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# Integrating to eBooks: APIs to Sell and Read eBooks for Affiliates, Retailers and Device Makers

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Kevin Landry, Tech Lead  
May 10-11, 2011

Hashtags: #Commerce  
Feedback: <http://goo.gl/F1How>

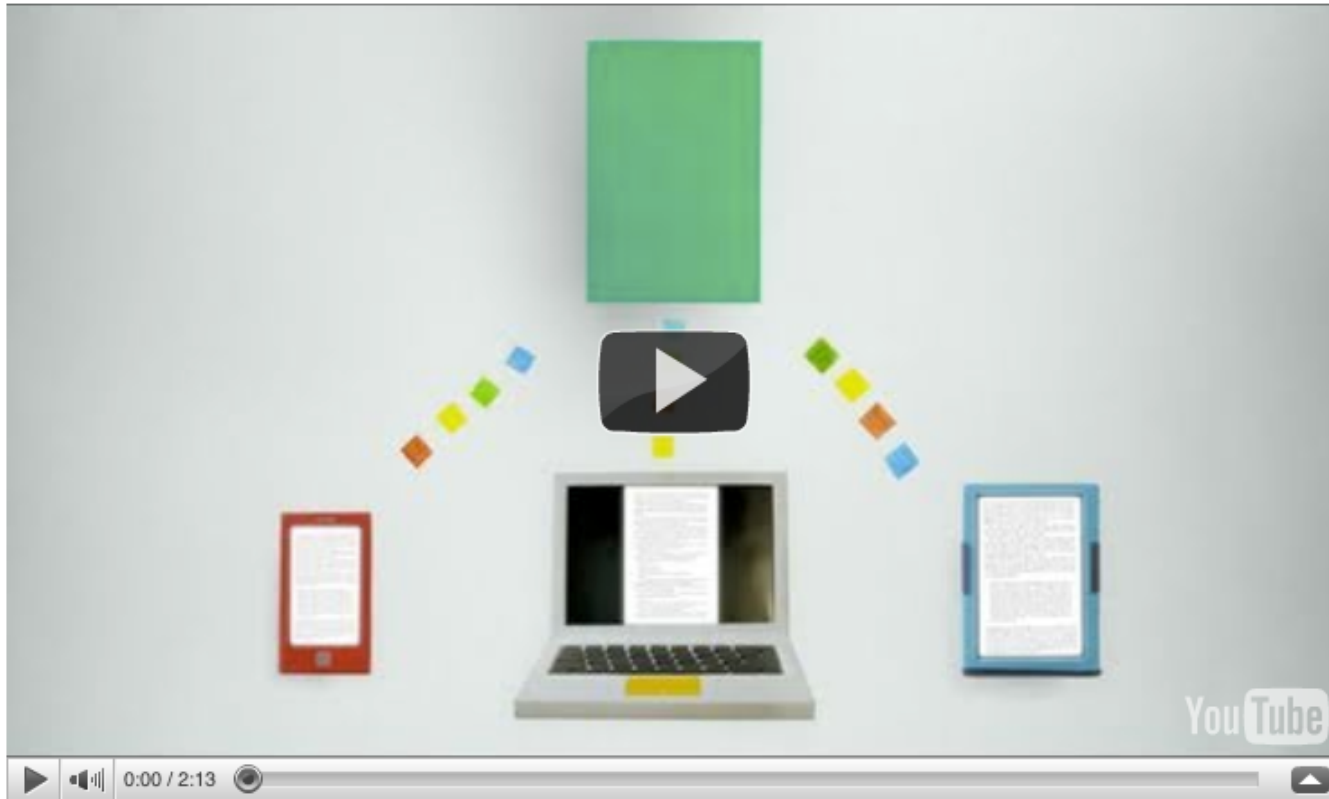
# Agenda

- What is Google eBooks?
- How do affiliates, retailers and devices use Books APIs?
- What are the APIs and how do they work?
- What are the key parts of an eBook integration?
- Affiliate integration example

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# What is Google eBooks?



