



MN Open API Implementation Guide: eBooks  
June 2010

## MN Open API Implementation Guide: eBooks

This supplement to the core MN Open API documentation covers the details of the newest feature added to the MN Open API: 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

This material will be included in the core doc set later in 2010.

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### Part One: Features and Business Rules

eBooks are the hot digital media topic of 2010, and now MN Open supports purchase downloads of eBooks in two 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. **In June 2010, MediaNet added support for Canada and the UK.**

The quickest way to add eBooks to your site is to integrate with these new and extended APIs -- and use the MediaNet Download Manager Web Component. (Customers 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:

- Client Software Detection
- DRM License Acquisition and Management



This supplement also contains sample code so Customers can implement their own Fulfillment; see Part Three: Sample Code below.

## 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 is not supporting the Microsoft eBook format at this time. Medianet will offer audio books in the future.

## Genres (Subjects)

- 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 "agency model" which requires a set price and reporting of taxes (Existing MN Open API Customers: compare with IsSetPrice for Sony, WMG, and UMG)
- Medianet will charge customers a percentage of the content costs
- Customers pricing for their users will come in two categories: agency model in which the publisher sets the price; or 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
- June 2010: Canada ("CA") and the UK ("GB")
- ...and others -- look for separate announcements

## Requirements

- Adobe Digital Editions, the most widely-used client software application that works with ACS4.



- Platforms supported = PC and Mac; not Linux or Mobile
- An AdobeID: Registration with Adobe  
Not registering with Adobe imposes greater usage constraints
- 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 or Apple "iDevices" are not supported, although there is an iDevice app called "Texter" which can aid in getting eBooks onto iDevices.

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.

### **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. 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/products/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 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. If you need to serve images securely (under HTTPS), please switch the domain to musicnet.com.

### **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.

### 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

Name	Description	Required?	Default	Value Type
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)
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

eBooks are returned in order of popularity (e.g., <PopularityRanking>1</PopularityRanking> tag returned from the call), with 1 meaning the highest popularity.

Revocation: 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.

## 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)
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### Part Three: Sample Code

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

The eBooks are actually stored at and delivered from the OverDrive Content Reserve and are obtained via the OverDrive Fulfillment Service (OFS). Upon a successful Purchase.UseCreditCard or Purchase.UseBalance method call, instead of receiving a download location to present to a user or pass to a Customer download manager, the MN Open API will return an Intermediate File and a location (URL) to submit the Intermediate File to. The next step is to perform a POST to that location. A successful POST "translates" the Intermediate File into a DRM-protected blob that a compliant client software application will open and obtain and insert a license for. 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.**

Sample HTML Form code to perform the POST follows the Fulfillment Steps.

### Fulfillment Steps

0. [Prerequisite] Ensure eBook-friendly client software application is installed
1. Perform an HTTP POST to the OverDrive Location returned by Purchase APIs
  - a. POST BODY includes special fields:
    - i. RetailerID: will always be "medianet"
    - ii. **FulfillmentRequest**: the authToken returned by 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

