



MN Open API Implementation Guide:
Supplement for eBooks

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MN Open API Implementation Guide: eBooks

This supplement to the core MN Open API documentation covers the technical details for integrating eBooks. Presentation will follow the same format as the core doc set:

- Part One: Features and Business Rules
- Part Two: Technical Details
- Part Three: Sample Code

Please make yourself familiar with the Part Two document. This material relies upon, and extends it.

Table of Contents

Part One: Features and Business Rules	2
Catalog	3
Sample Publishers	3
Formats	3
Subjects (Genres)	3
Pricing	3
Digital Rights Management (DRM) Technology	3
Territories	3
Requirements	4
Part Two: Technical Details	4
Fulfilling eBooks	4
Image Data	4
Content Discovery APIs	5
Book.Get	5
Search.GetBooks	6
Important Note about Catalog Updates and Revocation	7
Management APIs	7
Partner.GetTaxAmount	7
Extensions to the Cart and Purchase Packages	9
Part Three: Sample Code	9
Fulfillment Steps	9
Experience with MediaNet Download Manager and Adobe Digital Editions	10
Appendix A: eBooks Metadata	11
New MN Open API Metadata Types	11
List of Subjects	11
Appendix B: Change History / Errata	13

Part One: Features and Business Rules

MN Open supports purchase downloads of eBooks in two DRM-protected formats: EPUB and PDF/A. This new asset type will first be exposed via the MN Open API in the new Book Package (sets of commands). The Purchase and Cart APIs have been extended to support eBooks as well; they now recognize the two new formats. With these API features, MN Open API Customers have complete control over the user experience, functionality, ecommerce and content catalog. Online retailers can rapidly implement more advanced browsing, discovery, and purchase options under their own brand. MediaNet supports three territories: the US, Canada and the UK. MediaNet supports for the US Agency Model.



The quickest way to add eBooks to your site is (a) integrate with these new and extended APIs, and (b) use the MediaNet Download Manager Web Component. (Customers who also sell music can opt to use the Download Manager only for eBooks.) It takes the work out of the Fulfillment of eBooks. eBooks are DRM-protected, unlike MN Open music assets, so there are additional elements of the user experience to manage -- and *the MediaNet Download Manager handles these for you*:

- Client Software Detection
- DRM License Acquisition and Management

Catalog

- MediaNet's eBooks catalog consists of more than 200,000 eBooks from the world's leading publishers covering three catalogs/territories: Canada, the UK, and the US.

Sample Publishers

- Simon & Schuster
- Harper Collins
- Hachette
- Random House
- Workman
- Open Road

Formats

- ePub (EPUB)
- PDF (PDF/A)
- Notes
 - JPEG for cover art. See Image Data below for important tips.
 - MediaNet does not support the Microsoft eBook format at this time. MediaNet plans to offer audio books in the future.

Subjects (Genres)

- More than 100 subjects with age specification which allows MN Open API Customers the flexibility to present the eBooks catalog in any manner desired. See also Appendix A: eBooks Metadata

Pricing

- MediaNet takes the hassle out of pricing including the intricacies of working directly with publishers on the new "US Agency Model" which requires a set price and reporting of taxes (Existing MN Open API Customers: compare with IsSetPrice for Sony, WMG, and UMG content)
- MediaNet will charge customers a percentage of the content costs
- Customers pricing for their users will come in two categories:
 - US Agency Model in which the publisher sets the price; or
 - "Regular" in which the publisher allows retailers to set their own prices

Digital Rights Management (DRM) Technology

- Adobe Content Server 4 ("ACS4")
- Applies to both ePub and PDF
- Purchased books can with authorization be downloaded on up to six computers or compliant eReader devices. For more information, see <http://www.adobe.com/products/digitaleditions/help/>.

Territories

- US, Canada ("CA"), and the UK ("GB")

Requirements

- Adobe Digital Editions, the most widely-used client software application that works with ACS4.
 - Computer Platforms supported = PC and Mac (not Linux)
 - eReaders: The purchased eBooks can also be read on a number of eReader devices. The list of devices is restricted to those that have implemented the capability to work with ACS4.
 - The Amazon Kindle is not supported
 - Apple "iDevices" aka iOS: the following iDevice apps offer a range of support:
 - Txtr: aids in getting eBooks onto iDevices
 - Bluefire Reader: full support
 - See <http://blogs.adobe.com/digitalpublishing/supported-devices> for more detail
- An AdobeID: Registration with Adobe
Note: this is optional, but not registering with Adobe imposes greater usage constraints

See also Appendix A: eBooks Metadata

Part Two: Technical Details

In addition to the new Book Package, there's a new Search.GetBooks API, and the Cart and Purchase APIs have been extended to recognize the new asset type formats EPUB and PDF/A.