<http://youtu.be/ZKEaypYJbb4>

# What is Google eBooks?

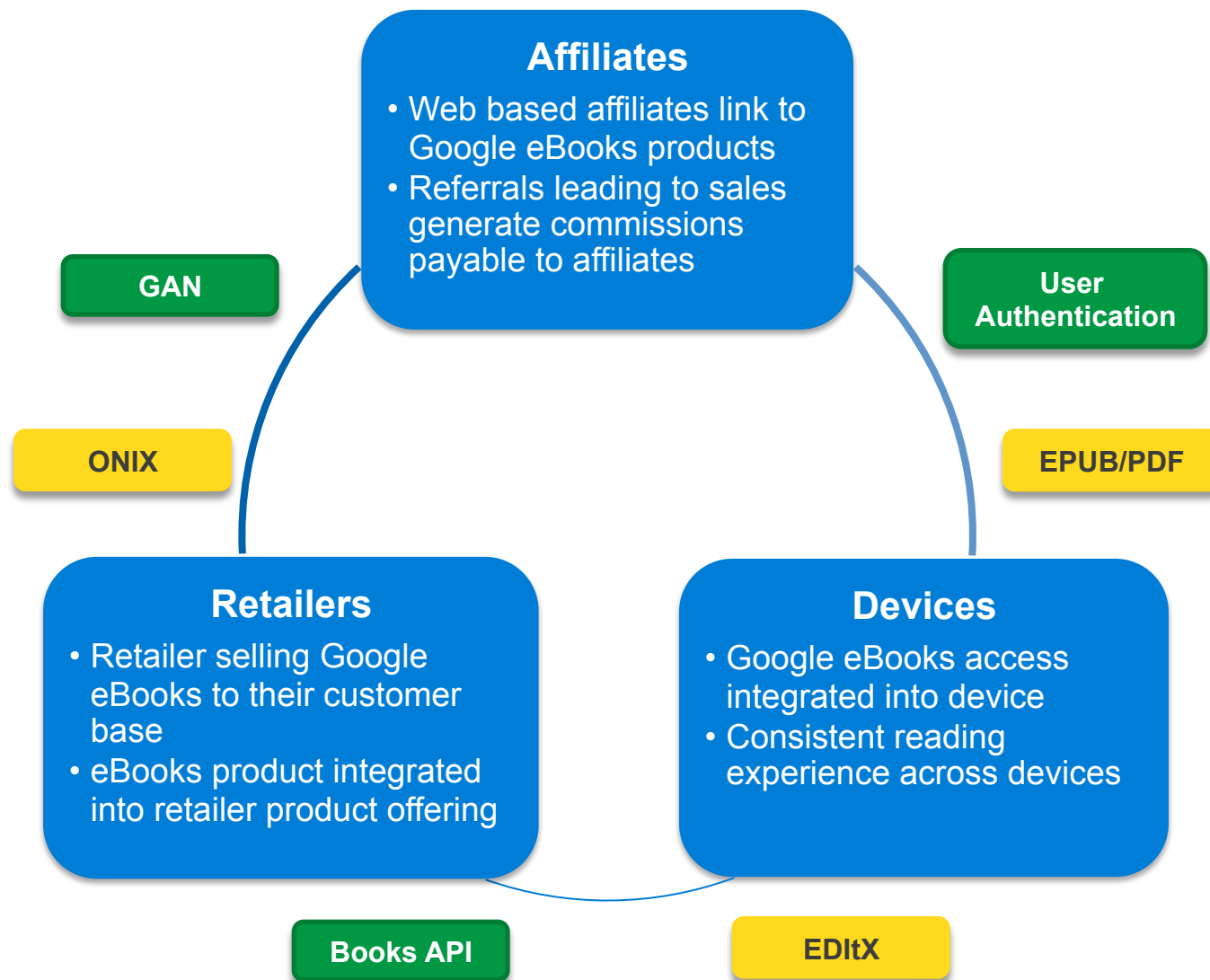
- Open, cloud-based e-commerce platform for browsing, buying, storing, and reading eBooks – launched late last year
- Supporting an open ecosystem that enables partners to play and make money in the digital book world
- Some interesting stats
  - 5k publishers have titles available as Google eBooks
  - Over 3 million Google eBooks available in the US; hundreds of thousands available for sale
  - More than 200 retail partners are selling them in the US



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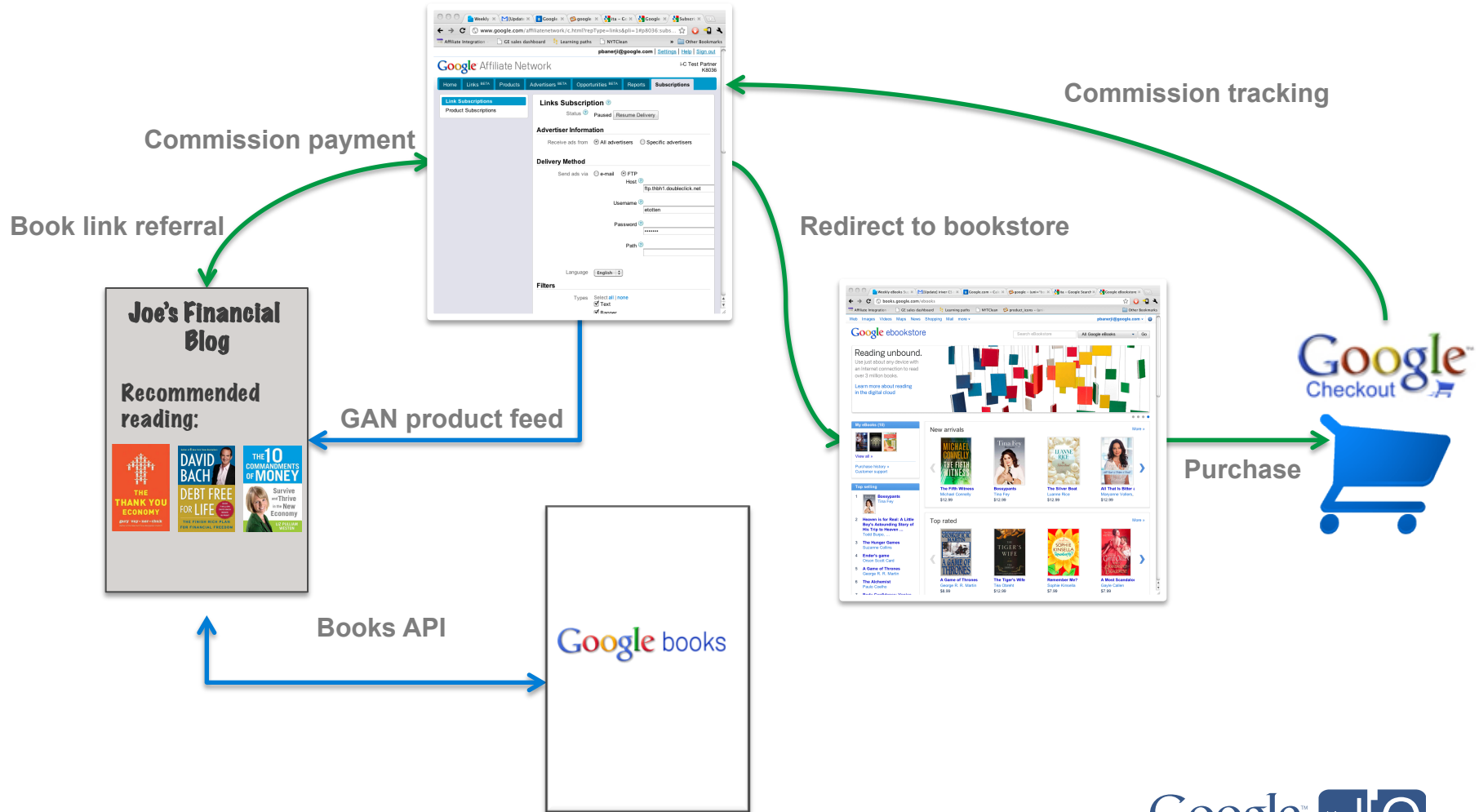
# Google eBooks enables a broad ecosystem





