

**docs.BloomLibrary.org**

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# Introduction



This site is a work in progress. Our initial goal is to bring together in one place the various advanced documentation writeups we've done over the years.

# The Bloom Platform

Bloom *Editor*, Bloom *Library*, and Bloom *Reader* comprise the Bloom *Platform*.

The Bloom Platform is an integrated approach to book-making which provides a robust and sustainable means for language communities to author, translate, publish, and distribute books for themselves in the language they speak or sign.

## Bloom Editor



Bloom Editor is a software program for authoring, translating, and publishing books and sharing those books with your community through Bloom Library. Bloom Editor runs on the Windows and Linux operating systems.

Bloom Editor is designed for ease of use. Bloom is so simple that if you can type and use a mouse, then you can make a book!

But despite its simplicity, in recent years, Bloom Editor has increasingly become a feature-rich desktop editor capable of producing beautiful print and electronic books. And where a simple, printed book is not enough, Bloom Editor makes it easy to add narration, sign language, and audio image descriptions for the visually impaired.

To view all of Bloom Editor's features, see [this page](#) on Bloom Library.

# Bloom Library

Bloom Library is a unique website that has more than 11,000 free books in 480+ languages. Books can be read online or downloaded in various formats for offline reading. The library interacts directly with the Bloom Editor for uploading and downloading books. The library also works with the free Bloom Reader Android app.

The screenshot shows the Bloom Library homepage. At the top, there is a navigation bar with icons for back, forward, refresh, and home, followed by a URL bar showing <https://bloomlibrary.org/read>. Below the URL bar is a red header with the Bloom logo on the left and two buttons: "READ" and "CREATE". The main title "Bloom Library" is displayed prominently in large, bold, black font. Below the title, a subtitle "Free Books in Your Language" is shown. The background of the page is white.

Key to Bloom's success is the generosity of local authors and organizations who freely share their openly-licensed books with the world, so others, in turn, can benefit from these materials and translate them into their languages.

Uploaded books are displayed using a “book card”. The book card shows a thumbnail image of the book’s front cover. Below that is a colored banner and 1-4 black dots to indicate one of four reading levels recognized by Bloom:

1. First words and phrases
2. First sentences
3. First paragraphs
4. Longer paragraphs

The image displays four examples of Bloom book cards, each featuring a different book cover and its details:

- Opposites and Differences 1** (English, Papua New Guinean Sign Language): A book card for a book about opposites, featuring a colorful illustration of a bird.
- Zibu & Zizo (Print)** (English): A book card for a book about two children, featuring an illustration of two children smiling.
- Ang Kaarawan Ni Emma** (Filipino): A book card for a book about a birthday, featuring an illustration of a multi-layered cake with a single candle.
- Баттли асосй** (Russian): A book card for a book in Russian, featuring an illustration of a person running.

Special book features and the list of languages represented in the book are also indicated on the book card.

## Bloom Reader

Bloom Reader is a free Android app that allows readers with Android devices to enjoy Bloom books offline. Books published to Bloom Reader can include all of Bloom Editor's advanced features: edge-to-edge images, synchronized audio narration, language switching (for books published with multiple languages), sign language video, audio image descriptions, and page navigation.



To get books onto a device that has Bloom Reader installed, users can either download from Bloom Library, transfer books directly from the Bloom Editor to their devices, or share from one device to another.

Organizations interested in mass distribution of Bloom books to a people group can transfer books onto SD-cards.

## Bloom Enterprise

**Bloom Enterprise** is a special service for organizations that need additional program and publishing features. For more information about Bloom Enterprise, see [Bloom Enterprise Service Overview](#).



# Installing Bloom

**Bloom Editor** is a program that runs on your computer. Before you can use Bloom, you need to install it on your computer. There are some additional programs that you should install, too, to use the Bloom image gallery.

# System requirements

## Hardware

Bloom is designed to run on fairly modest hardware. Your computer should have at least the following to run Bloom:

- 1.5 Ghz processor
- 4 GB memory (RAM)
- 2 GB available hard disk space

## Operating system

Bloom is primarily a program for the Microsoft Windows operating system. To run Bloom, you need **Windows 8.1**, **Windows 10**, or **Windows 11**.



Bloom can also run on computers that use Ubuntu Linux. Bloom comes pre-installed in [Wasta-Linux](#), SIL's Linux distro. If you are using Ubuntu Jammy (22.04)+, you can download the latest version of Bloom as a Flatpak here:

<https://flathub.org/apps/details/org.sil.Bloom>,

For Ubuntu Bionic (18.04) and Focal (20.04), Bloom is distributed as apt packages from SIL's package repository. See [https://docs.bloomlibrary.org/installing-bloom-linux](#) for installation instructions.

...



You can use older versions of Bloom with Windows XP and Windows Vista, but this is not recommended. If you must use these unsupported operating systems, you can download the required versions of Bloom from the [Bloom Library downloads](#) page.

...

## Fonts and keyboards

Bloom assumes that you have a way to type your language on your computer. That will often involve using a certain font. SIL offers a free, high-quality fonts for many scripts on its website at [software.sil.org/fonts](http://software.sil.org/fonts).

You may also need a special **keyboard layout** to let you type the characters in your language. **Keyman** is a free program from SIL that has many keyboard layouts. You can get Keyman from [keyman.com](http://keyman.com).

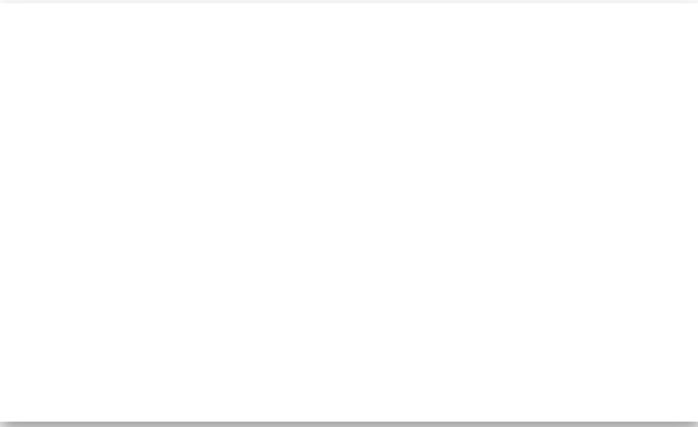
If you need help to find a font or keyboard for your language, try looking on SIL's [ScriptSource](#) site.

# Downloading Bloom

You can download Bloom installation program from the Bloom Library at [bloomlibrary.org/downloads](http://bloomlibrary.org/downloads). Click the **Download** button at the top of the page to download the latest release version for Microsoft Windows.

# Installing Bloom

Double-click the installer program to install Bloom on your computer. While the installer is working, it will display this window.



After the installer has finished, it will show you a license agreement. Click **I agree to the terms of the license agreement.**

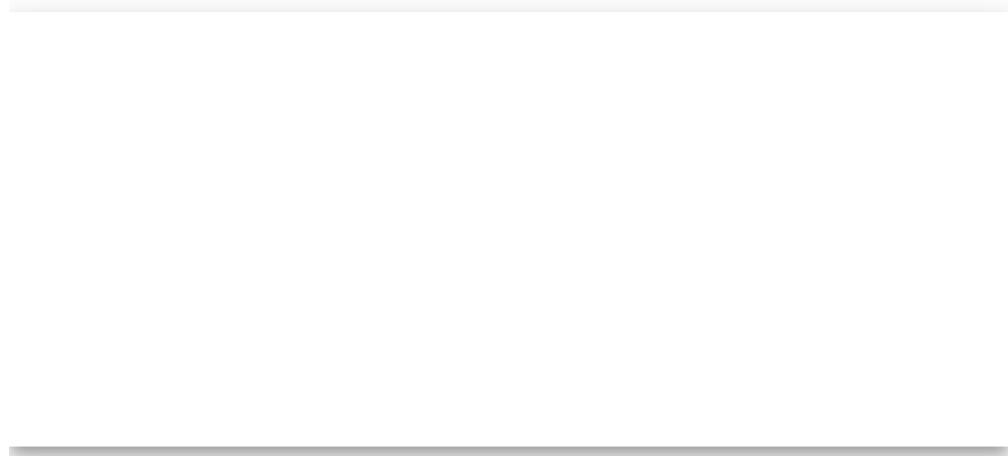
When you launch Bloom the first time, Bloom will ask you to create a **collection**. You may do so at this point, or you can create your initial collection later.

For more details on how to create a collection, see **Creating a new collection**.



## Installing *The Art of Reading*

*The Art of Reading* is an collection of black and white line drawings from SIL International that you may use without cost.



To download *The Art of Reading*, click on **The Art of Reading illustration collection** link under "Related Software" on the Bloom installers page. That link will take you to the Art of Reading web page. Click on the link there that says, **Download Art of Reading version 3.3 installer**. The installer will download to your computer.

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Next, double-click *The Art of Reading* installer to install the image library. The installer program will take you through a series of screens where you will accept the license

agreement, find out more information about the collection, and, finally, click the "Install" button.

---

There is no icon or desktop shortcut for *the Art of Reading*. It will be available the next time that you run Bloom.



If you are using Bloom for Linux, see [bloomlibrary.org/page/create/art-of-reading](http://bloomlibrary.org/page/create/art-of-reading) for instructions on installing *The Art of Reading* from the SIL package repository.

:::

# Troubleshooting

If Bloom does not install properly, try temporarily disabling your computer's anti-virus software. Then try to install Bloom again. It will probably install correctly this time.

## CAUTION

Be sure to re-enable the anti-virus software after you have installed Bloom!

If this does not work, ask an IT expert to help you. You may find other helpful ideas in [this community site post](#).

# How to Report a Problem with Bloom

If you come across a software problem when using Bloom, our team wants to know about the problem so we can find a solution for you.

There are four steps to this process:

1. [Initiate your error report](#)
2. [Report the Problem](#)
3. [Check for an email receipt](#)
4. [Follow-up with Correspondence](#)

# Initiate your error report

To start the process, you must:

- 1. Select the book which shows the problem. You might be editing the book, or publishing the book.**
- 2. Click the ? in the top right corner.**
- 3. Click Report a Problem\*\*.\*\***

# Report the Problem

Following this, the **Report a Problem** dialogue will appear.

- 1. Describe the problem in as much detail as you can.** For example, which page(s) of your book exhibit(s) the problem?
- 2. Tell us if the problem happened only once, or if it keeps happening.**
- 3. Ensure your email is entered and is correct.** (Hint: if you registered in Bloom, your email will appear automatically.)
- 4. Ensure these boxes are ticked.**
- 5. Click Submit\*\*.\*\***

Depending on the speed of your internet, and the size of your book, it may take some time to send your book to Bloom's error-reporting system.

Eventually, you will see a message like this:

You can close the message.

# Check for an email receipt

If you open your email program, you should see a message confirming that your error report was received by the Bloom team. The message will look something like this:

If you do *not* receive an email, there are two possible causes:

- You made a mistake in your email address
- The email was flagged as SPAM.

# **Follow-up with Bloom team**

Through this email thread, the Bloom team will send responses to you about the status of their investigations. Sometimes, they will ask additional questions.

Please note that it is your responsibility to respond to requests from the Bloom team when asked. If the Bloom team does not receive a response from you when asked, the issue will be eventually be closed.

# **Join our Forum and Mailing List**

The Bloom Community Forum is the place to get announcements, ask for help, share ideas, and vote on new features.

# Step 1: Sign Up to the Web Forum

[Click here to sign up](#)

## Step 2: Go to the Bloom Section

[Click here for the Bloom section](#)

# **Step 3: Turn on email notifications for Bloom Topics**

Finally, in order to get emails of announcements and discussions,

1) Click on the bell icon

2) Select “Watching”

---

# **Creating Accessible Books**

## **Creating Accessible Books in Bloom**

Accessible books are electronic books that have features to make their content more readily accessible or available to people with visual disabilities. Such features include audio recording of the text, descriptions of images, and text size that can be changed by the person reading the book. Bloom can help you create books with these features and that meet technical accessibility standards.

## **What to expect in this module**

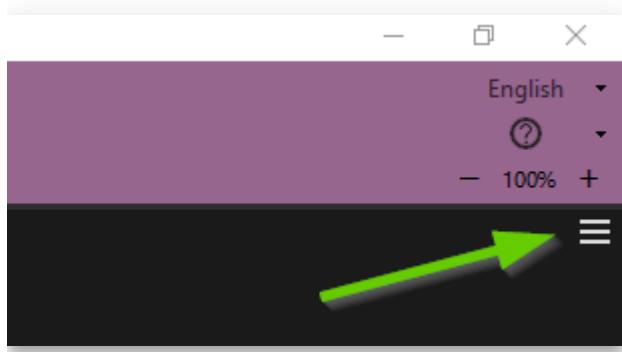
In this training module, you will learn how to:

1. Create image descriptions,
2. Record audio of the text in the book and in image descriptions,
3. Evaluate whether images need adjustment for visual impairment, and
4. Choose images that are going to be easier to perceive

# Activating the Image Description Tool

In order to access the Image Description Tool, click on the menu icon at the top right of the screen.

The toolbar will open. If the Image Description Tool is not listed at the top, click on the “More...” button at the bottom of the toolbar.



Then activate the **Image Description Tool** by clicking in the check box.



## Create Image Descriptions

Now that the Image Description Tool is open, a space will be created next to the image for adding a text description. You may now type in the text which describes the image. If you are not familiar with how to write image descriptions, you may want to visit: [poet.diagramcenter.org](http://poet.diagramcenter.org).

Once you are satisfied with the image description, you can close the Image Description Tool by clicking on the X above the Image Description Tool window.

 **NOTE**

If you are using the Overlay Tool to make comic books, Bloom allows you to have a background image. You can describe that image just like any other. However, the Overlay Tool also lets you drag images on top of the background, and Bloom does not currently allow you to add image descriptions to these draggable images. Instead, you will need to describe whatever the user needs to know about the scene based on your description of the background image.

## Recording Audio of Text and Image Descriptions

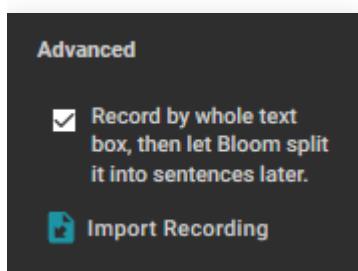
*Learning to Use Bloom* tells how to record audio of the text in a book. Those instructions start on page 149. The process is the same for recording the audio of image description text. To make a book accessible, you need to record all of the text as well as all of the

image descriptions. Here we will show you how to record the image descriptions. Begin by switching the active tool from the Image Description Tool to the Talking Book Tool.

If needed, use the Next and Back button to change from one text box to another. If you are recording by sentence, The Next and Back buttons will move one sentence at a time.

## Recording by Sentence or by Text Box

Bloom allows you to record one sentence at a time, or to record the whole text box at one time. Some speakers find that recording the entire text box all at once will give a better recording. Others find it better to record one sentence at a time.



You can experiment with both approaches to determine which is best for your needs.

Some Bloom users like to record themselves using other audio equipment than the microphone in their computer. They then transfer these audio files to their computer and import them into Bloom. This imported audio must correspond to an entire text box.

## Recording Image Descriptions by Text Box

### TIP

This section will assume you are recording your audio on your computer with the Advanced setting, “Record by whole text box”.

Read aloud the highlighted text several times until you are familiar with the text.

When you are ready to record, click on and hold down the **Speak** button and start reading the highlighted text. While you are recording, the button will turn yellow.

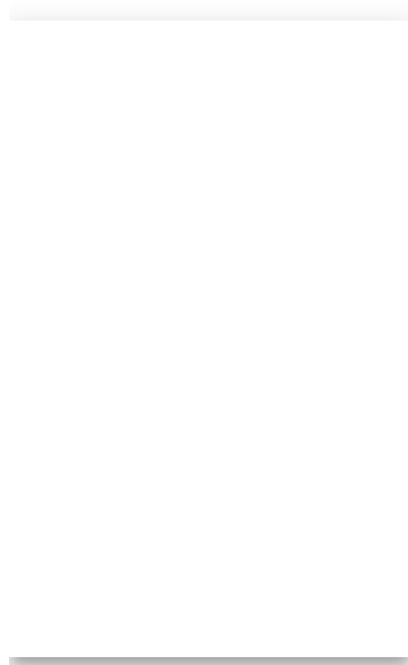
—

When you are finished reading, release the **Speak** button and Bloom will stop recording. Now, click the Check button to review your recording.

## **Activating the Impairment Visualizer**

The Impairment Visualizer is another tool for creating accessible books. This tool allows you to select several filters that will show you what the image might look like to someone with several different kinds of visual impairment.

Activate this tool by clicking on More... in the Tool Panel and selecting Impairment Visualizer.



Using this tool, you can evaluate whether an image should be modified so that it is easier to interpret for people with these sorts of visual impairments.

Bloom does not have a tool for editing images. If an image needs to be edited, you will have to use another program to do that.

## **Using the Image Visualizer**

The first choice shows what the image might look like to someone with cataracts.

For color blindness, there are three possibilities. The first shows what the image might look like to someone with red-green color blindness.

The second option shows what the image might look like to someone with blue-yellow color blindness.

The third option shows what the image might look like to someone with complete color blindness.

## General considerations for choosing images

Choosing images that are appropriate for readers with low vision is a complex subject, but we can consider some general principles.

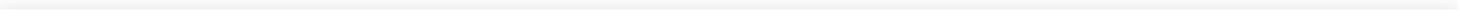
- In general, simple images are preferable.
- Graphics should be relatively large to make them easier to see.
- It is helpful for objects and key features to have a black outline.
- Black and white line drawings (such as come with the Art of Reading) serve well, but even then some have more details than others.
- If color is used, they should be colors that contrast well with one another.
- In line drawings, the lines should be thick and solid black. Use black and white images rather than grayscale.
- Photographs often have many details that can be hard to distinguish. Only use them if they are simple and not too detailed.

Now we will compare some images to provide some examples of these principles.

## **Considerations for choosing images: Amount of detail**

Here are some examples of images with more detail compared with images with less detail. All of these images are from the Art of Reading. It will be better to use the images with less detail.

For example, the Images with less detail on the left, rather than the images with more detail on the right:



Here are some additional examples of images with less detail on the left and more detail on the right:

---

## **Considerations for choosing images: Thick black lines**

These images from the Art of Reading illustrate images that have thick, solid black lines compared to images with thinner, less distinct lines. It will be better to use images with thick, solid lines.

The images on the left have thicker, solid lines, and the images on the right have thinner, less distinct lines.

---

Here are some additional examples of images with thicker, solid lines on the left and thinner, less distinct lines on the right.

## **Considerations for choosing images: Color and photos**

We all like photos and color illustrations, but they are visually more complex. Below you can compare line drawings to a photo or a color illustration or a simpler color illustration to a more complex one. It will generally be better to use simpler images.

The images on the left are simpler, while the ones on the right are more complex.

Additional examples of simpler images on the left and more complex images on the right:

---

## **Summary**

In this training module, you learned how to:

1. Gain access to accessible book tools in Bloom,
2. Create image descriptions,
3. Record audio of the text in the book and in image descriptions,
4. Evaluate whether images need adjustment for visual impairment, and
5. Choose images that are going to be easier to perceive.

# Installing Bloom on Newer Linux Systems (Ubuntu 22.04 and later)

Bloom 5.3 is available as a flatpak package which will run on newer versions of Ubuntu and Wasta (and probably other Linux distributions). For details on installing the flatpak version of Bloom, see <https://flathub.org/apps/org.sil.Bloom>. The debian packages will not work on these newer releases of Linux because the system libraries are no longer compatible with some of the older software libraries used inside Bloom.

If flatpak has been installed on your system, then installing Bloom can be done with the following command in a shell window:

```
flatpak install org.sil.Bloom
```

Updating Bloom is a similar command:

```
flatpak update org.sil.Bloom
```

Running Bloom from the command line is also a similar command:

```
flatpak run org.sil.Bloom
```

Setting things up for a desktop icon that you can click on is a bit trickier. If Bloom was installed globally (the default), then the following commands should work:

```
cp /var/lib/flatpak/exports/share/applications/org.sil.Bloom.desktop  
~/Desktop  
chmod +x ~/Desktop/org.sil.Bloom.desktop
```

If Bloom was installed just for the local user, then these commands are needed:

```
cp ~/.local/share/flatpak/exports/share/applications/org.sil.Bloom.desktop  
~/Desktop  
chmod +x ~/Desktop/org.sil.Bloom.desktop
```

## Known Limitations of the Flatpak Bloom

- Team Collections do not work in the flatpak version of Bloom 5.3. (This will be fixed when 5.4 is released.)
- Checking ePUB accessibility by ACE by Daisy does not work. At this point, there are no plans to try to get this working. It should be possible to save an ePUB from Bloom and check that file separately with the ACE by Daisy program outside of Bloom.
- Bloom 5.4 will be the final version of Bloom available on Linux in either a flatpak or debian package for the foreseeable future. The Bloom team is working to convert all of the Bloom user interface to be web-based, but has a long ways to go to get there. Once that is achieved, we hope to be able to offer a more cross-platform Bloom available on Apple OSX and Linux as well as Windows. We do not have a time-table for when that will happen.

# Installing Bloom on Older Linux Systems (Ubuntu 20.04 and 18.04)

## Step 1: Try to install the Bloom Desktop program

```
sudo apt install bloom-desktop
```

If this succeeds, you can skip to step 4 below (you are already a user of SIL software). If this fails because of authorization issues or a missing sudo program, you need to consult with the local Linux administrator. If this fails because apt cannot locate the package, then the following steps are needed.

## Step 2: Add the SIL repository to your system

See the [Enable access to SIL software and fonts in Ubuntu](#) for alternative instructions on how to add the SIL repository to your system.

### (for bionic or wastia 18):

```
wget -qO - <https://packages.sil.org/sil.gpg> | sudo apt-key add -
sudo add-apt-repository "deb <https://packages.sil.org/ubuntu> bionic main"
sudo apt update
```

### (for focal or wastia 20):

```
wget -qO - [https://packages.sil.org/sil.gpg]
(https://packages.sil.org/sil.gpg) | sudo apt-key add -
sudo add-apt-repository "deb [https://packages.sil.org/ubuntu]
(https://packages.sil.org/ubuntu) focal main"
sudo apt update
```

## Step 3: Install the Bloom Desktop program

```
sudo apt install bloom-desktop
```

(This is just a repeat of step 1 now that you have access to the SIL software repository.)

## Step 4: Copy the desktop launcher to your local area

```
cp -i /usr/share/applications/bloom.desktop ~/Desktop  
chmod +x ~/Desktop/bloom.desktop
```

## Step 5: Launch the Application

### (mouse)

Double click the desktop launcher icon

### (keyboard)

Type the name of the program in a terminal window or into the dashboard or startup menu

```
bloom
```

Once Bloom has been installed, updates will be downloaded and installed the same way your system is already installing updates to other software.

# Getting Bloom Beta Releases on Linux

A **beta release** of Bloom 5.4 is available for Ubuntu Bionic and Focal (or Wasta 18 and 20). Again, you are welcome to try other versions of Linux but we cannot promise to support them. As with Windows, a current release of Bloom (`bloom-desktop`) can coexist with a beta release of Bloom (`bloom-desktop-beta`) on Linux: installing one does not affect the other.

Note that any beta releases are available only in debian package form.

## Step 1: Try to install the beta release of the Bloom Desktop program

```
sudo apt install bloom-desktop-beta
```

If this succeeds, you can skip to step 5 below (and you are living as a constant beta tester of SIL software). If this fails because of authorization issues or a missing sudo program, you need to consult with the local Linux administrator. If this fails because apt cannot locate the package, then the following steps are needed.

## Step 2: Add the SIL experimental repository to your system

See [Beta software](#) for alternative directions on how to add the experimental repository to your system. The first command (which adds the security key for the SIL repositories) may be unnecessary if you already use SIL software.

### (for bionic or wasta 18):

```
wget -qO - <http://packages.sil.org/sil.gpg> | sudo apt-key add -
sudo add-apt-repository "deb <http://packages.sil.org/ubuntu> bionic-
experimental main"
sudo apt update
```

### (for focal or wasta 20):

```
wget -qO - [http://packages.sil.org/sil.gpg]
(HTTP://PACKAGES.SIL.ORG/SIL.GPG) | sudo apt-key add -
sudo add-apt-repository "deb [http://packages.sil.org/ubuntu]
(HTTP://PACKAGES.SIL.ORG/UBUNTU) focal-experimental main"
sudo apt update
```

## Step 3: Install the beta release of the Bloom Desktop program

```
sudo apt install bloom-desktop-beta
```

## Step 4: Remove the experimental repository from your system for safety

Note that removing the experimental repository reference will prevent the beta version of Bloom from being updated. So you have a trade-off to consider. Do you want to always have the latest beta release of Bloom at the risk of getting other beta software that you don't want? Or do you want to prevent surprises at the cost of going through the process of adding and removing the experimental repository reference every time a new beta release of Bloom is announced?

### (for bionic or wastia 18)

```
sudo add-apt-repository --remove "deb [http://packages.sil.org/ubuntu]
(HTTP://PACKAGES.SIL.ORG/UBUNTU) bionic-experimental main"
sudo apt update
```

### (for focal or wastia 20)

```
sudo add-apt-repository --remove "deb <http://packages.sil.org/ubuntu>
focal-experimental main"
sudo apt update
```

## Step 5: Copy the desktop launcher to your local area

```
cp -i /usr/share/applications/bloom-beta.desktop ~/Desktop  
chmod +x ~/Desktop/bloom-beta.desktop
```

## Step 6: Launch the Application

### (mouse)

Double click the desktop launcher icon

### (keyboard)

Type the name of the program in a terminal window or into the dashboard or startup menu

```
bloom-beta
```

Once a beta release of Bloom has been installed, updates to the beta release will not be downloaded and installed the same way your system installs updates to other software **unless you skip step 4 above.**

# **Is Bloom right for my project?**

Bloom is an excellent tool for creating books, but Bloom is not the right tool for every situation.

# **When using Bloom is a good choice**

Bloom is a good tool to use under the following circumstances:

- The people writing books have limited computer skills.
- The books people want to create are relatively simple in design.
- People want to adapt existing books to new languages and cultures.
- People want to create decodable and leveled books.
- People want to create “talking books” with a synchronized audio recording of the text.
- People want to create sign language books or books for the visually impaired.
- You want to provide writers with reader templates to help them write books that meet certain specifications.

# **When Bloom may not be a good choice**

Bloom is not good for every purpose. Here are a number of needs that Bloom does not accommodate:

- Text does not flow from one page to the next. Rather, Bloom is page-oriented. If authors have more text than will fit on one page, they must stop typing, insert a new page with a text box, and start typing again.
- There are limitations to Bloom's page layout capability: for example, you cannot create a page where text wraps around a picture. You cannot easily create tables with rows and columns. If authors need complex page layouts, Bloom may not be the right tool.
- There are limitations to Bloom's text formatting capabilities: for example, bulleted and numbered lists are not possible.

# **Other limitations of Bloom**

- Bloom does not have built-in tools for editing images, audio, or video. Bloom lets you crop an image, but cannot make any other changes to it.
- Bloom only knows four types of content: text, pictures, audio, and video. Bloom books cannot include any other sort of content.

# When you may need Bloom Enterprise

**Bloom Enterprise** is a set of publishing tools for institutional users. Bloom Enterprise subscribers have the following additional tools available to them:

- HTML5 widgets, for interactive pages
- Quiz pages, for testing readers' comprehension
- The Overlay Tool, for creating more complex layouts and comic books
- Team Collections, to allow multiple team members to work together on books
- Custom branding and book designs
- A dedicated collection on the Bloom Library website

To learn more about Bloom Enterprise, see [Bloom Enterprise Service Overview](#).

# Two Different Approaches to Publishing Books in Multiple Languages

Several organizations like to publish their books to the Bloom Library in *multiple languages*. We encourage this, but also want to outline two different workflows or approaches and discuss the resulting ramifications of using each approach.

## Method 1

Publish one single book to Bloom Library which contains multiple embedded languages for your original title

### Advantages:

- There is only one book folder on your computer to manage for each original book title.
- When published to Bloom Library, your book will automatically become visible in all of the embedded languages.
- It is easy to “tweak” your book and republish it just once, and for that to immediately affect *all* versions of your book in the various languages on Bloom Library.
- The Bloom Reader version of your book (online or offline) can be viewed in any of the published languages and switched using the built-in language chooser.

### Disadvantages:

- The online PDF of the book will only be available in a single language.
- The exact same structure of the book – sizing of images and number of pages – must suit all of the languages.



Regarding the “tweaking” mentioned above, if your book is not yet ready to show to the entire world, mark the book as a draft.

Legitimate “tweaking” of an already published Bloom book might include things like *adding* or improving the audio narration, or perhaps adding a forgotten book acknowledgment, or some other minor change.

## Method 2

Publish one source language book, and then create derivative copies of the book in other languages

### **Advantages:**

- An online PDF will be available for *each* language.
- The structure of the book – sizing of images and number pages – can be adjusted to suit each individual language.

### **Disadvantages:**

- You cannot easily “tweak” all versions by republishing once since there are multiple copies of the book which each need to be corrected.

Now that you understand the advantages and disadvantages of these two methods, let's talk about how your workflow would differ for each method.

## **Workflow for Method 1**

For this method, you will create just *one* Bloom collection on your computer which will serve as a “master” collection and it will hold *all* of your books in *all* the languages you desire. When you wish to Edit a book in a different language, you will simply switch languages in your collection’s Language Settings. Bloom will then reboot and open your collection in the new language.

Repeat this process until you have completed adding all the languages you desire for a given book.

Once you are ready to publish your book, set your language setting back to the language you want the book’s PDF available in.

Click Publish, then Web. Under Upload Text, select the check boxes for each language you want to become available for your book and be sure to select Narration if you want your audio to become available.

If, at a later date, you need to update your book for any reason, you will need to upload the book again. When you do so, Bloom will present a screen showing the book already in Bloom Library compared with the one you are uploading. If the thumbnail and title match, then click on “Yes, this is an update of my book”.

## **Workflow for Method 2**

In Bloom, create a separate Bloom collection for *each* language your organization is working with.

Then, for each new book you author, you will need to decide which language will be considered the “source” or the “original” language for the book in question. That language choice need not be the same for each book, but if you think you will sometimes be using (say) English as the “original” language for one title, and (say) “French” for some other title, then you will need some system to keep track of where your original book is located, otherwise, you may run into some confusion should you need to revise your book at a later date.

Once you’ve decided the language choice for your new book, open the corresponding language collection and create a new book in that collection. When completed, upload your book to the Bloom Library.

Versions of that book in other languages can then be done by you (or someone else in your organization) by downloading that book from the Bloom Library into the appropriate language collection and translating it. This book is called a “derivative” and Bloom assigns this “derivative” a unique book ID, different from the original book. So, when this “derivative” is uploaded to the Bloom Library for the first time, it will not replace the original – it will stand on its own.

# **Effective use of Styles**

There are a number of simple “best practices” to follow to ensure your Bloom publications will display *optimally* on a variety of devices with Bloom Reader (or ePUB), or on Bloom Library.

When a user does not follow these best practices, the resulting book will be less flexible and less adaptable to changes in font settings and various publishing options.

Another way of saying this is that books which don’t follow best practices will be more “fragile” and more prone to “break” if you make a change in font settings or publishing format.

There are two bad habits that violate best practices:

- Using spaces to center or indent text.
- Formatting entire text boxes using *character* formatting instead of using the text box style.

## **Using Spaces to Center or Indent Text**

Often users need to center text or indent the first line of a paragraph. Bloom provides a way to do this, but new users sometimes miss this and attempt to center or indent text using spaces.

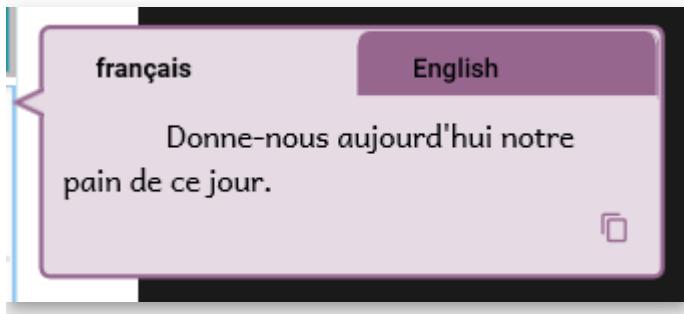
The trouble with this approach is that doing any of the following will cause the text to no longer be centered:

- Changing the text in any way (adding a word, deleting a word, etc.)
- Changing the font size
- Change the font to a different font

For example, increasing the font size results in the text shifting to the right making it no longer fit on one line:

Likewise, changing the paper size will break the perfect centeredness of the text.

Also, if you upload your book to Bloom Library and then later someone downloads the book in order to translate it into their language, the translation bubble will retain those spaces:



This could be confusing for people.

### TIP

Conclusion: Do not use spaces to center text or to indent text. Instead, use a centered text box style, or an indented paragraph style.

## **Formatting the entire text box using *character* formatting instead of using a style**

Bloom allows you to select certain words in a text box and make them bold, italic etc.. This is useful for highlighting particular words, e.g.:

But if want an entire text box to be (say) Bold, you should set that formatting using the text box style, e.g.:

 **TIP**

Key principle: use character formatting to highlight particular words or phrases in a text box, and use text box Styles to format an entire text box.

If you need a new Style for a text box, Bloom provides a simple way to create one:

## Accurate Language Tagging



**TIP**

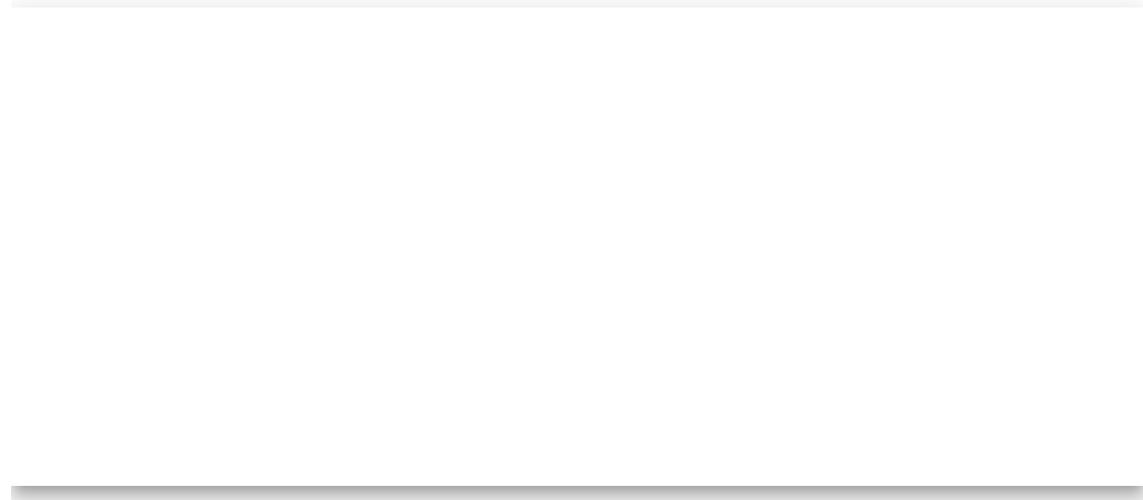
Key principle: the actual text typed in any text box needs to accurately correspond with the language tag associated with it.

When you are editing a book in Bloom Editor, Bloom indicates the language which should go in each text box using a light grey “language tag” located in the bottom right of each text box:

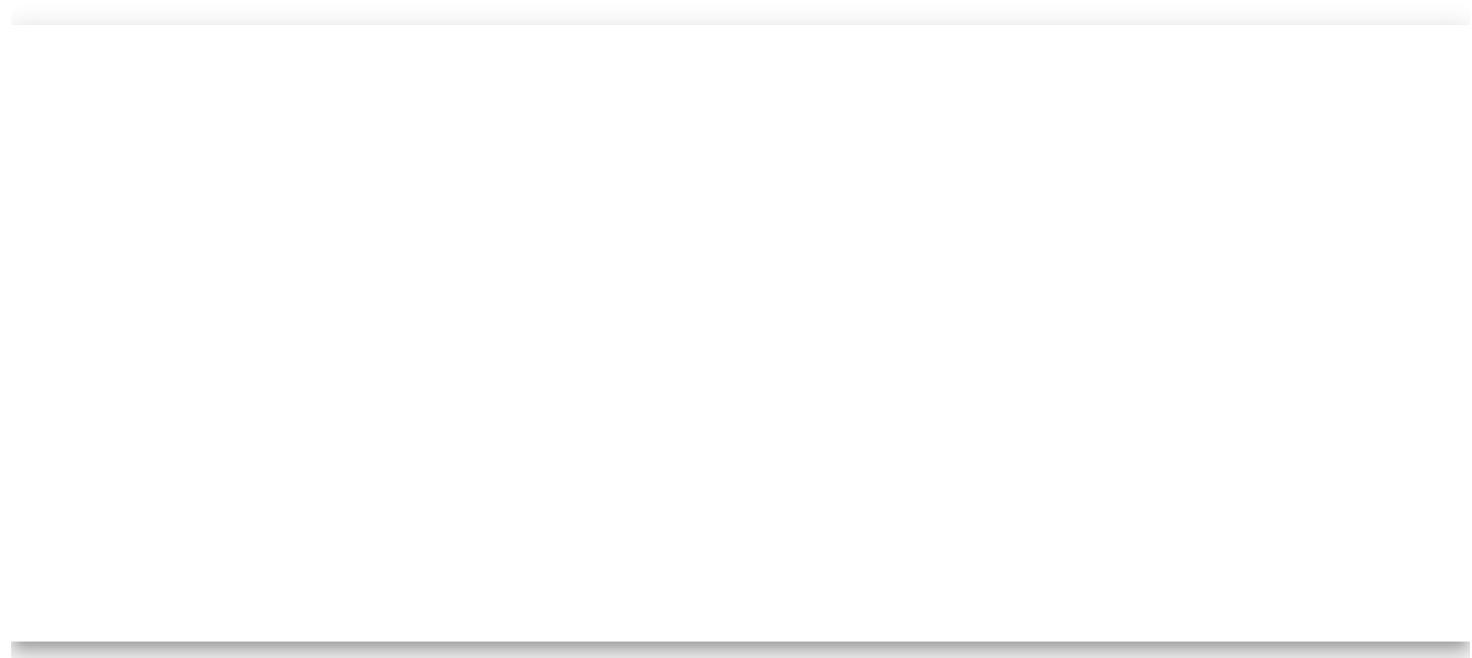
When you are making books in Bloom, it is *very* important that these language tags accurately correspond to the actual language written contained within each text box.