### Sample POST using HTML Form

```
<html>
<head>
<title>OFS Sample Code - Download Page</title>
</head>
<body>
<p><big><b>OverDrive Fulfillment Server (OFS) Sample Code - Download Page</b></big></p>
<form action="http://ofs.contentreserve.com/bin/OFSGatewayModule.dll/SampleDownload.odm"
method="POST">
  <input type="hidden" name="RetailerID" value="medianet"></input>
  <input type="hidden" name="FulfillmentRequest"
value="&Hash=6UZgHSjzRF+UGaaokQsU6JuAClpqLzK6PxxhJT0lMJU+HMjXF4XeLCGt2sh/XjE/Nh6ZxAqN3cf904iU9yu5G
Tuyk9Lh2PyLRl0oLT+GdXVa31ILKjX5DsanZp/5W9lWuixLRrLZC7ehZRqSe2RVia5JxjxSb+2phjU5tU7Q8LwWhVhvcU6n1
lIOprDnTUu8IQmvK0Ifz07L3QY/nw9D4SfnBMrSgrCLh/Y4pxCOlR/egNj0zKotTpay+49jIoE2cai+PEcihxBWMHtdepfJSO
As/zREz53DQaBjoD/0FvcfvRz2fy8slB/7dvmCscxpZ4UgCdTJTh9gZx0hHmSfM7amqZLo2RgTFH+wuympXFz2jV/PfWAZlK+
4s/djNwrxjK4C8E7HSvs3QG36gmGAO/wbVVDJtw7Wy0p01WEBSf7YYT742Ow7w9NQQRs8bpwQBMIi8C5BtSN4VUUmUwzYlKvt
90FRPWEyxcu2/P+TOVl0BEYv32uWqTSYOKnzvpxzrprcvkqQOmpEo3GpAKVbVRd7I+3EzJs5vcOhjYgbZWLZBiugozW+ZQdRV
u/ahDKl7lV5vHwDeL0Pa4mydPRphqwaHTCgWhc jvhwTPdn15joIBH4fq6h/MNydnEwM5tL/TQKtq1nJGEMONvvyCEAQZ9mqUXB
```



```
moANSEWG0TfMbb5j0lrVUai75+I7c43D+mXaHL1ErBXR2KZze9juBEs6BNq/IsNyBaNprOlJuT7UW+JYb56N6IdYZm/Hwbndf
VlSZjzFbBwYYL6/TPZniooGLUIg==&Version=1.1"></input>
  <input type="submit" value="Download requested eBook..."></input>
</form>

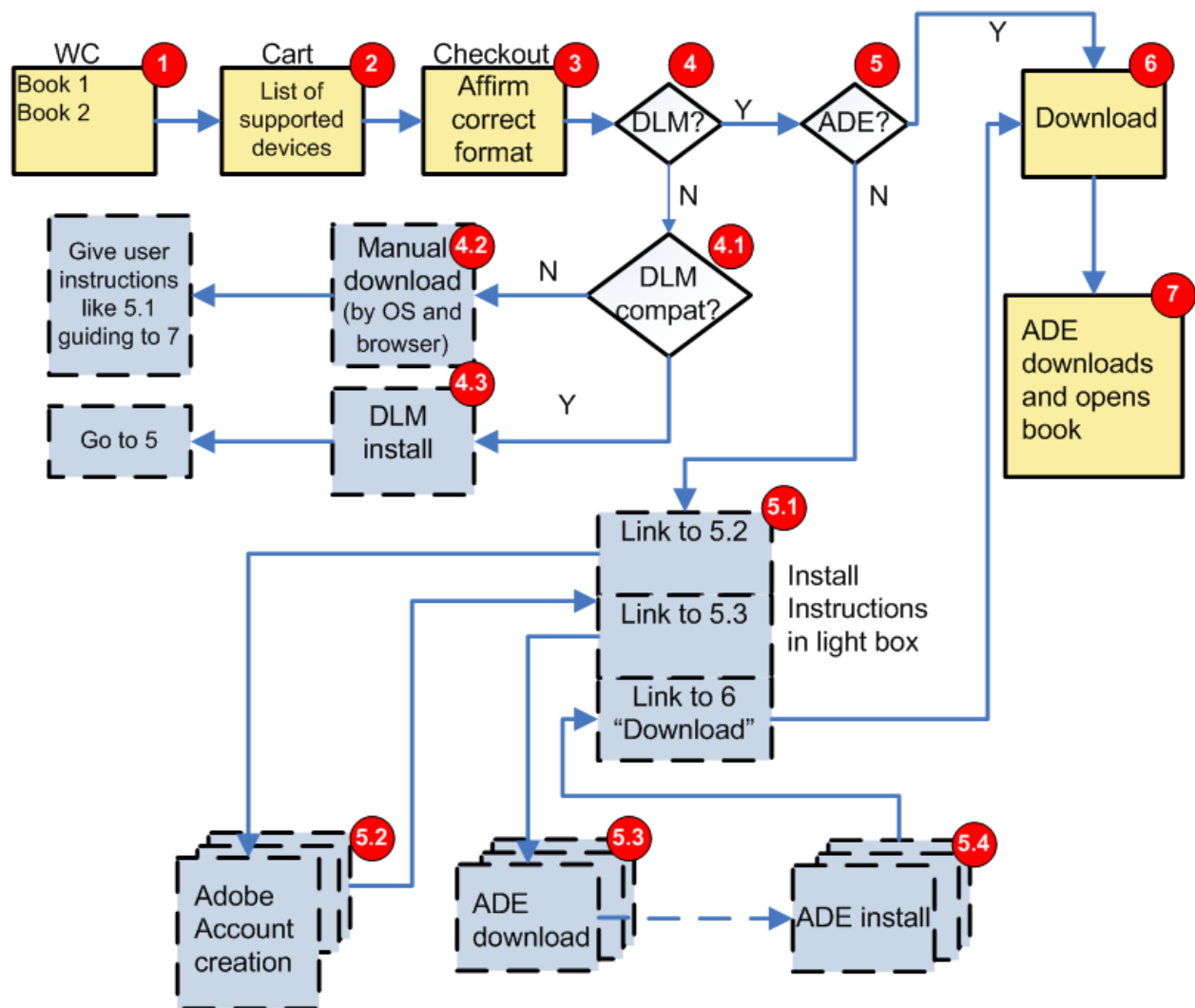
</body>
</html>
```




The following diagram 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.

## 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 1<sup>st</sup> and 2<sup>nd</sup> use
-  Appear on 1<sup>st</sup> 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