



## Introduction to E-books

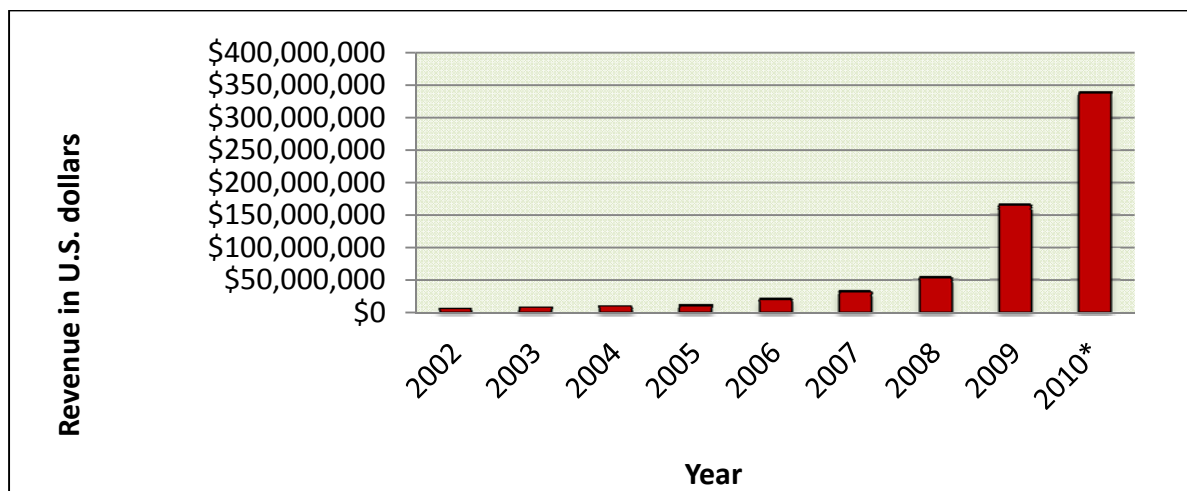


### What are e-books?

- Text, images, or some combination of both, bound within a data file that is meant to be displayed on the screen of a device
- Emphasis is usually on the content, not the format, of the file

### E-book industry

Annual e-book sales (wholesale) in the United States



\* Data for 2010 available only up to October 2010.

Data source: International Digital Publishing Forum (2011). Industry statistics. *International Digital Publishing Forum*. Retrieved from: <http://idpf.org/about-us/industry-statistics>

### Popular e-book readers

2 types: (1) e-ink based dedicated readers; and (2) reader apps for multi-functional devices, such as tablets, smart phones, and desktops

#### E-ink based dedicated readers

- Use electromagnetically charged black and white particles, suspended in a layer behind the screen, to display content
- Images and text are in grayscale and require only ambient light in order to be read
- With the absence of backlight, power is only needed to refresh or change the screen image, resulting in greater energy efficiency and less glare

Maker/Main investor	Examples
Sony	Sony Reader Touch, Sony Reader Daily Edition
Kobo (Chapters, Borders)	Kobo Reader, Kobo Reader Wifi, Kobo Reader Touch
Barnes & Noble	Nook Reader*
Amazon	Kindle DX, Kindle Graphite

\*Exception: The basic Nook Reader employs e-ink technology, but the Nook Color does not; the latter is a traditional backlit device.

### Multi-functional devices

- Rely on software applications or “apps” to display e-book content
- Tend to be costlier than e-ink devices and less energy efficient, but their users enjoy the convenience of all-in-one devices

Maker	Examples	Operating Systems
Adobe Systems	Adobe Digital Editions	Mac, Windows
Amazon	Kindle	iOS, Android, Blackberry, Windows Phone, Mac, Windows,
Apple	iBook	iOS
Lexcycle (based in Austin, TX and Portland, OR)	Stanza	iOS, Mac, Windows
Overdrive (based in Cleveland, OH)	Overdrive Mobile	iOS, Android, Blackberry, Windows Phone, Mac, Windows
Kobo	Kobo	iOS, Android, Windows, Blackberry, Palm Prē

## Common file formats

### PDF

- Open standard for document exchange
- Preserves layout, page formatting, typesetting, font, and graphics
- Devices will zoom in and out on the page, but will not alter actual text size

### EPUB

- Based on XML
- Does not preserve layout, page formatting, typesetting, and font
- Text is re-flowable, meaning that text size can be altered for greater legibility
- Represents, packages, and encodes structured and linked content in a single file format, acting much like a zip file
- Can be encrypted using DRM
- Open standard, but developed and maintained by the International Digital Publishing Forum
- IDPF members include major trade organizations and publishers, such as:
  - Adobe
  - American Booksellers Association