If you are simply printing your book, then having inaccurate language tagging will not negatively affect yourself or anyone else.

However, if you want your book to participate in Bloom's "ecosystem", i.e. the Bloom Platform, then accurate language tagging is absolutely crucial so that books on Bloom Library can be found in the correct language category:



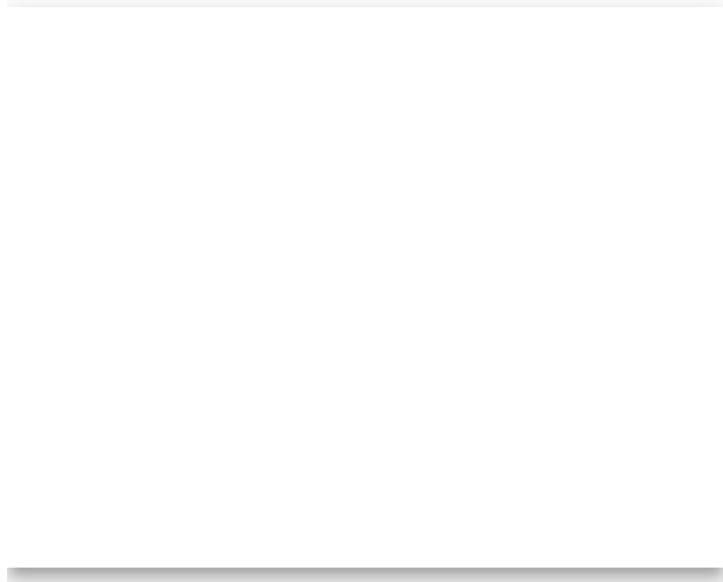
In addition, if someone downloads the book to translate it into another language, the language displayed in the "translation bubble" is also accurate:



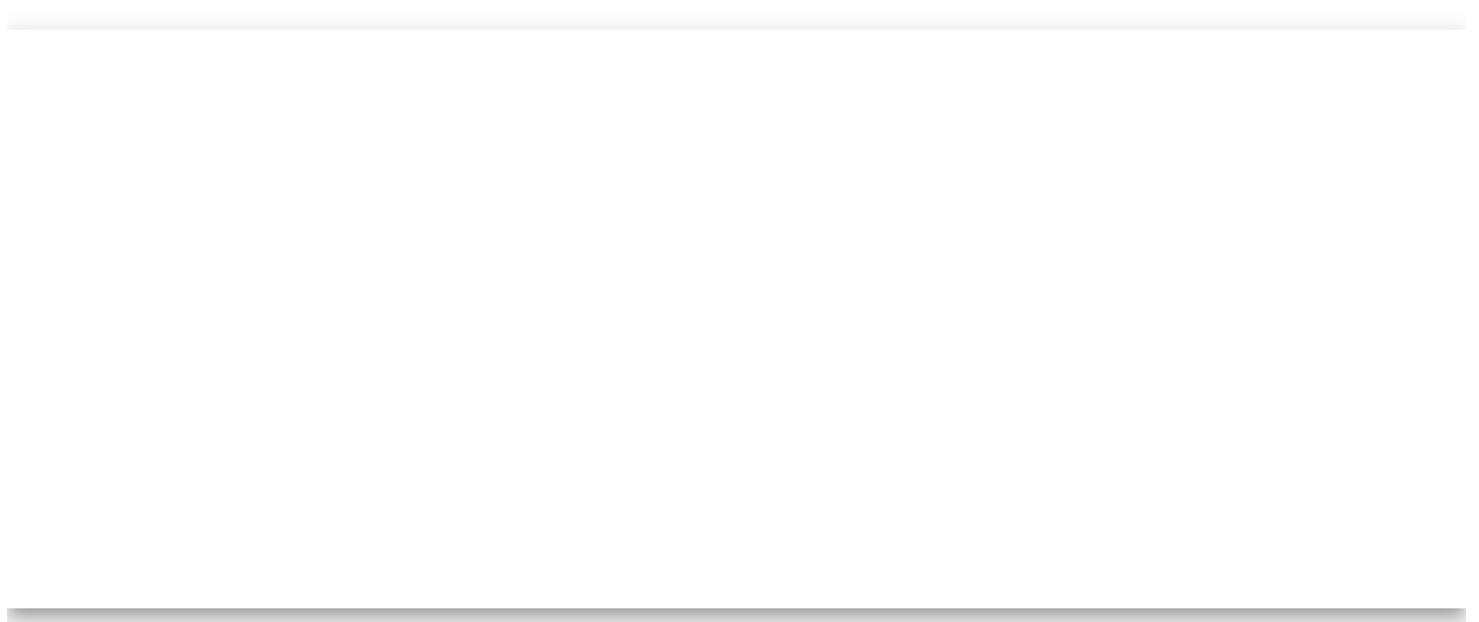
Typically, this won't be a problem since whatever language you specified as your main language will also be the same one used for any text box you add to your book.

Where the need does arise to pay attention to accurate language tagging is you are making a bilingual or trilingual book. Now, typically, when you specify you want to show

two or three languages in your book, Bloom will show the 2 or 3 languages *stacked* one upon each other like this example:



But you may wish to deviate from the above “stacked” orientation for your bilingual (or trilingual) book. For example, you might want a layout that has one language on the left, and another on the right:



To achieve this specialized layout like the above, you will (1) slide the Change Layout slider across, (2) click on the gear icon of the text box, and (3) choose the desired language:

## **Image Credits**

Please ensure that you have accurately filled out the copyright and licensing information for all images in your book.

For ideas on options for illustrations, please refer to [this important article](#).

# Issues around derivative books

There are only three approved ways to make a book in Bloom.

1. Make a brand new book from a book template, such as the Basic Book template.
2. Make a book using an existing book in Sources for new books, typically, to translate it into another language.
3. Duplicate an existing book.

## Book IDs

When you make a book using any of the above Bloom-approved methods for making books, the Bloom Editor will generate a unique number and assign that number to your book. This “book ID” is unique and it will follow that book *wherever* that book “lives” even when it is uploaded to the Bloom Library.

## Consequences of using Windows Explorer to make a new book

If you use Windows Explorer to make a new book by copying a book folder from one collection into another collection, then the two books will have the *same* ID. This could cause confusion later on.

The problem will surface when you upload the two books sharing the same ID to Bloom Library, Bloom will then present you with an opportunity to correct this problem and assign a new ID to your copied book.

You will see a dialogue like this:

In this example, based on the two *different* thumbnail images and the *different* titles of these two books, we can safely determine that they are indeed different books. So, we select the second option, “No, these are different books”. In other cases, however, it may not be so obvious that they are different books.

To avoid this problem, here is the key point to remember:

 **TIP**

To ensure that all of your Bloom books receive a unique book ID, it is important to *only* use the Bloom Editor – not Windows Explorer – to create a book, duplicate a book, or make a derivative.

# Publishing Draft Versions of Books

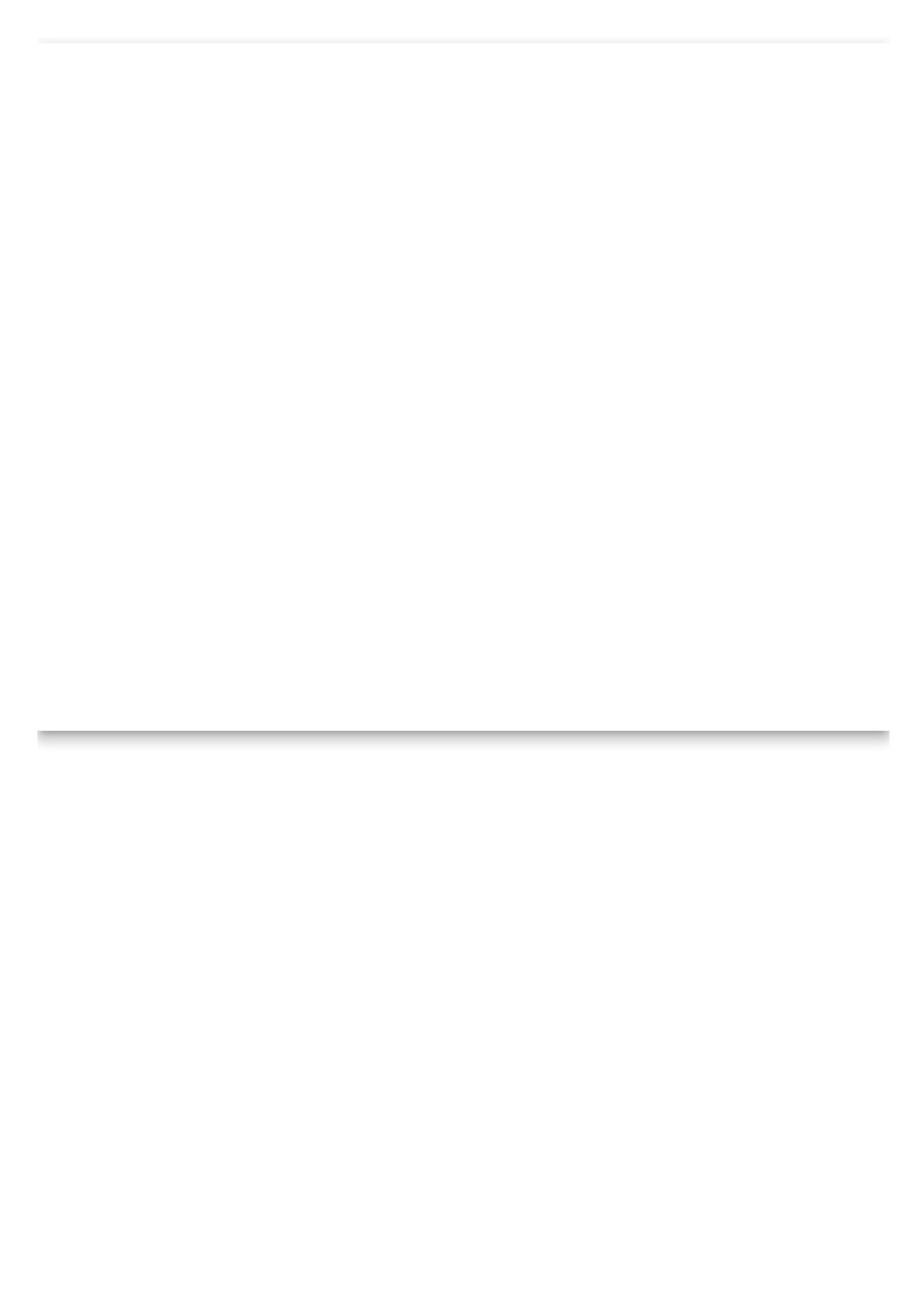
One very powerful feature of Bloom is its ability to harness the generosity of its global user-community – book-creators from all over the world – who allow their original works to be freely translated into other languages. And so, a user in (say) India, can create a beautiful book using Bloom, upload it to the Bloom Library, and make it available to the entire world to freely adapt and translate into other languages.

It's wonderful.

However, this powerful feature comes with an important caution because once people start downloading and making adaptations of your books, any mistakes or glitches in your original book will be *propagated* to those adaptations.

For this reason, *before* publishing original works to the Bloom Library, you should ensure that everything in the book is absolutely perfect: spelling, formatting, logos, copyright, licensing, credits, acknowledgments, audio, etc.

If your book is *not* yet ready to show to the entire world, but you need some way to share the book with others for review, you may consider uploading it to Bloom Library, and marking the book as a draft:



# HTML5 Widgets

Bloom pages can embed little custom HTML5 activities called “widgets”. When published as a bloompub, these widgets will work on the web, Bloom Reader, and RAB Apps. You can see examples of widgets in [these interactive books](#) in the Bloom Library.

Many of these widgets already exist on the web, because they work with Apple's iBooks and other software. You can also make your own using programs like [Active Presenter](#). Most widgets don't have any custom programming, but if software like Active Presenter is not sufficient for what you need, you can hire a web developer to do something even more advanced.

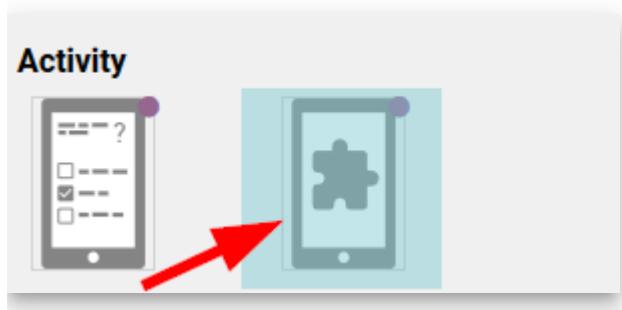
# Format

Bloom can import any of the following widget formats

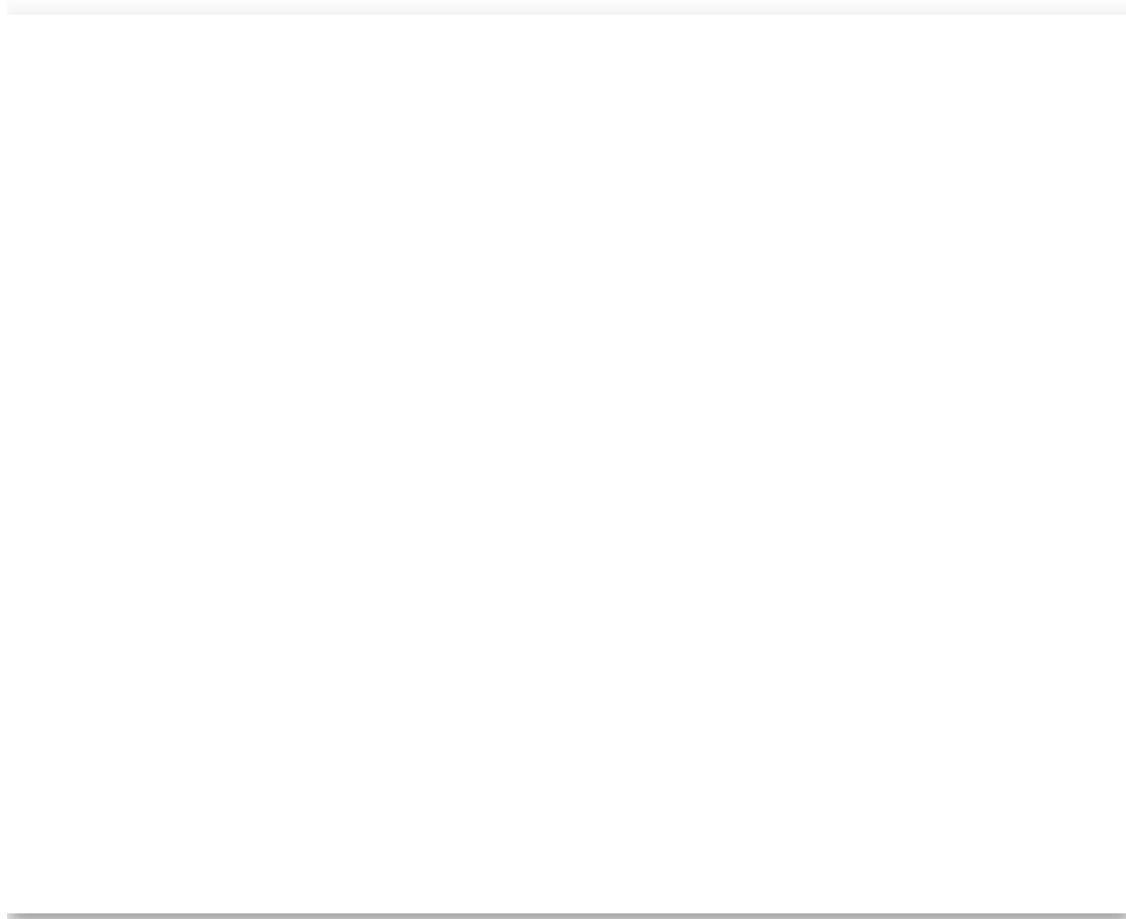
- a zipped set of files ending in ".wdgt". which contains a file named "index.html", or, if the .wdgt file is not zipped, you can import the index.html file.
- the main .html file from a saved Active Presenter output.

# Adding to Bloom

To add a widget, Click “Add Page” and then select one of the template pages. These have an image of a puzzle piece:



Then click on the button in the corner of the widget:



In the file chooser dialog, you can either choose a .wdgt file, an .htm file, or an .html file. A “.wdgt” file is just a zip file containing all the files of the widget. If you instead choose an HTML file, Bloom will gather up and import all of the files in that same folder.

# Captive Widgets

Normally, when Bloom Player shows a widget, it also shows page navigation buttons:

If you want to hide these navigation buttons, follow these steps:

## 1: Use the special page template

In Bloom (version 5.1 or later) when you choose “Add Page”, you should see a “Captive Widget” page:

Bloom Player will not give the user any way to navigate away from this page except by leaving the book entirely. It will be up to your widget to tell Bloom Player when you want the user to leave this page and go forward or backward in the book.

## 2: Send navigation messages

To tell Bloom Player to navigate, you will need to add some javascript to a button:

```
window.parent.postMessage('{"messageType": "control",  
"controlAction": "navigate-to-previous-page"}', "*");
```

or

```
window.parent.postMessage('{"messageType": "control",  
"controlAction": "navigate-to-next-page"}', "*");
```

# Setting the image resolution in BloomPUBs

Currently, images in BloomPUBs and online reading are down-sampled to a max dimension of 600 x 600 pixels. This is to better serve users who have poor internet and/or limited memory on their devices.

In Bloom 5.4 and 5.5, you can increase this number by following these steps:

- 1) In the `publish-settings.json` file for the Bloom book, change  
`"imageSettings":null` to `"imageSettings": {"maxWidth":1200, "maxHeight":900}` Or whatever number you want.
- 2) Create your bloomPUB again, or upload to the book to Bloom Library.



Note, images in PDFs are not down-sampled



Bloom normally down-samples *incoming* images to 3500 x 2550 (landscape) or 2550 x 3500 (portrait). These maxes were chosen to fit A4 paper at 300dpi. This was done to avoid the situation we were seeing where less-technical users were getting gigantic images into Bloom and then having memory problems.

# About Bloom Enterprise

**Bloom Enterprise** is a subscription service that provides additional features and tools for organizations and projects. By subscribing to this service, organizations and projects can meet some of their unique needs while also supporting the development of Bloom, which helps everybody.

Bloom Enterprise subscribers have access to the following features and tools:

- Enterprise book features
  - [Branding and custom page layouts](#)
  - [Overlay Tool](#)
  - [Activity pages](#)
  - [HTML5 widgets](#)
- Enterprise editing tools
  - [Team Collections](#)
  - [Spreadsheet export/import](#)
- Enterprise publishing tools
  - [Bloom Library Collections](#)
  - [Uploading collections to Bloom Library](#)
  - [Convenient creation of multiple BloomPUBs](#)
- [Analytics](#)
- [How to subscribe](#)

# Enterprise book features

Enterprise customers gain access to additional Bloom Desktop Editor features:

## Branding and custom page layouts

Bloom can automatically display your logo(s) on the cover, title page, or back cover of your books. Enterprise customers can also specify the copyright and license that each book will contain. For further details on Bloom branding, see [What Bloom Branding can do](#).

 **NOTE**

Bloom Enterprise customers may also request custom covers and front-matter pages at an additional charge, based on the amount of work such customization requires.

## Overlay Tool

The **Overlay Tool** allows the user to place text, images, or video over a partial or full-page image. This allows more complex page layouts, including Digital and Paper Comic Book Templates.

## Activity pages

Bloom supports two kinds of **activity pages** in digital books: Comprehension Questions and Simple Choice Activities.'

**Comprehension questions** let you design multiple-choice questions for readers to answer. These activities enhance the reading experience, and Bloom's analytics system can capture whether readers answer the questions correctly or incorrectly. Such information can provide valuable data for an organization or project's monitoring and evaluation efforts.

**Simple Choice Activities** come in two varieties: **Choose Word from Picture** and **Choose Picture from Word**.

## HTML5 widgets

**HTML5 widgets** are JavaScript apps that are programmed outside of Bloom and can be embedded in Bloom book pages. These widgets open up many options for making books interactive.

To view just one example of a Bloom book with a widget, click on the READ button below and go to page 9:

[embed](#)

# Editing tools

## Team Collections

Team Collections enable a team to collaborate on a single collection of books. Team members check books in and out as they work on them, and use the Dropbox file-sharing service to synchronize files between their computers.

## Spreadsheet export/import

**Spreadsheet export/import** allows you to export the contents of a Bloom book to a specially formatted Excel spreadsheet, and import the content back into a Bloom book. While there are some limitations on what can be exported and imported, this can be a convenient way to add translations into one or more new languages to a Bloom book.

# Publishing features

## Bloom Library Collections

Enterprise customers can request a dedicated page on [bloomlibrary.org](http://bloomlibrary.org) that features their books. The page can also feature a logo, a short blurb about the project or organization, and a link for more information. Bloom Library pages can also be embedded on your own website.

## Uploading collections to Bloom Library

Bloom Enterprise users can upload all the books in a collection—or even several collections of books—to Bloom Library in one step.

## **Convenient creation of multiple BloomPUBs**

**Bloom Reader** is a free Android app that allows readers with Android devices to enjoy Bloom books offline. Bloom Reader uses a special BloomPUB file format that supports all Bloom's features, including audio and video playback. Bloom Enterprise subscribers can create BloomPUB files for all books in a collection in one step.

# Analytics

Bloomlibrary.org collects anonymized analytics data from books read online, in Bloom Reader, or in other apps that use Bloom books. Enterprise customers can monitor the usage of their books through this dashboard, including reading activity, location data, and responses to comprehension questions.

For an additional charge, customers can also be given access to the SQL database of analytic events for their collection for more detailed analysis or presentation.

# How to subscribe

To learn more about Bloom Enterprise, or to subscribe, [contact us](#).

 **NOTE**

SIL International staff should read about Bloom Enterprise on [Gateway](#).

# What Bloom Branding can do

A typical Bloom book has prebuilt **content slots** in the front and back matter. A custom **branding pack** can fill these slots with text or graphics to create a consistent branding across a collection of books.

Standard branding slots include the following:

- Front cover top
- Front cover bottom
- Credits page top
- Credits page bottom
- Title page bottom
- Outside back cover top
- Outside back cover bottom

In addition, a branding pack can declare:

- Default copyright notice
- Default license notice
- Default license notes

Creating a custom branding pack is a paid service. If you think you need a custom Xmatter pack, contact the Bloom team at [info@bloomlibrary.org](mailto:info@bloomlibrary.org).

## NOTE

You can do a lot with a custom branding pack, there are limits: see [What Bloom branding cannot do below](#).

## Branding pack samples

Here are some examples of front and back matter pages that have been customized using a custom branding pack

### Cover Page

# **Title Page**

# The Moon and the Cap

Written by Noni Illustrations by Angie and Upesh

Tangshang Naga



Title Page Bottom

Credits Page Top

## **Credit Page default license & license notes**

(from Suluh-INOVASI)

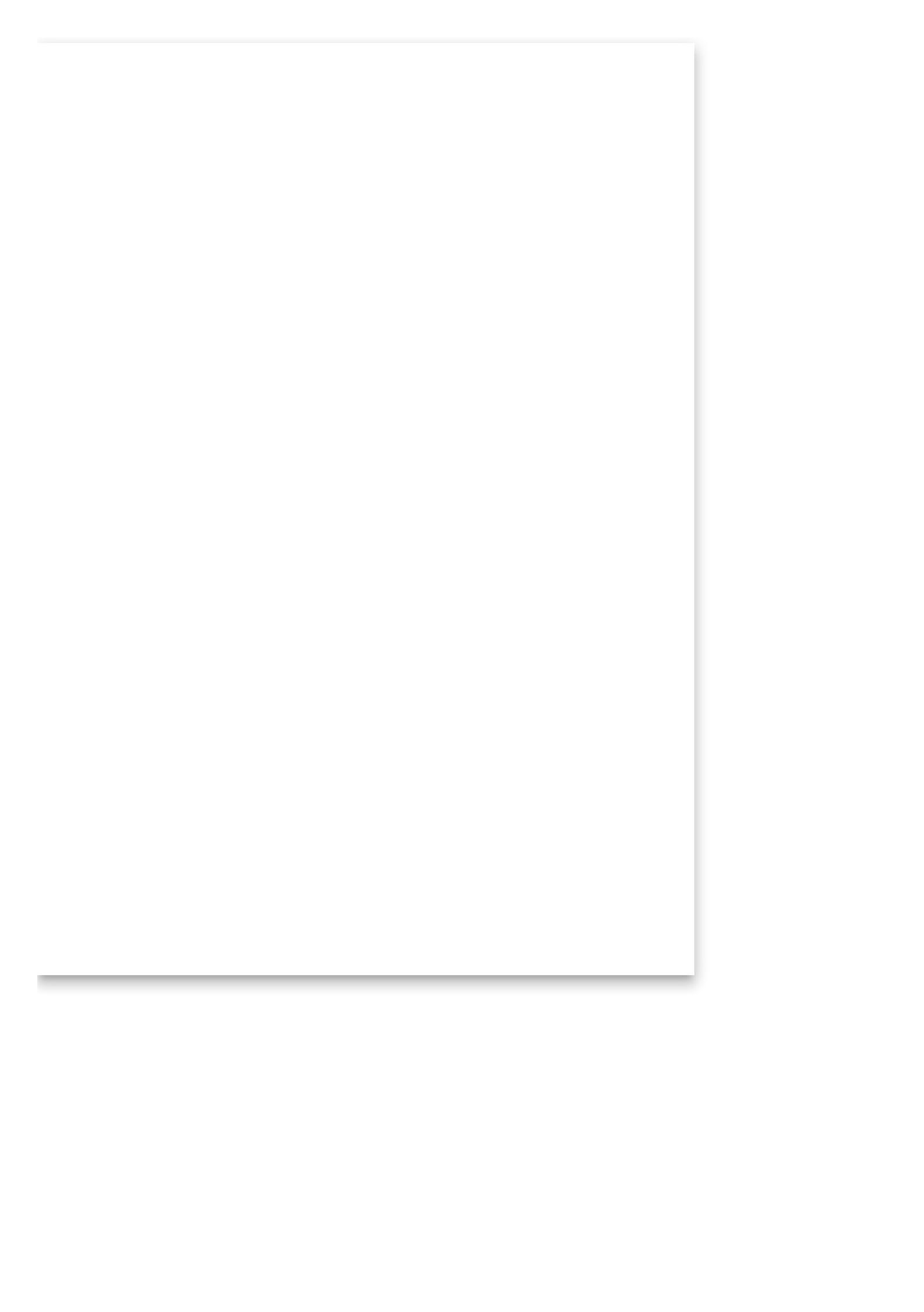
(from GRN-REACH)

## **Credits Page Bottom**

**Back Cover Top**



## **Back Cover Bottom**



(Suluh-INOVAS)

## **What Bloom branding cannot do**

Making a branding pack in Bloom is like decorating a house: it's easy, but there are limits. In contrast, making a custom **Front/Back Matter pack** is like moving walls or adding on new rooms. With a custom front/back matter pack (called an **Xmatter pack**), you can add

new front and back matter pages and new branding slots. Custom Xmatter packs must be created by a Bloom developer.

Creating custom Xmatter packs is a paid service. If you think you need a custom Xmatter pack, contact the Bloom team at [info@bloomlibrary.org](mailto:info@bloomlibrary.org).

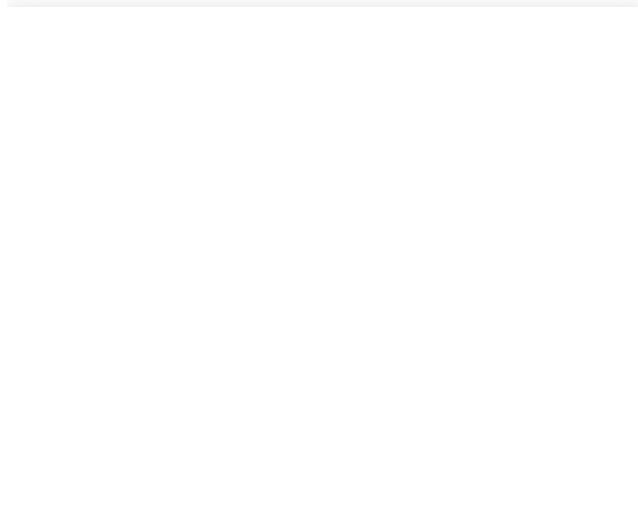
# Bloom Analytics For Publishers

## **BloomLibrary.org Stats pages**

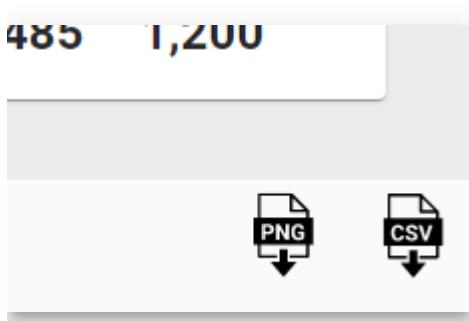
Bloom Enterprise subscribers get a URL that gives them analytics on the reach of the books in their collection, updated once a day.

---

There are various reports:



Each report comes with buttons to get an image or a spreadsheet file of that data:



# **Advanced low level access to analytics data**

We can also supply the raw data to your project through access to our SQL database. You can use this with your own custom dashboards.

See [Available SQL Fields](#)

Example dashboards using this data: [PNG RISE](#), [PNG Western Province E-Learning](#).

## **Events that we measure**

All Bloom Player contexts (Bloom Library, Bloom Reader, BloomPub Viewer, RAB apps)

- Pages read
- Was the last (numbered) page in the book read?
  - This is some indication that the entire book was read. Note: it is possible to just flip past pages, or to move randomly through the book. So it wouldn't be hard to cheat this system.
- Time spent
- Comprehension Quizzes
  - including how many questions were present and how many answered correctly.
- Duration of audio and video playback
- Book branding
- Bloom Library
- Downloads
- Bloom Reader Specific events
- Installations

No events at this time:

- Shared book
- Shared bookshelf
- Shared APK
- Share Link to app on Play Store
- EPUB

## **User Information that we collect**

## Web

- IP address (--) city / country?)

Bloom Reader only:

- Named device ids
- ANALYTICS\_DEVICE\_PROJECT
- ANALYTICS\_DEVICE\_ID
- Location
- Latitude, longitude, locationSource, locationAccuracy, locationAgeDays

We record the locations available from each of the standard providers (network, gps, and passive) explicitly. But for the standard location for this report, we mainly want the most recent location we can get; precision is not very important.

However, we know from experience that in poor countries, IP address doesn't give us reliable location, and we expect that wifi and other networks will be similarly unreliable as means of location. So if we have a reasonably recent high-precision location we will take that in preference to a lower-precision one that may be even more current. (Elsewhere we request one location per hour from GPS, if available, to ensure that the "last known location" for the gps provider will be reasonably recent.)

- Districtution Source
- Hardware info
- Android version?

## Difficulties getting analytics

- Getting analytics from devices that are normally offline
- No internet
- Effect of blocking cookies?
- Firewalls

- No events on EPUB
- Privacy Issues
- No emails
- IP addresses?
- Cookies
- GPS resolution
- GPS opt in/out
- Device hardware IDs
- Named Device IDs

# Analytics Fields

| [View field documentation](#)

# Internet Connection Issues

## How much bandwidth?

These are the most common analytics events sent by Bloom Reader:

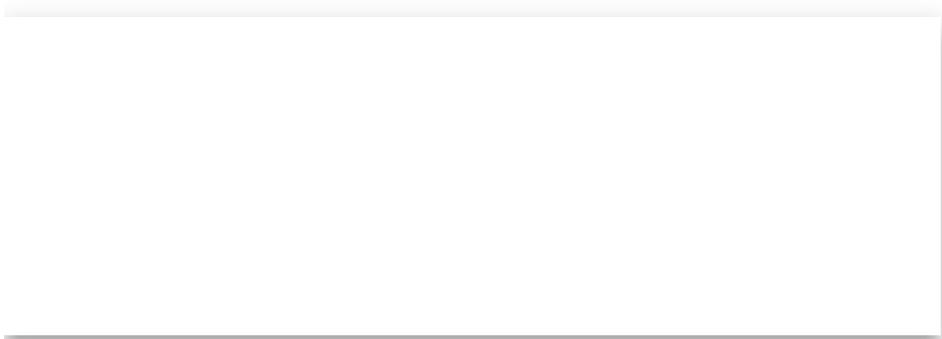
- Bloom Reader started
- Bloom Reader backgrounded
- Book Opened
- Book Closed

Each event is less than 3KB. So a person who runs Bloom Reader, reads 2 books, then quits will send less than 18KB.

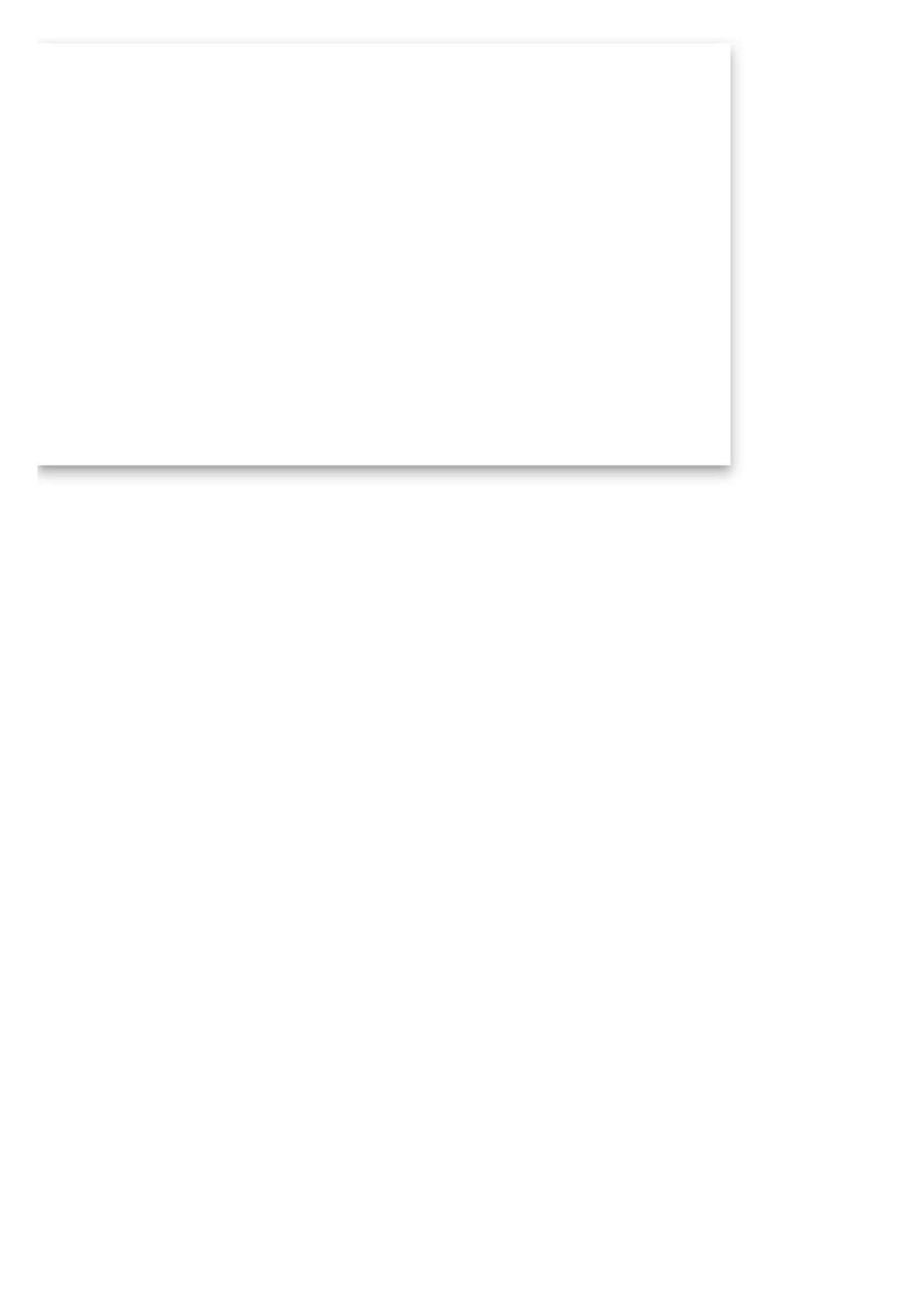
## What if the user is not connected to the internet?

If the user is not connected to the internet, Bloom Reader will cache their events. The cache is limited to 1000 events.

To prompt Bloom Reader to send all of its events *right now*, open the menu:



At the bottom of this screen, you will see Bloom Reader's progress in sending the events:



# How to Collect Bloom Reader Analytics by Device

When a project owns and distributes hardware to use with Bloom Reader, it is possible to get analytics that are specific to each device. To make this work:

- You will need to tell Bloom Reader the ID you want to appear in the analytics. To do this, there are two options:
  - Option 1: Enter the information directly within Bloom Reader.
  - Option 2: Create and place a special file on each device. Make sure Bloom Reader has permission to read this file.
- You will need to be directly reading from our analytics database. This device ID will not be available from a BloomLibrary.org stats page.

