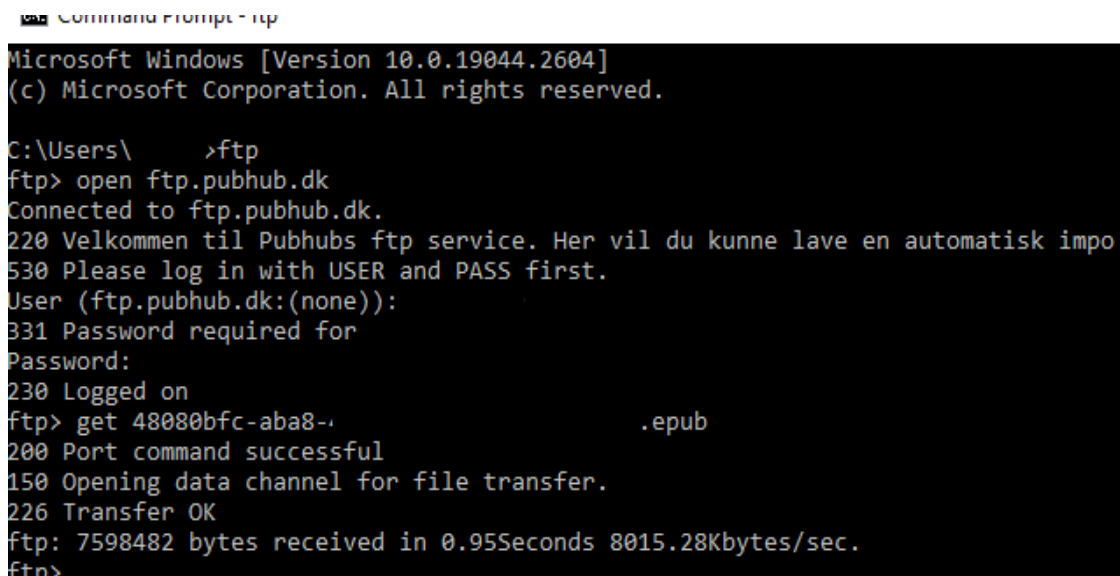
Below are three examples of how to download an e-book file.

(For security reasons credentials and actual file paths have been removed)

1) Using wget

```
wget.exe ftp://<username>:<password>@ftp.pubhub.dk/[guid].epub
```

2) Using windows command prompt



```
Command Prompt - ftp
Microsoft Windows [Version 10.0.19044.2604]
(c) Microsoft Corporation. All rights reserved.

C:\Users\      >ftp
ftp> open ftp.pubhub.dk
Connected to ftp.pubhub.dk.
220 Velkommen til Pubhubs ftp service. Her vil du kunne lave en automatisk impo
530 Please log in with USER and PASS first.
User (ftp.pubhub.dk:(none)):
331 Password required for
Password:
230 Logged on
ftp> get 48080bfc-aba8-4... .epub
200 Port command successful
150 Opening data channel for file transfer.
226 Transfer OK
ftp: 7598482 bytes received in 0.95Seconds 8015.28Kbytes/sec.
ftp>
```

### 3) Using C# and FluentFTP

```
using FluentFTP;
using System.Net;

FtpClient client = new FtpClient();
client.Host = "ftp.pubhub.dk";
client.Credentials = new NetworkCredential("[ftp username]", "[ftp password]");
client.Connect();
client.DownloadFile(@"D:\localfile.epub", "[guid].epub"); // or pdf
```