In November 2010 MediaNet added support for the US Agency Model. This required the creation of a Partner.GetTaxAmount API. In the event an end user is about to purchase at least one US Agency eBook, before performing a Cart.Purchase call, or a Purchase.UseBalance or Purchase.UseCreditCard call, you must now first call Partner.GetTaxAmount to obtain the correct tax to charge for that asset according to the ZIP code of the end user. Please see below for more details.

Fulfilling eBooks

Important: due to the complexity of detecting compliant client software and managing license acquisition and insertion for the DRM-protected eBooks, we strongly recommend use of the MediaNet Download Manager. (Customers using MediaNet Commerce may use this free of charge. Customers using their own Commerce may be required to pay a monthly fee. Please contact your MediaNet Business Development representative for details.)

Please see the section entitled "How to Use the Download Manager Web Component" in the MN Open API Implementation Guide Part Two: Technical Details, available at <http://www.mndigital.com/integration/openapi.html>. As a preview, the implementer must pass an OrderID returned by one of the Purchase APIs to the Download Manager Web Component, and it handles all the complexity.

To perform an integration without the use of the MediaNet Download Manager Web Component, please see Part Three: Sample Code below for more information about how to complete fulfillment of an eBook.

Image Data

MediaNet has eBook cover art in multiple sizes for 90% of the books in the catalog in three sizes. Please be sure to check for HTTP error 404 to detect the case when eBook cover art is not available. For Customers familiar with our Album and Artist art, the image identifiers are the same as Album images: s, m, and g. Note that there are ~10,000 fewer images in the "g" size than for the "s" or "m" sizes.

eBook Cover Art

75x100 - the "s.jpeg"

150x200 - the "m.jpeg"

510x800 - the "g.jpeg"



Please be advised that, by default, image locations are served via HTTP and from the mndigital.com domain. Only HTTP is supported. (This "channel" or option is served via our Content Distribution Network (CDN) partner for optimal end user experience.)

If you need to serve images securely (under HTTPS), please contact ApiSupport@mndigital.com for details. This "channel" or option is reserved for Plus Customers.

Content Discovery APIs

Book Package

Contains methods for retrieving information about an eBook.

Book Package Summary:

- Get

Book.Get

Description: Retrieves by MediaNetID (mnetid) the metadata about a specific eBook, including author and review info, cover art location, etc.

Returns: Author, eBook, and Review information about the specified eBook.

Recommended HTTP Action: GET

Signature or SSL Required? Neither.

Parameters:

Name	Description	Required?	Default	Value Type
ApiKey	Partner's API key.	Yes		String
Method	The name of the method to invoke.	Yes		String
CC	The Country Code determines which catalog/territory an API call works against. *Optional for Customers with a single territory. Strongly recommended for every call for Customers with multiple territories.	No*	Customer's default catalog	String (Values: CA, UK, US)
Format	The format the response should be in, JSON or XML.	No	XML	String (Values: XML, JSON)
Mnetid	The MNetId for an eBook. Mnetid is returned in the various methods of the search package.	Yes		String

Example:

?method=book.get&mnetid=39412543&ApiKey=YourApiKey

Returns:

BookMetadata

- Book Book
- Error Error
- bool Success

Search Package

Contains methods for searching the MediaNet catalog.

Important: Results for all Search methods are automatically sorted by popularity. Plus Customers have access to the popularity rank values.

Search Package Addition:

- GetBooks

Search.GetBooks

Description: Searches for eBooks by title, author, author MNetID, and/or keyword. Can choose to set mainAuthorOnly (default=false).

Returns: eBook matches (with a count) including author, and eBook cover art

Recommended HTTP Action: GET

Signature or SSL Required? Neither

Parameters:

Name	Description	Required?	Default	Value Type
ApiKey	Partner's API key	Yes		String
Method	The name of the method to invoke.	Yes		String
AssetFormat	Format of ebooks to be retrieved (EPUB and/or PDF/A)	No	Both EPUB and PDF/A	String (Values: EPUB, PDF/A)
Author	The name of the author.	No		String
AuthorMnetID	The MNetID of an author.	No		String
CC	The Country Code determines which catalog/territory an API call works against. *Optional for Customers with a single territory. Strongly recommended for every call for Customers with multiple territories.	No*	Customer's default catalog	String (Values: CA, UK, US)
Format	The format the response should be in, JSON or XML.	No	XML	String (Values: XML, JSON)
includedSubjects	Facilitates searching or filtering by subject; takes a comma-delimited list (no spaces); see Appendix A	No		String
Keyword	Search term to be used in a combined Album, Artist, and Track search that will return tracks	No		String
MainAuthorOnly	Flag to constrain results to those with a single author match	No		Boolean (false)
Page	The page number that should be retrieved	No	1	Integer
PageSize	The number of items per page.	No	5	Integer
Title	The eBook's title.	No		String

Example:

?method=search.getbooks&title=blue&page=1&pageSize=10&ApiKey=YourApiKey



Returns:

BookSearchResults

- Int TotalTracks
- BookMetadata; see Common Response Data Elements above

Important Note about Catalog Updates and Revocation

Please note that, just like music assets, the full set of books that are available through the API changes as authors and books are added to, or deleted from, the full catalog offerings. The API always returns up-to-date information. Subscribers of the MediaNet XML Content Data Feed must stay on top of their daily ingestion to stay current.

Management APIs

Partner Package

Contains methods for managing your account balance and other account-level operations.

Partner Package Addition:

- GetTaxAmount

Partner.GetTaxAmount

Description: Obtains required tax values for US ZIP codes. **[Applicable only for US]**

Returns: tax value per MnetID submitted

Recommended HTTP Action: POST

Signature or SSL Required? Signature

Parameters:

Name	Description	Required?	Default	Value Type
<i>In the Query String...</i>				
ApiKey	Partner's API key.	Yes		String
Method	The name of the method to invoke.	Yes		String
CC	The Country Code determines which catalog/territory an API call works against. *Optional for Customers with a single territory. Strongly recommended for every call for Customers with multiple territories.	No*	Customer's default catalog	String (Values: CA, UK, US)
Format	The format the response should be in, JSON or XML.	No	XML	String (Values: XML, JSON)
Signature	All other query string parameters in an HMAC-MD5 hash. The Partner's Shared Secret is the key.	Yes		String
<i>In the POST Body...</i>				
Items:				
MnetId	The MediaNet item identifier for track or album.	Yes		String
ItemType	The type of item being purchased.	Yes		String (Values: Track, Album)

Name	Description	Required?	Default	Value Type
Format	The (asset) format of the item being purchased	Yes		String (Values: MP3)
Price	The retail price collected from end-user.	Yes		Double
BillingAddress:				
AddressLine1	The end-user's physical address.	Yes*		String
AddressLine2	Additional address line.	Yes*		String
City	The end-user's city.	Yes*		String
State	The end-user's state (two-letter code).	Yes*		String
PostalCode	The end-user's postal code.	Yes*		String
Country	The end-user's country	Yes*		String

Example in JSON:

?method=Partner.GetTaxAmount&format=json&apiKey=APIKEY&signature=SIGNATURE

Body of POST:

```
{
  "Items": [
    { "MnetID": 39534019, "ItemType": "Book", "Format": "PDF", "Price": 0.99 }
  ],
  "BillingAddress": {
    "AddressLine1": "2401 Elliott Ave",
    "AddressLine2": "Suite 300",
    "City": "Seattle",
    "State": "WA",
    "PostalCode": "98121",
    "Country": "US"
  }
}
```

Example in XML:

?method=Partner.GetTaxAmount&format=xml&apiKey=APIKEY&signature=SIGNATURE

Body of POST: → *Note the case of the elements*

```
<GetTaxAmount xmlns="http://api.mndigital.com">
  <Items>
    <LineItem>
      <MnetId>39534019</MnetId>
      <ItemType>Book</ItemType>
      <Format>PDF</Format>
      <Price>.99</Price>
    </LineItem>
  </Items>
  <BillingAddress>
    <AddressLine1>2401 Elliott Avenue</AddressLine1>
    <AddressLine2>Suite 300</AddressLine2>
    <City>Seattle</City>
    <State>WA</State>
    <PostalCode>98121</PostalCode>
    <Country>US</Country>
  </BillingAddress>
</GetTaxAmount>
```

Returns:

GetTaxAmountResults

- ItemsMetadata

Extensions to the Cart and Purchase Packages

Enumerations have been added to support eBooks:

Items:				
ItemType	The type of item being purchased.	Yes		String (Values: Track, Album, Book)
Format	The (asset) format of the item being purchased: MP3 = music, Non-DRM MP4 = music, Non-DRM (aka AAC+) EPUB = eBook format, DRM-protected PDFA = Adobe PDF eBook, DRM-protected	Yes		String (Values: MP3, MP4, EPUB, PDFA)

Part Three: Sample Code

As discussed above, the DRM-protected state of the eBooks entails the likelihood of having to handle many more steps between the Purchase and the Download, and the opening and enjoyment of an eBook by an end user.