## **Option 1: Steps for adding the information directly within Bloom Readerundefined**

1. Decide on a project ID and device IDs for each device.
2. Open the menu by clicking on the menu at the top-left of the book list.
3. At the bottom of the menu, there is an item which indicates it is trying to send stats information or all stats have been sent.
  - i. Tap the menu item three times.
4. The following form will then allow you to enter the project ID and device ID:
5. Save. 2. You may change the IDs using this form, but the only way to remove them completely is to clear the app settings (from the Android settings) or uninstall.
6. See

Verification below.

## **Option 2: Steps for creating the file that identifies each deviceundefined**

1. Decide on a project ID and device IDs for each device.
2. Create a file called deviceId.json. { project: 'projectID' , device: 'deviceID' } 2.  
Example: \ { project: 'RISE2' , device: 'STUDENT NORTH FLY 001' }

1. The file content must be \

3. Put the deviceld.json file on the device in the Bloom folder which contains the Bloom Reader books (at the root of Internal Storage).
4. Restart Bloom Reader. 3. This may require actually closing the app if it is currently running. 4. The user will see a brief message indicating the failure or success of loading the project and device IDs. The message is only shown once. The only way to change it after it is initially set is to clear the app settings (from the Android settings) or uninstall.

## 5. See

Verification below. 6. If this is not working, it means that Bloom Reader does not have permission to read from the Bloom folder at the root of Internal Storage. 5. Open the

menu at the top-left of the book list. 6. Tap “Find lost books”. 7. Navigate to the Bloom directory if needed, then tap “Use this Folder” or “Select” to give permission to the directory.

## **Verification**

To verify the setup was successful, open the

at the top-left of the book list. There will be a new item at the end which will display “Stats ID: {device ID} (project)”.

Once the device is properly set up, it will begin reporting analytics with these values in the device\_project.hardware\_code field of various analytics tables. The value will be projectID-deviceld.

# Spreadsheet Import/Export

## CAUTION

The Spreadsheet Import/Export function was introduced in Bloom 5.2. It is an *experimental* Bloom Enterprise feature that is still under development.

To access the latest developments of this experimental feature, it is essential to use the very most recent version of [Bloom Beta](#).

# **1. Introduction**

Exporting your Bloom book to a spreadsheet opens up an alternate workflow possibility for you and your colleagues. One typical workflow is to allow translators on your book-production team to add additional language translations to your books using a spreadsheet rather than the Bloom program.

After the additional language translations have been added to the spreadsheet, the team supervisor or administrator imports the spreadsheet into Bloom.

In this way, only the team supervisor needs to learn Bloom.

## 2. Enabling Spreadsheet Import/Export

To access this advanced feature, open Bloom Settings, then:

1. Click on the **Advanced Program Settings** tab
2. Tick the box **Spreadsheet Import/Export**
3. Please ensure you have ticked the box **Automatically Update Bloom**
4. Click to **Restart** Bloom

### 3. Exporting a book to a Spreadsheet

1. Right-click on the book you wish to export, then,
2. Click **More**
3. Click **Export to Spreadsheet...**

## 4. Importing a Spreadsheet into Bloom

After editing the spreadsheet, it can be imported back into Bloom. Typically, the spreadsheet will be imported back into the original book or into a duplicate of the original. In this way, the original structure of each page will be maintained.

You can also import a spreadsheet into a new blank book. In this case, however, the original page structure will not be maintained.

1. Right-click on the book you wish to import the spreadsheet into, then,
2. Click **More**
3. Click **Import Content from Spreadsheet...**

A progress dialogue will appear. Note, a backup of your original book will be placed in a temporary folder in case there is a problem.

The location of the backup is: C:\Users\YOUR USER NAME\AppData\Local\Temp\bloom pre-import backups

# 5. Understanding the Spreadsheet layout

The exported spreadsheet is organized into rows and columns. By default, only the main translatable material (the title, and the basic text) from the book is presented, and all other material — such as Copyright and Credits — is *hidden* from view.

## CAUTION

The rows and columns that are hidden from view should generally *not* be edited directly in the spreadsheet. Instead, it is best to edit these in Bloom itself.

Generally speaking, the rows of the spreadsheet progress through the translatable pages of the book, while the columns contain the content of the corresponding pages in various languages.

By default, the following are hidden:

- Row 1
- Columns B and C
- Approximately 14 hidden rows at the end of the spreadsheet for various “xmatter” material like Copyright and Credits

# 6. Usage Scenarios

## 6.1 Simple corrections or editing

Some teams prefer to use spreadsheets, rather than Bloom itself, to do the final editing of their Bloom books.

### CAUTION

If you have already recorded audio for a Talking Book, be careful editing text (whether in Bloom or in a spreadsheet).

## 6.2 Adding another language translation to a book

Some teams have translators who are comfortable using spreadsheets, but not Bloom.

To add a new language to a book, the exported spreadsheet will need a new column for the language. The easiest way to do this is to ensure the new language is listed in the Languages tab of your Bloom Settings prior to exporting the book.

Alternatively, you can add the new column to an existing spreadsheet. In this case, you will need to unhide row 1 to type in the language code of the language. The language code must be enclosed in square brackets.

## 6.3 Fixing an incorrectly tagged language

Sometimes, a user makes a book and only later discovers they have used the wrong language code.

This can be a fairly technical procedure. The following steps will cover simple cases only:

1. Change the Collection Language Setting to the correct configuration.
2. Export the book to a Spreadsheet.
3. Replace the wrong language code (row 1) and language name (row 2) in the spreadsheet with the correct one.
4. Import the spreadsheet into a *blank* book.

Bloom imports in a non-destructive way. This means it *updates* existing data *but does not erase* existing data. For this reason, it is important for this usage situation to import into a

*blank* book; otherwise, the original, incorrectly tagged language data, will remain.

Importing into a blank book works provided the book has a simple structure of one image and one text box per page. If the book contains multiple text boxes or images, the spreadsheet will have to be imported back into the original book in order to maintain the same data structure. In this case, the unwanted text (incorrectly tagged) will remain unless it is emptied out in the spreadsheet. This may require a Bloom specialist.

When publishing your book to Bloom Library, be sure to uncheck the box for any unwanted language. Doing this will strip out that unwanted language for Bloom Library.

## 6.4 Changing a book to Digital Comic Book

If your original book was made from the Basic Book template and you want to transform it into a Digital Comic Book, then do the following:

1. Create a blank book using the Digital Comic Book template.
2. Add a **Comic** page.
3. Using the Overlay Tool, add a Caption or Text Block to the page.
4. Right-click on this page's thumbnail, and choose **Duplicate Page Many Times** so that this blank comic book has the same number of pages as the original book.
5. Import the spreadsheet into this blank comic book.

### CAUTION

Limitations: this method works if the original book has one image and one text box per page.

# 7. Current Limitations

*Updated for Bloom 5.5*

The following are *not* supported:

- Color on words is lost during export and import
- Quizzes and other Activity pages
- Image Descriptions (forthcoming in Bloom 5.5)

In addition, there are dangers to editing a Talking Book in a spreadsheet. If you change the words of a sentence in any way, the audio recording will no longer match. Similarly, if you change the sentence boundaries, the recording will no longer match.

In addition to the above limitations, it is important to understand that when you export a book to a spreadsheet, Bloom does *not* include the characteristics of the page *layout* for the book. And so when you import a spreadsheet into a Bloom book, Bloom will either map the data from the spreadsheet onto the page structure of whatever book you have chosen to import into, or if need be, map the data onto its default page layout, namely the “Basic Text & Picture” layout.

# **Release Notes Index**

This section explains what is new in each release.

# Bloom 5.3 Release Notes

## Publish to Audio or Video

You can now turn your book into a video that can be shared on Facebook or YouTube. You can also make a version that will work on inexpensive “feature phones” or mp3 players. Here is the original [Feature Request](#).

## Text Color

To highlight a word or some characters, you can now select some text and set its color.

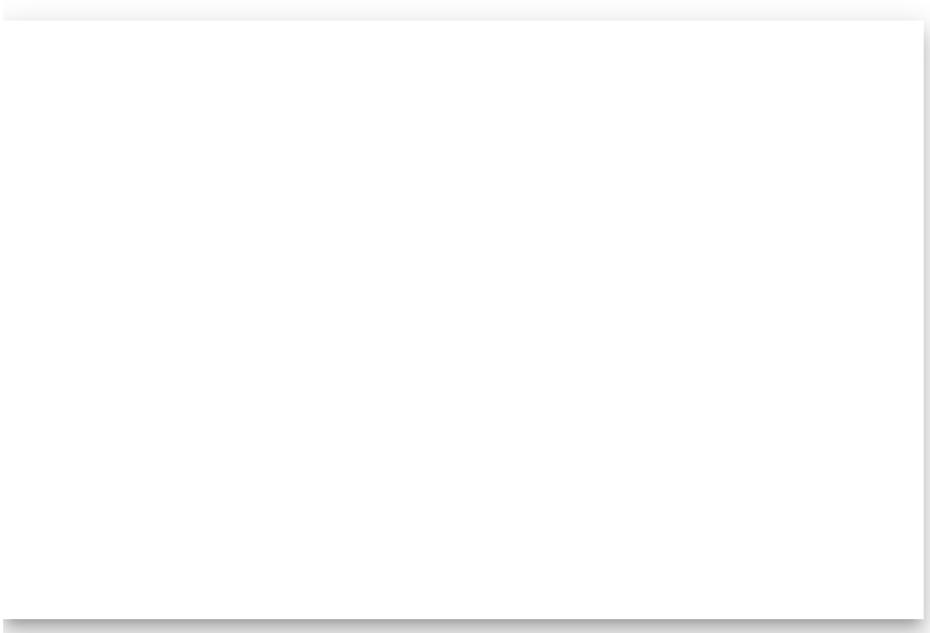
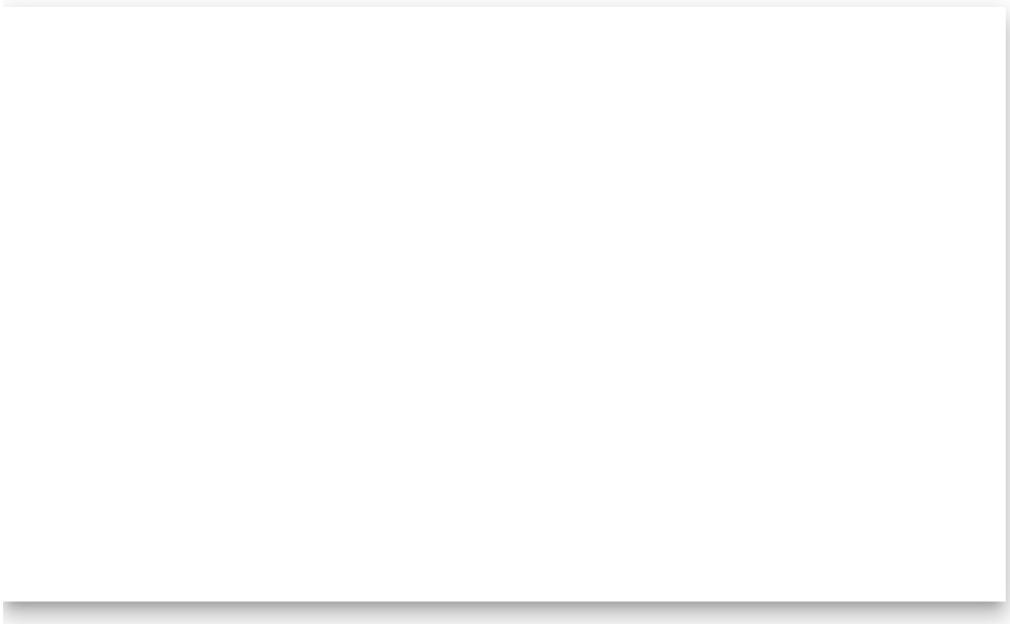
## New Copyright / License Dialog

We've re-worked the copyright / license dialog in order to help you better understand your choices.



## Font License Info

When you're just making paper or PDF copies of your book, you can use whatever fonts are on your computer. However, many fonts are not freely licensed for use on the web or in ebooks. But how are you supposed to know? It turns out that inside many fonts, there is some metadata that indicates things like what the license is, where the font comes from, and what version of the font you have. Bloom now reads this information and uses color and icons to indicate how safe a font is to use.



# Team Collection: Single Book History



# **Startup Time**

We made several changes to speed up Bloom's launch time.

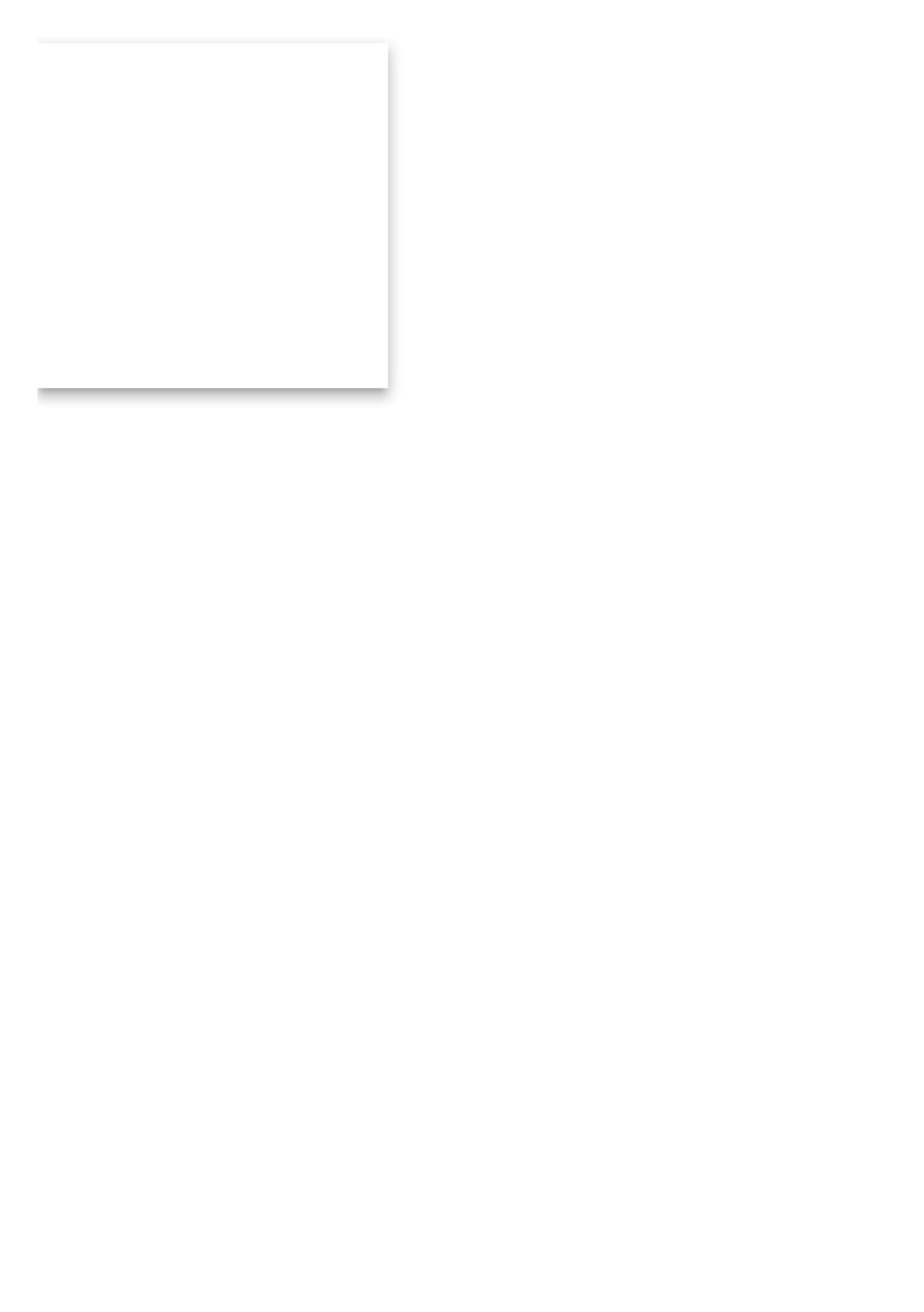
# Menus

In the Collection dropdown menu, we

- Renamed the “Advanced” submenu to “Troubleshooting”.
- In “Source” collections (which we think should be *very* rare in 2022), we moved “Make Bloom Pack” from the toolbar to this menu.

We simplified the book menu:

Less-used commands are now under a “More” submenu. In the future, we intend to simplify this further.



# **BloomLibrary.org**

Project cards can now have country names:

We added a map showing where the collection is being read:

And finally, we added city and country tables:

# Bloom Reader

We have changed the name and file extension of Bloom's digital book publishing format from `Bloom Digital / .bloomd` to `BloomPUB / .bloompub`. All readers have accepted both for some time, and now Bloom Editor and [BloomLibrary.org](http://BloomLibrary.org) both deliver `.bloompub`. The new name is purposely parallel to the better-known `ePUB` format.

# Bloom 5.4 Beta Release Notes

## Simple Choice Activities

We've added two new activities that you can add to your books. Just enter the correct answer in the first box. When someone reads the book, Bloom will shuffle the answers.

### Choose Word from Picture

---

---

### Choose Picture from Word

Are there other simple activities that you would like to have in your Bloom books? Feel free to request them in a [Feature Request](#). Note that a [Bloom Enterprise](#) subscription is required to add new activities to a book.

 **TIP**

Enjoy [this 185 page animal alphabet book](#) that includes these new Simple Choice Activities.

## Get More Books from Within Bloom Reader

Finally, users can get more books into their Bloom Reader without going to a separate browser window. We've added a button at the bottom of the screen:

You then choose a language and Bloom Reader shows you books from BloomLibrary.org. It will remember your recent languages, so you don't have to find them each time:



Once you pick a book, you can either download it into Bloom Reader or just read it online:

## **Smarter Splitter**

We heard you: getting image and text boxes to *just the right size* was too hard. We've made the splitter smart in a couple of ways:

- 1) You can now double-click the splitter to make it snap to the position used by the previous page.
- 2) The splitter now "snaps" to some common locations:
  - The position used by the previous page.

- The position that perfectly matches the image's proportions.
- 1/4, 1/3, 1/2, etc.
- Square

- 3) Previously, the splitter moved by tenths of a percentage. Now, it moves only by full percentage points.
- 4) If you need more precision, hold down the CTRL key to go back to moving by tenths of a percent, ignoring snap points.

## Fixed Layout ePUBs

Bloom can now create ePUBs in “Fixed” mode which asks ePUB players to preserve the page as you see it in Bloom. If you have a very simple book, Bloom will also let you choose the previous “Flowable” mode.

With this improvement, you can now publish overlay (comic) books as ePUBs.

### CAUTION

Note that if you make a Talking Book out of an Overlay (comic) book, ePUB readers will read bubbles in the order you created them. That won’t always be the correct

order! We have an idea of how to improve things for Bloom 5.5.

See [here](#) for more information about the state of Bloom-to-ePUB publishing.

## Color Chooser

We improved the color chooser and made the same chooser available everywhere you can set a color, including text, background colors in the overlay tool, and cover colors.

## Text Color in Styles

As before, you can also color individual words and letters:

## Modernised Topic Chooser

### “Needs Copyright” Button

We've noticed that sometimes people forget to add a copyright, which later prevents them from publishing the book to BloomLibrary.org. Now Bloom shows this button to prompt you.

### Overlay Tool

- We've added a new Bubble shape, “Rectangular”:

- We added hints to remind you about two important shortcuts:



- You can now click on the background image in order to change it.
- If a bubble somehow ends up off-screen, Bloom will move it back on screen the next time it loads the page.

Note that a [Bloom Enterprise](#) subscription is required to add new Overlay (comic) images to a book.

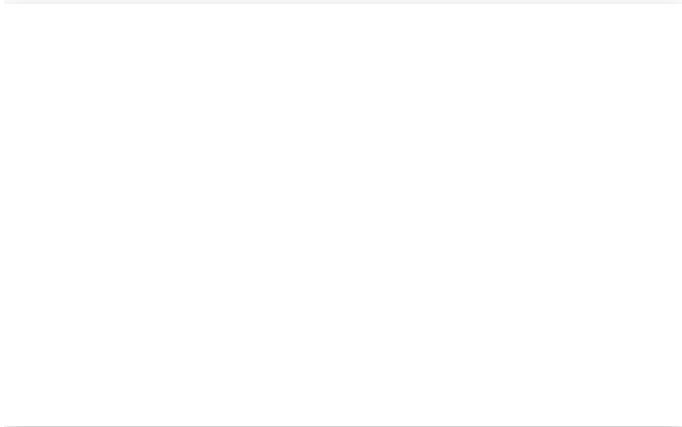
## Other Improvements

- Previously, there was a slight difference in text size between the Edit Tab and what Bloom would actually publish. You could see this even just in the Collection Tab preview. Where this mattered was that a line might break in a different place. We have fixed this difference in favor of the published versions, so that if a book is re-published using this version of Bloom, the layout will be the same as it was previously. But if you look in the Edit tab, changes may be visible from what you would have seen in the Edit tab in previous versions.

- Bloom's experimental spreadsheet import/export now retains a book's metadata.
- We added experimental spreadsheet import/export for Talking Books. Note that a [Bloom Enterprise](#) subscription is required to use the spreadsheet commands.
- We made it feasible to use leading spaces in a Talking book to make the left edge of a text box vary in order to do things like conform to the image to the left of the text. While we don't *like* this approach, it is currently the only way to achieve this.
  - Don't highlight leading/trailing whitespace of current audio segment.
  - Collapse multiple whitespace in translation bubbles.
- When Bloom makes a BloomPack, it now includes any audio in the books.
- Bloom now shows the Sign Language name on the cover. Note that the name only appears once there is at least one recording, and only after the book has been reloaded.
- You can now access the "Scripts & Variants" settings for a Sign languages. The "scripts" part is not relevant, but this allows you to define a language as a regional dialect of a more widely known Sign language.
- If you download and translate a book, Bloom now gives you the same cover colors as the original.
- SIL has deprecated Andika New Basic since Andika now contains all of its characters. We are gradually switching everything over to Andika in a way that we think will be invisible to users. For this release, we switched Bloom Reader & Viewer to come with Andika built in.
- We improved sorting of books in BloomLibrary.org. By default, books now sort from newest to oldest. For particular collections, we can change this to sorting by title with good number sorting so that numbered series will show in order.
- BloomLibrary's "stats" pages now have a "People Reached Digitally" Stat

- We added a way for advanced users to override the image compression we do when we publish books.

- We added a 6" x 9" paper size.
- You can now set text to right-align:



- You won't notice it, but we did months of work preparing Bloom to move to a modern browser component. This investment will reduce our maintenance cost and unlock some new capabilities in the future.
- We introduced a new layout to most of our "Publish" screens. In the next version, we'll complete this transition by rewriting the PDF/Print and Web Upload screens to fit this new system. In the end, the publish screens will be much more uniform so that if you learn one, others will be more familiar.

# Bloom 5.5 Almost-Beta Release Notes

## Publish: New Print / PDF

- No longer uses Adobe Reader
- Now shows booklet instructions below the Print dialog
- Modern design is now consistent with other publishing options
- Part of our multi-year rewrite towards Mac and Linux compatibility

## Publish: New Web Upload

- Modern design is now consistent with other publishing options
- Part of our multi-year rewrite towards Mac and Linux compatibility

- If your book isn't ready to meet the world just yet, you can now click the "Draft" button.

- To turn off the draft status of a book that you uploaded earlier, go to it on [BloomLibrary.org](https://BloomLibrary.org) and un-tick the Draft button:

## Publish: BloomPUB Preview

- We have reorganized this screen to work better for users with small screens. The preview portion no longer hides the portion where you can actually save and share your file.
- Bloom no longer constructs a Preview when you go into this screen. Instead, if you want a preview, click the new “Preview” button.

- You can now expand the preview to fill up most of the Bloom Window ([Feature Request](#))

## Publish: ePUB Preview

- As with the BloomPUB Preview, we have reorganized this screen to work better for users with small screens. The preview portion no longer hides the portion where you can actually save and share your file.
- As with the BloomPUB Preview, Bloom no longer constructs a Preview when you go into this screen. Instead, if you want a preview, click the new “Preview” button. ([Feature Request](#))

## Talking Books

We have renovated the Talking Book Tool “Advanced” section:

- You can now click “Insert Segment Marker” to break up your text into smaller portions for the purpose of highlighting audio. As always, you can also just type in the “|” character.
- These segment markers will be automatically hidden when you’re not using the Talking Book tool.



**TIP**  
Previously, you had to remove the “|” characters yourself. Now, just leave them in. Bloom will take care of hiding them.

- We made the “Recording Mode” easier to understand and added pop-up tooltips explaining all advanced buttons.
- You can now fine-tune timings created when using Aeneas via the “Split” button ([Feature Request](#))
- You can now apply timings files created from Audacity:
- You can now show and hide image descriptions (for the blind).



Clear



Listen to the  
whole page

► Advanced

- You can now control both the foreground and background color of the highlight that Bloom uses while playing a talking book. This is part of the textbox style, so to change it, click on the gear icon in the lower left of the text box. Then go to the new “Highlighting” section. ([Feature Request](#))

## Palettes

Bloom collections now remember what custom colors you have created. So whether you are setting text for a style, a text selection, an audio highlight, or an overlay text, you are working with the same palette. Cover color are a separate palette.

## Spreadsheet Import/Export

### CAUTION

This feature is Experimental

### NOTE

This feature requires a Bloom Enterprise subscription

- Roundtrip Activities

- Roundtrip Image Descriptions
- Roundtrip colored words
- Importing Overlays now preserves text styles
- On import, remove pages that have been removed from the spreadsheet
- 

## Overlays

### NOTE

Creating **new** overlay pages requires a Bloom Enterprise subscription. Translating existing ones does not.

- Overlays now work great in books that can be switched between languages. As you change to a different language, the size and location of bubbles are updated to match what they should be for that language.
- Overlay bubbles now respond better when you change the size / orientation of the book.

## Scrolling Text Boxes in Device Layouts

When a text box has more text than can fit, Bloom does several things to draw your attention to the "overflow". However, if you later view the book on the web or in Bloom Reader, we turn on a scrollbar and allow the user to scroll down to see the entire text. This has been true for a while now. With this new version, if you have chosen either of the "Device16x9" layouts, we don't make a big deal out of the overflow. We simply let it overflow and show a scrollbar.

### CAUTION

Note that for technical/cost reasons this scrollbar actually takes up some of the box's horizontal space, whereas during actual playback of the book, the scrollbar hovers above the text. So you won't get exactly the same line breaking.

## Templates

- If you create a template book in your collection, you can now choose "**Make new**

**book using this template”** to add a new book to your collection, based on that template.

## Team Collections

- The Book History now includes Import events
- If you report a problem with a book, the Bloom Team now gets the Book History in the report, along with version numbers.

## BloomPUB Viewer

- Added Full Screen Mode ([Feature Request](#))

## **Bloom Reader**

- We improved handling of books in Right-to-Left languages. Now, to advance, you swipe left.

- When switching languages, Bloom now stops any audio that is playing, and starts the page over, playing the newly selected language.

## Bloom Library

- We added a new set of statistics to the “stats” page for each collection.

## The End of Andika New Basic

Bloom's default font has always been Andika New Basic (ANB), and before this version, we installed it on your computer along with Bloom. ANB is now completely replaceable by the Andika font, and will no longer be updated by its publisher (SIL). Therefore, in this version we have switched to Andika. As part of this switch,

- Bloom longer installs ANB (or any other fonts). Instead, Andika is built-in to Bloom itself.
- All books that request ANB will actually be given Andika in the Bloom Editor software, in Bloom Reader, in BloomPUB viewer, and on the web.
- Bloom now also comes with another popular font, ABeeZee. This does not have nearly the range of glyphs to handle the world's alphabets like Andika does, but it's a fine option for languages with only the most common accent characters. See <https://fonts.google.com/specimen/ABeeZee/glyphs>

## The End of “Source Collections”

The *idea* of "Source Collections" may have had merit, but in practice, too many people were getting confused by them. Therefore, we reviewed all the various behaviors and features related to Source Collections, and for each one, we either created new ways to achieve the same thing or decided that it was not worth keeping.

- We've removed the "Choose the collection type" page in the "Create New Bloom Collection" wizard.
  - Books are never locked
  - You can always give the command to "Make Bloom Pack of Shell Books"
- 
- You can now remove collections under "Sources for New Books" (1, below).
  - If you want to show a collection on your machine in the "Sources for New Books", there is now a button to do that (2, below).

# The End of Linux Updates (for now)

Bloom 5.4 was the last version of Bloom for now. Ideally, in several years, we hope (but do not promise) that we will again have the technology and staff required to ship new releases for Linux (and Mac).

**Technical Details:** Bloom started as a Windows-only application, using .net technologies plus an embedded web browser. Unfortunately, a software key component (*geckofx*) stopped development a few years ago. GeckoFX was the magic that allowed us to embed a Firefox Browser in our .net application. Bloom relies on over a thousand other open-source libraries, and increasingly, we cannot make use of *their* updates and fixes, because our browser is stuck in 2018. We have only a small amount of resources to spend, and we can't justify spending an increasing amount of it going against the tide. Bloom 5.5 uses a modern embedded browser, *WebView2* from Microsoft.

We will eventually get Bloom to a state where its UI is no longer a hybrid of .net and browser UI. With each version, we are retiring some .net UI and replacing it with browser UI. When this process is complete, then new cross-platform possibilities will open up, be it a .net/electron or something else. Microsoft may also deliver *WebView2*, for Linux and Mac (they list this on [their roadmap](#), in a non-committal way).

See also:

[Installing Bloom on Linux](#)

# The End of Graphite Font Support

A software component (*geckofx*) that Bloom has used to provide support for Graphite fonts is no longer being maintained by its author, and the Bloom team does not have the resources to maintain it. Therefore, starting with Bloom 5.5, we are switching to an alternative that is maintained by Microsoft. This has many benefits for us, but one downside is that Bloom will no longer support complex non-roman scripts that require “Graphite” technology. For most non-roman fonts, this will not be a problem. However, Nastaliq and Lanna fonts do require Graphite. As far as we can tell, no one has ever contributed a book to Bloom Library using these fonts, and our analytics tell us that no books are using it with Bloom 5.4. If you need Graphite font technology, please use Bloom 5.4 and also contact us.

# Bloom 5.2

## Decodable Reader

★ When the Decodable Reader tool generates a report, it now includes a list of all the usable words for each level. [Feature Request](#)

## BloomLibrary.org Upload

When you upload a book, Bloom checks to see if there is already a book with the same internal ID on the library. If it finds one, it now gives you two choices. You can replace the existing book or upload your book as a new item. The latter option fixes your book's ID to be unique.

## Team Collections (Bloom Enterprise, Experimental)

★ When you check in a book, you can now type in a short note saying what you did.

★ Bloom now lists check-in notes and other operations in the collection's history panel.

★ Team administrators can now force-unlock a book that has someone else has left checked out. This feature is helpful when a computer is lost or when the teammate who checked out the book cannot check it back in for any other reason.

# ★ Export / Import Spreadsheet (Bloom Enterprise, Experimental)

## Export

You can now export a Bloom book to Excel spreadsheet format in a way that preserves text and images. (Satisfies this [Feature Request](#))

Note that there are currently several things that Bloom does not export: Talking Book audio, Music, Video, Activities.

## Import

You can now import an Excel spreadsheet *onto* an existing Bloom book. The target book can be a new empty book you just created or an existing book that you want to update. When importing onto an existing book, Bloom can currently not safely protect some things in the existing book, so if your book has any of these things, it will refuse to do the import. These items in a book prevent it from getting an update through a spreadsheet import: Talking Book audio, Activities.

Bloom's import/export feature is still a work in progress. Already, for simple books, it will enable you to do many previously difficult things, including:

- Get translations done by people without Bloom, using Excel, Libre Office, or Google Sheets.
- Apply bulk changes to the text in an external editor.
- Fix mistakes where someone typed text into a box with the wrong language.
- Merge text in different languages into a single book

While not fully supported yet, we also expect that this feature will eventually be useful for:

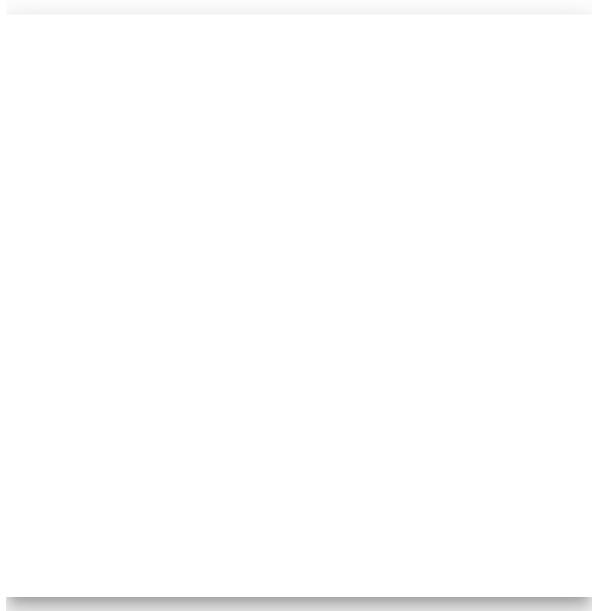
- Making new editions of books designed for paper vs. devices. This is possible because the importer can actually spread content out over a different number of pages.
- Use online translation services like Crowdin to engage translators, including paid ones.

To enable Spreadsheet Import/Export, tick the box under `Collection Settings / Advanced Program Settings / Spreadsheet Import/Export`.

# Collection User Interface

## New Collection UI (Experimental)

As the next phase of our multi-year effort to modernize the Bloom code base, we have completely rewritten the left-hand side of the Collection Tab using Web technologies. This has been a *very large* undertaking, so we're making it available as an experimental feature for Bloom 5.2 to give us all more time to test it. With this new interface, Team Collections get nice avatar images of their teammates over books they have checked out:



Books with badges showing who has them checked out

Other users will notice only minor improvements to book thumbnail buttons. To enable this new mode, tick the box under `Collection Settings / Advanced Program Settings / Try the New Version of the Collection Tab.`

## Collection Settings

Many Bloom Enterprise projects use their own custom front/back matter packs. Previously in Bloom, everyone could see these in the list of choices. Now, these custom choices are not listed but instead are automatically selected based on the Bloom Enterprise code.

# 5.1

## Collection Tab

★ You can now rename a book. Previously, Bloom always used the name of a book's title. The new name appears under the thumbnail of the book and also the name of the folder on disk (). [Feature Request](#)

## Edit Tab

★ You can create **hyperlinks** that point to other pages in the same book. This can be used for creating your own simple Table of Contents. When creating ePUBs, these links will be turned into normal text because the feature does not work in ePUBs. [Feature Request](#)

★ **Duplicate Page Many Times.** You can now enter a number to make many duplicates of a page all at once ([see animation](#)).

We made several fixes to the checks in Decodable and Leveled Readers.

## Leveled Reader

We added a visual notification when pages have too many sentences.

We improved how we count words in complex pages (such as arithmetic pages).

## Overlay Tool (Bloom Enterprise)

★ The Overlay Tool can now add videos [Feature Request](#)

★ The Overlay Tool can now add images on top of the image [Feature Request](#)

(See an animation of these [new overlay features](#))

## Team Collections (Bloom Enterprise)

Team Collections are a new feature that helps you safely share a collection within your team, across the internet, without full-time internet access. For this release, we're going to keep this feature behind the "Experimental" checkbox. For now, we are only supporting

Dropbox & LAN environments. Please contact us if you are considering using this. We need your help to fully understand how this will be used, and how the experience goes.

## About Bloom's use of Dropbox

People will be naturally resistant to installing Dropbox. There are two things that may help them. First, once Dropbox is set up, you will not have to actually learn to use Dropbox, as it just sits in the background for Bloom to use, invisibly. Second, we are starting with Dropbox support because it is far superior to Google Drive in one crucial way: when you make a small change to a book, Dropbox will send just a small amount of data over the internet to your teammates. In contrast, Google Drive will send the entire book: all the text, images, recordings, videos, activities, etc. Because we want this feature to work well in environments with slow or expensive internet, we, therefore, decided to put our initial efforts into supporting Dropbox. In the near future, we will attempt to make Google Drive an option for teams with great internet.

screenshot-online-only

Team Collections debuted in Bloom 5.0 beta. For 5.1, we have added a few small features:

★ We added a basic History tab to the Team Collection dialog. It currently only tells you the history of check-ins (who edited the book, when). We will be adding more history in future versions.

## screenshot

We added a little informational menu option that provides information about the name and “avatar” (picture) associated with books you check out. The dialog also provides links for changing (or setting) the avatar and name.

## screenshot

screenshot

★ You can now “Forget Changes & Check in Book” if you decide to abandon the changes you’ve made to a book since you checked it out.

screenshot

## Images

We have removed, from the lower-left corner of images, the button that opened the “Image Description Tool”. We did this because of reports that users were clicking on it, not understanding what was happening and then entering their story text into the image description box. Authors making books for the blind can still use this tool, of course. You just won’t have this convenient shortcut anymore. [Feature Request](#)

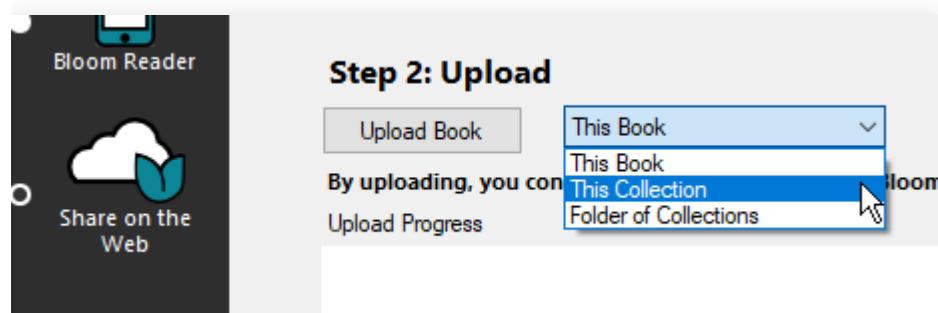
When Bloom has trouble loading an image and you send us an error report, we now will receive the offending image file. That will help us figure out what the problem is.