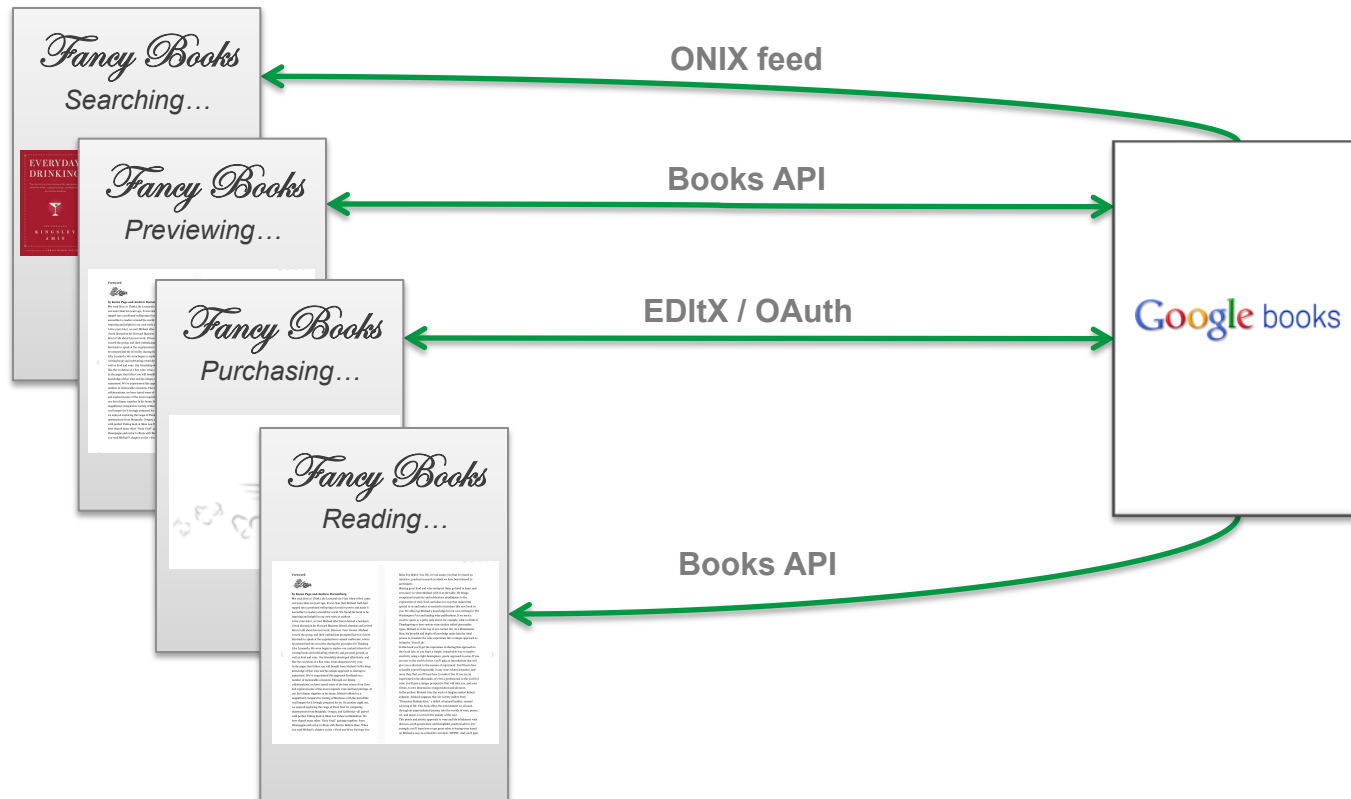
# High level affiliate integration

*Example: Financial blog site wants to earn commissions by referring customers to Google Books*