- American Printing House for the Blind
- Apple
- Barnes and Noble
- Cengage
- Cambridge University Press
- Google
- Harper Collins
- JSTOR
- OCLC
- O'Reilly Media
- Overdrive
- Oxford University Press Canada
- Pearson Education
- RAND Corporation
- Random House
- Simon and Schuster
- Sony
- Springer
- Swets
- University of California Press
- University of Michigan Library
- University of Montreal
- Vook
- World Health Organization

Others formats commonly read by devices (compatibility depends on the device and model)

- TXT
- DOC
- LRF (proprietary file format formerly read by Sony devices)
- MOBI (file format purchased by Amazon)
- AZN (Amazon-developed proprietary file format for the Kindle)

## Sources for e-books

### Project Gutenberg

- Public domain works
- Copyright varies by country; users should confirm that a work is in the public domain of their country before downloading
  - For Canadian copyright, see Canadian Intellectual Property Office website (<http://bit.ly/bfxmvS>)
- No digital rights management (DRM) encryption on e-books
- Most files are in TXT or HTML; EPUB is still an experimental format on the website

### E-book stores

- Every major e-book device maker sells e-books through their own e-bookstore platform
- Individual publishers may also sell e-books on their own site
- Most e-books have DRM encryption

### Overdrive

- Acts as third-party vendor, negotiating deals with publishers on libraries' behalf, to make e-books available to library users for borrowing
- Libraries pay an annual subscription fee to Overdrive
- DRM encryption ensures that books "return" automatically to the library at the conclusion of the user's borrowing period (active period expires after 7 to 14 days, much like typical library borrowing periods)

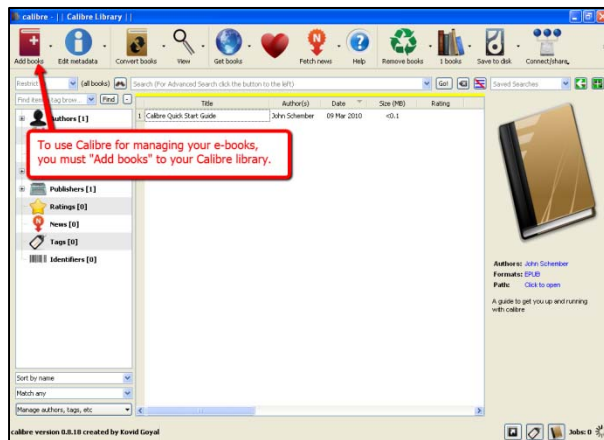
## Personal e-book management with Calibre

Calibre (<http://calibre-ebook.com>) is an open-source e-book management software application developed by users. Versions for Windows, Mac, and Linux are available. Use Calibre to:

- Organize personal e-book collections
- Edit metadata of downloaded e-books
- Convert e-book file formats
- Read e-books
- Upload e-books to dedicated e-book devices

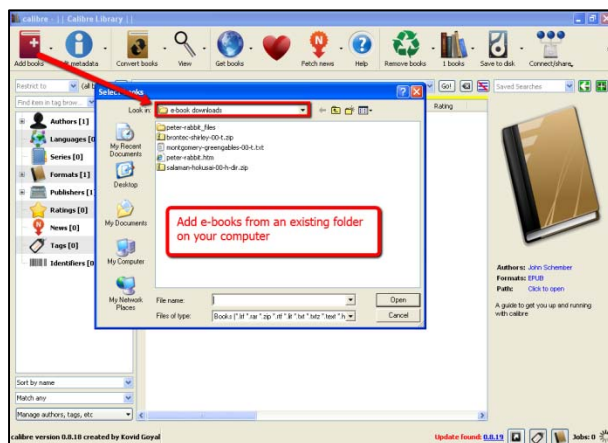
Note that Calibre is mainly designed for viewing and managing e-books without DRM encryption.

### Adding an e-book to your Calibre library



Screen capture of Calibre, version 0.8.19.

To start managing, viewing, converting, or uploading e-books using Calibre, e-books that you have downloaded must be manually added to your Calibre library.

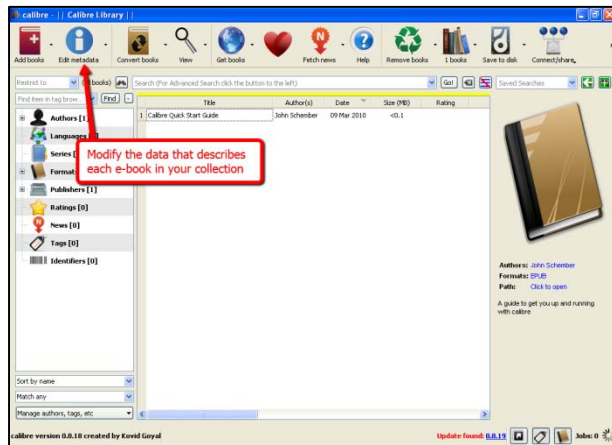


Once you have clicked “Add books”, you will be prompted to locate the e-books on your computer that you wish to add to your Calibre library.