## Publish Tab

We added a new tool for making it easy to create a BloomPUB of every book in a collection, with a single command. (Bloom Enterprise)

screenshot

You can now also upload an entire collection or even multiple collections to the Bloom Library. (Bloom Enterprise)



screenshot

## Bloom Library

We improved counts and stats on Bloom Library. For example, a collection that contains child collections can now display the total count ([example](#)).

We added the ability for a project to list its sponsors at the bottom of the page ([example](#)).

We added a new page selector for Bloom Player, the engine that powers book reading in Bloom Reader, BloomLibrary.org, and embedded Reading App Builder books.

## Other Good Stuff

**Faster Enterprise Subscription Delivery** When projects get a new Enterprise subscription, there is a delay while we build their branding pack (logos, boilerplate text, etc). Starting with Bloom 5.1, customers don't have to wait... their Enterprise code will work immediately. Bloom will show a placeholder message on the back cover that shows the subscription name. When an update to Bloom contains the branding files for the subscription, this message will be automatically replaced with the branding images, the next time the books in the collection are edited.

## Work towards a more cross-platform Bloom

As with most versions, we did a bunch of behind-the-scenes work towards rewriting making Bloom be more portable to other operating systems. For the most part, you won't be able to tell the difference.

# 5.0

## Collection Tab

We made hovering over a book thumbnail show the folder name of the book. This is helpful to see what's-what when you have multiple copies of a book.

### Bookshelf selector

In collection settings, Bloom Enterprise projects that have bookshelves on Bloom Library can now choose the bookshelf that corresponds to the collection. Then when books are uploaded to BloomLibrary.org, they automatically go to the correct bookshelf. This setting also can now be used to automatically choose a back-cover image to show where the book fits in the overall curriculum and choose a cover color based on the grade (this is used for a large MOE project in Kyrgyzstan).

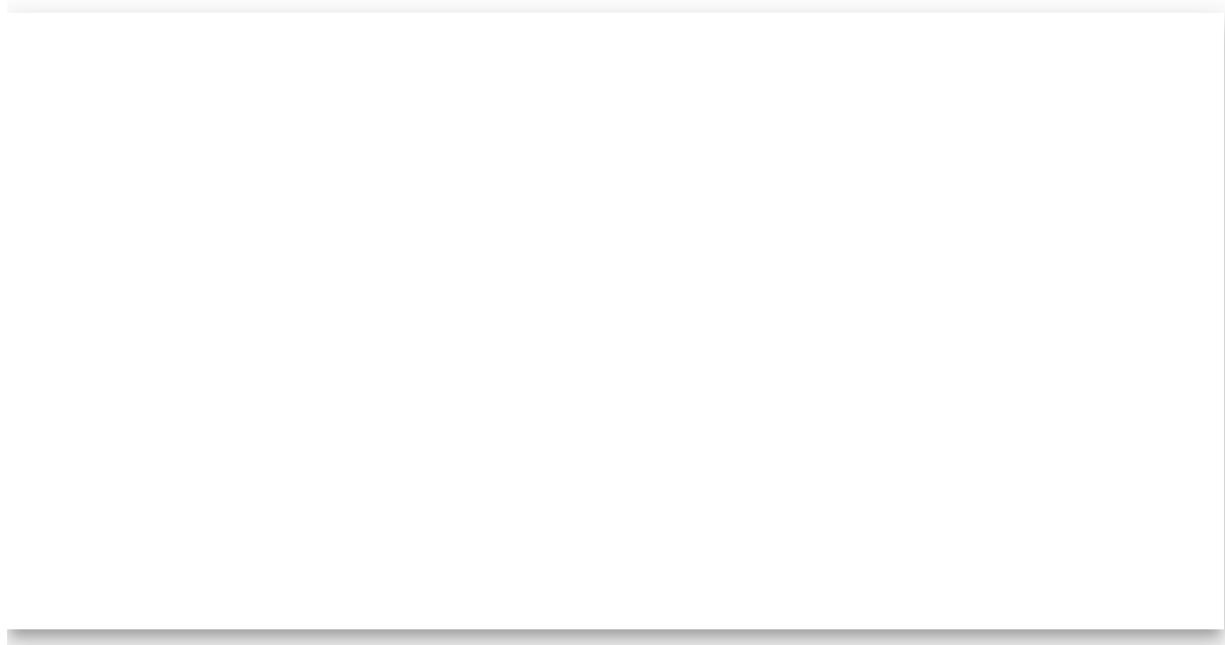
## Edit Tab

### Comic Tool —> Overlay Tool

The Comic Tool is now the “Overlay Tool”. We made this change because this tool is now useful for more than comics and people who were not interested in comics were not finding it.

**!** The Overlay Tool requires a Bloom Enterprise subscription. However, books that contain overlays can be translated into other languages without a Bloom Enterprise subscription. If this change causes you any problems, remember that you can always enable Bloom Enterprise freely if you do not have external funding. If that option does not work for you, please reach out to us at [issues@bloomlibrary.org](mailto:issues@bloomlibrary.org) so that we can help you finish your book in some other way.

★ You can now control the transparency of overlayed text elements and make corners round. You can also show a line that you can use to point to something in a diagram:



screenshot-online-only

★ You can now make circle text elements. [Feature Request](#)

### Talking Book Tool

You can now pause playback in the Talking Book Tool.

### Widgets

We've made it easier to add HTML5 widgets from [Active Presenter](#). No more zipping/unzipping.

There is now a "Widget Page" that gives you a full-screen page to host your html5 interactive widgets. (Widgets are part of Bloom Enterprise).

screenshot-online-only

## Leveled Reader

You can now specify two new limits: Sentences per page and Average count of sentences per page.

We added some new measures: total sentences in book, longest sentence in book, and longest word in the book.

We added a button to copy all the leveled reader measures of a book to the clipboard, in a form that can be pasted into spreadsheets.

Text on Simple Quiz pages is no longer counted when computing whole-book statistics. Note that this change only applies to newly created Quizzes. Contact us for instructions about applying this change to pre-existing quiz pages.

## Team Collections

**!** *NOTE: Team Collections debuted in Bloom 5.0 beta, but did not "graduate" out of beta successfully because of a bug found by a beta tester (yay beta testers!). We did not have*

*time to properly test the fix before it was time to release Bloom 5.0. Therefore, you need to run Bloom 5.1 beta in order to use this feature.*

## Performance

Recently we spent weeks improving Bloom's ability to deal with large books and long Bloom sessions without running out of memory. As part of that effort, we've added a tool for watching what happens to available memory and speed as Bloom does various things. This is mostly for our own use, but it's also available to you, in case you suspect that Bloom is eating memory or slowing down as you use it.

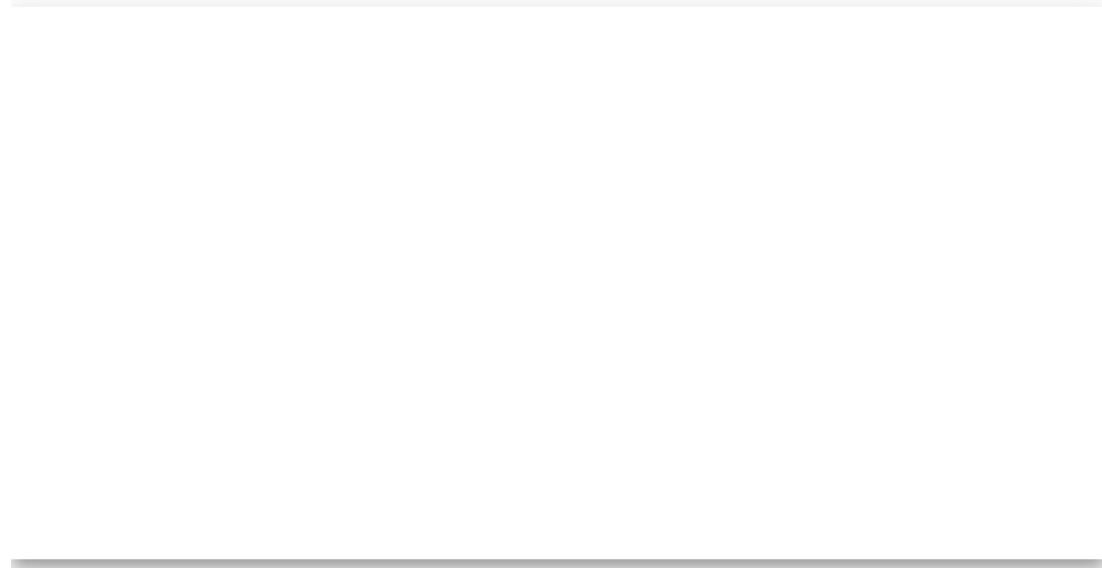
screenshot-online-only

screenshot-online-only

When you download books from BloomLibrary.org that have audio, Bloom will now download the audio as part of the shell book.

We've improved what you see when you look at [template books on BloomLibrary.org](#). It is now easier to understand what the template pages are for:

screenshot-online-only



screenshot-online-only

# 4.9

## Edit Tab

Bloom now makes much better use of your computer's memory. You should be able to work much longer, with much larger books, before encountering any memory limitations.

★**Talking Book Segmentation.** You can now type a vertical bar (|) to break up the recording of long sentences. This also works for splitting audio that you import. After recording or splitting, you will need to remove these vertical bars so that they don't show when you publish the book.

The Talking Book tool no longer treats “Myanmar signed little section” (U+104A) as a sentence-ending character.

### **13cm Square** page size. ([Feature Request](#))

The list of page sizes now includes *13cm Square* as one of the possibilities. This requires printing with A3 paper if you wish to produce booklets using this new page size. (Each printing would create 3 copies of the booklet.)

When you open a large book, the thumbnail representing the current page is now automatically scrolled into view.

In the Comic Tool, you can now set custom background colors for text boxes.

In the Comic Tool, you can now click a button to duplicate the current bubble.

When you hover over an image or image placeholder, Bloom now tells you what resolution image you need. This information can be useful to your illustrator.

## **Copy Text from Source Bubble**

We have added a Copy button to the Source Bubble. ([Feature Request](#))

## **Publish Tab**

Login to BloomLibrary allows you to just click the Google button to use your Google identity (including sil.org accounts, for those of you who have that).

You can now provide a custom thumbnail for Epub publications. Place a file labeled `epub-thumbnail.png` in the books folder.

We can now provide custom “Full Bleed” layouts to Enterprise projects that need edge-to-edge printing at commercial print shops.

# 4.8

## Edit Tab

★ **Talking Book Text Playback Order.** You can now control the playback order of all the text boxes on a page, including comic book bubbles.

**Improved performance with very large books.** Some of you are creating terrific picture dictionaries with Bloom. These run into the hundreds of pages. However, the page thumbnail list gets very, very slow in these books. In 4.8, we've re-written that page thumbnail list from scratch, so that it is now much easier to edit these huge books.

### Original Title

Bloom now has a way to declare the title of the original book upon which your translation is based, in the Credits page. It will automatically determine this if it can, otherwise you can type it in.

### Added a new “longpress” character for showing diacritics in alphabet books

If you hold down “o”, the menu of special characters that pops up now offers ⓘ. This is useful in showing diacritics without arbitrarily showing a base character to show it with.

### ★ **Widget Activities (Feature Request)**

You can now embed little interactive activities in digital publications (web, Bloom Reader, RAB App). Many of these widgets already exist (they work with Apple's iBooks and the Kotobee book software). You may also be able to make your own or commission a programmer. If this approach gains popularity, we'll have a set of them to share within the Bloom community. To learn about “book widgets”, please see [this blog](#). To enable this feature, you need to go to Collection Tab/Settings/Advanced Program Settings and tick “Show Experimental Features”. Bloom requires that the widget be a zipped set of files ending in “.wdgt”. The files must include a file named “index.html”. We will be making this a bit easier in Bloom 5.0.

## 4.7

### Edit Tab

★ Import Audio ([Feature Request](#))

★ Comic Tool ([Feature Request](#)). Look out world, here come beautiful comics in minority languages!

Helpful tip: use CTRL + mouse drag to move bubbles, and ALT + mouse drag to resize them. Of course there are things to click on do to those things also, but if you're doing a whole comic, these make you much more productive.

Limitation: Books that use any comic elements are limited to one language.

Limitation: Bloom cannot make ePUBs with comics.

Limitation: Unlike other Bloom Books, comic books do not auto-scale to different page sizes. That would mess up the bubble locations when the image underneath them changes size. Therefore, if you create a comic book with A5 size and then send it to Bloom Reader, we have to keep the A5 orientation, rather than switching to 16x9. So there would be black areas above and/or below each page.

*Known limitation in this release: If you turn a comic book into a Talking Book, it will play back in the reverse of the order that the bubbles were created. This is fixed in Bloom 4.8.*

*Known limitation in this release: There is not yet a way to have an exclamation bubble with a tail.*

*Known limitation in this release: When the Comic Book tool is visible, you can't change the image. Just close the tool, set the image, then re-open the tool.*

★ Digital Comic Book Template. Use this when starting a new comic designed for screens.

★ For some complex scripts, the size of language text in the Decodable Reader was too small. We added a font-size chooser under `Settings:Book Making:Special Script Settings:Font size when displayed in tools`.

### Publish Tab

In Publish: Bloom Reader screen, you can now decide which of the languages in a book you want to publish.

In all publish screens, if a book uses Bloom's new Content Licensing system, Bloom will prevent publishing a language that has not yet been licensed for that book. This will prevent accidental violation of license agreements in which a publisher needs to limit which languages are published. For example, they may allow minority language translations to be Creative Commons licensed while relying on sales of the original English version for company revenue.

In Publish: ePUB, you can now add a summary/description to the ePUB metadata.

We added a way to export a single mp3 file for each page of the book. Right click on the left bar, then choose "Export audio files, 1 per page".

## Collection Tab

We simplified book thumbnails to just show the image on the cover.

We have created a New Problem Report Dialog which is both more convenient for users and should help us get the information we need to be of help.

## Other

★ Really complex scripts. Bloom 4.7 is available in two versions. The new version, "Bloom CS 4.7", supports those scripts that require the latest *graphite* font rendering. We are still working out some performance kinks in Bloom CS, so only use it if you need it and are willing to help us find bugs.

# 4.6

## Collection Tab

In Settings, we've added the option to use Kayah and Shan numeral systems. ([Feature Request](#))

When opening a different collection, Bloom now offers you the last 9 collections you opened. ([Feature Request](#))

## Edit Tab

★ We added a completely new **WYSIWYG Quiz** page. You can control formatting ([Feature Request](#)), location in the book ([Feature Request](#)), and the content of the heading. You can also record audio for all parts of it ([Feature Request](#), [Feature Request](#)).

★ Bloom can normally tell if you are working on a derived book or an original. But if it gets it wrong, you can now remove the derivation copyright and license using a new checkbox in the Copyright & License dialog ([Feature Request](#)).

★ You can now marks books as Public Domain using CC0 ([Feature Request](#), [Feature Request](#)).

★ You can now paste hyperlinks into books which will work when people use the digital version of the book([Feature Request](#)).

★ You can now copy text from language translation speech bubbles.

The “Add Page” dialog now clearly indicates which template pages are available only with Bloom Enterprise enabled.

## Books with many pages

We have improved Bloom's ability to work with books that run into the hundreds of pages.

## Sign Language Books

We have improved computer performance when working with sign language videos. Page thumbnails no longer include the first frame for the video (this was hard on memory and CPU).

In the Publish:Upload screen, we've added a place to identify the language of your sign language videos.

We added a "Text above Video" template page.

## Talking Books

You can now record audio for all the parts of a Quiz Page. ([Feature Request](#), [Feature Request](#))

We improved the smoothness of Talking Book playback by now playing only a single audio file per page. This means that highlighting is now based on timestamps, rather than on starting up individual audio files for each sentence. Talking books created with 4.6 require a Bloom Reader version that is up to date (latest v1.3).

## Publish Tab

### Bloom Reader Publish Preview

★ New, easier publish screen

We added a preview that lets you interact with the book before publishing to a real device.

We added new hints about publishing with USB and Wi-Fi.

We've added the ability to limit Bloom shellbook downloads to BloomLibrary.org visitors in single country. If you need to publish books with that kind of restriction, please contact us.

### ePUB Publish

★ New, cleaner ePUB publish screen

## User Interface

We added smarts to Bloom's user interface to use different fonts, as needed, in order to display various non-roman languages. This is not related to what you see in books, just the Bloom interface. Bloom now ships with Google's "noto" fonts for Arabic, Bengali, Devanagari, Thai, and CJK (Chinese, Japanese, Korean).

This version is the beginning of a multi-version effort to move Bloom's UI to a more consistent and contemporary visual design language. We have chosen to move towards Google's [Material Design](#), which is what users will be familiar with from their phones.

# 4.5

★ We have adjusted the background colors in order to provide a higher contrast for those with poor screens, lighting, or vision ([Feature Request](#)).

## UI Languages

★ Bloom's programmers can now specify "fallback languages" for the Bloom user interface. Previously, the fallback was always English. Now, for example, if we have a UI translation in a Mayan language, we would set the fallback to Spanish. That way, if something on screen has not been translated yet, the user will see the Spanish, rather than the English.

## Edit Tab

★ Bloom has a way of changing the layout of a page to match one of the template pages. Now, in the "Choose Different Layout" dialog you can now tell Bloom to make that change for *all* similar pages in the book. This makes it easy to, for example, add a place for a sign language video to all pages.

## Talking Books

★ In Bloom 4.4 we added the ability to record entire text boxes, instead of each sentence. Starting with Bloom 4.5, Bloom can find where in the recording each sentence starts, so that your book can still highlight individual sentences as they are read. We will be improving this feature in the next couple of versions. Currently Windows only. If the default settings don't split your sentences well, see the helps for information on adapting your scripts, choosing a TTS language, and how to use CTRL+Click on "Check" to hear how the TTS language is reading your vernacular.

## Books for the Visually Impaired

We have improved advice given in Image Description Tool, simplified it, and added a checkbox for stating that the image should not be given an image description (e.g., because it is purely decorative).

## Sign Language Books

★ The Sign Language tool sometimes has problems, particularly with memory use, so for now it is only available if you set Settings:Advanced>Show Experimental Features and set up Settings:Bloom Enterprise. But it's certainly usable if you're ready to start experimenting!

★ The Sign Language tool has been simplified.

★ The Sign Language tool now displays information about the video, including length, aspect ratio, and codec.

★ The Sign Language tool now has a tool for trimming the beginning and end of a video. Currently the trims are not permanent until you publish the book to ePUB, Bloom Reader, or a Bloom Pack.

You can now get a list of sign languages by entering “sign” in the “Lookup Language Code...” dialog.

Note: Some “2-in-1” laptops (like Microsoft Surface) have both a front and rear-facing camera. Bloom does not yet have a way to switch between these cameras. If the user doesn’t normally use the rear-facing camera, then a fix is to go into Windows Device Settings and disable the driver for the rear-facing camera.

## Publish Tab

When publishing digital books, Bloom now removes unused branding images.

The PDF generator can now handle books with Device 16x9 layouts, and you can upload them to Bloom Library.

## 4.4

For those of you helping us out by running and giving feedback on the Bloom beta channel, **thank you!** You are a vital part of the Bloom team. We are now moving on to building Bloom 4.5, and will release new editions of the 4.4 beta if you find any problems with it.

Here's what's new in 4.4:

## Settings

★ The Settings dialog has a new tab named “Bloom Enterprise” which allows you to enter the new subscription codes.

## Edit Tab

★ Cover pages have some improved default typography: Regular—>Bold, line space 1.4 -> 1.1 (national language 1.7->1.1), min-height: (1.8em -> auto). This puts the two boxes closer to each other. *This works well for most scripts, but some will need to increase the line height.*

★ When recording Talking Books, you can now choose to record whole text boxes at once. You can still record each sentence separately, as before. Note that during playback, if you record the whole box at once, the whole box will be highlighted at once. So what you may gain in naturalness, you may give up highlight synchronization. See the new “Record by sentences” checkbox in the Talking Book tool. **Books that use this feature will not be usable with earlier versions of Bloom.**

★ Impairment Visualizer. See an approximation of how images will look to readers with colorblindness or cataracts.

## Publish Tab

Previously, if you had a large paper size (like A3), the booklet buttons would be greyed out but it wasn't obvious why. Now, there is a message on screen explaining the situation.

★ Book Metadata form. In the ePUB tool, there is now a form you can open up that adds various metadata to the ePUB. These include accessibility features and fields needed for submission to the Global Digital Library.

★ When uploading a book to BloomLibrary.org, you can now choose to upload a book's audio (narration and background music).

★ When uploading a book to BloomLibrary.org, you can now specify features of the book to help people find it. Current options are “Accessible to the Blind”, “Accessible to the Visually Impaired”, and “Sign Language”.

## 4.3

## Settings

★ In the “Lookup Language Code” dialog, you can now differentiate the language by declaring any of: Script, Region, or Variant (dialect). [[Feature Request ✓](#)]

## Edit Tab

★ You can now record talking books that are diglots or triglots. [[Feature Request ✓](#)]

★ You can now add an “Instructions Page” to books. These are instructions for book creators, not book readers. They do not have a page number, do not contribute to page number advancement, and do not show up in PDFs, ePUB, or Bloom Reader publications.

## Publish Tab

Bloom now uses less memory when creating PDFs, and the “Use Less Memory (Slower)” option should be more effective.

## Branding

*Custom branding packs are part of Bloom Enterprise subscriptions*

★ Branding packs can now have “presets” that pre-fill front or back matter fields with boilerplate text.

★ It is now possible for a Branding pack to add an image at the top of the Credits page, before the Copyright. This image can contain text, but it won’t be able to adjust to different page sizes.

# Experimental Features

This release is a stepping stone for a more complete set of features for making books for those with visual and hearing impairments. These features are marked as:

- *Experimental*, meaning that you will only see them if you go to Settings:Advanced>Show Experimental Features
- *Bloom Enterprise*, meaning that you must choose a “Bloom Enterprise Project” in Settings:Project. Note that one of the choices there is “Local Community”, which makes all these features free to use for projects which are completely funded by the local community.

## Accessible Books for people with visual impairments

This work is funded in part by [Book Boost](#). Note that this is a work in progress, and there are a couple more tools we will be building for Bloom 4.4. [This query](#) will show you what is coming.

- ★ New *Image Description Tool* allows you to type in a description of images, so that Talking Books can describe them to blind people.
- ★ New *Accessibility Checker* gives you tools to check that your ePUB is accessible.
- ★ The ePUB generator has new options for making accessible books.

## Sign Language

Note that this is a work in progress, and there are many rough edges that we need to sort out. [This query](#) will show you what we plan to do in the future, mostly in Bloom 4.5.

You can now use Bloom to make Sign Language books. One way to use this is to make **diglots** which people who sign can use to read, and people who read can use to learn to sign.

- ★ You can import pre-made videos
- ★ You can easily record videos right in Bloom using the new *Sign Language Tool*
- ★ You can start a book with a “Sign Language Template”
- ★ You can add “Sign Language Template” pages to a book

 You can add custom Video objects to pages, just like you could previously with Text and Picture

At this time, video does not support sound. We know there will be requests for that, but we need to focus on finishing the sign language features.

## 4.2

- Edit Tab
  - New “Motion Tool” allows you to specify pan/zoom effects of a page, to make a “Motion Book” in Bloom Reader. Then tick the “Motion Book” button when publishing to the Android Bloom Reader. What you’ll get is a book that is a normal talking book in portrait mode, then goes to sit-back-and-watch mode when you turn the device sideways.
  - New “Music Tool” allow you to choose background music and levels, to go along with your Motion Book.
  - We’ve reinstated the ability to zoom via CTRL+mouse wheel.
- Publish
  - Fonts are now embedded in Bloom Reader books, if their embedded metadata allows that.

## 4.1

- Settings
  - You can now customize how Language 2 and Language 3 are displayed, just like you previously could for Language 1. [See original feature request](#)
- Edit Tab
  - Enhance the “Paste Image Credits” function to include page numbers.
  - Allow “Change Layout” to be reached even in Device layout
  - Organize all page-related buttons together in lower left corner.
    - Move the unlocking button to a more obvious location
  - Move “unlock” button there, where it will be easier to find.
- Publish
  - Bloom now ships with the mp3 encoder (“LAME”), so you do not need to install that separately anymore in order to make talking books.
- Art Of Reading
  - AOR 3.3 offers the new, more permissive BY-SA Creative Commons License

- Bloom Reader
  - From “Add Page”, you can add a “Bloom Reader Quiz” page (one works with books published with a Bloom Enterprise subscription)
  - You can add bookshelves and sub-bookshelves (requires Bloom Enterprise subscription)

## 4.0

- Publish Tab
  - Publish Book to **Bloom Reader** Android app, which can get from the Play store or another user who has it installed.
  - **PDFs are now automatically compressed**, so they are often a small fraction of their previous size.
  - When you save a PDF, you can now choose CMYK coloring to satisfy some print shops.
- Collection Tab
  - When creating a new collection, Bloom now chooses the *primary* country of the language as a default.
  - When choosing a language, Bloom no longer displays "alternative names\*" of languages, as some may be offensive.
  - Added a custom Front/Back matter choice for SIL PNG
  - Added a custom branding pack choice for ToMasewalTlahtol of Mexico.
- Edit Tab
  - You can now add moveable text blocks on top of images. Use this for comic books or kids' books that fill the page with an image and then put text on top of it. This feature is still pretty rough, so **we've left it rather hidden**. Right-click on an image to add a moveable and resizable text block.
  - We've added a new zoom control in the upper left. We've removed CTRL-Mouse wheel zooming (sorry) because it appears that some people were doing it accidentally and then getting very confused.
  - Bloom now shows page numbers on the page, in the Edit Tab.
  - Left vs. right margins are now shown as they will on the printed book.
  - We have **reduced the time it takes to change pages**. This is still slow for large books like the picture dictionaries some folks are building.
- UI Localizations
  - Added Dari & Northern Pashto
  - Updated Spanish

- Localization (translating the Bloom user interface) has moved from something you could do inside Bloom to something you do on the web, using crowdin.com. Use [this link](#) to **sign up as a translator**. Each project must have at least one translator and one proofreader. Our policy is to require one of them to be a native speaker. Once a proofreader has “approved” a given string, it will flow into a future release of Bloom.
- OTHER
  - When Bloom is first run after your computer starts, there was a delay caused by .net. This could cause people to think Bloom wasn’t running, so they would try and run it again. Bloom will now show a simple splash screen instantly to indicate that it is coming. Currently on Windows, this feature is lost if you pin a running Bloom to the Windows taskbar. Instead, pin the icon from the desktop.
  - Changed “Vernacular” to “Local Language”
  - We removed Settings and Other Collection buttons from the Edit and Publish Tabs. They aren’t really needed there, and we think that having them only available on the Collections Tab promotes an understanding of what it is that they do.

## 3.9

- Custom Templates
  - ★ We’ve created a “Template Starter” template that lets you make a book full of template pages that you and others can reuse.
- Collection Setup
  - You can now change the UI language when Bloom runs for the first time. Previously, you couldn’t change it until you’d made your first collection.
  - Added new branding pack, ToMasewalTlahtol
- Edit Tab
  - ★ You can now enable automatic paragraph indent on styles.
  - ★ You can now control spacing between paragraphs.
  - ★ When you make books from a shellbook, Bloom now moves the original copyright and license to its own field. Thus preserved, you can now set your own copyright and license for the adaptation. Bloom does not yet verify that the new license is compatible with the original. If you add a book to a Source Collection, Bloom does *not* take this step. Bloom assumes that what you are trying to do is to edit the book you just added in some way, not really create a new derivative.
  - ★ Text Box Formatting (under “Change Layout”)
    - You can now set the vertical alignment of text boxes (top, middle, bottom)

- We have moved borders and background shading from the text styles to the Text Box Formatting
- ★ You can now copy a page from one book and paste it into another. One use for this is for making template pages out of complex pages you've already created.
- Text on cover pages (the large boxes where you can type anything) is no longer copied into derived books.
- Help
  - Added/updated some links to point to our new [community forum site](#).

## 3.8

- Windows Installation
  - Bloom now requires a newer .net, .NET 4.6.1. If your computer has received an operating system update in the past year, then you already have this.
  - We've made the Windows installer less likely to trigger over-eager anti-malware programs. If you still have problems, check out the [installation troubleshooting guide](#).
- Linux Installation
  - On Linux, you can now have alpha, beta, and release versions installed concurrently, just like on Windows.
- Settings
  - You can now set the numbering system used for page numbering to one of 25 styles.
  - We've added an "SIL International" branding option that puts that logo on the Title Page.
- Edit Tab
  - We have added A3 Landscape and A5 Landscape choices.
  - In "Change Layout", you can now set the language of the text box. This will allow people making translations and glossaries in the back of the book to create a box, for example, which only holds the national language.
  - In the "Add Page box", you can now add pages from the "Basic Book" and "Arithmetic" templates, regardless of the template your book started with. This feature will grow in subsequent releases so that it gets easier to combine pages from multiple template page collections.
  - We've added a button for superscripting selected text.
  - If you hold down 'c', © is now one of your choices (when not using a keyboard program like keyman).

- Linux users can now record Talking Books.
- Publish Tab
  - We have upgraded Bloom to a new Firefox engine which reduces memory use, particularly when making PDFs.
  - PDF files that Firefox makes for Bloom can still be huge. If this is a problem for you, please see our [guide to shrinking your pdfs](#).
  - In the Upload section, you can now see the user ID you are logged into bloomlibrary.org with.
  - Linux users can now make Epubs.
- Bloom now saves backups of the html file (the file that contains the book's layout and text). These are saved as “.bak” in the same folder. Should that file become corrupted by something like a power outage, Bloom will restore from the backup.
- Over a hundred other fixes and tiny improvements.

## 3.7

- You can now “unlock” a shell book that you are translating, so that you can do things like:
  - add pages
  - delete pages
  - edit fields that are normally locked during translation

To unlock the book, go into the toolbox (which lives to the right of the page in the Edit Tab). Click on the icon of gear, and tick the checkbox there. The book will remain unlocked only during the current editing session; the next time you come back to this book, it will be locked again.

- New or improved interfaces for Arabic, Bengali, Chinese, French, Hausa, Kiswahili, Indonesia, Nepali, and Russian.
- A new “Branding” collection setting allows organizations to specify logos, copyright, and license.
- The Copyright & License box now allows you to select the “Intergovernmental” version of the Creative Commons License.
- Leveled Readers now display the average sentence length, and you can set a maximum average sentence length for the book.

- When you drag the splitters to resize elements on the page, Bloom now shows a percentage indicator. You can use this number to set splitters to the same value on different pages, so that elements line up when they are on facing pages in the printed book.
- If you don't have Keyman or the like running, then when you hold down a key, Bloom shows the "Special Characters" panel which show variants of the key you pressed. Normally, you use your mouse to aim at the one you want. However some laptops are now disabling the touchpad when a key is down. So with we now display little shortcut characters next to each choice. Pressing the indicated key selects the choice.
- When the page was zoomed in an using a smaller screen, the Special Characters panel was sometimes off-screen. Now it's always visible.
- When you do Help:Report a Problem, Bloom now has a better approach to sending us the problem book, so that you can send us larger books than before.
- Previously, some text-heavy parts of the interface (like the descriptions of various Reader templates and how to use them) could not be translated into a different language. Now they can.
- A new "Super Paper Saver" Front/Back Matter pack puts the title page on the inside of the front cover, and the credits on the inside of the back cover.
- If no topic is set, the language name on the front cover is now centered.
- Wall Calendar now comes out right when made into a booklet, even when the selected Front Matter has an odd number of pages.
- Formatting changes are now saved, even if you delete the page before Bloom has a chance to save it.
- Languages that use a non-standard way of marking sentences (e.g. Thai uses a space) can now define that in the Leveled Reader settings.
- Over 170 fixes and small improvements.

## 3.6

- This version focuses on what we are calling "the toolbox": a panel on the right side that you can open to do specialized tasks like working on decodable and leveled readers or recording audio for "talking books".

- You can now hide or show the toolbox
- “Talking Book” recording is now controlled from a panel in the toolbox
- When setting up a new collection, Bloom now allows you to change the font.
- When setting up a collection, Bloom now always allows you to set the name of the project.
- “Add Page” button is now brighter and easier to discover.
- You can now “Undo” when in “Change Layout” mode.
- In the Format box, you can now type in any arbitrary font size. Previously, you were limited to choosing from the offered set of sizes. Note: you must press Enter after typing in size you want.
- Administrators of computer labs can now install Bloom for all users of the machine. From a command prompt running as administrator, run the installer with the “-allUsers” flag. “-silent” is also supported. This will put Bloom in the Program Files(x86) directory. Bloom will not attempt to update itself, nor will users be able to cause an update to happen.
- Many other fixes & tiny improvements.

## 3.5

- You can now copy and cut images
- You can now hover over an image to get its dimensions, dots-per-inch, and color depth
- Bloom uses less memory when you have very large image files
- Better image memory handling
- Book folders no longer accumulate files for images that you aren’t using anymore
- Can now delete source books downloaded from BloomLibrary.org
- Faster bloomlibrary.org downloads
- New Arithmetic Template
- Better error report when the operating system blocks Bloom from touching a file due to weird file permissions
- New experimental EPUB option in Publish Tab (Enable from Settings:Advanced)
- New experimental Talking Book recording/publishing. Enable from Settings:Advanced. To start, right-click in text and choose “Record Audio”.
- Fixed Art Of Reading forgetting what language you want to search with.
- Fixed problem where black and white (1 bit) images were converted to 32 bit
- Fixed problem with publishing from a network drive
- Fixed problem where blank lines would disappear

- Several other small fixes

## 3.4

- If after creating a page you decide that you want a different layout than the one you originally chose, you can now select “Choose Different Layout” and select a different one.
- If you have the latest [Art Of Reading](#) installed (version 3.1), then you can now search for pictures in one of: Arabic, Chinese, Bengali, English, French, Hindi, Indonesian, Portuguese, Spanish, Swahili, and Thai.
- Bloom now supports Letter, HalfLetter, and QuarterLetter (North American) paper sizes.
- Fixed Problem where blank lines were removed.
- Dozens of Fixes.

## 3.3

- All basic pages are now “customizable”. That means you can change the relative size of elements on the page, for example making the picture bigger and the text area smaller. You can also click the “Change Layout” button to add new elements to the page.
- When you select some text, Bloom now shows a small popup with buttons for bold, underline, and italic.
- Previously, Bloom used screen space to show a list of available pages you could add. Now, we’ve freed up that precious space and instead there is an “Add Page” button you click to see a list of pages you can add.
- The toolbar now rearranges itself as needed so that everything is available on very small screens (netbooks).
- Books now default license to CC-BY (requested by All Children Reading).
- Books made from Leveled Reader template delivered via Leveled Reader Bloom Pack now have all the formatting locked down, preventing writers from altering the font, size, or spacing of the text (requested by All Children Reading).

## 3.2

- Support new Decodable Readers workflow. Instead of defining a set of letters plus sight words for each Decodable Stage, Bloom now allows you to specify one or more

text files of “Allowed Words”.

- These must be simple, unicode text files. Other formats are not supported: Word, LibreOffice, Excel, etc.
  - We have found that 1000 words works fine even on an old slow laptop. If you have much larger lists and a slow computer, there may be some lag while editing. Please let us know if this is a problem for anyone.
  - Complex characters in unicode can be coded in more than one way. At this point, if the word list has a word code in one way, and the text in the book was entered a different way, Bloom will not recognize the word. Please let us know if this is a problem for anyone.
- Bloom’s Edit tab now always returns you the last page you were viewing in a book. This was a [UserVoice Request](#)
  - “Source text bubbles” in shell books have received a much needed makeover, including real tabs in a drop-down list of languages for books that have many source languages.
  - In the set up dialog for Decodable Stages, Bloom now outlines letters from previous stages in orange. Previously, they were only bold and some users didn’t notice them.
  - In the Collections tab, the selected book now displays a little triangle. Clicking on that shows a menu of things you can do with the book. More advanced items are still only available by right-clicking on the book.
  - That Book menu now offers a “Copy Book” command.
  - Both “Factory” and “Traditional” Front Matter packs now set the first content page to “1”

## 3.1

Version 3.1 was a disciplined sustained & effort to improve hundreds of “little things” that could confuse or block people in certain situations from getting books created, translated, or printed. It also represents the first version where the Linux (Trusty and Precise) version is very close to parity with the Windows version.

## Important Notices

### Andika Replaced By “Andika New Basic”

- Many Bloom collections use SIL’s free “Andika” literacy font as their default typeface. When you create a PDF using Andika, styles such as bold, italic etc. are lost. This will

happen with any font that doesn't include a real bold/italic/etc face. This problem is outside of our control at this time (we've reported it to Mozilla). Happily, SIL has released a subset of Andika named [Andika New Basic](#). Bloom now installs this font for you and uses it by default. If your language is not fully supported by Andika New Basic, please choose another font, ideally one which includes built-in bold and italic. You can test your font by using CTRL+B to make some text bold, then going to publish and looking to see if bold makes it through to the PDF.