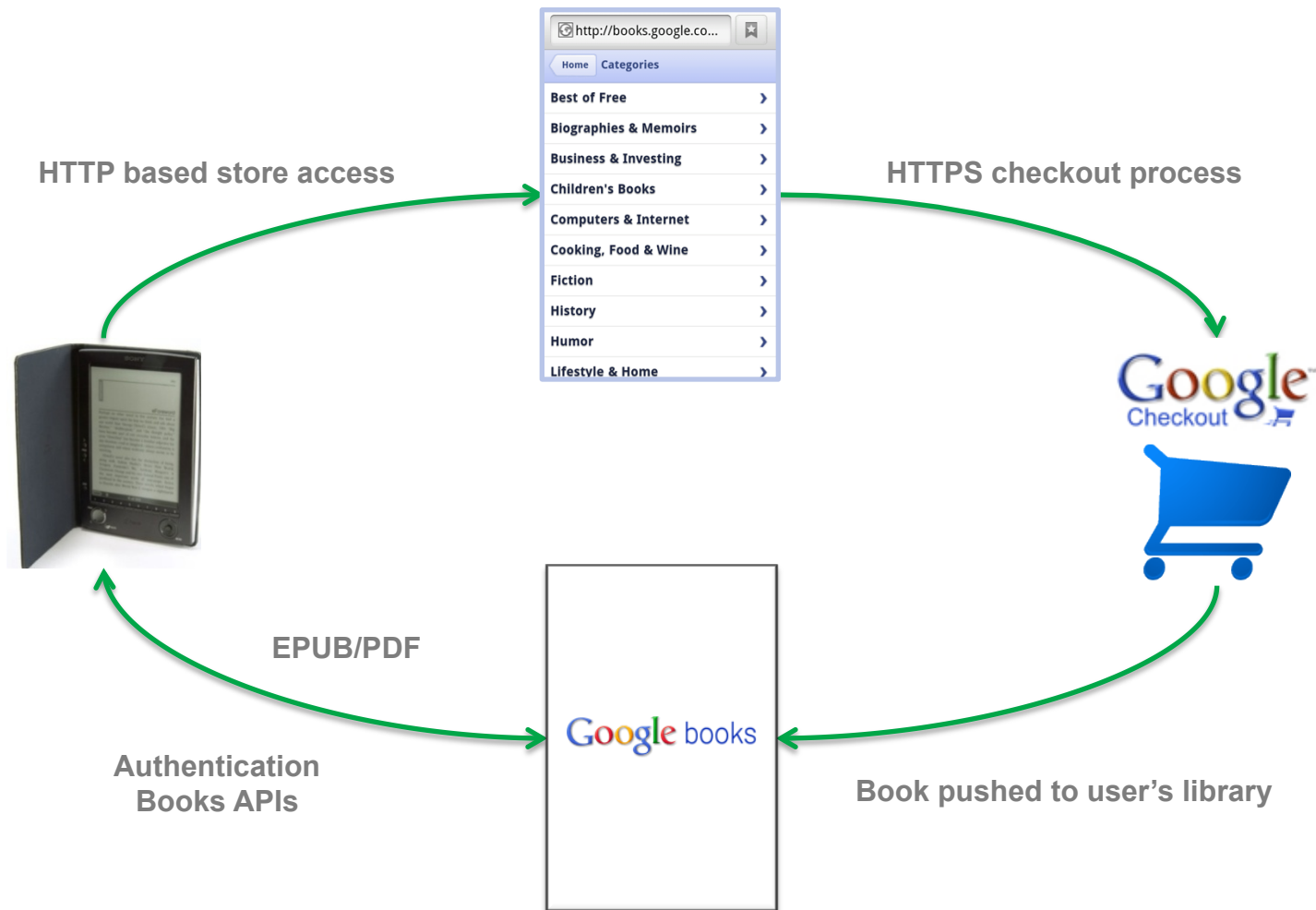
# High level retailer integration

*Example: Book retailer wants to sell Google eBooks*



# High level device integration

*Example: Device manufacturer wants to offer Google eBooks access*



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# API Overview

- **Data**
  - Volume Information (title, author, etc..)
  - User Content (Bookshelves, Reviews)
  - Order Information
- **Output Format**
  - XML, JSON
  - Industry Standards (EDItX, ONIX)
- **Book Content**
  - PDF
  - EPUB
  - Embedded Viewer



ePUB



My library

My Google eBooks (3) 

Purchased (2) 

Reviewed (0) 

Recently viewed (7) 

Favorites (1) 

Reading now (2) 

To read (4) 

Have read (1) 

Create new bookshelf

Books of interest (21) 

# API Technologies ...

- **NEW Books Labs API**

- JSON response
- Code Site - <http://code.google.com/apis/books/>
- API URL - <https://www.googleapis.com/books/v1/>

- **Authentication**

- Account management, link retailer/device & Google accts
- OAuth 2.0/1.0, Open ID, etc..
- <http://code.google.com/apis/accounts/docs/GettingStarted.html>

# Book Industry API

- **EDItX**

- Book industry XML for orders, inquiries, reports
- <http://www.editeur.org/88/EDItX-Overview/>

- **ONIX**

- Book industry XML for book product definition
- <http://www.editeur.org/83/Overview/>

- **Book Content**

- ePUB, PDF
- Adobe Digital Editions document encryption

# ... more API Technologies

- **Embedded Viewer API**

- Embed book content directly on a website.
- [http://code.google.com/apis/books/docs/viewer/developers\\_guide.html](http://code.google.com/apis/books/docs/viewer/developers_guide.html)

```
<script type="text/javascript" src="http://books.google.com/books/previewlib.js">
</script>
<script type="text/javascript">
GBS_insertEmbeddedViewer('ISBN:0738531367',
600,500);
</script>
```