Find the folder on your computer in which you have saved your downloaded e-books.

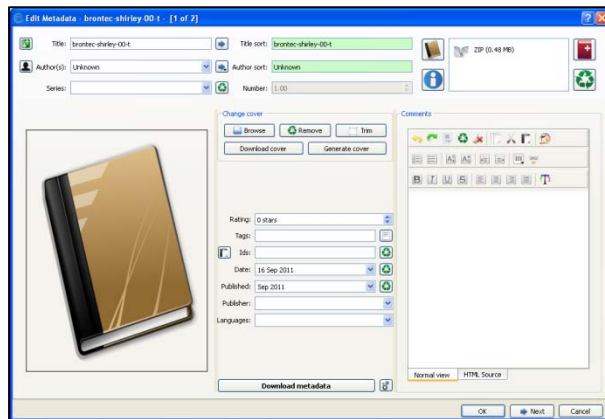
Most standard e-book file formats can be added, as well as TXT, RTF, DOC, PDF, HTML, and ZIP.

## Editing the metadata of an e-book

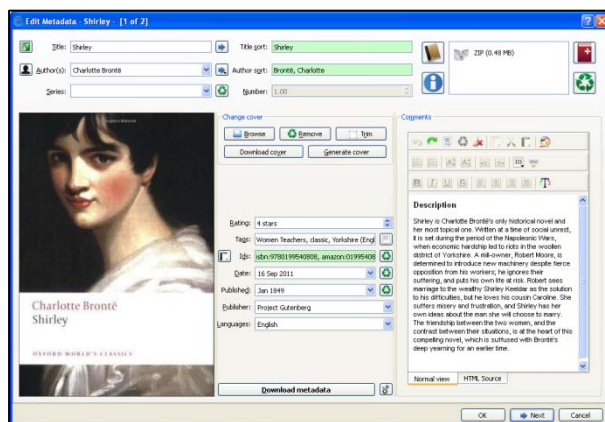


If you have downloaded a public domain e-book from sources such as Project Gutenberg, your e-book may have only a minimal amount of metadata associated with it.

To help you sort your Calibre library more effectively, and to help you search for e-books within your library in the future, you can catalogue your e-book by clicking on “Edit metadata”.

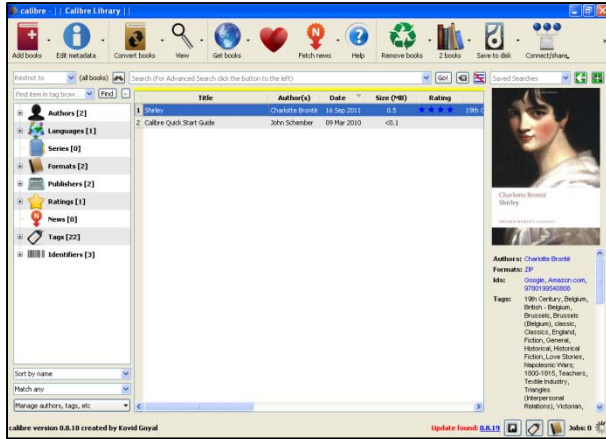


Once you highlight the e-book you want to catalogue, complete the “Edit metadata” dialogue box that appears.



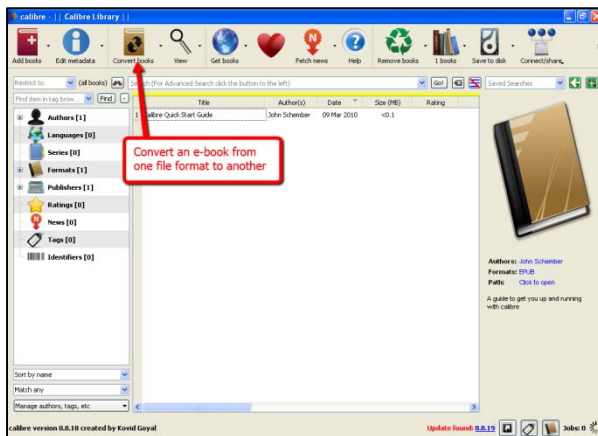
By clicking the “Download metadata” button at the bottom of the dialogue box, you can also import existing metadata associated with similar versions of the book, from sources such as Amazon and Google. You can also download a book cover.

After you have downloaded metadata from the external source, you can still modify the metadata to make corrections that better reflect your copy.