- Note, Bloom will automatically change the default font from Andika to Andika New Basic, if you have Andika set. It will only do this once, so if you choose to change it back to Andika, it won't keep changing it. Note also that Bloom will not attempt to change any custom styles you may have created. If you need bold/italics to show up in a custom style, you'll have to change away from Andika by hand.

## Keyman 9

- If you enable Keyman 9 while on a page, you'll need to switch to another page and back before you can type.

## Printing Quality

- To get good printing reliability on Windows, install the [Free Adobe Reader](#) software. On Linux, we are switching to the system's default way of printing PDFs (which is normally GhostScript). On Windows, having Adobe Reader installed will also take care of some problems with showing images in preview of the PDF.

## The end of the line for Windows XP

- Starting with Bloom 3.1, Bloom will no longer run on Windows XP. Sorry! As Microsoft has retired support for XP, it has become difficult for us to be limited to program bits that work on XP. But Bloom 3.0 will continue to be available and works just fine. We don't expect there to be any problems with someone using Bloom 3.0 on XP using books created by other people using Bloom 3.1.

## 3.1 Beta 3

- Running the installer again does an uninstall/reinstall
- Added privacy notice to "Report A Problem" dialog
- Allow user to control which languages are advertised on bloomlibrary.org, when uploading

- Show source language names even if they aren't part of the collection
- Fixed incorrect margins in PDFs
- Andika New Basics now part of Linux package
- 61 other minor fixes/improvements

## **3.1 Beta 2**

- Improved feedback during application updating
- Various memory-use improvements (more to come)
- Fix overlapping text bubbles
- Fix page numbering
- 52 other minor fixes/improvements
- New faster installer with automatic incremental upgrades. This will be getting some more attention for the next beta, including a re-install capability.
- Page thumbnails now show an “attention” icon if some text on the page overflows its box

## **3.1 Beta 1**

- Includes the new “Andika New Basic” font, which includes real bold and italic faces. PDFs made with this show bold and italic, where PDFs created with “Andika” do not.
- CTRL+Click does a paste, and the pasted material is cleaned up, removing the extraneous line breaks that you get when copying out of a PDF.
- Window remembers un-maximized size and placement
- New Indonesian localization
- Updated Arabic, French, & Spanish localizations
- Added description texts to Leveled and Decodable Reader templates
- Added links to training videos in the Help menu
- Book name now shown in the title bar
- Higher quality creative commons logos
- Warns if your collection is in Dropbox
- Pasted images are now named “image1”,2,3, etc.
- Improved support for Paragraph-oriented fields (indentation, numbers, prefixes) in hand-made templates.
- Support for text wrapping around images and captions in hand-made templates.

- When pasting large color images from Libre Office, automatically switch to jpeg if that will keep the file size small
- Hover over an image to see its file name, size, and dimensions
- We've reinstated integrations with the [Free Adobe Reader](#) after the open source alternative we used in 3.0 proved unreliable. It is still available as a fall-back in situations where Adobe Reader is unavailable. On Linux, we are switching to the system's default way of printing (which is normally GhostScript).
- In a field with the “RequireParagraphs” flag, pressing tab inserts an emspace instead of moving to the next tab.

## Bloom 3.0 is the last version for Windows XP

- Starting with Bloom 3.1, Bloom will require Windows Vista, 7, 8, 10, etc.

## Fixes

- Can now type with KeyMan 9 if (and only if) it was turned on before displaying the current page. In a future release we'll remove that requirement.
- Fixed Booklet production of A6 Books
- Make Format dialog more localizable
- Fixed problem when deleting a box in a custom page.
- Fixed Image License changes made directly in Bloom are lost
- Fixed Text size is different on title page: “Language” is smaller than “Topic”
- Fixed Vertical Scroll Bars showing prematurely on small boxes in custom page
- Fixed insufficient space for French labels on thumbnails
- Fixed Font size of “second language” Book Title is lost after re-opening
- Many fixes related to book topic and different languages
- Overflow detector misfires on right to left text.
- Reinstated Chinese UI translation.
- Bloom no longer saves metadata you enter back to the original image. Too dangerous.
- Can choose TIFF images again.
- Bolding or underlined parts of words would introduce unwanted spaces.
- Stopped “Source Bubbles” from overlapping with other stuff by saying that unless the field takes up the full width of the page, only show the bubble when the cursor is in the field.
- Fixed problem with changing the collection name.

- Pasted images are now named “image 1”, “image 2”, etc., instead of having random names.
- Vaccinations book had lost its Creative Commons license image.
- Fixed problem with saving meta data into certain jpeg images.
- Decodable Reader If you change the letters of a stage then close the dialog by clicking “OK”, the toolbox tool doesn’t update to show the new letters
- Decodable Reader If a letter is in a letter combination in current the stage, DR should not automatically allow its constituent letters
- Bloom’s feature of making white transparent makes pdfs look awful in some previewers.
- Calendar Title Page font-changing widget in “Funding” box is non-functional
- Fixed bold items not using the same font as its surroundings when styles are customized.
- [Linux] Right-click on Main Tabs & other Menu Bar Selections causes focus shift
- [Linux] Edit page (sometimes) needs multiple refreshes
- [Linux] “Report A Problem” can’t report directly, has to go through email.
- [Linux] Art Of Reading instructions truncated
- [Linux] Problem typing in Art Of Reading search box
- [Linux] Some interfaces languages are listed multiple times.
- [Linux] Double clicking on a BloomPack didn’t run Bloom

## **3.0.106 Version Stable Release**

- Fix problem with downloading Kande’s story
- Allow letters and sight words in Decodable Reader tool to be entered separated by commas
- For tall scripts like Devanagari, automatically increase the minimum height of fields to the line height

## **3.0.103 Version Stable Release**

- Added links to training videos in the Help Menu.

## **3.0.102 Version Stable Release**

- Update French and Spanish User Interface localizations.

- Add explanatory texts to decodable and leveled reader templates.
- Fixed an error in the “Key Concepts” document.
- Decodable reader will now complain about words with letter combinations.(like “ch”) if they are defined but haven’t been taught at the current level, but only the constituents (like “c” and “h”) have.
- Fix display of a page number count in leveled reader tool.

## **3.0.101 Version Stable Release**

- Adds Thai User Interface localization
- Adds Lao User Interface localization
- Fixed rare error when a page is being saved

## **3.0.100 Version Stable Release**

### **3.0.97 Beta**

- Update French UI Translation (thanks David Rowe)
- When importing, Bloom no longer
  - makes images transparent when importing.
  - compresses images transparent when importing.
  - saves copyright/license back to the original files
- Fix crash after closing settings dialog when no book is selected
- Fix insertion of unwanted space before bolded, underlined, and italicized portions of words
- Fix creative commons license on Vaccinations sample shell

### **Fixes**

- Spaces are no longer inserted between bold or underlined parts of a word and the normal parts
- Fixed a problem that prevent renaming a collection
- Fixed Vaccination shell Creative Commons logo

## **3.0.93 BETA**

## A couple known problems

- If upgrading from Bloom 2, the Windows installer loses one of Bloom's files. It will now notify you that this happened and ask you do reinstall and choose "repair".
- We discovered that books with very large illustrations (e.g. 5 mb color files) are breaking the PDF'ing system. Bloom now detects this and gives you pointers on how to work around the problem, until Bloom itself can do so, in the future.

## Fixes

- Fixed text in calendar day boxes
- Calendar grid lines are now uniformly thin
- Fixed a occasional crash when switching to a different user-interface language
- Tweak xmatter stuff to ease creating custom xmatter from installer

## 3.0.88 BETA

- Users upgrading from Bloom 2 may need to uninstall first, or run the Bloom 3 installer twice. A message with instructions now appears if this is necessary.
- [UserVoice Suggestion] Introduction of A6 Portrait option. **Feedback appreciated**

## Front/Back Matter

### Cover Page

- Fields on the Cover can now grow to fit however many lines you need, because...
- The image on the Cover page will now automatically shrink so that whatever text you need can fit
- Front cover & title page can now show title in all 3 languages

### Title Page

- [UserVoice Suggestion] Title page's funding box can now grow, to use for a cheap Table Of Contents if Needed

### Credits Page

- The Credits page now has more room for acknowledgments

- When selecting a Front/Back Matter pack in the Settings dialog, you can now read a short description of each one
- When you select a different Front/Back Matter pack, existing books will automatically use it if appropriate

## Other Front/Back Matter

- Trial of a Front/Back Matter pack for SIL Cameroon, which is like “Traditional” but includes the ISO 639 code of the language
- Big Books now use the same Front/Back Matter pack as the rest of the collection. You can now delete the “instructions for teachers” page if you don’t want it

## Other

- Big Books now include the “Custom” page template
- Removed the “A5 Portrait Bottom Align” option
- New shortcut keys (In the future we expect to introduce UI buttons for these things, but we are delayed because we need to do it without making the UI more complex):
  - CTRL+R: right-align
  - CTRL+L: left-align
  - CTRL+SHIFT+E: center text
  - ALT+CTRL+0: Normal
  - ALT+CTRL+1: Heading 1
  - ALT+CTRL+2: Heading 2

## Fixes

- Bloom will now be patient if Dropbox is temporarily locking the languagedisplay.css file
- Title page now updates immediately if you change country/province in Settings Dialog
- Format dialog tooltips no longer make Source Bubbles disappear
- Improved error messages when an html file can’t be opened
- Thai script is now larger in shell book source bubbles

## Linux Fixes

- Can now open book downloaded from Bloom Library
- Fonts are now listed in alphabetical order

- Crash due to deleted temporary html file has been fixed.
- We are working on a problem typing in the “Report Problem” dialog box.

## 3.0.80 BETA

- Fix: “Open in Firefox” should now work even if you have spaces in the path
- Fix: BigBook National Language title was missing a parenthesis
- Fix: Was hard to insert an uppercase character using the long-press special character feature
- Fix: “Update Book” messed up custom pages
- Several Linux-only fixes

## 3.0.74 BETA

- A new Front/Backmatter option is available, named “Traditional”. This puts the credits page on the back of the title page, rather than the inside of the front cover. This is good in cases where you pay by the page imprint, rather than by pieces of paper. You can select it from Settings:Book Making:Front/Back Matter Pack. ~~Once you have chosen this, you won't see it on any existing books until you do these steps: In the Collection Tab, click on the little triangle, then select “Advanced: Do Updates of All Books”.~~

## 3.0.72 BETA

- More French coverage of UI
- Better captioning of books with long names
- Calendar now has smaller margins, more room for text in day boxes
- Restored vertical centering in “just text” page

## Known Issues

- Fonts with modifiers like “Arial Narrow” cannot be shown. This appears to be a bug in Firefox (which is at the heart of Bloom). So for now we don’t offer these fonts in the font-picking menu.

## 3.0.70 BETA

## New

- More Right To Left support. If the Vernacular language is right-to-left, PDF Booklets will be ordered so that pages are ordered back-to-front (see Settings:Book Making).
- New right-click menu on pages for removing and duplicating.
- Language picker: when picking a language and there are more than 2 countries, now says, .e.g. “4 countries”.
- Language picker: when picking a language, you can now have major spelling differences and it will still find the language.

## Fixes

- Fixed “sticky” scrollbar on page template list and Art Of Reading gallery.
- Fixed problems with opening books over a network (needs user testing in various environments, though).
- Fixed problems with the front-cover language.
- Fixed problem with booklet pdfs.
- Fixed problem with downloading and then using book templates that are a collection of re-usable pages, e.g. Gleny’s Water’s Primer Template
- Book colors will now always stay the same (until we add the option of selecting the color you want).
- Many other small fixes

## Known Issues

- The gear-shaped button that brings up the Format box has positioning problems; we’re working on a solution.

## 3.0.69 BETA (Windows Only)

- The Help menu now has has a “Report Problem” command.
- Now installs the newly updated Andika version 5.
- Fixed problem with “Booklet Insides” publishing option.
- Fixed several issues in the Format dialog.
- Modifier keys no longer trigger the Special Characters popup.
- Several other minor fixes.

## **3.0.66 BETA (Windows Only)**

### **Flexible Layouts and Styling**

- Use the new “Custom” page template to make your own unique page layouts.
- Use “Duplicate” button to reuse your custom page within a book.
- You can now set a default font family for each of the languages in a book.
- You can now apply styles name (like Word / LibreOffice) to text boxes keep things consistent throughout the book
- You can now set the font family, size, line spacing, word spacing, justification, border, and background of each text box, along with all other boxes with the same “style”. Just click on the little “gear” icon in the lower left of a text box.

### **Improved PDF Making**

- Bloom now uses the same rendering engine for both editing and pdf-making, eliminating WYSIWYG glitches of previous versions.
- New PDF engine renders fonts better.
- Languages requiring Graphite Complex-non-roman script rendering are now supported.
- Adobe Acrobat no longer needed to view PDFs in the Publish tab

### **Other**

- Holding down a key now shows a “Special Characters Panel” that lets you select from similar characters. Use your mouse, mouse wheel, or arrow keys to select the character you want (see screenshot below).
- You can now right click on a book and export its contents to Word or Libre Office (most formatting will be lost).
- Bloom’s interface has new translations, in Arabic, Chinese, Tamil (India), Hindi (India), Telugu (India), and Kinyarwanda (Rwanda). French and Spanish translations have been updated.
- Andika Font is now installed along with Bloom

### **###Experimental Features in this release**

- Decodable Reader Tool helps you develop a series of books that introduce a few letters at a time. *Reads a folder for texts you have placed there, and suggests words to the writer that are “decodable” at each stage.* Words that are not appropriate for

the current stage are highlighted. You can export a file detailing each decodable stage: letters, sight words, and available words to use. Thanks to Norbert Rennert for sharing code from his Symphony engine.

- See “Help: Building/User Reader Templates” for more information.
- Leveled Reader Tool helps you develop books for readers at various levels of ability by setting limits on the number of words per sentence, page, and book.
  - See “Help: Building/User Reader Templates” for more information.
- New “Custom” page that lets you divide up the page into text and picture portions. You can then just use the page, or treat it like a template for other pages in the book.
- Holding down a key now shows a “Special Characters Panel” that lets you select from similar characters.
- Languages can be marked as Right-To-Left. However, changing the page order is still up to you, using a PDF editor like Adobe Acrobat (or maybe use the RTL option in PdfDroplet)?
- Initial Linux Version (Precise and Trusty).

## Known Bugs & Limitations

- “A5Portrait Bottom Align” does not layout correctly in bilingual or trilingual mode [BL-46].
- Page Template names are always shown in English.
- Books with Graphite complex-non-roman scripts cannot be printed directly from Bloom yet. Instead, open the PDF in Adobe Reader and print from there.
- Sample texts for use with the decodable reader must be saved as unicode text files.

## 2.0 RELEASE October 2014

### 2.0.1038 BETA 23 July 2014

A4Landscape with “Picture on top” now gives 70% of the page to the picture, was previously 45%.

### 2.0.1038 BETA 6 June 2014

Added ability to have

edit boxes, rather than FF's

default, so you can do styling like paragraph indents. Needed for SIL-LEAD SHRP project.

## **2.0 1022 BETA 13 May 2014**

Templates can now have a markdown “readme” for telling people about the template. Select the Big Book or Wall Calendar templates to see how these are displayed.

## **2.0.1021 BETA 9 May 2014**

Can now publish books to books.bloomlibrary.org Can now get books at books.bloomlibrary.org and they will open in Bloom New Big Book template & Front matter Basic Book now auto-enlarges fonts if you make it A4Landscape (for making a5 books into Big Books)

## **1.1.574 18 Feb 2014**

New experimental keyboard shortcuts: Bold=Ctrl+b, Underline=Ctrl+u, Italics=Ctrl+i, F6=Superscript, Ctrl+space=clear any of those. F7=Heading1, F8=Heading2. Pasting text with

# Team Collections- Introduction

A **Bloom Team Collection** is a normal Bloom Collection that is shared among team members through the synchronized cloud storage service [Dropbox](#) or a local area network. By synchronizing files across computers, each person who works on a book has the latest version available. **We recommend this system for any project where more than one person touches a book before it is published, and where everyone has adequate internet access.**

## System requirements for using a Team Collection

- A Bloom Enterprise subscription, **OR** you can affirm that your project is fully funded by a local community
- Bloom 5.1 or greater. (It is recommended, but not required, that all the team members use the same version of Bloom.)

### CAUTION

Each team member must register his or her copy of Bloom with a unique email address.

- A [Dropbox](#) account. The [free version of Dropbox](#), which provides 2GB of storage space, should be sufficient for 100-1000 typical Bloom books.

### NOTE

These instructions focus on using Dropbox to synchronize Team Collection files. If you want to use a local network share instead of Dropbox, contact the Bloom team at [experimental@bloomlibrary.org](mailto:experimental@bloomlibrary.org).

## How Team Collections work

A Bloom Team Collection has two parts. The first part is a normal Bloom collection of working files. This is a folder that contains one or more Bloom books, each in its own folder, as well as special files used by Bloom.

The second part is a special **shadow collection folder**, which is created for the Team Collection by Bloom. Bloom synchronizes the shadow collection and the working files. The

shadow collection is also synchronized between your computer and the Dropbox cloud storage service, which synchronizes it to other team members' computers.

**(i) NOTE**

A **shadow collection folder** (sometimes called a “shadow collection” or “shadow folder”) is a special folder that contains compressed copies of all the Team Collection files. The shadow collection folder is stored in a cloud-synchronized local directory on your computer.

For example, let's say Awa has a collection of books on her computer (Figure 1):

Awa's collection is a Team Collection, so Bloom creates a shadow collection folder on her computer from her working files. The shadow collection is also synchronized to the Dropbox file-sharing service (Figure 2).

Awa shares the shadow collection folder with her teammate Barkari using Dropbox. Now Awa and Barkari both have a shadow collection folder on their computers (Figure 3).

When Barkari launches a special file in the shadow collection folder, Bloom copies the Team Collection files from the shadow collection on his computer, to create a working collection. Now Barkari can edit books in the collection, too.

Whenever Awa or Barkari change something in the working collection on their computers, Bloom copies the changes into the shadow collection, and Dropbox copies the changes to the other one's computer. In this way, they can both work on the collection, even though they are using different computers.

## Checking books in and out

In a Team Collection, each book has a **status**. There are three possibilities for a book:

- **Available for editing**

- **Checked out by you**

- **Checked out by someone else**

Only the person who has a book checked out can make changes to it. Whenever one user checks out a book for editing, Bloom uses Dropbox to notify the other team members that the book is checked out. After the user checks the book back in, Bloom notifies the other team members that the book is available for editing again.

This checkout system ensures that team members do not develop multiple conflicting versions of a book that must be painfully reconciled later.

## **What if I don't have Internet access all the time?**

You do not need continuous internet access to use Bloom team collections. You only need to be connected to the internet when you check books in and out. Your internet service does have to be sufficiently fast and reliable to transfer books to and from Dropbox.

## **Why Dropbox?**

Team Collections works with Dropbox because we have found that it works more reliably and efficiently for this purpose than other commercial filesharing services do. In particular, Dropbox lets other team collection users know when a teammate has updated a book more reliably than Google Drive does. Even more important, when you change part of a book, Dropbox transmits only the parts of the book that have changed rather than the entire book. This is helpful in places with less than super-fast internet.

## **For more information**

- [Getting started with Team Collections](#)
- [Working with Team Collections](#)
- [Team Collections FAQs](#)
- [Team Collections: When things don't go according to plan](#)
- [Team Collections: Advanced Topics](#)

# Getting Started with Team Collections

To create a Team Collection, you start with an existing Bloom collection and convert it into a Team Collection. In this guide, we will walk through the process of converting an existing collection into a Team Collection.

The basic steps are:

1. [The team designates a Team Collection Administrator](#)
2. [The Administrator converts a Collection into a Team Collection](#)
3. [The Administrator shares the Team Collection with the other team members](#)
4. [Other team members join the Team Collection](#)

Let's look at each step in turn.

## Before you begin

Before you begin, make sure:

- The latest version of Bloom is installed on your computer, **and** you have registered it with a distinct email address.
- You have a Bloom Collection that you want to convert to be a Team Collection.
- You have a Dropbox account.
- The Dropbox app is installed on your computer. If the Dropbox app is not installed on your computer, see [Setting Up Dropbox on Your Computer](#).

### NOTE

Dropbox is free for most users, so you may want each team member to have his or her own Dropbox account. If this is a problem (for instance, if you have a limited number of high-capacity Dropbox accounts available), it is possible for all your team members to use the same Dropbox account.

## Step 1: The team designates a Team Collection Administrator

Your team must decide who will be the Team Collection's *Administrator*. The Administrator is the one who will convert the collection into a Team Collection and share it with the other team members.

 **NOTE**

In addition to setting up the Team Collection and sharing it with the other team members, the Team Collection Administrator has sole control of all Team Collection settings, including the default font, Bloom Enterprise subscription code, and "xmatter" (front and back matter) book settings. The Administrator also has control over any Leveled Reader and Decodable Reader settings.

## **Step 2: The Administrator converts the Collection into a Team Collection**

The next step for our Administrator is to convert the "regular" Collection into a Team Collection. The collection can be an existing one with books already in it, or it can be a newly created, empty collection.

 **NOTE**

If your team has multiple copies of the exact same book or even multiple copies of several books, the team should carefully determine which book is the most up-to-date version of each title. The team should gather those books together and pass the "master copy" to the team administrator who will place these books in their Bloom collection.

Once you have the base collection prepared, there are four steps to the process:

1. [Open the Collection Settings in Bloom](#)
2. [Enable Bloom Enterprise features](#)
3. [Enable Team Collections](#)
4. [Create the Team Collection](#)

Let's look at each step in detail.

### **2.1 Open the Collection Settings in Bloom**

Open the Collection in Bloom, and click on **Settings** in the "Collections" toolbar (make sure you are in the "Collections" mode, not "Edit" or "Publish").

## 2.2 Enable Bloom Enterprise features

Team Collections is a Bloom Enterprise feature. Navigate to the **Bloom Enterprise** tab of the Collection Settings.

Click the **Enterprise Subscription** radio button and enter your Bloom Enterprise subscription code ①.

**① NOTE**

If your project is funded entirely by a local community, you can enable Bloom Enterprise features by clicking "Funded by the local community only" ②.

**Restart** Bloom ③.

## 2.3 Enable Team Collections

Team Collections is an experimental feature that must be enabled. After Bloom restarts, return to the Collection Settings and navigate to the **Advanced Program Settings**.

Tick the **Team Collections** box ④.

**Restart** Bloom ⑤.

## 2.4 Create the Team Collection

After Bloom restarts, return to the Collection Settings. This time, you will see a new tab for **Team Collections**. When you activate it, you will see a warning message:

⚠ This is an **experimental** feature. Please contact us at [experimental@bloomlibrary.org](mailto:experimental@bloomlibrary.org) so that we can talk over your needs and make sure that this feature is ready for you.

Click the **CREATE A TEAM COLLECTION** button ⑥.

Now Bloom will present another dialog box titled “Create a Team Collection”, with two sections.

The first section lets you choose a location for the team collection’s “shadow folder”. You can accept the default location suggested by Bloom, or you can click **CHOOSE FOLDER**  and navigate to another location within your synchronized Dropbox folder.

 **NOTE**

The **shadow collection folder** is a special folder of compressed files stored in Dropbox, which Bloom uses to synchronize files between team members’ computers. See [How Team Collections work](#) for more details.

 **CAUTION**

Make sure that the folder you choose as your shadow folder (the “LAN or Dropbox Folder”) is NOT one of the following:

- a folder that is already a shadow folder (i.e., DON'T choose a folder that contains a `.JoinBloomTC` file)
- a Bloom collection working folder working collection (i.e., DON'T choose a folder that contains a `.bloomCollection` file)
- a folder that already contains a folder with the same name as the shadow folder you are trying to create

Next, take a moment to read and make sure you understand the three items in the second section ❸. Then, tick the three boxes showing you have read and understood these notices.

If you are satisfied that everything is correct, click **CREATE & RESTART ❹**.

Bloom will create a special “shadow folder” in your shared Dropbox folder and begin to add the books in your Collection to it. Be aware that if your collection of books is very large, this may take some time.

After Bloom has finished creating the cloud collection folder, Bloom will restart. Now you should see the Team Collection notice in the tab bar:

### **3. The Administrator shares the Team Collection with the other team members**

For others to collaborate on your Team Collection, you need to share your Team Collection folders with them. You do this by sharing with them the synchronized folder that contains your cloud collection folder. Assuming you are using Dropbox on Windows, you can do this by right-clicking the team collection shadow folder *in Windows File Explorer* (10a) and then clicking **Share....** (10b).

### NOTE

The shadow collection folder contains a special file called `Join This Team Collection.JoinBloomTC`. (This file might appear as simply `Join This Team Collection`, if you have Windows File Explorer set to hide filename extensions.) The Administrator can rename this file (for instance, to translate it into another language), but the file **must** retain the `.JoinBloomTC` filename extension.

### NOTE

If you are using Windows 11, you will probably need to choose **Show more options** (10b) from the right-click context menu, then choose **Share...** (10c) from the larger menu.

Enter the email address of each person you want to invite. Make sure the recipient will have **editing** privileges for the folder. (This is the default setting.) You can also type an introductory message (11). Then Click **Share** (12). Each team member will receive an email notification from the Administrator about the shared folder. (If the recipient has the Dropbox app installed on their computer, there will also be a pop-up message.)

## 4. Other team members join the Team Collection

To join a Team Collection, other team members do the following:

1. Make sure that Bloom is registered.

 **NOTE**

If the user's Bloom installation is not registered, he or she can register it by clicking the **Registration...** line under the Bloom Help menu (marked with a **(?)**)

icon).

1. Add the shadow collection to his or her Dropbox by clicking **Add** in response to the Administrator's invitation.
2. Locate the shadow collection folder in the Windows File Explorer and open it.
3. Locate and double-click the [Join this Team Collection.JoinBloomTC](#) file **(13)**.

 **CAUTION**

It is essential to double-click [Join this Team Collection.JoinBloomTC](#) **in Windows File Explorer**, not in the Dropbox interface in a web browser.

 **NOTE**

The Administrator may have changed the name of the file, but it will still have a `.JoinBloomTC` filename extension.

Next, Bloom will present a dialogue box allowing the user to join the team collection. Click **Join (14)\*\*.\*\***

Next, Bloom will launch itself and copy the working files from the shadow directory into a new working directory.

### **NOTE**

If the user already has a collection with the same name as the Team Collection, Bloom will present a dialogue box allowing the user to *Join and Merge* the Team Collection. This action will cause this team member's private collection to be merged with the Administrator's team collection. Note that during the merge process, the Administrator's settings will overwrite the member's collection settings.

After Bloom has copied all the files into a working collection, Bloom will restart and open the new collection. All the team members should see the Team Collection badge in the toolbar.

## **What next?**

Working with a Team Collection is like working with a regular Bloom Collection, but you need to check books out in order to edit them. When you're finished making edits, check them in again so that your teammates can work on them. For more details, see [Working with Team Collections](#).

# Working with Team Collections

## Checking In & Checking Out Books

When you open a Team Collection, the first thing you will notice is a “Team Collection” badge in the toolbar. You will probably also see colored circles on some of the book thumbnail images. These circles indicate which books are checked out for editing by members of your team.

When you click on a book thumbnail, Bloom will display who has the book checked out. Books that are checked out to other team members are not available for editing. (Notice that the “Edit” tab is gray, meaning that you cannot click on it to edit the book.)

In the example below, team member Awa Issa sees that the book “ **JWÍ**” is **available for editing** and wishes to edit that book. She clicks the thumbnail image **(1)**, and then clicks **CHECK OUT BOOK (2)**.

The book’s status immediately changes to **This book is checked out to you**, and Awa is now permitted to edit. Awa can click the **Edit** tab **(3)** or the **EDIT THIS BOOK (4)** button to begin editing the book.

While Awa has this book checked out, other team members will see in the book's status panel that Awa has the book checked out. Awa's teammates cannot edit the book until after Awa has checked it back in.

When Awa is finished editing the book, she can check it back in. First, she types a brief note about the changes she made, to let her team members know what she has done **(5)**. (This step is optional.) Then she clicks the **CHECK IN BOOK** button **(6)**.

The book is now available to the other team members to make further edits.

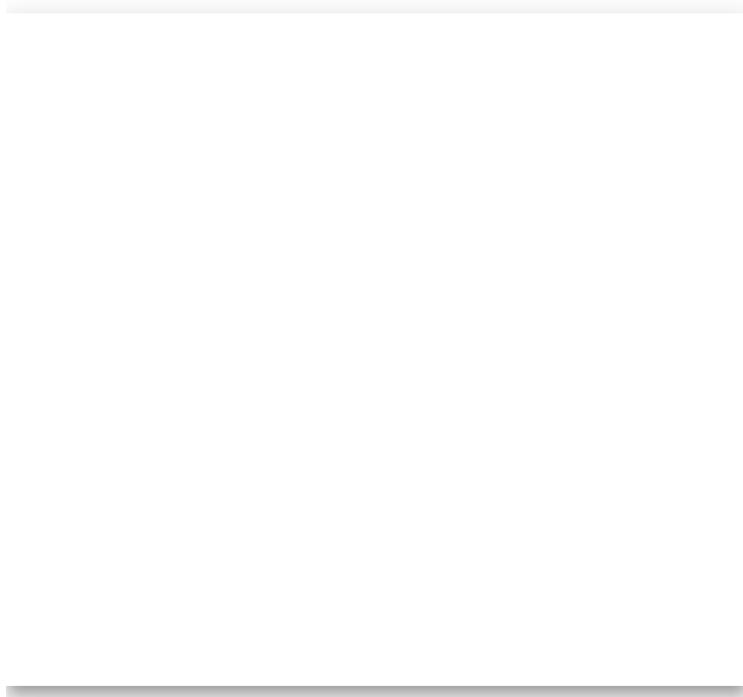
#### CAUTION

**Slow internet connections can cause status update delays** The status panel of a book may take some time to update over slow internet connections. When this happens, it is possible that two people may start to edit the same book at the same time. This will cause an editing conflict. If an editing conflict occurs, Bloom will determine one team member to be the “winner” and will put the other team member’s edited book into a special *Lost and Found* folder. (If this happens, see [Retrieving a book from Lost and Found](#).)

If your team members do have poor internet access, you may wish to schedule the work through email or other means to lessen the potential for editing conflicts.

## Making avatars for your team

Bloom marks the thumbnails of books in a Team Collection with an initial letter of the name of the user who has a book checked out, or a small image (called an “avatar”) to represent the user:



How does Bloom know what to show? In the Bloom Registration, there is a field for name and email.

Make sure each user has a correct and unique email. From that, Bloom can generate an avatar that uses their initials. If you want to have a picture instead of just initials, you can register your email address at [gravatar.com](http://gravatar.com).

## Manually updating your team collection

If another team member checks in a book, the Team Collections badge may say **Updates Available**. To get the latest version of the collection's books right away, click on the **Updates Available** badge (7).

## Book history

Clicking on the Team Collection badge in the toolbar lets you see a history of changes.





# **Team Collections- When things don't go according to plan**

## **Check-in / Check-out problems**

**What happens if there is a delay in synchronization such that two people both have a book checked out?**

This should happen only rarely. If it does happen, Dropbox will choose one of the users as the “winner” and one as the “loser”. On the “losing” machine, Bloom will notice within a minute or so that another user is editing the same book. Bloom will send that user back to the Collection tab, and any changes made to the book on the “losing” machine will be removed. Bloom will alert the user to what happened, and why.

## **What happens if I connect to a Team Collection with multiple computers?**

You can join a Team Collection using multiple computers. To do this, use the same email address to register Bloom on each computer, and launch the [Join this Team Collection](#).joinBloomTC file on each machine. (You’ll also need to use the same email address for Dropbox on both computers.)

Be aware that you can check out a book for editing *on only a single computer at a time*. If you have a book checked out on one computer and look at the same book on a different computer, Bloom will inform you that “This book is checked out to you, but on a different computer. You cannot edit the book on this computer, until you have checked it in on [the other computer’s name].”

## **What happens if someone checks out a book but then becomes unreachable for a long time, and the team wants to edit that book?**

The Team Collection Administrator can use the “Force Unlock” command to make the book editable again.

### **⚠ CAUTION**

**“Force unlocking” a book is not the same as checking the book in!** When the administrator force-unlocks a book, any changes made by the user who originally checked the book out will not be saved to the shared team version. Instead, that

version of the book will be moved to a “Lost and Found” folder. If you want to incorporate those changes into the shared team version later, you must do so by hand.

## **What happens when the long-lost team member comes back online?**

On the long-lost team member’s computer, Bloom will notice that the shared team version no longer has a “lock file” that indicates that he or she has that book checked out for editing. It is now likely that there are diverging versions of this book. Bloom will save the force-unlocked version to a special “Lost & Found” folder in Dropbox, remove that user’s edit access, and notify him or her of what just happened.

If your long-lost teammate has been very productive and you want to use his versions of the books, you’ll need to retrieve them from the “Lost & Found” folder. It’s best to get a Bloom expert to help you do this. If you’re a confident computer user and want to do it yourself, see [Retrieving a Book from Lost & Found](#).

## **Bloom Enterprise license problems**

## **What happens if someone tries to join a Team Collection but does not have a Bloom Enterprise License?**

Enterprise Licenses are for the project, not people. So anyone joining a Team Collection is joining a collection that already has the Enterprise license set up.

## **What happens if a Bloom Enterprise License expires on a Team Collection?**

The collections will keep working, but they will become disconnected from each other. Without the Bloom Enterprise enabled, the books on the team members' computers will not synchronize with each other, nor will they have a checked-in/checked-out state.

## **What happens to a Team Collection when an expired Bloom Enterprise license is renewed?**

Each user will have to rejoin the team collection. (This allows any edits that were done while not in enterprise mode to be properly merged.)

## **Naming conflicts**

### **What happens if you join a Team Collection but you already have a local collection with that name?**

This has several answers.

Usually, the two collections are merged. Books that are unique to either collection are copied to the other. If a book is found in both places and they are not identical, the local version is moved to a special folder called “Lost & Found” and the Team Collection version is copied to the local folder.

If the local collection is found to be already connected to the Team Collection you are trying to join, Bloom will point this out in a message and open it normally. As a special case of this, if you have moved the Team Collection (for example, reorganizing your Dropbox, or switching from a LAN Team Collection to a Dropbox one), joining the collection in the new place will provide a way to reconnect them. (Otherwise, when Bloom can't find the Team Collection at the old location, it will report that it is “disconnected”.)

### **What happens if a book has been renamed before a copied collection is merged into a team collection**

Recall that if a user tries to join a Team Collection, but already has a collection with the same name as the Team Collection, Bloom will ask the user to *Join and Merge* the local collection with the Team Collection. If the user agrees, Bloom will add the books in the user's private collection to the Team Collection.

Now, suppose that Joe got a copy of Fred's collection. Fred's collection isn't a Team Collection — it's just a regular Bloom collection. Since then, Joe has renamed *Book 1* to *Joe's book*, and Fred has renamed *Book 2* to *Fred's book*. Joe then makes his collection into a Team Collection, and invites Fred to join it.

When Fred tries to join the Team Collection, Bloom will see that team collection has a book called *Joe's book*, and that *Joe's book* has the same internal ID number as *Book 1* in Fred's local collection. Moreover, Bloom will see that *Book 2* in the Team Collection has the same internal ID as *Fred's book* in Fred's collection. Bloom has no way of knowing which name is right for each book, but a decision must be made, since we don't want the resulting collection to end up with two books that have the same internal IDs.

In this situation, the Team Collection wins. Bloom will put Fred's books *Book 1* and *Fred's book* in a special Lost & Found folder, and update Fred's local collection to have the Team Collection versions of *Joe's book* and *Book 2*.

## What happens if two Team Collections have the same name?

Suppose Fred is creating books in the VMU language. He creates a Team Collection called "VMU books" and shares it with his friend Joe. Joe joins Fred's "VMU Books" team collection.

Joe's friend Sally is also creating books for the VMU language. Sally also creates a Team Collection called "VMU Books", and shares it with Joe. But when Joe tries to join Sally's collection, Bloom disables the Join button and tell Joe that he already has a collection called "VMU Books", and it is not the same collection as the one he is trying to join.

What to do:

- *If Fred, Sally, and Joe want to work together, they should decide which collection they should all use.* In this case, they agreed that Sally's collection was the best.
  - If Sally invites Fred to join her collection, he will get the same warning as Joe did, because he still has a Team Collection with the same name as Sally's Team Collection. Fred should remove his Team Collection and try again. This time Bloom will merge Fred's local collection with Sally's Team Collection. Sally's collection will

now contain all the books. Now that Fred's collection is gone, Joe can join Sally's collection.

- *If Fred and Sally do not want to work together, they should choose different names for their Team Collections so that Joe can work with them both.*

# Team Collections FAQs

## What happens if I want to edit a book but I cannot get online?

If you already have the book checked out, you can edit it. If you do not have the book already checked out, you cannot check it out or edit it.

## Does everyone on the team have to have the same version of Bloom?

No. The members of a team can use different versions of Bloom, with one limitation: if one team member adds a book that uses a new Bloom feature, other team members will not be able to edit that book until they update Bloom on their computers. (This is how Bloom works in general, not just for Team Collections.)

## What happens if I drag a Bloom Book folder into my Team Collection folder?

Bloom will notice that the book is not yet part of the Team Collection, and automatically add the book to the Team Collection as a “checked in” book.

## How can I remove a book from a Team Collection?

To remove a book from a Team Collection, do the following:

1. **In Bloom:** Check Out the book. (Remember, you need to check the book out to make changes.)