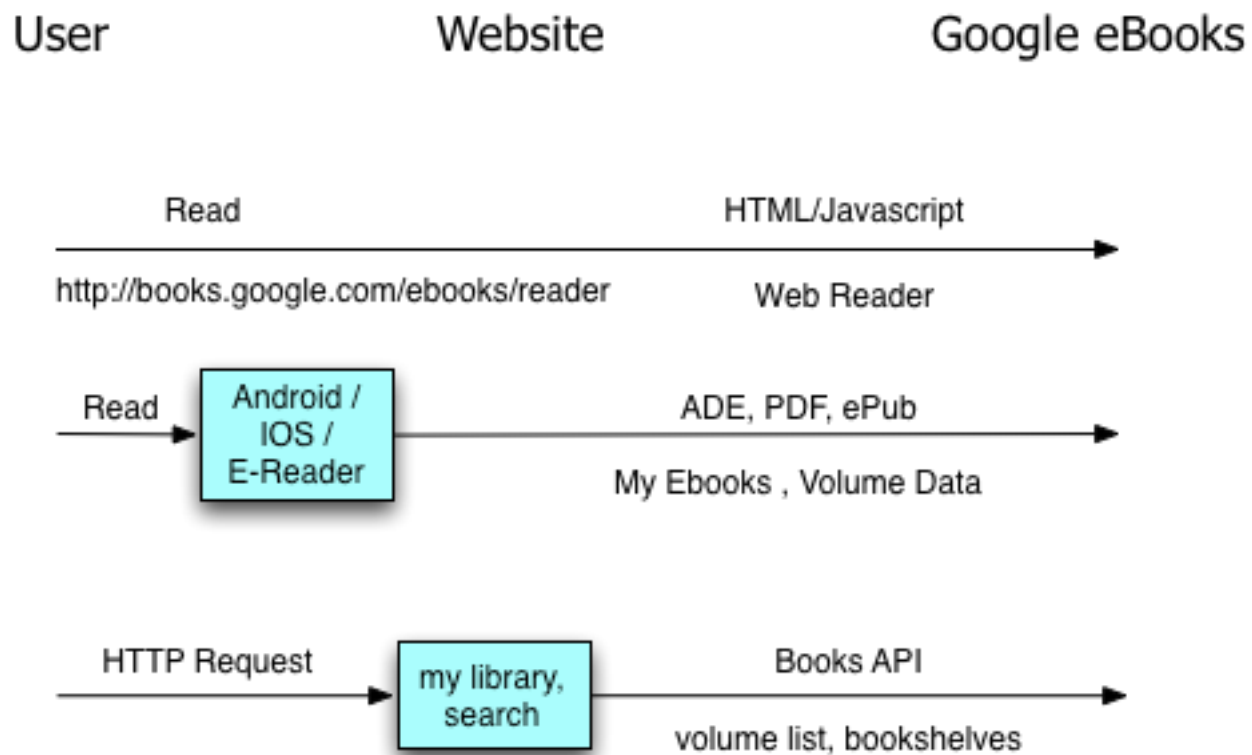




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# Google Books API



# Google Books API

## Get developer key

- <https://code.google.com/apis/console/>
- key parameter on all requests

### APIs for Books



### Books API

**Active** – The Books API allows clients to access the Google Books repository.

Deactivate

[+ Show details](#)

## Make the request

- <https://www.googleapis.com/books/v1/>
- **Volume Information**
  - [/books/v1/volumes/\[volume id\]](#)
  - User Authentication not needed
- **Bookshelves**
  - [/books/v1/mylibrary/bookshelves/\[shelf id\]/volumes](#)
  - User Authentication required

## JSON Output

# Example: Chrome Extension

## Development Site

<http://code.google.com/chrome/extensions/index.html>

## Three Components

Background page – stores state

Content Script – runs within the loaded page

Popup – icon popup page

## Volume Search

`/books/v1/volumes?q=[query]`



# Chrome Extension – Sending Request

```
function getTextForISBN(isbn) {
  var xhr = new XMLHttpRequest();
  xhr.open("GET",
           "https://www.googleapis.com/books/v1/volumes?key=" +
           "[YOUR KEY]&q=isbn:" + isbn,
           true);
  xhr.onreadystatechange = function() {
    if (xhr.readyState == 4) {
      addResult(JSON.parse(xhr.responseText));
    }
  }
  xhr.send();
}
```

# Chrome Extension – Using Response

```
function addResult(result) {
  var results = document.getElementById("results");
  for (var i in result.items) {
    if (!hasId()) document.getElementById("results").innerHTML="";
    var book = result.items[i];

    ...
    var bookhref = "openTabForUrl('http://books.google.com/books?id=" + book.id +
      "&source=chromeext')";

    ...
    img.src = getThumbnail(book);
    ..
    txt.innerHTML = book.volumeInfo.title;
    ...
    if (book.volumeInfo.subtitle) {
      txt = document.createElement("div");
      txt.id = "subtitle";
      txt.innerHTML = book.volumeInfo.subtitle;
      bookinfo.appendChild(txt); }
  }
}
```

# Google Books API (JSON Output)

[https://www.googleapis.com/books/v1/volumes/hZm0JA\\_Ri\\_0C?key=...](https://www.googleapis.com/books/v1/volumes/hZm0JA_Ri_0C?key=...)

```
{
  "kind": "books#volume",
  "id": "hZm0JA_Ri_0C", // Unique identifier for a volume.
  "etag": "KevoJDYkrd0", // Opaque identifier for a volume version
  "selfLink": "https://www.googleapis.com/books/v1/volumes/hZm0JA_Ri_0C",
  "volumeInfo": {
    ... // General volume information
  },
  "userInfo": {
    // User specific information related to this volume. (e.g. page this
    // user last read or whether they purchased this book)
  },
  "saleInfo": {
    ... // Any information about a volume related to the eBookstore and/or
    // purchaseability. This information can depend on country
    // (i.e. books may not be for sale in certain countries).
  },
  "accessInfo": {
    ... // Any information about a volume related to reading or obtaining
    // that volume text. This information can depend on country (books
    // may be public domain in one country but not in another, e.g.).
  },
}
```

# Google Books API (volumeInfo)

[https://www.googleapis.com/books/v1/volumes/hZm0JA\\_Ri\\_0C?key=...](https://www.googleapis.com/books/v1/volumes/hZm0JA_Ri_0C?key=...)

```
"volumeInfo": {
  "title": "Mark Twain",
  "subtitle": "A Life",
  "authors": ["Ron Powers"],
  "publisher": "Simon and Schuster",
  "publishedDate": "2005-09-13",
  "description": "Mark Twain founded the American voice....",
  "industryIdentifiers": [
    {
      "type": "ISBN_10", // Identifier type (ISBN_10, ISBN_13, ISSN and OTHER)
      "identifier": "074327475X"
    }
  ],
  "pageCount": 754,
  "printType": "BOOK",
  "categories": [
    "Biography & Autobiography / General",
    ...
  ],
}
```



# Google Books API (volumeInfo)

```
"averageRating": 4.0, // The average review rating for this volume.  
                    // (min = 1.0, max = 5.0)  
"ratingsCount": "76",  
"contentVersion": "preview-1.0.0", // An identifier for the version  
                                // of the volume content.  
"imageLinks": {  
  "smallThumbnail": "http://...",  
  ...,  
},  
"language": "en",  
"mainCategory": "Literary Criticism / American / General"  
},
```

# Google Books API (userInfo)

[https://www.googleapis.com/books/v1/volumes/hZm0JA\\_Ri\\_0C?key=...](https://www.googleapis.com/books/v1/volumes/hZm0JA_Ri_0C?key=...)

```
"userInfo": {  
  "review": "Great Book!",  
  // The user's current reading position in the volume, if one is  
  // available.  
  "readingPosition": {  
    "position": "GBS.PA176.w.1.2.0",  
    "updated": "2011-04-05T15:44:57.000Z",  
    ..  
  },  
  "isPurchased": true  
}
```