While it is true that, upon a successful `Purchase.UseCreditCard` or `Purchase.UseBalance` method call, you will receive per normal a download location (URL), it's not one that you will pass through to show to an end user or pass to a Customer download manager. If Adobe Digital Editions (ADE) is installed on the end user's machine, then you would handoff the download location to ADE. This handoff is managed by MIME type (Content-type) association; thus ***a prerequisite for a smooth end user experience is installation of an appropriate client software application.***

Please see the diagram on the next page which depicts graphically the smooth handling by the MediaNet Download Manager of the complex steps for downloading and licensing an eBook. Customers developing their own end user experience should handle the same cases and steps.

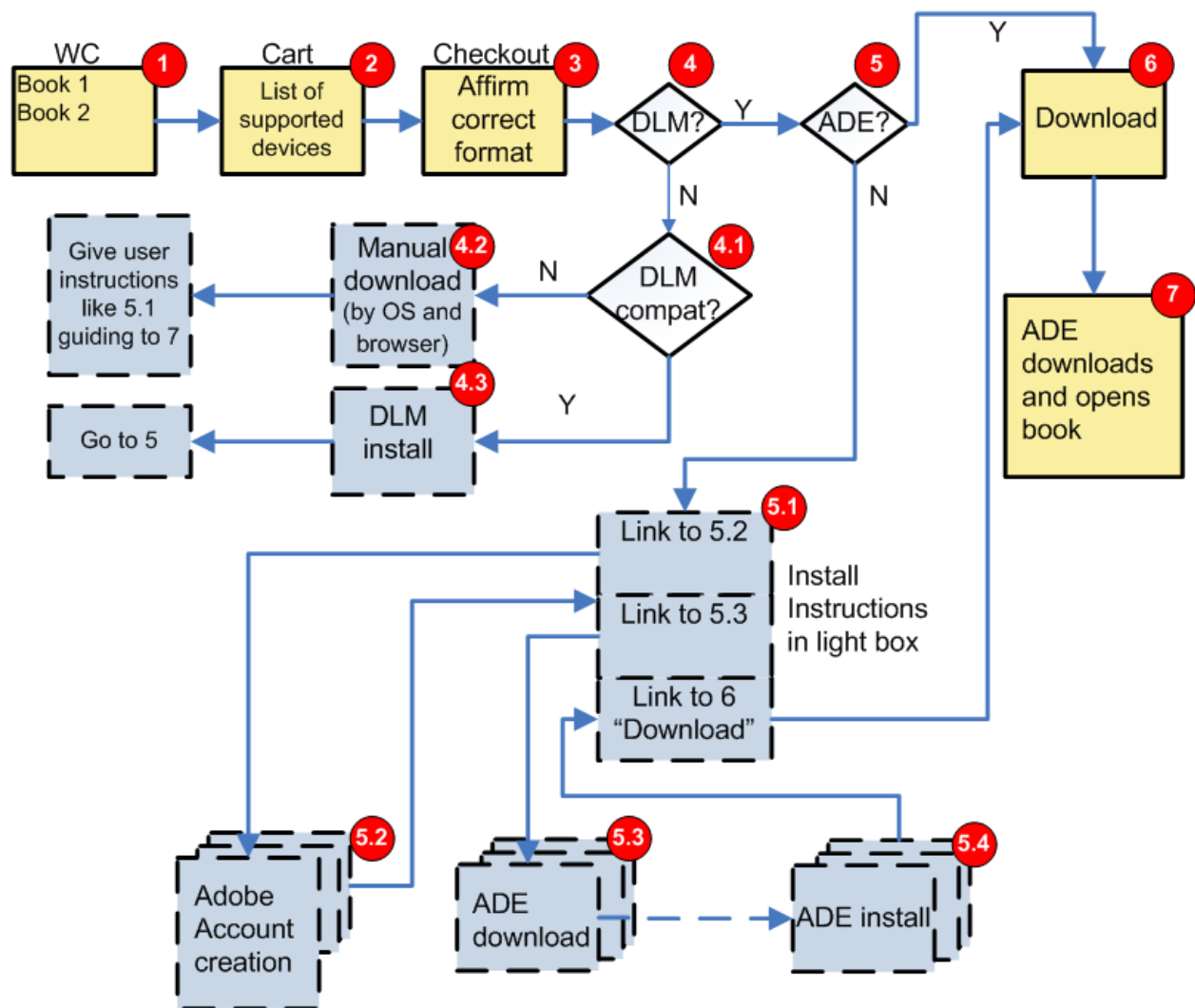
Fulfillment Steps




0. [Prerequisite] Ensure eBook-friendly client software application is installed
1. Perform an HTTP GET with the URL returned by Cart and/or Purchase APIs
2. The HTTP Response will include a blob of XML that is an ACSM file
3. At this point, the Customer implementer has a choice:
 - a. Create UI that directs the user to save the ACSM file locally, and then open with an eBook-friendly client software application, or
 - b. Write code that downloads the file silently in the background while invoking the eBook-friendly client software application, and passing the downloaded file off to it.

Experience with MediaNet Download Manager and Adobe Digital Editions

Please review the following diagram to understand the suggested flow that accounts for all steps required to download and license an eBook.

eBook Purchase and Use with Adobe Digital Editions (ADE)



-  Appear on 1st and 2nd use
-  Appear on 1st use only
-  Background process

Notes

- DLM removes the “open” or “save” decision by end users, and allows one-click multiple downloads. It auto-detects ADE and guides user with easy install instructions.

Appendix A: eBooks Metadata

This section describes new pieces of metadata that accompany eBooks and/or Author(s).

New MN Open API Metadata Types

The following table extends the MN Open API Metadata table found in Part One: Features and Business Rules.

Metadata Item	Description	Notes
Award		
Coverage	A time/place/region the book covers	
Edition	Edition information. Can include a number or: Volume, Issue, revised/updated/extended, etc	Similar to VERSION.