2. **In Bloom:** While the book is still checked out to you, right-click on the book's thumbnail and choose **Delete Book**.
3. **Dropbox** will ask whether you want to "Remove (book title) from your Dropbox account and all devices?" Click "Move out of Dropbox". If you do not want to see such notices in the future, you can tick the box "Don't ask me this again".
- 4.

## What happens if I rename a book in a Team Collection?

Bloom treats renaming a book in a Team Collection as a *deletion* followed by an *addition*.

Suppose you check a book out, and while you have the book checked out you change its name. Until you check the book in, the *local* book and folder will have the new name, but the corresponding file in the Team Collection's "shadow collection" will have the *old* name.

When you check the book in, Bloom will remove the book from the shadow collection, and add a new book (with the new name) to the shadow collection. The next time your teammates synchronize their team collection files, Dropbox (or your LAN) will remove the old book and add the new ones to their team collection files.

If one of your teammates checks a book out and renames it, the same thing happens: the old book is removed, and a new one is added. But this time, the change starts on *their* computer, and Dropbox (or your LAN) and Bloom propagate the change to your computer.

In the Team Collection history log, Bloom will report that the book has been renamed.

# Team Collections- Advanced Topics

## Moving a book from one collection to another

Sometimes a book needs to be moved from one collection to another. For example, suppose you have multiple Team Collections organized according to grade levels or difficulty. After reassessing a book's level of difficulty, you decide it needs to be moved to a different collection.

The procedure to do this is as follows:

1. **In Bloom:** Check Out the book. (Remember, you need to check the book out to make changes.)
2. **Using Windows File Explorer:** Copy the book's *local* folder (not the Dropbox or LAN folder), to the new collection folder.
3. **In Bloom:** *While the book is still checked out to you*, right-click on the book's thumbnail and choose **Delete Book**.

## Locking down a book to prevent further modifications

There are several ways you can “lock down” a book to prevent further modification:

- The Administrator can permanently Check Out the book.
- The Administrator can move the book out of the team collection (see [Moving a book from one collection to another](#)).
- The Administrator can “retire” the entire Team Collection (see [Retiring a Team Collection](#)).

(In a future version of Bloom, we may add the ability to “lock down” a book. )

## Retiring a Team Collection

The team collection Administrator may wish to “retire” a particular Team Collection in order to prevent accidental book modification or deletions. This might happen if a team has completed work on a book collection, or if collaboration on the book collection is no longer needed or desired.

The team collection Administrator can change the Team Collection back into a regular Bloom collection. The procedure to do this is as follows:

1. **In Bloom:** Ensure all books have been checked in.
2. Close Bloom.
3. **Using Windows File Explorer:** delete the following files from the Team Collection **local** folder:
  - lastCollectionFileSyncData.txt
  - log.txt
  - TeamCollectionLink.txt
4. **Using Dropbox:** Delete or un-share the shared **Dropbox** folder containing the Team Collection. (If you are using a LAN for file sharing, delete or un-share the shared LAN folder.)

## Changing the name of a Team Collection

When you create a Team Collection, you are warned that you will not be able to change the name of the collection later. This is not *exactly* true: it is possible to change the name, but it's painful. If you find yourself in dire circumstances and must change the Team Collection name, here is how you can do it:

1. The Team Collection Administrator "retires" the Team Collections, following the instructions in Retiring a Team Collection above. (Note that this requires that all books be checked in.)
2. The Team Collection Administrator deletes shadow folder, so that it is removed from all team members' computers. If for some reason the Administrator cannot delete the shadow collection from the team members' computers, the team members should be sure they have removed the shadow collection from their computers.
3. The Team Collection Administrator renames the retired Team Collection (which is now a "regular" Bloom collection).
4. The Team Collection Administrator follows the regular instructions to create a Team Collection from the collection (see Getting Started with Team Collections).

## Moving a Team Collection's shadow collection folder to a different location

When you create a Team Collection, you choose a Dropbox (or LAN) folder for the Team Collection's shadow collection folder. If you later decide you need to move the shadow

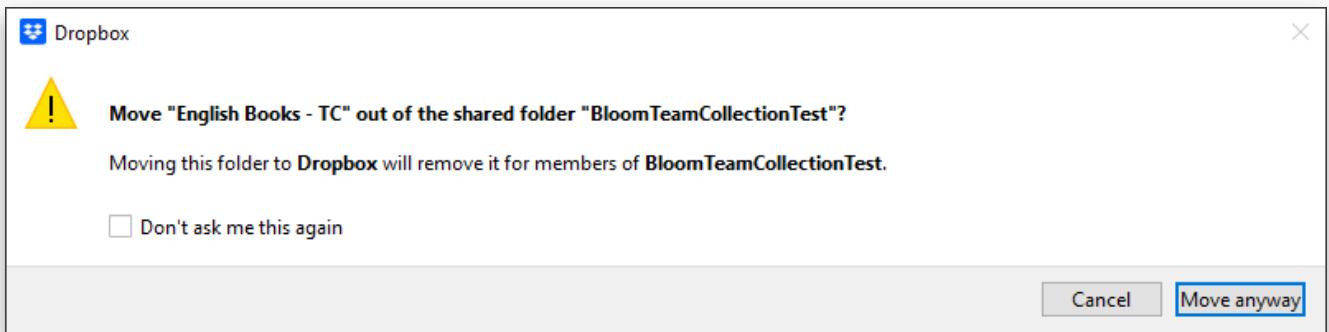
collection folder to a different location, here is how you can do it:

**1. Close Bloom.**

**2. In Windows Explorer**, navigate to the location of the shadow collection folder (in your Dropbox folder). Move the shadow collection folder to its new location.

**(i) NOTE**

You may get a notice from Dropbox warning you that moving the folder will “remove it for the members of” the folder you are moving it out of. This happens when you rely on the sharing settings of a higher-level folder to share the shadow collection folder with your teammates.



If you see this notice, click the **Move anyway** button. Then re-share the shadow collection folder (or a higher-level folder) with your teammates.

**1. In Windows Explorer**, re-join the Team Collection by double-clicking the `Join this Team Collection.JoinBloomTC`. (This will alert Bloom to the new location of the shadow collection folder.)

**2. Bloom** will start, and will show this message:

3. Click **JOIN**. Bloom should proceed to open the Team Collection.

 **NOTE**

If you try to open a Team Collection whose Dropbox folder has been moved, Bloom will show a “disconnected” state in the Team Collection status badge, and display a message which outlines the above steps.

# Retrieving a book from “Lost and Found”

There are a number of situations where conflicts arise between books on different team members’ computers and Bloom cannot decide which one it should treat as authoritative. In these cases, Bloom chooses one version as the “winner” and saves the other one in a special folder called “Lost and Found”. (The Lost and Found folder exists only in the synchronized team collection “shadow folder”, not in your working files.)

**If you want to rescue a book from the Lost and Found, it’s best to get a Bloom expert to help you.** If you are a confident computer user and want to do the job yourself, here’s how:

1. Navigate to the Dropbox (or LAN)-synchronized “shadow folder” (for instance, `C:\Users\<your username>\Dropbox\My-collection - TC\`).
2. Now look for a subfolder called `Lost and Found`. Inside the `Lost and Found` subfolder you will find one or more files with a `.bloom` extension. Each of these is a compressed book folder.
3. Copy the desired `.bloom` file to a different location on your computer, and uncompress it into a new folder. You will probably need to use a zip utility such as `7-Zip` to do this. (Alternately, you can change the filename extension to `.zip`, and use Windows’ built-in zip tools to uncompress the file into a new folder.)
4. Copy or move your newly uncompressed folder into your **local** Team Collection folder. **WARNING: Make sure the folder has a different name than the original book’s folder name!** Otherwise you’ll get back into a conflict situation.
5. Launch Bloom (or close and relaunch Bloom). Bloom will recognize that a book has been added to the Team Collection, and will automatically check it out to you.
6. Check in the book, and Bloom (with a little help from Dropbox or your LAN) will propagate the new book to the other Team Collection computers.

**Now comes the hard part:** you must manually reconcile the two different versions. This means identifying the parts you want to keep from one book (the version you will not keep), and manually moving them into the one you will keep. This can be a painful process!

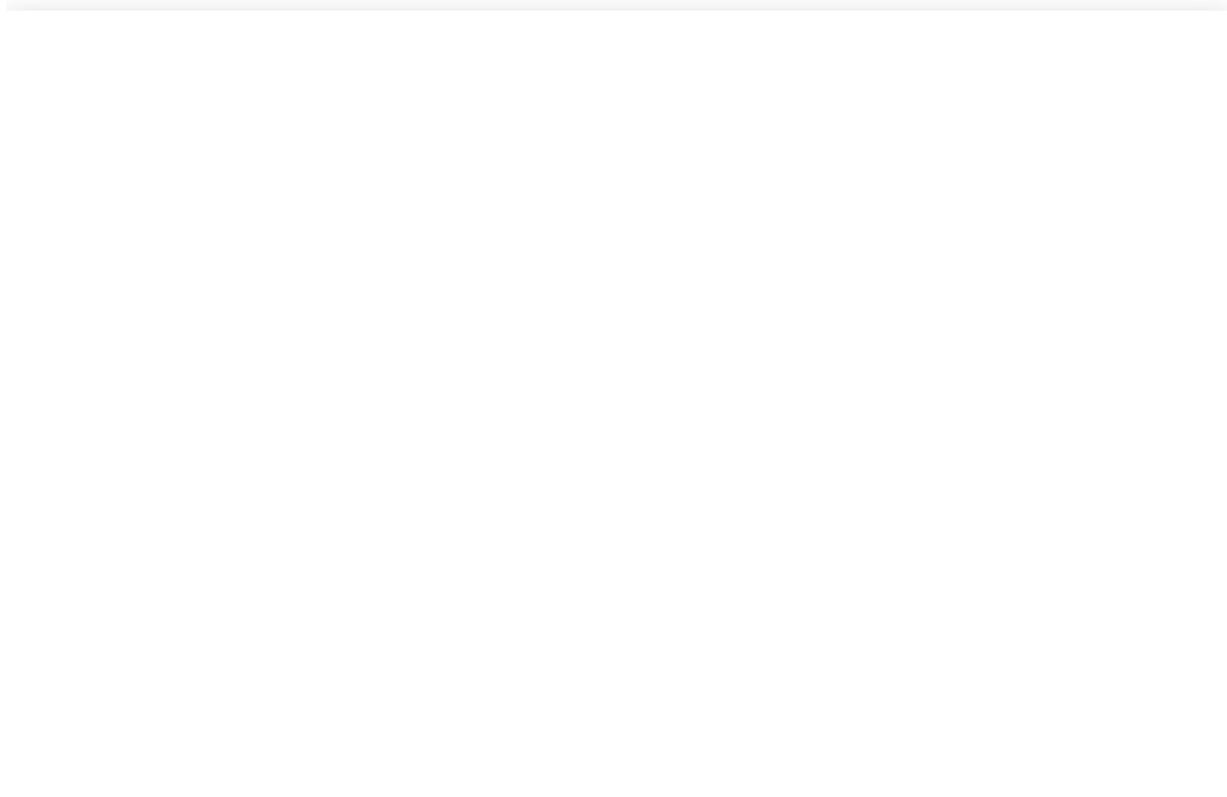
After you have finished reconciling the two books, you can remove the one you do not want to keep (see [How can I remove a book from a Team Collection](#) for instructions on how to do this).

# Setting up Dropbox on your computer

As a Cloud service, Dropbox can operate entirely through a web browser interface. However, in order to use Bloom Team Collections, **you need to also install the Dropbox App on your computer.** The Dropbox App allows you to access your Dropbox files through your computer's file manager (in Windows, that's File Explorer). It also allows Bloom to synchronize your Team Collection between Bloom's working files and the Team Collection's cloud collection folder.

In this guide, we'll walk through the process of installing the Dropbox app on a Windows computer.

When you sign into Dropbox initially, you may see this dialogue box. Click on the Download button to get started.



If you don't see that sign, then from your web interface in Dropbox, click on your account icon (1), then click on "install Dropbox app"(2).

You'll see:

DropboxInstaller.exe will download. After download, double-click on the file to install it.  
You may need to register a phone number to your account. After that you should see:

Other steps may be presented. Eventually, you'll get to:

If you only have a basic Dropbox account, you must choose the first option.

Next, Dropbox will want to add several large folders to be automatically backed up. It is very likely that the space requirements for backing up these folders will surpass the allotment of a Basic Dropbox account.

If you only have a Basic Dropbox account, uncheck those boxes and click “Not now” to proceed.

You'll see a warning:

Click to **Continue to Dropbox**.

Dropbox will create a folder on your computer to hold synchronized files. On most computers, this will be located at `C:\Users\<your username>\Dropbox`.

That's it! Now you can store your Bloom Team Collection cloud collection folders in your synchronized Dropbox folder, and enjoy using Bloom Team Collections.

# Notes on Team Collections

## CAUTION

The following are known problems and limitations of this feature.

# We know you'd rather be using Google Drive

Team Collections relies on other file syncing systems while hiding their complexity. Currently, you can use a local LAN server to sync or Dropbox. We don't yet offer Google Drive because our experiments with "Google Drive for Desktop" showed that it was not reliable enough to use for Team Collections. However, in the future, we hope to build a reliable Google Drive option based directly on Google APIs instead of the "Drive for Desktop" app.

# **It might be possible for two people to check out a book simultaneously**

Only one person can have a book checked out at once. When you try to check out a book, Bloom first makes sure that it isn't already checked out. However, due to delays inherent in cloud-based file syncing, it is at least theoretically possible that the book was checked out recently by a teammate, and your computer hasn't received that data yet. In the future, we plan to add a full-proof cloud-based system that will close this loophole.

# OPDS API

## NOTE

An “API” is a way for programmers to connect their program to another system. In this case, Bloom’s OPDS API allows programmers to get information on BloomLibrary.org’s collections of books.

Bloom implements the [OPDS API](#), which is a common API in the ePUB world. The OPDS format is extremely verbose, and we don’t love it, but it works. Using Bloom’s OPDS API, you can

- Get lists of languages
- Get lists of books in a language
- Get thumbnails and URLs for books

## Getting an account from us

There are two general ways to get an account:

- 1) a Bloom Enterprise Subscription
- 2) an agreement based on mutual content sharing or other partnership

We will set up your account and provide you with the credentials you need.

## NOTE

Before requesting an API key, please create an account at [BloomLibrary.org](#). Then when you write, tell us what the email address is that you used to create that account.

To discuss getting a key, please write to [admin@bloomlibrary.org](mailto:admin@bloomlibrary.org).

## CAUTION

We don’t currently have a way of rate-limiting you, so it is on you not to break us! Please do not use this API in a way that would generate queries every time one of your users opens a page. Instead, please cache the results and update them daily or whatever.

This also holds for the thumbnails this provides. If you are a high-volume site, we will need you to cache the thumbnails.

Thanks!

## Base URL

<https://api.bloomlibrary.org/v1/opds>

## Queries

In the following

- `YOURACCOUNT` is the email you use for your [BloomLibrary.org](#) account
- `YOURKEY` is the secret API key we will give you
- `LANGUAGETAG` is a [BCP47](#) tag

## Parameters

The following parameters are our additions the OPDS spec:

`key`: YOURACCOUNT:YOURKEY

`lang`: string, optional. bcp47 lang tag that narrows the search to one language

`ref`: string, optional. The referrer tag, used internally for recording who is doing the query

`tag`: string, optional. Limit search to books with this tag

`organizeby`: string, optional. If defined, the only option is “language”.

`minimalnavlinks`: “true” | “false” (default), optional.

`epub`: “true” | “false” (default), optional.

## Languages

To get a list of languages, use a URL like this:

```
https://api.bloomlibrary.org/v1/opds?  
organizeby=language&minimalnavlinks=true&key=YOURACCOUNT:YOURKEY
```

This will return a large result that looks like this:

```
<feed xmlns="http://www.w3.org/2005/Atom"  
      xmlns:dcterms="http://purl.org/dc/terms/" xmlns:opds="http://opds-spec.org/2010/catalog">  
<id>https://bloomlibrary.org</id>  
<title>Bloom Library Books</title>  
<updated>2022-11-09T17:39:22.868Z</updated>  
<link rel="http://opds-spec.org/facet" iso="haz"  
      href="https://api.bloomlibrary.org/v1/opds?  
lang=haz&organizeby=language&minimalnavlinks=true" atMost="26"  
      title="Hazaragi" opds:facetGroup="Languages"/>  
<link rel="http://opds-spec.org/facet" iso="acu"  
      href="https://api.bloomlibrary.org/v1/opds?  
lang=acu&organizeby=language&minimalnavlinks=true" atMost="1"  
      title="Achuar-Shiwiar" opds:facetGroup="Languages"/>  
<link rel="http://opds-spec.org/facet" iso="fub"  
      href="https://api.bloomlibrary.org/v1/opds?  
lang=fub&organizeby=language&minimalnavlinks=true" atMost="7"  
      title="Fulfulde (Adamawa)" opds:facetGroup="Languages"/>  
etc...
```

## Important OPDS/catalog/link attributes

**iso**: Actually a bcp47. That is, normally this is iso-6393 code, unless it has been augmented with script or regional variant information.

**atMost** : Use this if you just want to know if we have books in a language. This is the total number of books we have, but not all of them will necessarily be in circulation, or available in your country. In other words, this query doesn't take the time to go and get an accurate count.

# Books of a language

To get a list of books in a language, use a URL like this:

[https://api.bloomlibrary.org/v1/opds?&minimalnavlinks=true&\[key=YOURACCOUNT:YOURKEY\]\(https://api.bloomlibrary.org/v1/opds?key=rev79\\_app%40sil.org%3AkCaAH0BD2r&minimalnavlinks=true&lang=hi\)&lang=LANGUAGE](https://api.bloomlibrary.org/v1/opds?&minimalnavlinks=true&[key=YOURACCOUNT:YOURKEY](https://api.bloomlibrary.org/v1/opds?key=rev79_app%40sil.org%3AkCaAH0BD2r&minimalnavlinks=true&lang=hi)&lang=LANGUAGE)

This will return a result like this:

```
<updated>2022-08-17T18:00:33.564Z</updated>
<dcterms:rights>Copyright © 2019, </dcterms:rights>
<dcterms:license>cc-by-nc-nd</dcterms:license>
<dcterms:language>nod</dcterms:language>
<link rel="http://opds-spec.org/image" href="https://api.bloomlibrary.org/
type="image/png" title="Image" />
<link rel="http://opds-spec.org/acquisition/open-access"
href="https://api.bloomlibrary.org/v1/fs/harvest/lweHdAjFbg/epub/%e0%b8%ab%e0%
type="application/epub+zip" title="ePUB" />
<link rel="http://opds-spec.org/acquisition/open-access"
href="https://api.bloomlibrary.org/v1/fs/upload/lweHdAjFbg/%e0%b8%ab%e0%b8%87%
type="application/pdf" title="PDF" />
<link rel="http://opds-spec.org/acquisition/open-access"
href="https://api.bloomlibrary.org/v1/fs/harvest/lweHdAjFbg/%e0%b8%ab%e0%b8%87%
type="application/bloompub+zip" title="bloomPUB" />
<link rel="http://opds-spec.org/acquisition/open-access" href="https://bloomlibr
<link rel="http://opds-spec.org/acquisition/open-access" href="https://bloomlibr
</entry>
</feed>
```

Notice that these book entries provide:

- link to a thumbnail
  - link to the [BloomLibrary.org](#) page for the book
  - link to read the book online

Also, depending on the book, it may provide:

- link to a pdf
  - link to an ePUB
  - link to a bloomPUB

# Notes on Publish as Audio or Video

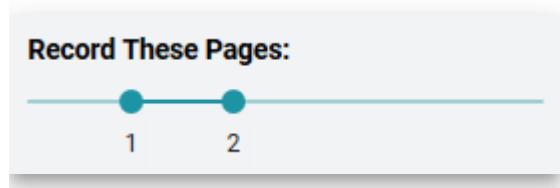
## NOTE

The following are known problems and limitations in this feature.

## **Known Bug: Sign Language video may be skipped in videos that are only a portion of the book**

When you record an entire SL book, and then playback the recording, all is well.

But if you select a portion of the book:



and if the first page you specify contains a sign language video, then that sign language video won't be included in the final video recording of the book.

Issue: [BL-11248](#)

## **Limitation: Bloom does not currently playback any audio from embedded videos**

Currently, Bloom only supports videos that are silent, i.e. for Sign Language. But some SL videos contain dubbed audio narration, e.g. [this book](#). When recording such books in Publish to Video, the audio is lost.

Issue: [BL-11249](#)

# Notes on “Publish as ePUB”

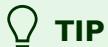


## Fixed vs. Flowable ePUBs

Starting with Bloom 5.4, you have the option of publishing ePUBs in either **Fixed layout** mode or **Flowable** mode.

**Fixed Layout** ePUBs work with fully compatible e-readers (ePUB 3 standard) to display the book exactly like it is shown in Bloom. Fixed mode ePUB is an attractive option for landscape books and it is the only option for Bloom books containing image overlays like speech bubbles and captions. Unfortunately, many e-readers do a very poor job of presenting landscape books. In addition, Fixed mode ePUBs do not handle scrolling text boxes, so all your text must fit on the page.

**Flowable** ePUBs allow e-readers to lay out images and text however they want. This mode also enables users to adjust the size of the text in the app or user system font settings.



Note that for dependable What You See Is What You Get digital Bloom books, we recommend readers that handle our **bloomPUB** format. Currently, these are: [Bloom Reader](#), [BloomPUB Viewer](#), and apps created with [Reading App Builder](#). These readers also supply analytics back to [BloomLibrary.org](#) so that you can see how your books are doing.

There are many ePUB readers available for Windows, Android, iOS and Linux, but these readers vary in their ability to comply with the ePUB3 standard. As a result, you cannot depend on them to faithfully display the contents of a Bloom book, play sign language videos, or to play audio of Bloom Talking Books.

In the following two charts, we present some notes on our testing with various readers, first for **Fixed** mode ePUBs, and secondly, for **Flowable** mode ePUBs.

## Performance of various ePUB readers for Bloom Fixed-mode ePUBs

	<b>Talking Book Audio</b>	<b>Talking Book Text Highlighting</b>	<b>Image Descriptions (audio)</b>	<b>Landscape Layout</b>	<b>Sign Language</b>
eKitabu Windows version	✓	No	✓	✓	✓
eKitabu Android v5.4.1	✓	No	✓	(1)	(1)
Lis-a Android version Feb 25, 2022	✓	✓	✓	(2)	(2)
Google Play Books Sept 2022	No	No	No	No	No
Apple Books Sept 2022	No	No	No	✓	✓
Dolphin EasyReader (Android version)	(4)	(5)	No	No	No
Thorium Reader (Windows)	No	No	No	✓	✓
<u>Simply Reading</u> (Android)	✓	No	✓	(1)	(1)

1. Various app controls (e.g. menu bar, media bar) obscure significant portions of Fixed mode ePUBs, making them unusable.
2. Text on right-side of screen is frequently slightly clipped.
3. The positioning of text inside speech bubbles and captions is inaccurate, sometimes badly.
4. Frequent audio clipping.
5. Text highlighting is erratic and unreliable.

## **Performance of various ePUB readers for Bloom Flowable-mode ePUBs**

	<b>Talking Book Audio</b>	<b>Talking Book Text Highlighting</b>	<b>Image Descriptions (audio)</b>	<b>Landscape to Portrait Rendering</b>	<b>Sign Language</b>
eKitabu Windows version	✓	✓	✓	(2)	✓
eKitabu Android v5.4.1	No	No	No	(2)	✓
Lis-a Android version Feb 25, 2022	✓	✓	✓	(2)	✓
Google Play Books Sept 2022	No	No	No	(3)	No
Apple Books Sept 2022	No	No	No	(2)	✓

	<b>Talking Book Audio</b>	<b>Talking Book Text Highlighting</b>	<b>Image Descriptions (audio)</b>	<b>Landscape to Portrait Rendering</b>	<b>Sign Language</b>
Dolphin EasyReader (Android version)	(1)	Unreliable	(1)	✓	No
Thorium Reader (Windows)	✓	✓	✓	(2)	✓
<u>Simply Reading</u> (Android)	✓	✓	✓	(2)	✓

1. Frequent audio clipping.
2. Top or bottom positioned text blocks (in Bloom Edit) will display nicely, but right-side text blocks (in Bloom Edit) may have reduced margins.
3. Text which should wrap is often simply cut off.

### CAUTION

For books produced by Bloom 5.4: if you make a Talking Book out of an Overlay (comic) book, ePUB readers will read bubbles in the order you created them. That won't always be the correct order! We have an idea of how to improve things for Bloom 5.5.

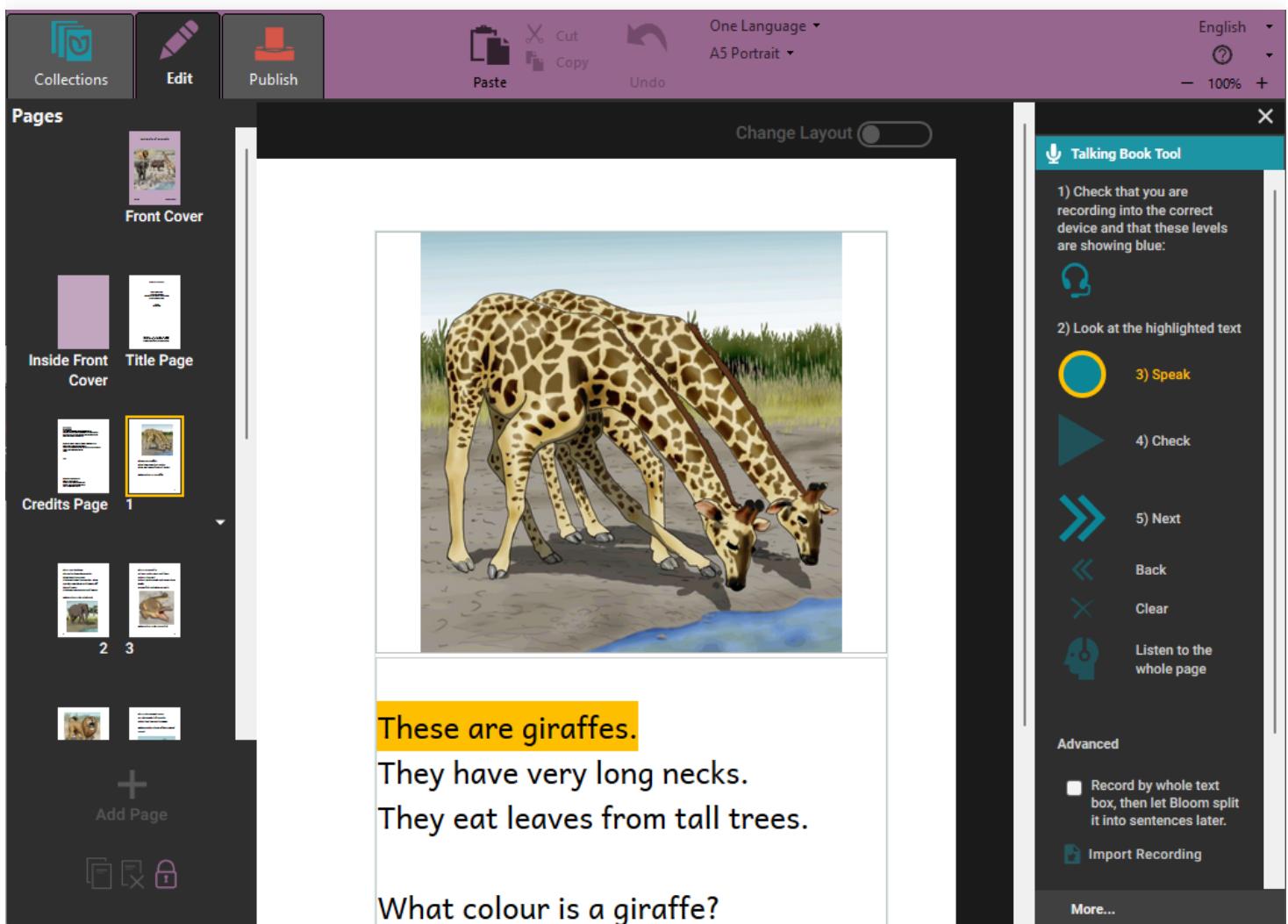
# Installing aeneas

## NOTE

This page describes how to install aeneas on a Windows computer for use with Bloom. **aeneas** is an additional, free software package which Bloom uses to divide recorded audio for a text box into sentence-sized chunks.

## Recording audio by text box

Bloom has two methods for recording audio narration for a book: **by sentence** and **by text box**. Bloom's usual way of recording narrated audio is one sentence at a time. Bloom will highlight each sentence and allow you to record audio for that sentence.



However, if you record a whole text box at once, the recording usually sounds more natural. If there is more than one sentence in the text box, Bloom uses an extra software package called **aeneas** to split the recording into sentences.

To enable recording by text box, tick the check box that says **Record by whole text box, then let Bloom split it into sentences later**. Bloom will highlight the entire text box.

The screenshot shows the Bloom app interface. At the top, there's a toolbar with 'Collections', 'Edit', 'Publish', 'One Language' (set to English), 'A5 Portrait', and zoom controls. Below the toolbar is a 'Pages' sidebar listing 'Front Cover', 'Inside Front Cover', 'Title Page', 'Credits Page' (with a yellow box around the first page thumbnail), and other pages numbered 2 and 3. In the center, there's a large image of two giraffes grazing. Below the image is a yellow text box containing the following text:  
These are giraffes.  
They have very long necks.  
They eat leaves from tall trees.  
What colour is a giraffe?  
An orange arrow points from the right side of the screen towards the 'Talking Book Tool' sidebar. This sidebar contains a list of steps: 1) Check that you are recording into the correct device and that these levels are showing blue; 2) Look at the highlighted text; 3) Speak; 4) Check; 5) Split; 6) Next; Back; Clear; Listen to the whole page; Advanced; and a checked checkbox for 'Record by whole text box, then let Bloom split it into sentences later'. There's also a 'More...' button at the bottom.

If you do not have the aeneas software package installed on your computer, Bloom will display a warning in the lower portion of the Talking Book tool controls, saying **To split recordings into sentences, first install the aeneas system.**

The screenshot shows a digital book creation interface. At the top, there are tabs for 'Collections', 'Edit' (which is selected), and 'Publish'. Below these are standard document tools: Paste, Cut, Copy, Undo, One Language (set to English), A5 Portrait, and a zoom control (100%). On the left, a sidebar titled 'Pages' lists the page structure: Front Cover, Inside Front Cover, Title Page, Credits Page (with icons 1, 2, and 3), and an 'Add Page' button. The main workspace contains a giraffe illustration and the following text:

These are giraffes.  
They have very long necks.  
They eat leaves from tall trees.

What colour is a giraffe?

On the right, a 'Talking Book Tool' sidebar provides instructions and icons for recording:

- Check that you are recording into the correct device and that these levels are showing blue:
- Look at the highlighted text
- Speak
- Check
- Split
- Next
- Back
- Clear
- Listen to the whole page

A red warning box contains the text: "To split recordings into sentences, first install this aeneas system. it into sentences later." There is also a 'More...' link.

## How to install aeneas

- Click the link under “aeneas” in the Talking Book Tool’s warning box, or navigate to this webpage to download the [aeneas](https://github.com/sillsdev/aeneas-installer/releases/tag/v1.7.3) software: <https://github.com/sillsdev/aeneas-installer/releases/tag/v1.7.3>
- Click the **aeneas-windows-setup-1.7.3.exe** link to download the software.

**aeneas tools v1.7.3 (Mac and Windows)**

danielbair released this Mar 22, 2018 · 49 commits to master since this release · v1.7.3 · 2979bb1

**NOTE:** Use *this* version if you will be using it with Bloom.

This installer Includes:

- eSpeak 1.48.04
- FFmpeg 3.2.4
- Python 2.7.13
- BeautifulSoup4 4.5.1
- lxml 3.6.0
- numpy 1.11.2
- aeneas 1.7.3

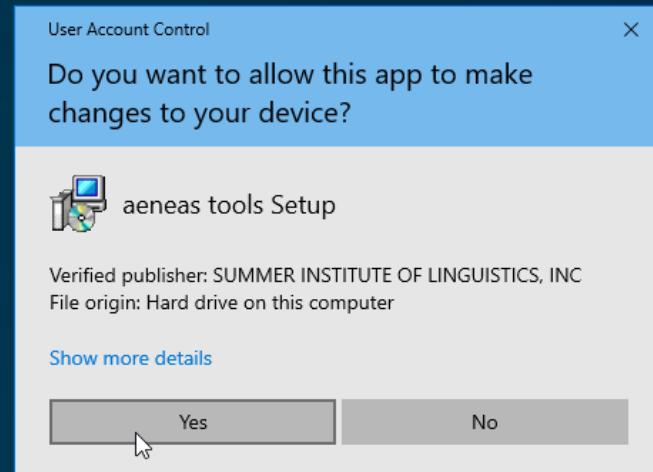
- aeneas.cew is compiled and working
- now both installers are code-signed
- tested on MS Windows 7 and up
- tested on Mac OS X 10.7 and up

**Assets** 4

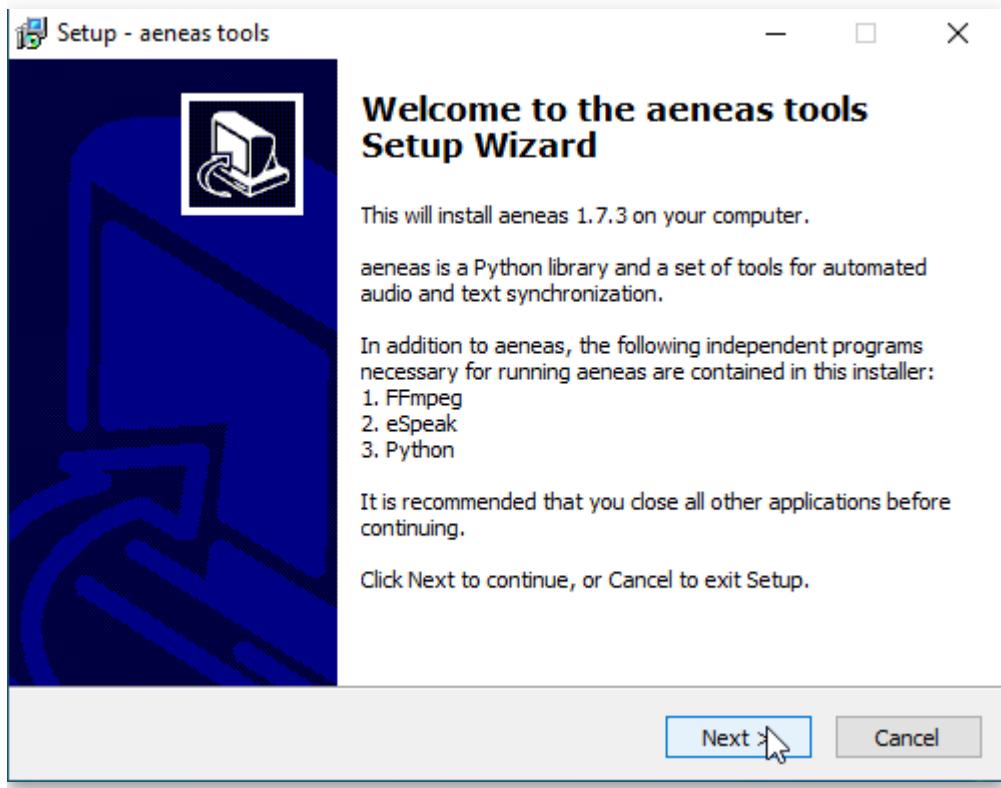
<a href="#">aeneas-mac-setup-1.7.3.dmg</a>	69.6 MB	Apr 18, 2018
<a href="#">aeneas-windows-setup-1.7.3.exe</a>	66.9 MB	Mar 22, 2018
<a href="#">Source code (zip)</a>		Mar 22, 2018
<a href="#">Source code (tar.gz)</a>		Mar 22, 2018

1. Find the downloaded **aeneas-windows-setup-1.7.3.exe** installer program (probably in the **Downloads** folder) and double-click it to launch the software installer. Windows will show you a User Account Control window, asking whether you want to allow the app to make changes to your device. Click **Yes**.

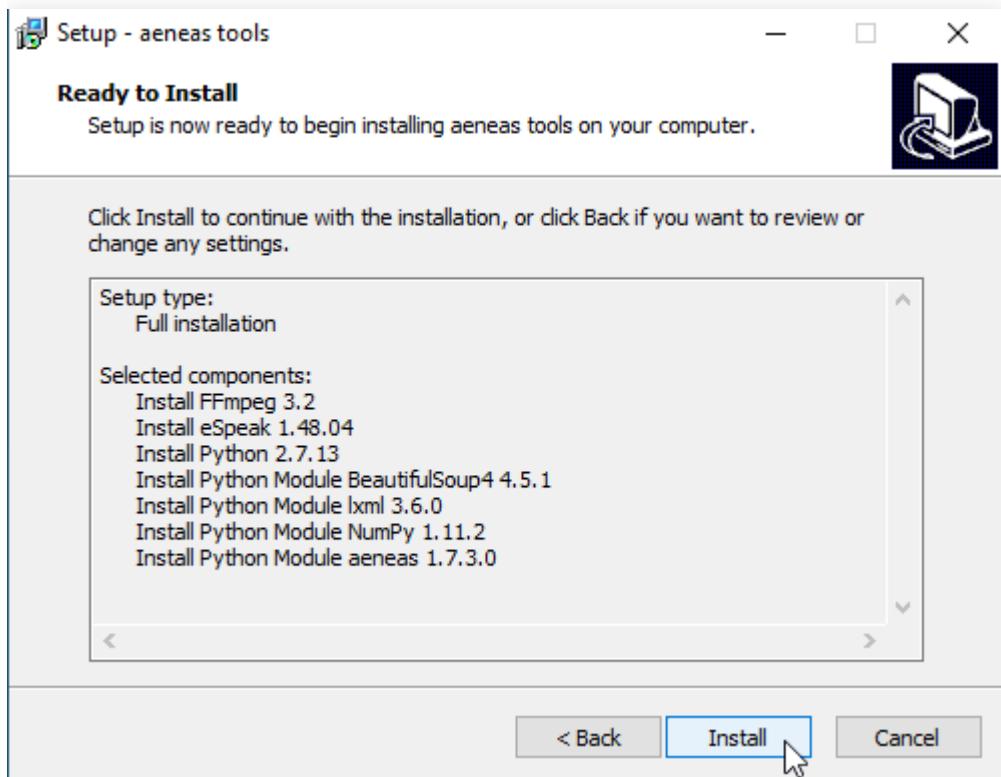
The aeneas tools setup wizard will start.