# Google Books API (saleInfo)

```
"saleInfo": {  
  "country": "US",  
  "saleability": "FOR_SALE", // FREE, FOR_SALE, NOT_FOR_SALE  
  "isEbook": true,  
  "listPrice": {  
    "amount": 13.99,  
    "currencyCode": "USD"  
  },  
  "retailPrice": {  
    "amount": 13.99,  
    "currencyCode": "USD"  
  },  
  "buyLink": "http://books.google.com/books?id\u003dhZm0JA_Ri_0C&ie  
\u003dISO-8859-1&buy\u003d"  
},
```

# Google Books API (accessInfo)

```
"accessInfo": {  
  "country": "US",  
  // The read access of a volume: UNKNOWN, PARTIAL, ALL_PAGES, NO_PAGES  
  "viewability": "PARTIAL",  
  // The ability to embed a viewport for this volume.  
  "embeddable": true,  
  // Whether or not this book is public domain in the country above.  
  "publicDomain": true ,  
  "epub": {  
    "downloadLink": "...", // URL to download non-DRM file.  
    "acsTokenLink": "http://..", // URL to retrieve ACS token for DRM  
    // file download.  
  },  
  "pdf": {  
    "downloadLink": "...",  
    "acsTokenLink": "http://..",  
  },  
  // Combines the access and viewability of this volume into a single  
  // status field for this user. Values can be FULL_PURCHASED,  
  // FULL_PUBLIC_DOMAIN, SAMPLE or NONE.  
  "accessViewStatus": "SAMPLE"  
}
```

# Google Books API (Volume Query)

- /books/v1/volumes

Parameter	Values	Description
q	“jet+skiing”, e.g.	Search terms. Supports advanced restricts such as “intitle:”, “author:”, “subject:”, etc.
langRestrict	an ISO-639-1 language code	Restrict to results that contain this language.
filter	partial, full, free-ebooks, paid-ebooks, ebooks	Restrict results by certain attributes.
orderBy	newest, relevance	Sort order for search results. By default, the sort order is by relevance.
maxResults		Maximum number of results to return.
startIndex		Index of first result to return, used for pagination.
download	Epub	epub = Limit to volumes with epub. Should also return volumes that won't have epub download links until post-purchase.

# Google Books API (bookshelf)

## Bookshelves

List of volumes for the user (My Ebooks, Purchased, Reviewed, etc..)

[http://books.google.com/books?as\\_coll=7&source=gbs\\_lp\\_bookshelf\\_list](http://books.google.com/books?as_coll=7&source=gbs_lp_bookshelf_list)

## Authentication

OAuth Playground

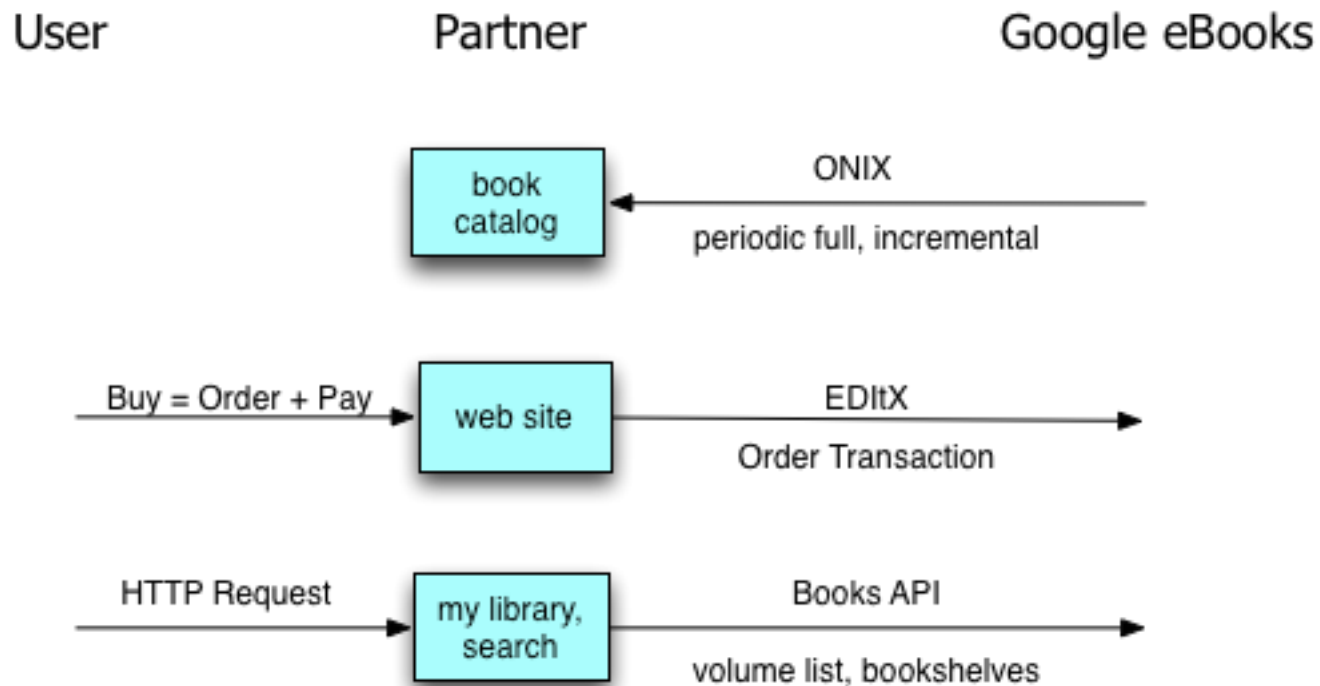
[http://googlecodesamples.com/oauth\\_playground/index.php](http://googlecodesamples.com/oauth_playground/index.php)

Scope: <https://www.googleapis.com/auth/books>

## URL

[/books/v1/mylibrary/bookshelves/\[bookshelf ID\]/volumes?key=...](/books/v1/mylibrary/bookshelves/[bookshelf ID]/volumes?key=...)