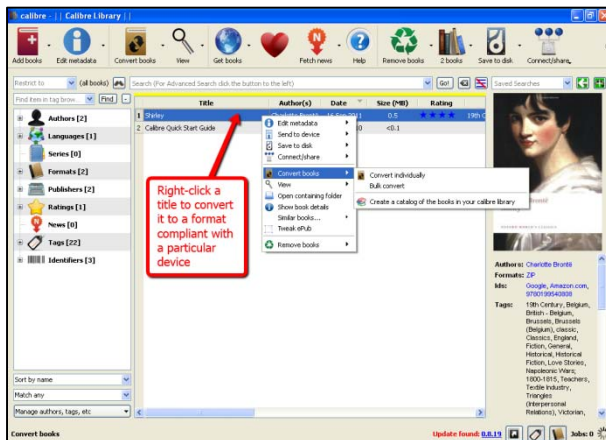


Screen capture of e-book with completed metadata fields.

## Converting an e-book

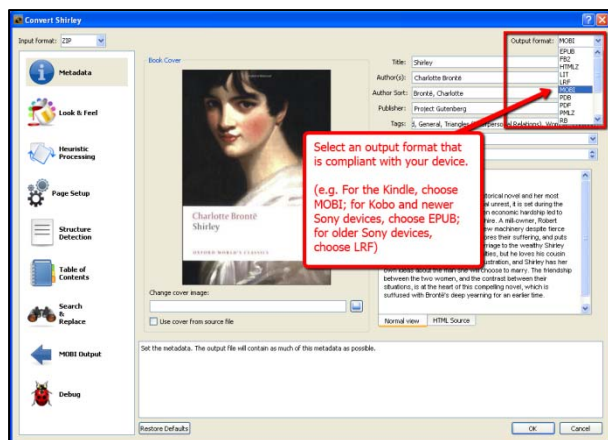


Use “Convert books” to create file formats of an e-book that are compatible with different e-book reading devices.



Right-click on the e-book in your Calibre library that you would like to convert.

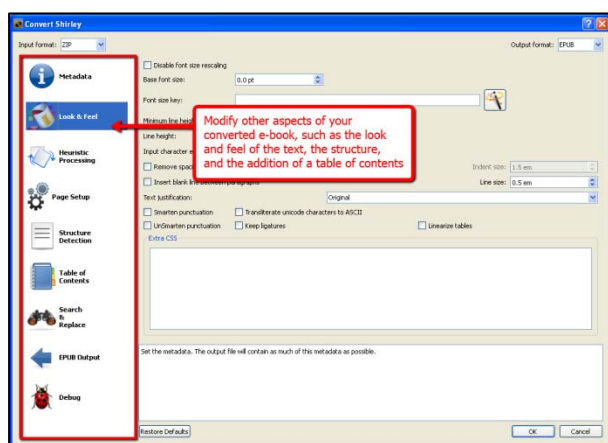
From the right-click menu, select “Convert books” → “Convert individually”.



Select the output format according to the type of device on which you will be reading your e-book.

E.g., for the Amazon Kindle, choose MOBI; for Kobo, newer Sony devices, and iPad/iPhone, choose EPUB; for older Sony devices, choose LRF.

Check that the metadata is accurate.

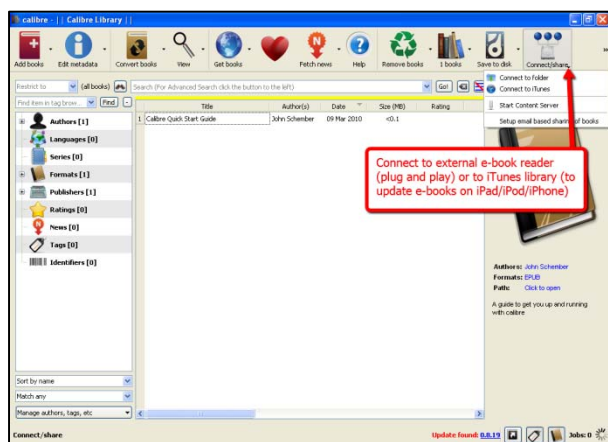


Control the “Look & Feel” of your e-book, including base font size, line height, and spacing between paragraphs.

You can insert a blank line between paragraphs to ensure easier legibility.

You can also improve the typography by requiring “smart” punctuation.

## Uploading an e-book to a device



To upload an e-book to your device...

**E-ink devices:** Simply plug and play. Click on “Connect” OR right-click on the e-book and select “upload to device” once your device has been detected by Calibre.

**iPad/iPhone:** Plug in your device. In Calibre, click on the “Connect/share” button, and select “Connect to iTunes”. Follow the instructions in Calibre for adding e-books to your iTunes library. Then sync your device to your iTunes library as you normally would.