1. Click **Next** to follow the steps of the setup wizard. **Do not make any changes to the default installation settings unless you are sure what you are doing.**

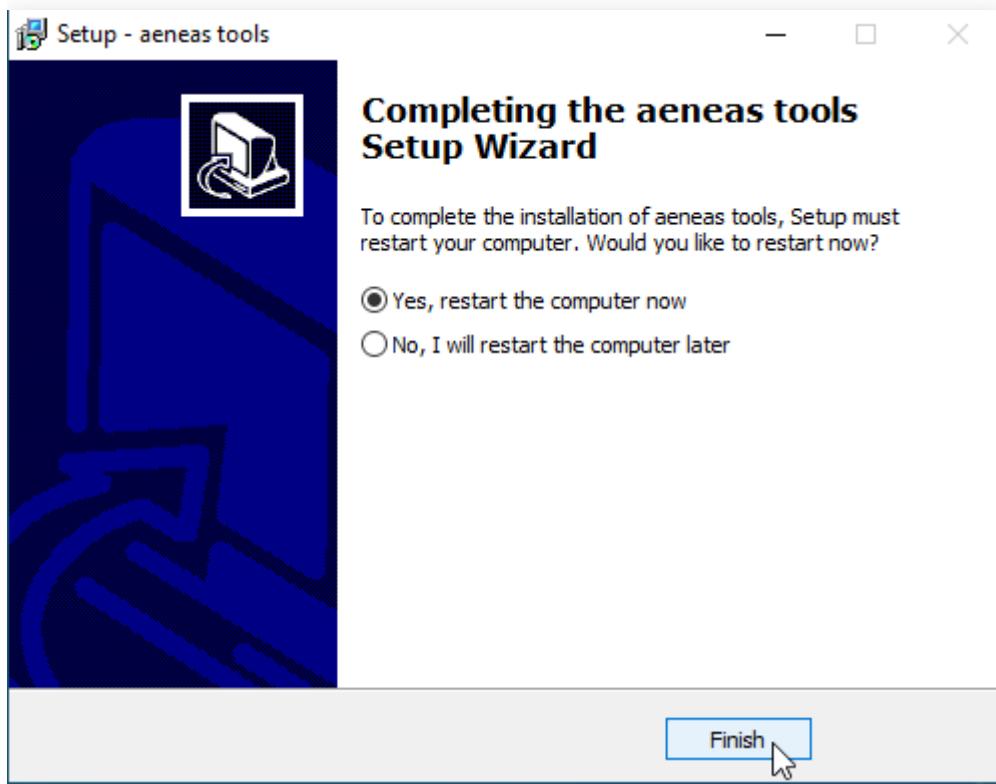


1. When you reach the “Ready to Install” screen, click **Install**. You will see a number of installation status screens, including some in the Windows command line.



```
C:\WINDOWS\system32\cmd.exe
[INFO] aeneas      OK
[INFO] ffprobe     OK
[INFO] ffmpeg      OK
[INFO] espeak       OK
[INFO] aeneas.tools OK
[INFO] shell_encoding OK
[INFO] aeneas.cdtw   AVAILABLE
[INFO] aeneas.cmfcc  AVAILABLE
[INFO] aeneas.cew    AVAILABLE
[INFO] All required dependencies are met and all available Python C extensions are working
[INFO] Enjoy running aeneas!
```

Eventually, you will see a “Completing the aeneas tools Setup Wizard” screen.



1. Restart your computer.

Now you can record an entire text box in Bloom, and let Bloom automatically split the recording into sentences.

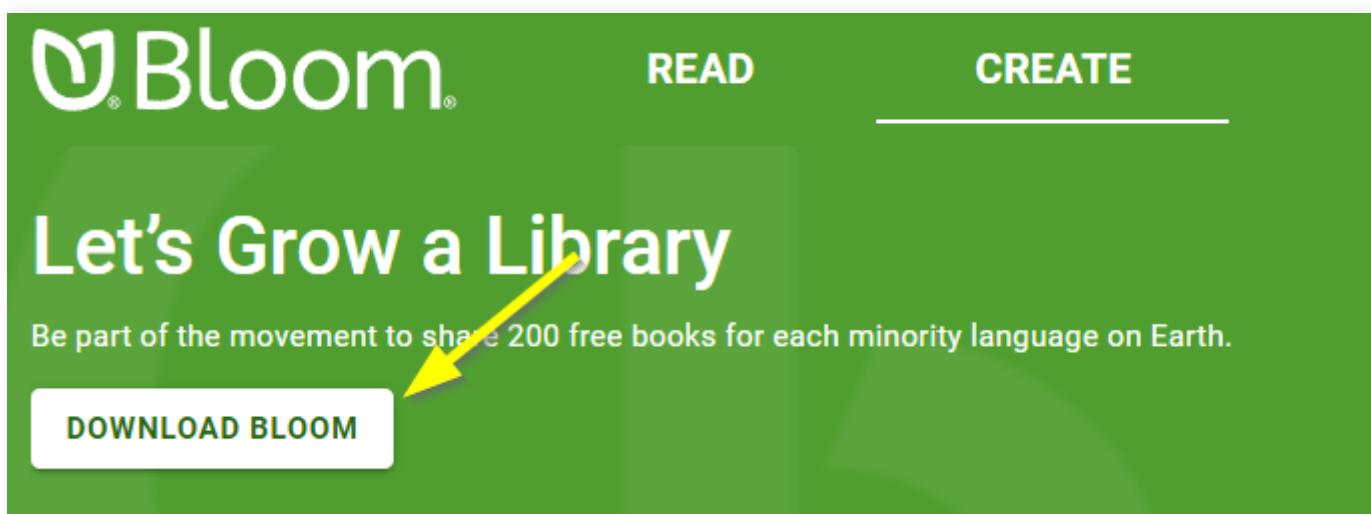
# Installing BloomPub Viewer

These days — for very good safety reasons — Windows makes it difficult to install programs that are not widely used. The BloomPUB Viewer is one such program. In this article, we will give steps to overcome the difficulties associated with installing BloomPUB Viewer.

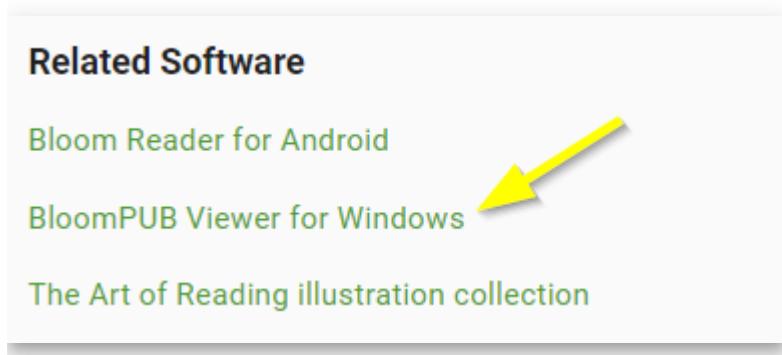
We will show you how to:

- Bypass the caution message on Chrome when downloading the BloomPUB Viewer.
- Bypass the caution message on Windows Defender.

## Step 1: On the CREATE tab of Bloom Library, click DOWNLOAD BLOOM

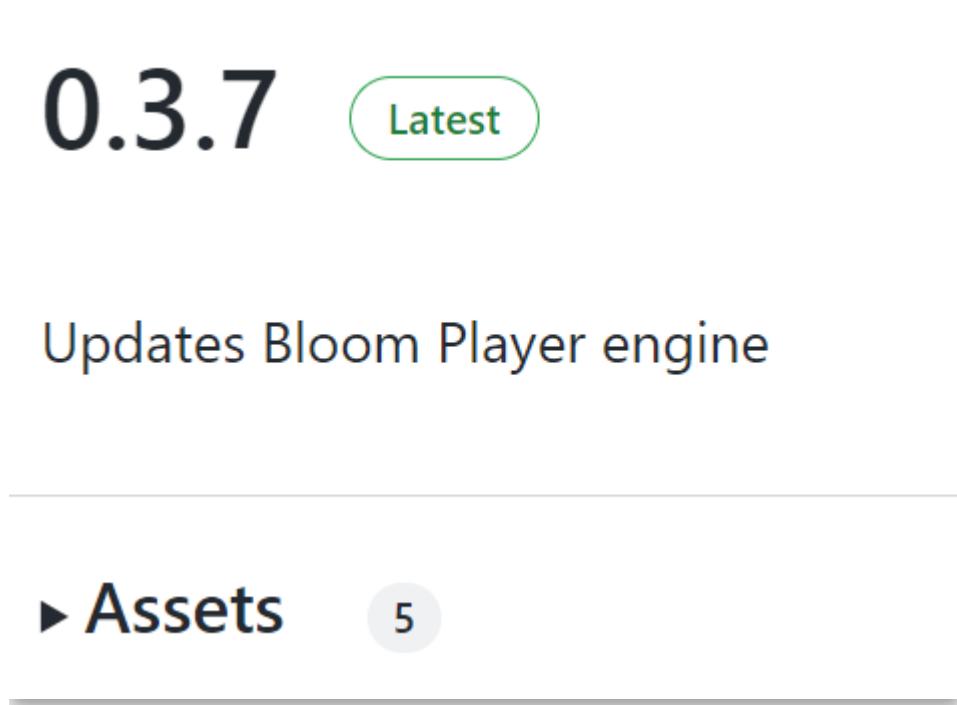


## Step 2: Click the link for “BloomPUB Viewer for Windows” under “Related Software”



Your browser will open up a webpage on [github.com](https://github.com). This page contains links to *all* versions of the BloomPUB Viewer program (current and previous versions).

Typically, you will want to install the *latest* version. The latest version will always be listed at the top of the page. It will be marked “Latest”:



### **Step 3: Click the arrow beside “Assets”**

To access the link to the actual installer program, click on the arrow ► beside “Assets” to reveal all of the files.

The arrow will change from ► to ▼.

### **Step 4: Click on the very first setup file in the list**

## 0.3.7

Latest

Updates Bloom Player engine

### ▼ Assets 5

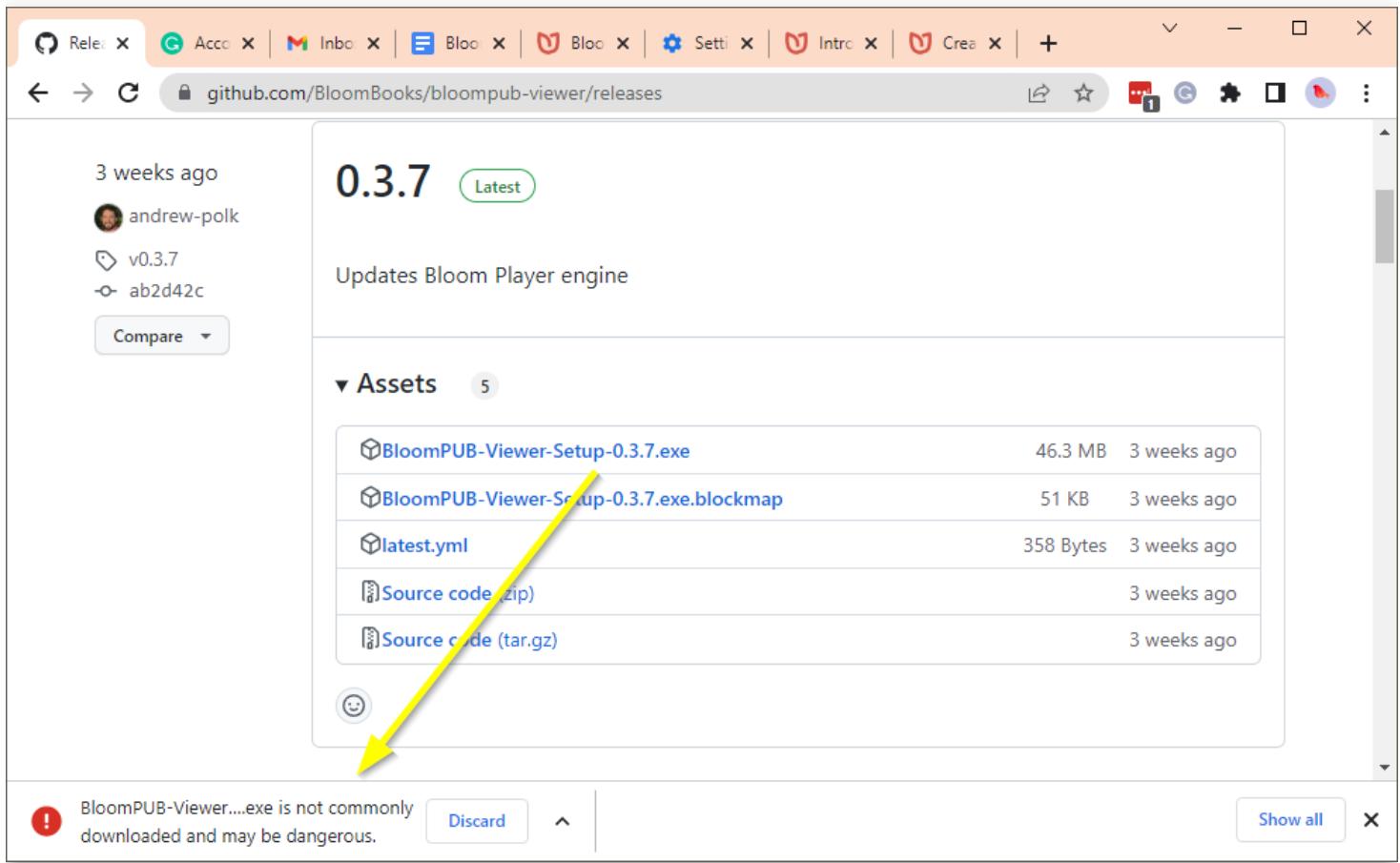
 <a href="#">BloomPUB-Viewer-Setup-0.3.7.exe</a>	46.3 MB	3 weeks ago
 <a href="#">BloomPUB-Viewer-Setup-0.3.7.exe.blockmap</a>	51 KB	3 weeks ago
 <a href="#">latest.yml</a>	358 Bytes	3 weeks ago
 <a href="#">Source code (zip)</a>		3 weeks ago
 <a href="#">Source code (tar.gz)</a>		3 weeks ago



### ⚠ CAUTION

Your browser may now present a File Explorer dialogue so you can Save the program to any location you wish, or your browser may automatically begin to download the program.

After the program has finished downloading, typically, it will show up at the bottom of your screen like this:

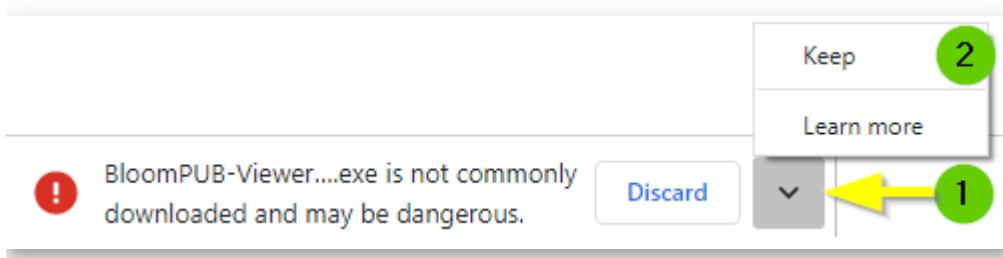


In the picture above, the exclamation mark ! is indicating that the installer program for BloomPUB Viewer is potentially dangerous. Remember, this is only because BloomPUB Viewer is not used by many people. The program is safe.

## Step 5: Click the arrow beside the “Discard” button and then click “Keep”

If your browser marked the BloomPUB Viewer installer as potentially dangerous, the default action your browser will suggest is to *discard* the installer. But since we know BloomPUB Viewer is a safe program, we need to override this default action and instead *keep* the downloaded file.

To do so, click on the arrow beside the “Discard” button, and choose “Keep”:



Now, the downloaded program will now no longer show the red ! mark:

 **TIP**

In the above examples, we are using the web browser **Chrome**. Be aware that other web browsers (e.g. Edge, Firefox) will have slightly different ways of unblocking potentially dangerous installer programs.

## Step 6: Click on the downloaded program

Click on the downloaded program to install it.

At this point, Windows Defender will probably halt the installation and will present a screen to alert you to a potentially dangerous program.

By default, this screen offers only one button: “Don’t run”.

 **CAUTION**

Remember, if you download some other program which you are not 100% sure is a safe program, then always click on the “Don’t run” button.

## Step 7: Click on “More info”

Since you know that “BloomPUB Viewer” is a safe program, you can click on “More info”:

×

## Windows protected your PC

Microsoft Defender SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk.

[More info](#)



**Don't run**

## Step 8: Click on “Run anyway”

Windows Defender now shows an additional button, “Run anyway.”

Click on this.

X

# Windows protected your PC

Microsoft Defender SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk.

App: BloomPUB-Viewer-Setup-0.3.7.exe

Publisher: Unknown publisher



Run anyway

Don't run

The program will now install and launch:

BloomPUB Viewer 0.3.7

File



**BloomPUB Viewer**



Choose BloomPUB book on this computer



Get BloomPUB books on [BloomLibrary.org](http://BloomLibrary.org)

# Share a BloomPUB via Wi-Fi (Firewall Permissions)

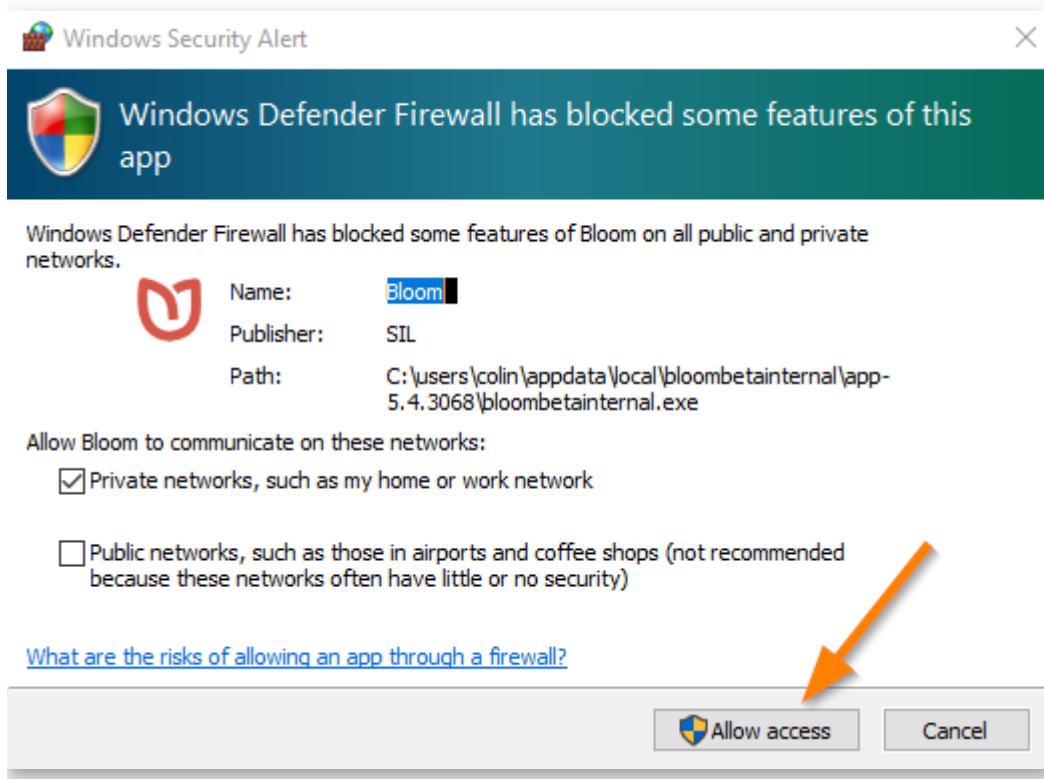
In Bloom, when you Publish your book to BloomPUB, there are three available publishing options:

- **Share over Wi-Fi** to a device
- **Save BloomPUB File** to your computer
- **Send over USB Cable** to a device

The first option allows you to share your BloomPUB to an Android device which has Bloom Reader installed on it.

When you do this action for the very first time, the “Firewall” on your computer will initially block the action.

For example, Windows Defender Firewall will show the following alert:



To allow Bloom to share books over Wi-Fi to devices (phones or tablets), you need to click the “Allow access” button.

You will need to do this once for each new version of Bloom you install.

# How to Embed a single book from Bloom Library In Your Website

It is possible to embed an interactive book directly on your website, if your website supports “iframes”.

```
<iframe
  src="https://embed.bloomlibrary.org/bloom-player/bloomplayer.htm?url=URL-
TO-THE-BOOK"
  title="my book"
  height="500px"
  width="100%"
  allow="fullscreen"
  allowFullScreen={true}
  initiallyPaused={true}
/>
```

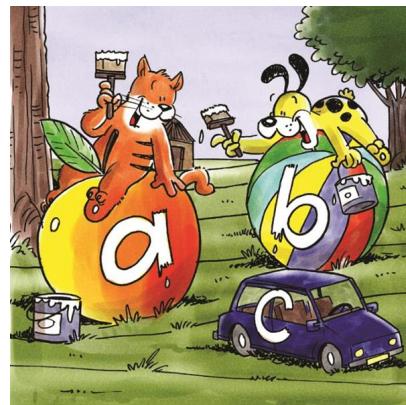
For example, if we use

```
<iframe
  src="https://embed.bloomlibrary.org/bloom-player/bloomplayer.htm?url=
[https://bloomlibrary.org/player/Da5Scm1XBK]
(https://bloomlibrary.org/player/rFnCBRPsDs)"
  width="100%" height="450px" allow="fullscreen" allowFullScreen={true}
  initiallyPaused={true}
/>
```

then we get

# 01a - Cat and Dog: Alphabet

## 01a - Pusi na Dok: Ol Leta



v1.0

English

Prim

### NOTE

It does cost us something to “deliver” books in this way. We don’t expect this will be a problem, but if in the future we had books that became expensive to serve this way, we might limit access to the service.

# How to Disable Display Scaling

When publishing your Bloom book to video, if the display settings of your monitor have “scaling” applied, then Bloom will give a warning and will disable the RECORD button.

To disable the scaling for your monitor, click the link “[Open Display Settings](#)”.

## ! *Disable Display Scaling*

Please change your display scaling to 100% while making videos. [Open Display Settings](#)

 RECORD



Now, scroll down until you see “Scale and layout”. There you will find a percentage % set to something greater than 100%.

Click the down-arrow:

## Scale and layout

Some apps won’t respond to scaling changes until you close and reopen them.

Change the size of text, apps, and other items

125%

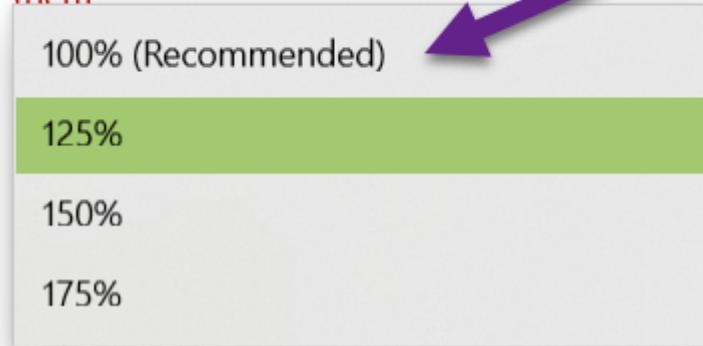
▼



Click on 100%:

## Scale and layout

Some apps won't respond to scaling changes until you close and reopen them



Your scaling is now set to 100%. This is the same as saying that scaling has been disabled.

For Bloom to recognize that your scaling has changed, you need to exit the Publish tab, then return to Publish.

The RECORD button will now be enabled. Click the RECORD button to begin your recording:

### 2 Make Recording

This will open a window and play the selected pages. Bloom will record it to match the "Format" option in the upper right of this screen. Don't disturb this window while the recording is in progress!

 RECORD

A purple arrow points from the text above to the RECORD button.

# The “Lost and Found” folder

A book gets put in Lost and Found in three scenarios:

1. When **Joining** an existing Team Collection, Bloom finds that there is already a Working collection by the same name and it contains a book with the same book ID as one in the Shadow collection but a different name.
2. When **Joining** an existing Team Collection, Bloom finds there is already a Working collection by the same name, and it contains a book with the same name as one in the Shadow collection but a different book ID.
3. When Syncing a Team Collection, Bloom finds a book that is checked out and edited in the Working collection, but is recorded in the Shadow collection as being: a) checked *out* by you elsewhere, or b) checked *out* by someone else, or c) checked *in* but edited and changed in any way.

#3b will create a `NotifyUserOfProblem`, allowing the user to report it.

#1 and #2 represent somewhat unusual circumstances, but not necessarily a failure of our code.

#3a and #3c probably indicate some failure of the checkout/checkin system, though it could be something else (e.g., someone unwisely restored an old backup of the Dropbox folder).

# Installing & Updating WebView2

Bloom 5.5 and later requires the Microsoft WebView2 Runtime “Evergreen” to be installed and up to date. If your computer regularly receives Windows Updates, you will already have this. Otherwise, follow these instructions:

# Only for you?

Click [here](#) to get a small program from Microsoft. When you run it, it will download and install whatever you need. It may mention “Microsoft Edge” instead of “Webview2”, that’s fine.

# Want to save bandwidth by getting an installer you can share with others offline?

Click [here](#) for a page that will let you download a large (~140mb) installer that you can share with others. When you get that page, click the one that says “x64”:

## Evergreen Bootstrapper

The Bootstrapper is a tiny installer that downloads the Evergreen Runtime matching device architecture and installs it locally. There is also a [Link](#) that allows you to programmatically download the Bootstrapper.

[Get the Link ↓](#)

[Download ↓](#)

## Evergreen Standalone Installer

A full-blown installer that can install the Evergreen Runtime in offline environment. Available for x86/x64/ARM64.

[x86 ↓](#)

[x64 ↓](#)

[ARM64 ↓](#)



# Introduction

Distributing SD cards that are *pre-loaded* with BloomPUBs is a fast and convenient way for an organization to grant users access to an *entire library* of Bloom books. This is a particularly useful distribution method when the intended consumers of these books have limited or no access to the Internet in their home environment. An additional benefit of distributing BloomPUBs pre-loaded on SD cards is that the books are safeguarded from accidental deletion from within the Bloom Reader app. (They can, of course, be deleted through other means.)

An alternative is to sell phones pre-loaded with the Bloom Reader app already installed and a library of books.

In this article, we will provide step-by-step instructions for both methods.

1. [Distributing Bloom books on SD Cards](#)
2. [Distributing Books via Pre-loaded Phones](#)
3. [Advanced Options](#)

# 1. Distributing Bloom books on SD Cards

When **Bloom Reader** starts, it automatically looks for an SD card and for certain private folders reserved for the app. If it finds such a folder, it includes the books it finds there in the list of available books to read. If it finds `.bloomshelf` files, Bloom Reader also organizes the books according to those *shelves*.

There are three steps:

1. **Gather your BloomPUBs**
2. **Create the required folder on your SD card**
3. **Copy over the BloomPUBs**

## 1.1. Gather your BloomPUBs

Gather all the books you want to distribute. These books will have an extension of either `.blooomd` or `.bloompub`. You can get BloomPUBs by [downloading them from the Bloom Library](#) (or perhaps a colleague has sent you a BloomPUB directly).

### Downloading BloomPUBs from the Bloom Library

From [Bloom Library](#), click on the book you desire and look for the Download section. Then click on the BloomPUB icon; for example:



## The battle of the White Blood Cells

English

1 books that may be translations

Comic on vaccination against COVID-19. Target audience: young people. Format: 16x9

READ



Translate into your language!

[Download into Bloom Editor](#)

Features



Download



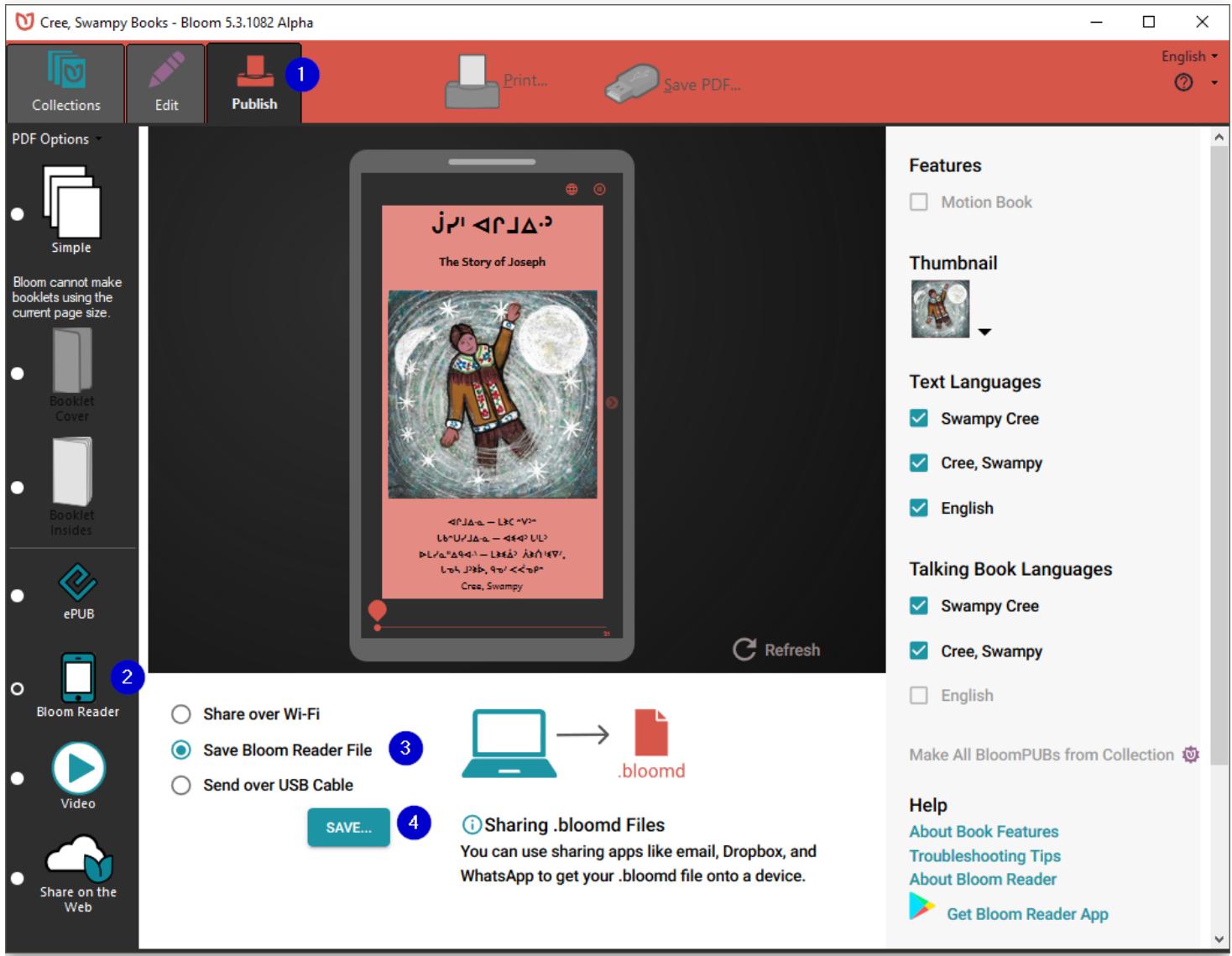
[GET BLOOM READER](#)



## Publishing BloomPUBs from the Bloom Editor

Using the Bloom Editor, you can make a BloomPUB file of any book in your collection by choosing the Publishing tab ①, selecting the Bloom Reader button ②, selecting the **Save Bloom Reader File** button ③, then clicking the **Save...** button ④:





## 1.2. Create the folder on your SD card

After gathering all your Bloom books on your computer, you will then use your computer to create the following series of folders on the SD card:

Android\data\org.sil.bloom.reader\files\Books

For example, if you mount the SD card as drive **D** on a Windows PC, you will first create the Android folder:

D:\Android\

Then, in the Android folder, you'll add the data folder:

D:\Android\data\

And so on until you have a series of nested folders as follows:

D:\Android\data\org.sil.bloom.reader\files\Books

 **Note that capitalization must be *exactly* as shown.**

## 1.3. Copy over the BloomPUBs

Copy the BloomPUBs into the folder.

The SD card is now ready to distribute.

## 1.4 Optional: Folders & Bookshelves

Beginning with **Bloom Reader** 3.0, you can organize this folder using subfolders. For example, you could have:

Android\data\org.sil.bloom.reader\files\Books\FooGrade1\letters.bloompub

Android\data\org.sil.bloom.reader\files\Books\FooGrade1\numbers.bloompub

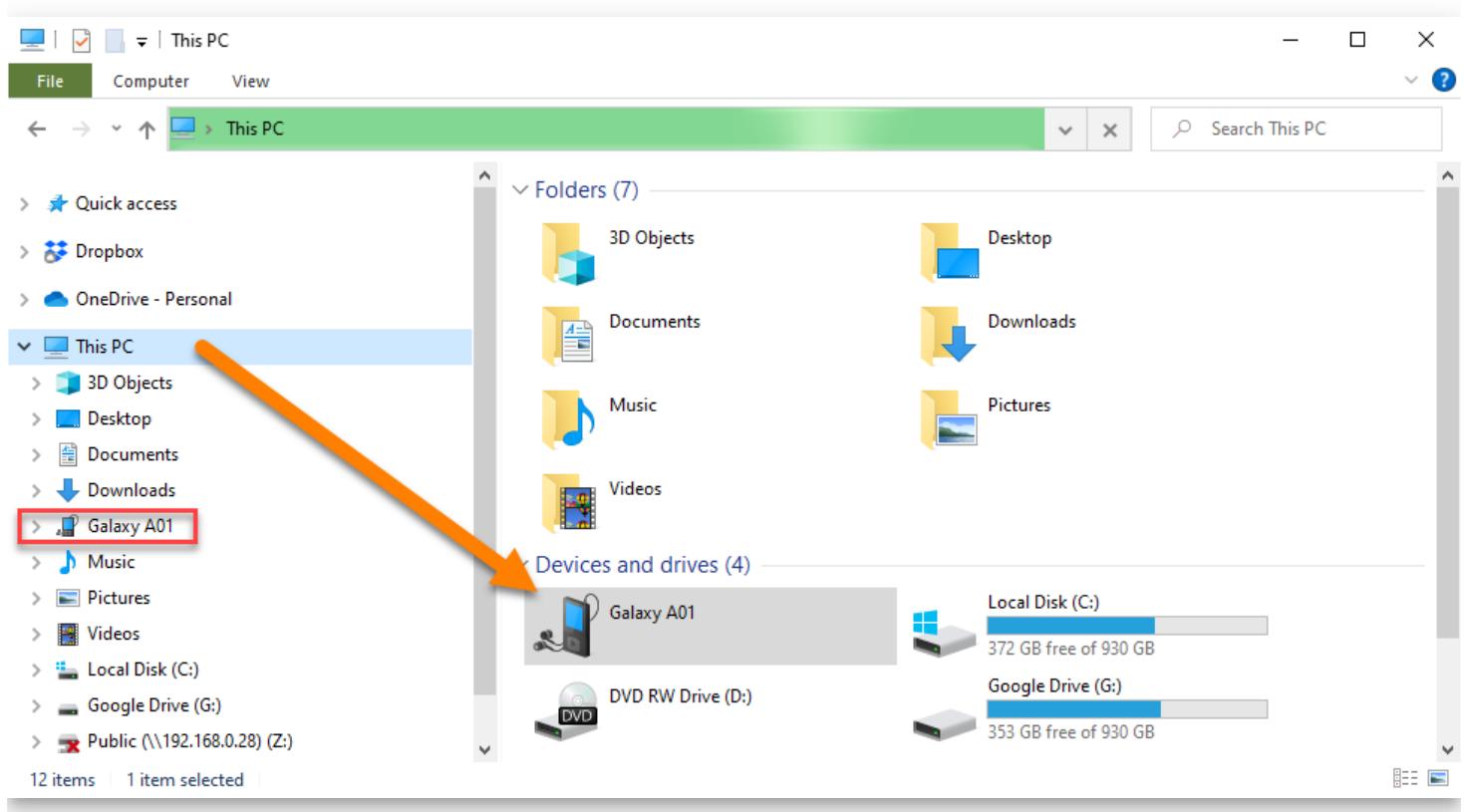
Android\data\org.sil.bloom.reader\files\Books\FooGrade2\animals.bloompub

# 2. Distributing Books via Pre-loaded Phones

## 2.1. Connect the phone to your computer

To pre-load your books onto a phone, you will need to connect the phone through a USB cable to your computer. Depending on the device and its version of Android, it may or may not allow immediate access. If immediate access is granted, then the phone will show up in Windows Explorer under “This PC”.