# Google eBook Partner Integration



# ONIX Catalog

- Periodic full catalog (agency, wholesale), daily incremental
- Version - ONIX v2.1 rev 03
- Each <Product> element describes a single e-book

```
<Product>
  <RecordReference>google:lx-_XRDzOKUC</RecordReference>
  <NotificationType>03</NotificationType> // 03, 05
  <ProductIdentifier>
    <ProductIDType>01</ProductIDType>
    <IDTypeName>GEID</IDTypeName>
    <IDValue>lx-_XRDzOKUC</IDValue>
  </ProductIdentifier> ...
  <ProductForm>DG</ProductForm>
  <ProductFormFeature>...</ProductFormFeature>... // Copy, print, images, downloads
  <EpubType>032</EpubType>
  <EpubFormatDescription>mobile-optimized,web-optimized</EpubFormatDescription>
```



# EDItX API

- The EDItEUR web site details a number of EDItX messages
  - Google Books uses a subset of the messages
    - <EDItX\_Message>
      - <Order>
        - » partner request to buy a book
      - <OrderCancelation>
        - request to cancel a purchase
      - <OrderResponse>
        - Google response
    - <EDItX\_MessageAcknowledgement>
      - Google response to an invalid <EDItX\_Message>

# EDItX overview

```
<EDItXMessage>  
  <EDItXMessageHeader/>  
  <EDItXMessagePayload>  
    <Order>  
  
      <Header/>  
      <ItemDetail/>  
  
      ...  
  
      <Summary/>  
  
    </Order>  
  </EDItXMessagePayload>  
</EDItXMessage>
```

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# Affiliate integration example - Goodreads

The screenshot shows the Goodreads website homepage. At the top, there's a navigation bar with the Goodreads logo, a search bar, and links for home, my books, friends, groups, explore, register, tour, and sign in. Below the navigation bar, there's a main content area with a welcome message and a sign-up button. To the right, there's a login form with fields for email address and password, a 'keep me signed in' checkbox, and a 'sign in' button. Below the login form, there are social media links for Facebook, Twitter, and Google+. The main content area also features sections for 'people recently on goodreads', 'most read books this week', and 'popular books published in April, 2011'. A 'sponsored books' section is also visible, featuring books like 'Ancient Awakening' and 'Minor Snobs'.

**Step 1: Browsing the affiliate website**

**Step 2: Selecting a book of interest**

**Step 3: Reading a preview of the book**

**Step 4: Clicking on the referral link to Google eBooks**

**Step 5: Browsing and purchasing on the Google eBookstore**

# Affiliate integration example - Goodreads

The Hunger Games (The Hunger Games #1)  
by Suzanne Collins  
★★★★ 4.54 · rating details · 147,905 ratings · 36,110 reviews

In the ruins of a place once known as North America lies the nation of Panem, a shining Capitol surrounded by twelve outlying districts. The Capitol is harsh and cruel and keeps the districts in line by forcing them all to send one boy and one girl between the ages of twelve and eighteen to participate in the annual Hunger Games, a fight to the death on live TV.

...more

my rating: ★★★★★  
**add to my books**

Hardcover, 374 pages  
Published October 1st 2008 by Scholastic, Inc.  
more details...

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lists with this book

**Books That Should Be Made Into Movies**  
1st out of 3946 books — 10337 voters

**Best Young Adult Books**  
5th out of 3678 books — 15429 voters

**More lists with this book...**

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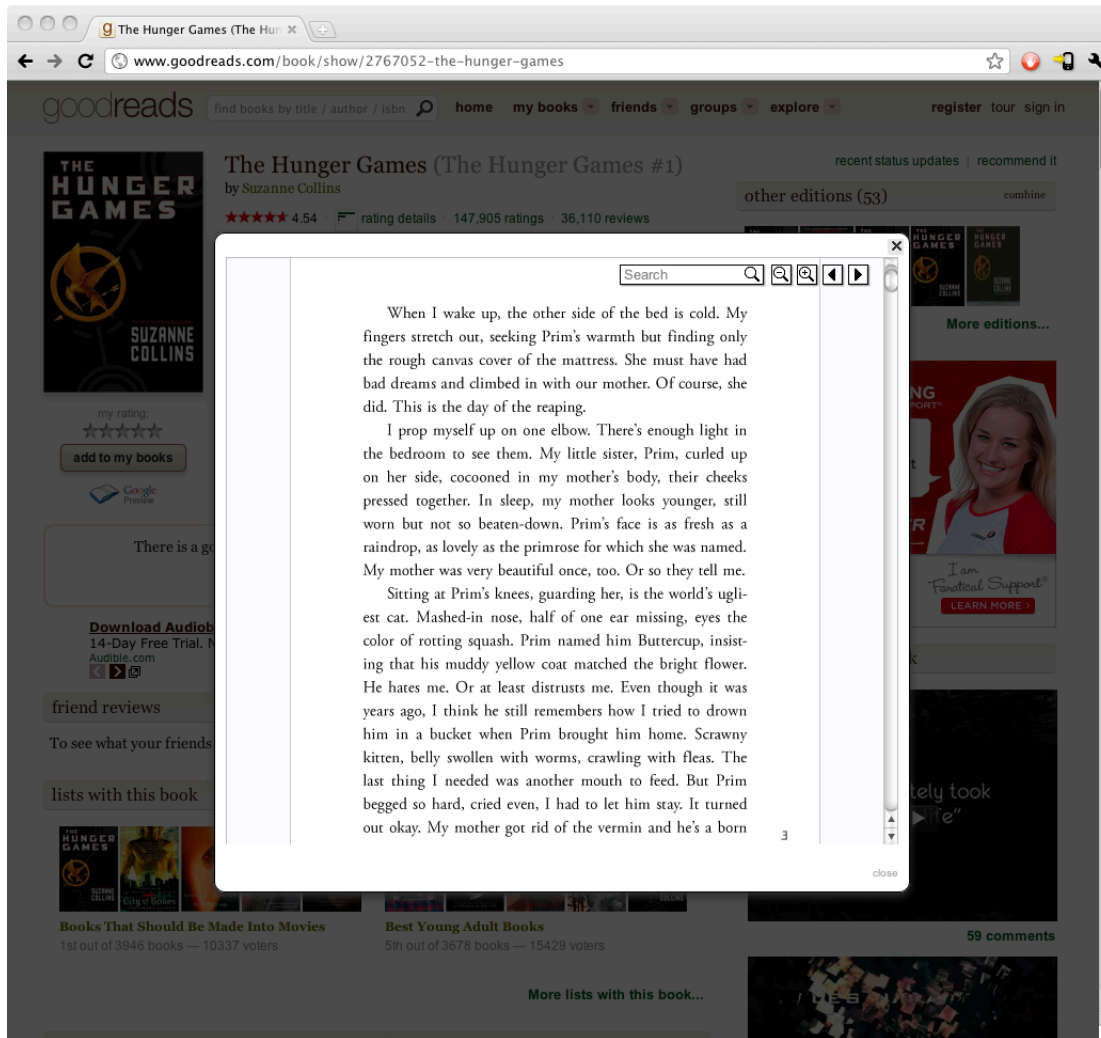
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Hardcover, 374 pages  
Published October 1st 2008 by Scholastic, Inc.  
more details...