Excerpt		
Imprint	Trade name / printing run	
ISBN	ISBN of the book or the format.	
Keyword	Keywords representative for the book. Likely to be used in searching	
Review		
Short Description	Shorter description of the book.	Contains HTML tags.
Sort Title	Title to be used for sorting	Not in database if the same as TITLE
Subtitle	A further refinement of the title	
Table of Contents		Appears to be under 4000 chars. Truncate if longer than 3950.

List of Subjects

Analysis	Finance	Media Studies
Antiquarian	Folklore	Medical
Antiques	Foreign Language Study	Military
Architecture	Games	Multi-Cultural
Art	Gardening	Music
Biography & Autobiography	Gay/Lesbian	Music-Sheet
Business	Gender Studies	Mystery
Careers	Geography	Mythology
Chemistry	Grammar & Language Usage	Nature
Children	Health & Fitness	New Age
Classic Literature	Historical Fiction	Non-English Fiction
Comic and Graphic Books	History	Non-English Nonfiction
Computer Technology	Home Design & Décor	Nonfiction
Cooking & Food	Horror	Outdoor Recreation
Crafts	Human Rights	Performing Arts
Crime	Humor (Fiction)	Pets
Criticism	Humor (Nonfiction)	Philosophy
Current Events	Journalism	Photography
Drama	Judaica	Physics
Education	Juvenile Fiction	Poetry
Engineering	Juvenile Literature	Politics
Entertainment	Juvenile Nonfiction	Professional
Erotic Literature	Language Arts	Psychiatry
Essays	Law	Psychiatry & Psychology
Ethics	Literary Anthologies	Psychology
Family & Relationships	Literary Criticism	Recovery
Fantasy	Literature	Reference
Feminist	Management	Religion & Spirituality
Fiction	Mathematics	Report



Research
Romance
Scholarly
Science
Science Fiction
Science Fiction & Fantasy
Self-Improvement
Short Stories
Sociology

Songbook
Sports & Recreations
Study Aids & Workbooks
Suspense
Technology
Text Book
Thriller
Transportation
Travel

Travel Literature
True Crime
Western
Women's Studies
Young Adult Fiction
Young Adult Literature
Young Adult Nonfiction

Appendix B: Change History / Errata

June 2010

- Added discussions about Canada and UK Territories/Catalogs.
 - Country Code parameter (&cc) to all relevant APIs

November 2010

- Added discussion about US Agency Model
 - Added Partner.GetTaxAmount
- Updated Fulfillment steps to reflect the change from POST to GET

March 2011

- Clarification of compatibility with mobile phones, smartphones, and ereaders
- New optional parameter for Search.GetBooks: includedSubjects