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friend reviews

To see what your friends think of this book, please sign up.

lists with this book

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# Affiliate integration example - Goodreads

The Hunger Games (The Hunger Games) - Suzanne Collins

★★★★★ 27830 Reviews

Scholastic Inc., 2008 - Performing Arts - 374 pages

In a future North America, where the rulers of Panem maintain control through an annual televised survival competition pitting young people from each of the twelve districts against one another, sixteen-year-old Katniss's skills are put to the test when she voluntarily takes her younger sister's place.

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What people are saying - [Write a review](#)

Crazy plot but so compelling. - Goodreads The only thing that slightly annoying was the ending. - Goodreads Ps. sorry if i gave away part of the ending...oops. - Goodreads

**Pretty Gosh Dang Awesome**

User Review ★★★★★ - pappers - Overstock.com

The first thing I want to tell you is to not read any other reviews because they are filled with Spoilers that take away from a great book. The book is a very exciting and entertaining read that ... [Read full review](#)

**Review: The Hunger Games (The Hunger Games #1)**

User Review ★★★★★ - Tara - Goodreads

Originally posted on My Bloody Words.This is a review of the entire trilogy, but no spoilers. Book(s): The Hunger Games, Catching Fire, and Mockingjay Genre: YA Fantasy/SciFi Rating: 10 out of 10 ... [Read full review](#)

Editorial Review - [Publishers Weekly](#) vol. 255 iss. 44 p. 58 (c) 11/03/2008

Signature Reviewed by Megan Whalen Turner If there really are only seven original plots in the world, it's odd that "boy meets girl" is always mentioned, and "society goes bad and attacks the good guy" never is. Yet we have Fahrenheit 451 , The Giver , The House of the Scorpion —and now, following a long tradition of Brave New Worlds, The Hunger Games . Collins hasn't tied her future to a specific date, or weighted it down with too much finger wagging. Rather less 1984 and rather more Death Race 2000 , hers is a gripping story set in a postapocalyptic world where a replacement for the United States demands a tribute from each of its territories: two children to be used as gladiators in a televised fight to the death. Katniss, from what was once Appalachia, offers to take the place of her sister in the Hunger Games, but after this ultimate sacrifice, she is entirely focused on survival at any cost. It is her teammate, Peeta, who recognizes the importance of holding on to one's humanity in such inhuman circumstances. It's a credit to Collins's skill at characterization that Katniss, like a new Theseus, is cold, calculating and still likable. She has the attributes to be a winner, where Peeta has the grace to be a good loser. It's no accident that these games are presented as pop culture. Every generation projects its fear: runaway science, communism, overpopulation, nuclear wars and, now, reality TV. The State of Panem —which needs to keep its tributaries subdued and its citizens complacent—may have created the Games, but mindless television is the real danger, the means by which society pacifies its citizens and punishes those who fail to conform. Will its connection to reality TV, ubiquitous today, date the book? It might, but for now, it makes this the right book at the right time. What happens if we choose entertainment over humanity? In Collins's world, we'll be obsessed with grooming, we'll talk funny, and all our sentences will end with the same rise as questions. When Katniss is sent to stylists to be made more telegenic before she competes, she stands naked in front of them, strangely unembarrassed. "They're so unlike people that I'm no more self-conscious than if a trio of oddly colored birds were pecking around my feet " she thinks. In order not to hate these creatures who are sending her to her death, she

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Step 5: Browsing and purchasing on the Google eBookstore



# Closing thoughts

- Google eBooks offers a broad set of APIs and services that allow partners to participate in the eBooks ecosystem:
  - Affiliates – Generate revenue from referrals
  - Retailers – Sell Google eBooks to customers
  - Devices – Allows users to access Google eBook content

- To learn more about our APIs, visit:

<http://code.google.com/apis/books/>

- To be notified when the Google eBooks affiliate program goes live, visit:

<http://goo.gl/2fm7q>

- Please see our retailer partner, Powell's, in the I/O Sandbox to learn more about how they've integrated with Google eBooks!

# Questions?

- Hashtags: #Commerce
- Feedback: <http://goo.gl/F1How>

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