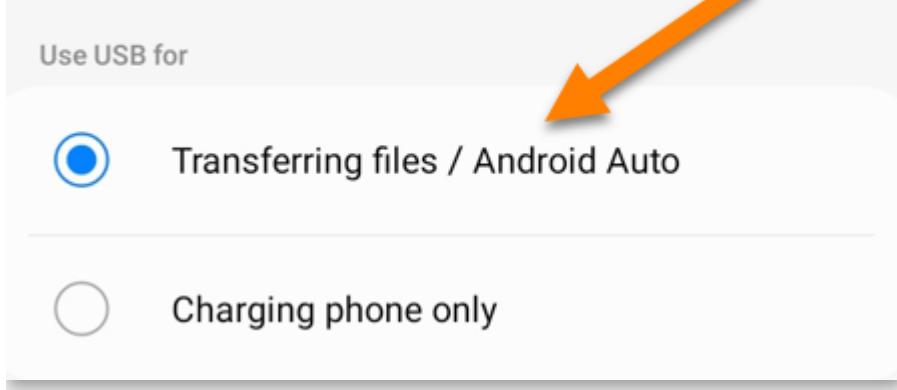
Here's an example:



If you cannot see the connected phone, you will need to open your phone's settings and find “USB settings.” There will be an option to allow you to transfer files.

Here's an example:

## < USB settings



## 2.2. Create a folder called “Bloom”

Once the phone is successfully connected, using Windows File Explorer, create a new folder called “Bloom” on the root of the Internal storage.

## 2.3. Copy over the BloomPUBs

Drag and drop all the desired books to the newly created Bloom folder.

## 2.4. Install Bloom Reader

Install Bloom Reader on the phone, either through the Google Play store or by copying the app to the Download folder and then “side-loading” the Bloom Reader from the phone’s file manager app.

To “side-load” the Bloom Reader app, you will need to grant permissions. For example, you may see something like this:



## My Files

For your security, your phone currently isn't allowed to install unknown apps from this source. You can change this in Settings.



**Cancel**

**Settings**

Click **Settings** to modify the permissions for installing unknown apps. Grant permission to your file manager by sliding the slider to the right ①. Then click to Install Bloom Reader ②:

## < Install unknown apps



Installing apps from this source may put your phone and data at risk.



Bloom Reader

Do you want to install this app?

Cancel

Install

2

271 MB



My Files

5.41 MB

1



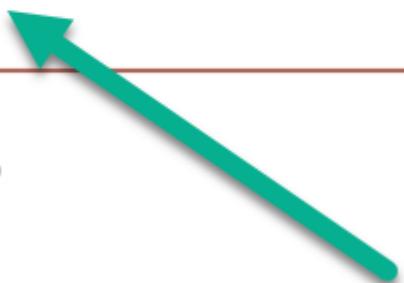
## 2.5. Check for Lost Books

When Bloom Reader opens and detects the folder “Bloom” in the internal storage, a prompt will appear to allow you to retrieve these books.

Click on “Check for Lost Books”:



Check for Lost Books



The Moon and the Cap



Click **OK** to the following prompt:

## Select Bloom directory

To find lost books, you will need to give Bloom Reader permission to use the Bloom folder at the root of Internal Storage. Touch USE THIS FOLDER



USE THIS FOLDER

OK

The file manager will then show the Bloom folder. Click on the blue button, “USE THIS FOLDER”:

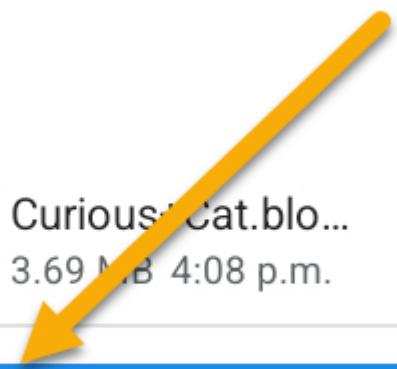
Files in Bloom



Animals+in+Pap...  
8.84 MB 4:08 p.m.



Curious+Cat.blo...  
3.69 MB 4:08 p.m.



USE THIS FOLDER

Finally, another prompt to confirm access will appear. Click ALLOW:

## Allow Bloom Reader to access files in Bloom?

This will let Bloom Reader access current and future content stored in Bloom.

CANCEL

ALLOW



Bloom Reader will transfer all the BloomPUBs from the Bloom folder into its private folder.

The phone is now ready for distribution.

# 3. Advanced Options

## ⚠ CAUTION

This section described advanced options and is *not* recommended for most users.

## Using Bloom Reader Beta or Alpha

The private books folder is *specific* to each ‘channel’ of Bloom Reader. Unfortunately, this means that if you want to make an SD card that will work seamlessly with Bloom Reader Beta, the books must be placed in:

Android\data\org.sil.bloom.reader.\beta\files\Books

and for Bloom Reader Alpha, in

Android\data\org.sil.bloom.reader.\alpha\files\Books

If you wish, and you have enough space, you can place the same collection in all these locations on the same SD card, so that it works with multiple “channels” of Bloom Reader.

## Support for older Bloom Reader versions

Bloom Reader will also notice the existence of the older system using a \BloomExternal folder at the root of the SD card, if it does not find \Android\data\org.sil.bloom.reader\files\Books.

N.B. : you can use *either* the \BloomExternal folder, or the private Books folder, not both at the same time. (Both can be present, as explained below, to support both old and new versions of BloomReader, but the newer versions will ignore \BloomExternal if they find the private Books folder, expecting it to be a duplicate.)

This is more complicated and is *not* recommended. The following are technical notes for those who need to know:

If Bloom Reader finds a \BloomExternal folder and does not find the private books folder described above, it will show a button the user can click, which will show instructions and guide the user through the process of giving BloomReader permission to access the folder. Once this permission is granted, books in \BloomExternal work just like those in the private books folder (except it will be somewhat slower, especially for larger books). If you

have a need to support both newer (3.0+) and older (pre-3.0) versions of Bloom Reader, you can place the same collection of books in both places. However, we don't expect this to be necessary for long, since devices will typically upgrade automatically to the latest version. It does mean, though, that SD cards made for older versions of Bloom will go on working, albeit less conveniently.

So, you can:

- Make SD cards with just books in `\Android\data\org.sil.bloom.reader\files\Books`. They will be ideal for current BloomReader.
- Keep using or making SD cards with just books in `\BloomExternal`. They will work with all versions of Bloom Reader, but will be slower with newer versions and require the user to give special permission
- Make SD cards with the same books in both **`\Android\data\org.sil.bloom.reader\files\Books`** and `\BloomExternal`. They will work well with both new and old versions of BloomReader.

# My Books

When you are logged into your Bloom Library account, there is a convenient way to view all of the books you have uploaded to the library.

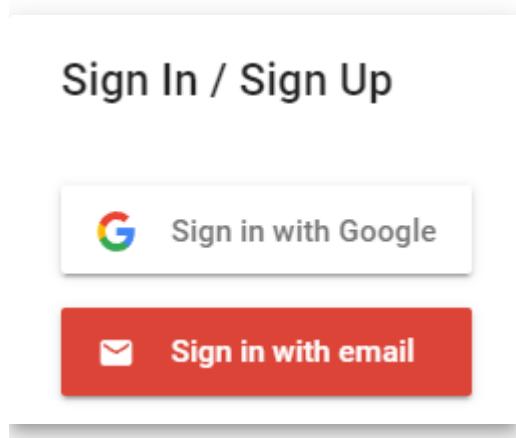
First, you must **Sign In** to your Bloom Library account:

The screenshot shows the Bloom Library homepage. At the top, there is a red header bar with the Bloom logo on the left, followed by three tabs: "READ", "CREATE", and a user icon with a green circle containing the number "1". To the right of the tabs is a search bar with the placeholder "search for books". Below the search bar is a button labeled "Sign In / Sign Up" with a green circle containing the number "2" above it. The main content area features a large, bold title "Bloom Library" and a subtitle "Free Books in Your Language".

1. Click on the blank avatar symbol in the top right corner.

2. Click on **Sign In / Sign Up**.

Bloom Library will present two options: you can **Sign In with Google**, or you can **Sign In with email**:

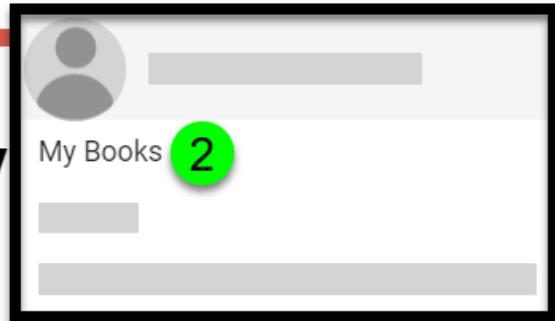


After signing in, your avatar will be displayed in the top right corner.

 search for books

# Bloom Library

Free Books in Your Language



1. Click on your avatar.
2. Click on **My Books**.

Following this, all of your books will be presented.

# **When Bloom is prevented from changing its image files**

Some users regularly run into an error in which something is preventing Bloom from updating some image files.

We are investigating this and will put more information here as we learn more.

Starting with Bloom 5.5, if you get this error, you will be directed to this page for more information.

# Likely Cause

Our leading theory is that these users have some non-Microsoft anti-virus program installed that is aggressively preventing Bloom from working with its own files, particularly .png files (these files are known to be able to carry viruses).

For now, if you run into this problem, please help us learn:

1. If the problem comes and goes, or if it is constant.
2. If you are using an extra antivirus program (beyond the built-in Windows Defender), try telling your antivirus to exclude Bloom. This is called “whitelisting”. For help with this, please refer to [this article](#). If you do not feel comfortable doing that, try temporarily disabling your antivirus.

Let us know if that helps so that we can spread the word to other people.

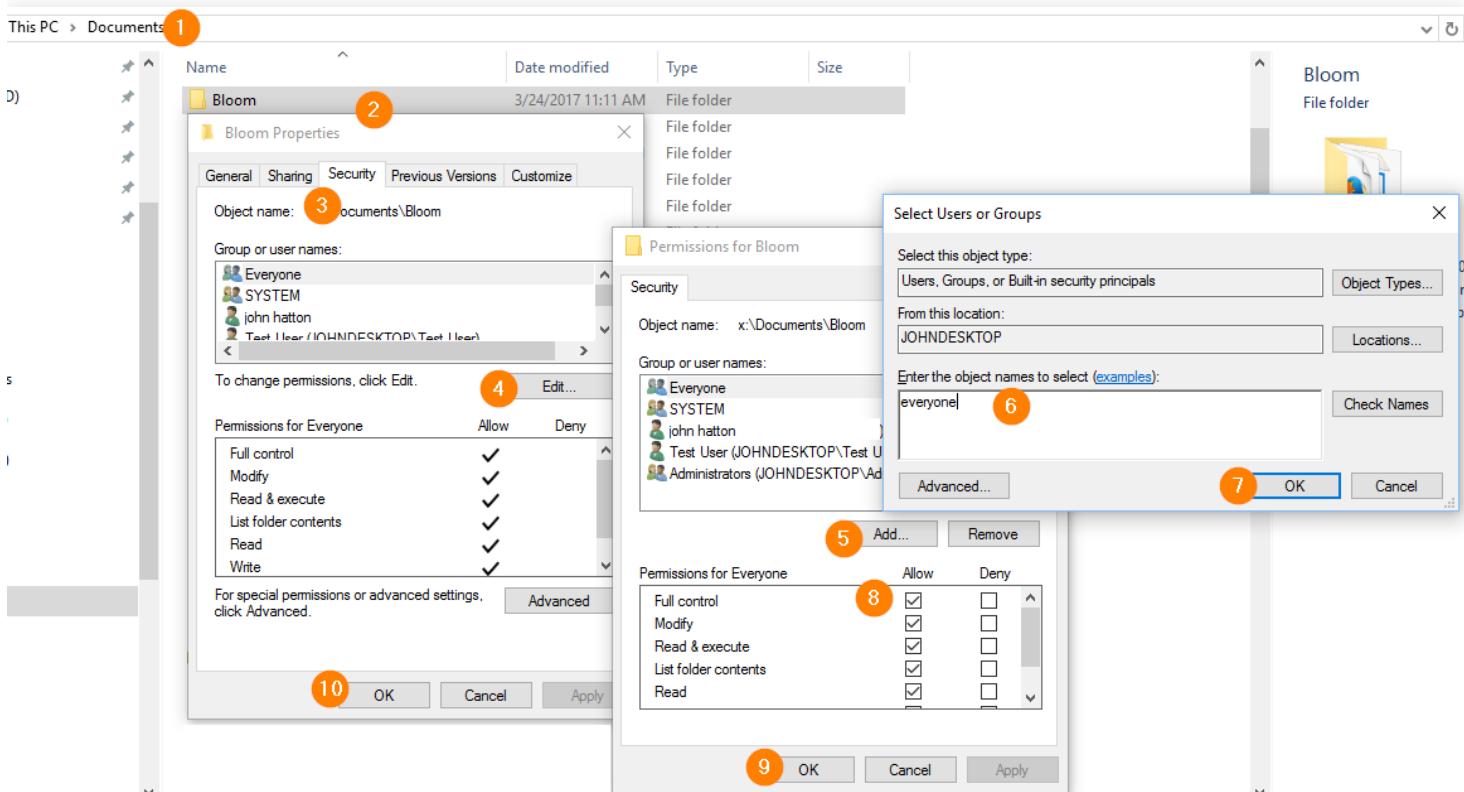
# Alternate Causes

If you are *not* using a non-Microsoft anti-virus program and you are encountering this problem, then there are a number of less-likely, yet possible, causes:

## User access settings for Bloom folders

About once a year, we work with someone whose Windows computer won't let Bloom access its own files. We don't know what causes that, but here's how to fix it:

1. Locate your Bloom folder. Normally this folder is Documents/Bloom.
2. Right click on the folder and choose "Properties".
3. Click on the "Security" tab.
4. Click Edit.
5. Click Add.
6. Type **everyone**.
7. Click OK.
8. Next to "Full Control", tick the box next in the "Allow" column.
9. Click OK.
10. Click OK.



## **Interference from a backup program**

If you are using a cloud backup program, such as OneDrive, Dropbox, or Google Drive, then it is possible that there could be a very brief disruption when Bloom is trying to access some particular files. If this happens, the problem should resolve itself almost immediately.

# Introduction to the problem

Bloom works great with the antivirus program that is built into Windows, which is called “Windows Defender”. Most people don’t need or want anything more than that.

However, some people choose to add a second antivirus program. These programs often wrongly say that Bloom is a problem. Bloom has a small audience, so these programs don’t recognize it. They assume the worst and start interfering with it. For example, you might see:

The screenshot shows a software interface titled "Scanner" with a "Threat Scan results" section. The table displays the following data:

	Name	Type	Object type	Location	Items detected	Scan time	Items scanned
<input checked="" type="checkbox"/>	Adware.Bloom	Malware	File	C:\Users\colin\AppData\Local\Bloom...tation\AndikaNewBasic-features.odt	3,084	15m 1s	356,072
<input checked="" type="checkbox"/>	Adware.Bloom	Malware	File	C:\Users\colin\AppData\Local\Bloom...tation\AndikaNewBasic-features.pdf			
<input checked="" type="checkbox"/>	Adware.Bloom	Malware	File	C:\Users\colin\AppData\Local\Blo...ldocumentation\DOCUMENTATION.txt			
<input checked="" type="checkbox"/>	Adware.Bloom	Malware	File	C:\Users\colin\AppData\Local\Blo...dikaNewBasic\AndikaNewBasic-B.ttf			
<input checked="" type="checkbox"/>	Adware.Bloom	Malware	File	C:\Users\colin\AppData\Local\Blo...ikaNewBasic\AndikaNewBasic-BI.ttf			

If your antivirus program is complaining about Bloom, do not write to us about it — there is nothing we can do. Instead, if you trust Bloom, you can tell your program that Bloom is OK. This is sometimes called “whitelisting”.

In this article, we will show you how to do this in a couple of different programs.

# General Instructions for Whitelisting Bloom

When you install Bloom, it adds a special folder to your computer. The path to this folder will be:

```
C:\Users\YOUR USER NAME\AppData\Local\Bloom
```

Every antivirus or antimalware program provides a way for you to tell it that **Bloom** is safe. You do this by telling your antivirus or antimalware program that this Bloom *folder* is safe.

For some programs, you will add the Bloom folder to a list of “allowed” folders.

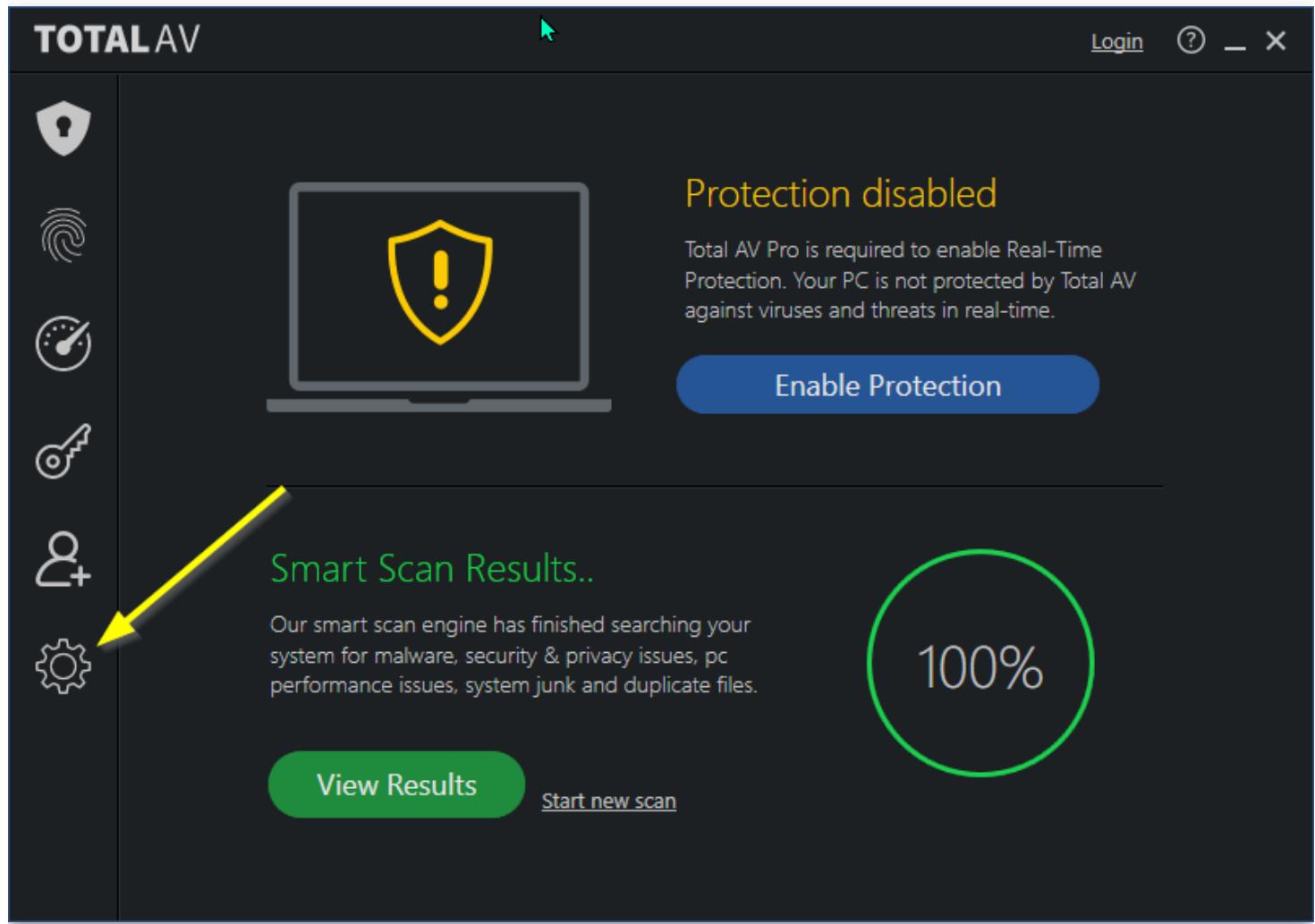
For other programs, you will add the Bloom folder to a list of “excluded” folders.

In either case, the result is that your program will no longer scan the Bloom folder looking for virus threats or Adware threats.

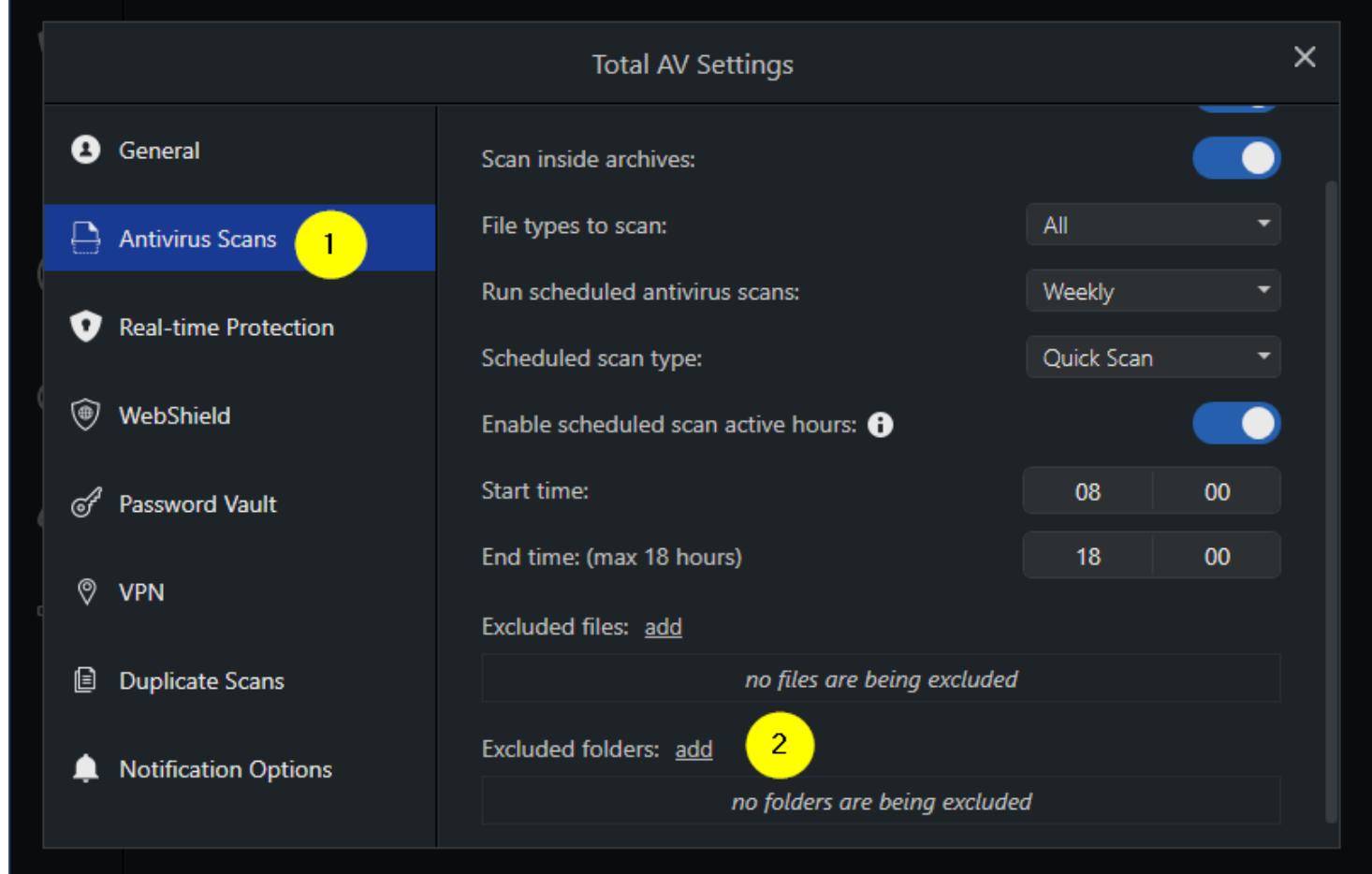
Each antivirus program will have its own method for doing this.

# Total AV

To begin, click on the **gear icon** to go to program settings:

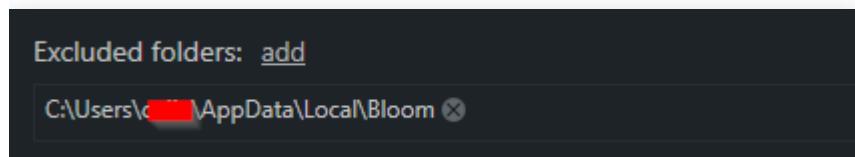


Next, in the (1) Antivirus Scans tab, click to (2) add an Excluded folder:



Navigate to the Bloom folder under \AppData\Local\ and click Select Folder.

The Excluded folder list will now have Bloom:



# Malwarebytes

To begin, do the following three steps:

1. Click on the **gear icon** to go to program settings.
2. Click on the **Allow List** tab
3. Click the **Add** button

The screenshot shows the Malwarebytes Settings window. At the top, there are links for 'Activate license' and 'Buy now', and icons for user profile, notifications, settings, and help. Below this is a 'Settings' header with a close button. The 'Allow List' tab is highlighted with a blue underline and has the number '2' above it. Other tabs include General, Notifications, Security, Display, Account, and About. A message below the tabs says, 'If Malwarebytes blocks something you know is safe, add it here to skip it in future detections.' To the right of this message is a blue circular button with the number '3' and an 'Add' button. Below the message is a table with columns for 'Name' and 'Type'. The table is currently empty.

Next, choose “Allow a file or folder”:

The screenshot shows the 'Add an item to your Allow List' dialog box. It contains four options: 'Allow a file or folder' (with a blue folder icon), 'Allow a website' (with a globe icon), 'Allow an application to connect to the Internet' (with a green checkmark icon over a stack of app icons), and 'Allow a previously detected exploit (Advanced)' (with a clock icon). A red arrow points from the text 'Allow a file or folder' towards the 'Allow an application to connect to the Internet' option.

Next, choose “Select a folder” and navigate to the Bloom folder under \AppData\Local.

Click Done.

## Add a file or folder to your Allow List



If you add a folder to your Allow List, all the files and subfolders inside it will be added too.

Select a file or folder

C:\Users\█████\AppData\Local\Bloom

Select a file

Select a folder

1

Exclusion rules

- Exclude from all detections
- Exclude from detection as malware or potentially unwanted item only
- Exclude from detection as ransomware only

2

Cancel

Back

Done

If you also use Bloom Beta, then you will need to repeat the process to add the Bloom Beta folder as well.

In the end, your **Allow List** should now look like this:

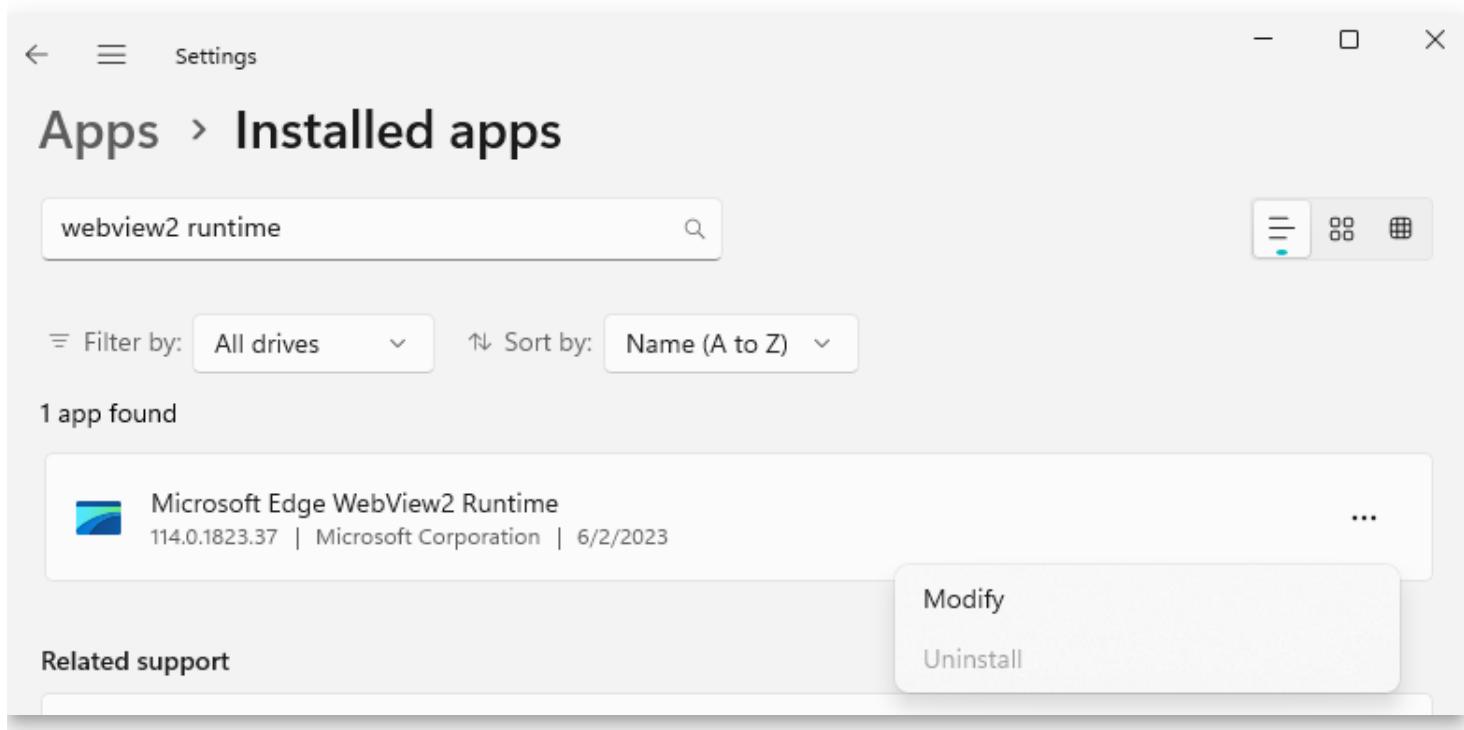
# WebView2 Trouble

## TIP

Please get in contact with us (<mailto:issues@bloomlibrary.org>) if you get directed here by Bloom. Even if the following instructions work for you, we need to know that this is actually happening to someone!

Bloom's user interface is powered by the same browser engine as Microsoft Edge, which is named "WebView2". If WebView2 were to get damaged in some way, Bloom would not be able to run. It would direct you to this web page.

If this happens to your, here are some things to try:



Click "Modify", then "Repair":

## Repair Microsoft Edge WebView

Repairing Microsoft Edge WebView requires an internet connection and will reinstall the browser. Your browser data and settings won't be affected.

Repair

Cancel

# If the repair doesn't work

## TIP

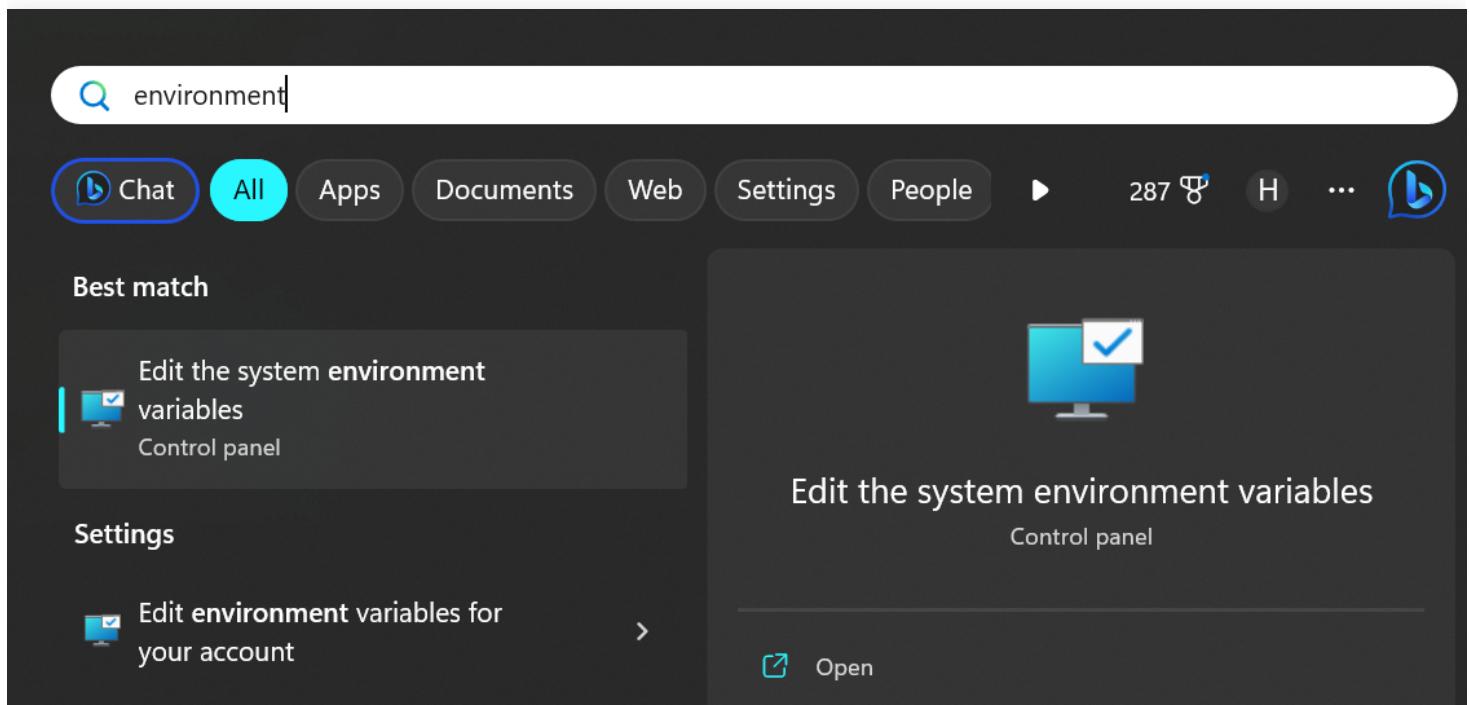
Please get in contact with us (<mailto:issues@bloomlibrary.org>) if you get this far. Even if the following instructions work for you, we need to know that this is actually happening to someone!

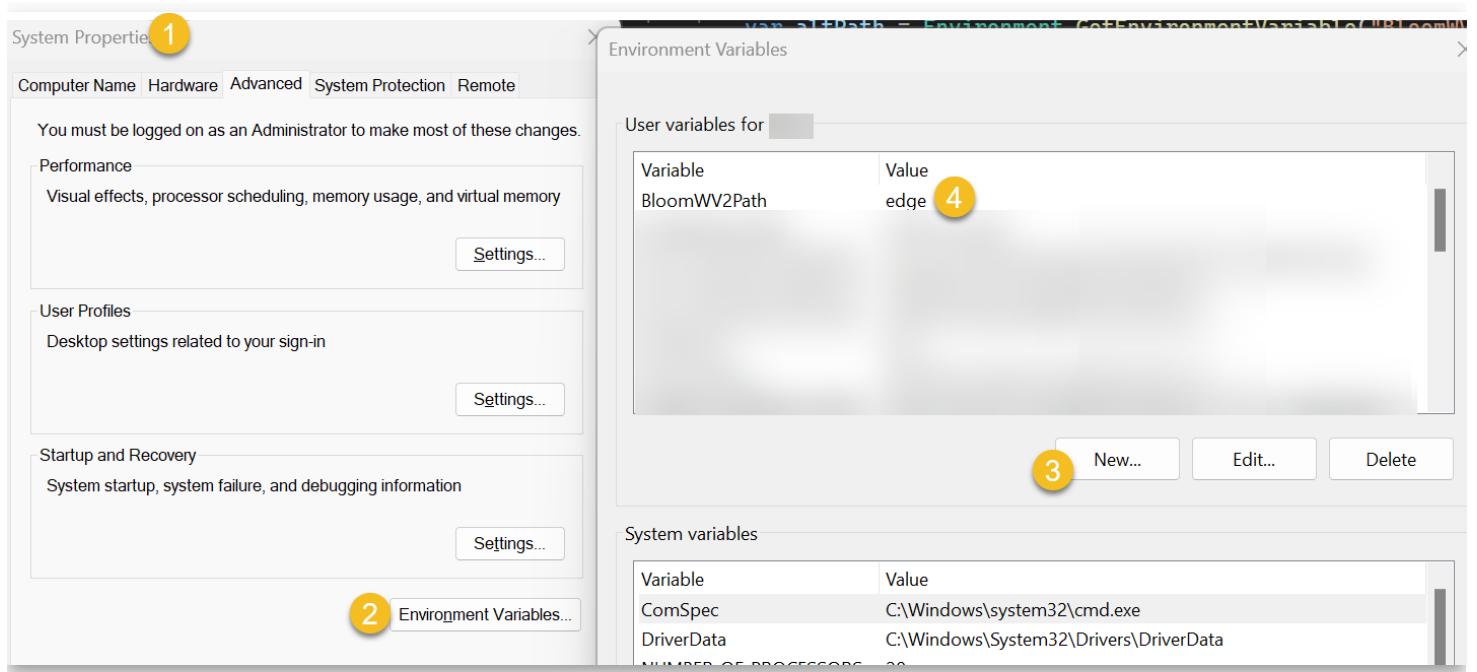
We have seen a situation where the above does not fix the problem, and have prepared a “nuclear option”: tell Bloom to use the WebView2 that comes with Microsoft Edge.

## CAUTION

The following has only been tested successfully with Windows 11. For other versions, there is a more complicated approach that we can walk you through, if necessary.

To do this, create an environment variable named “BloomWV2Path” and set it to “edge”:





Close these windows and run Bloom again. If this doesn't work, or even if it does, Please get in contact with us (<mailto:issues@bloomlibrary.org>).

# Glossary

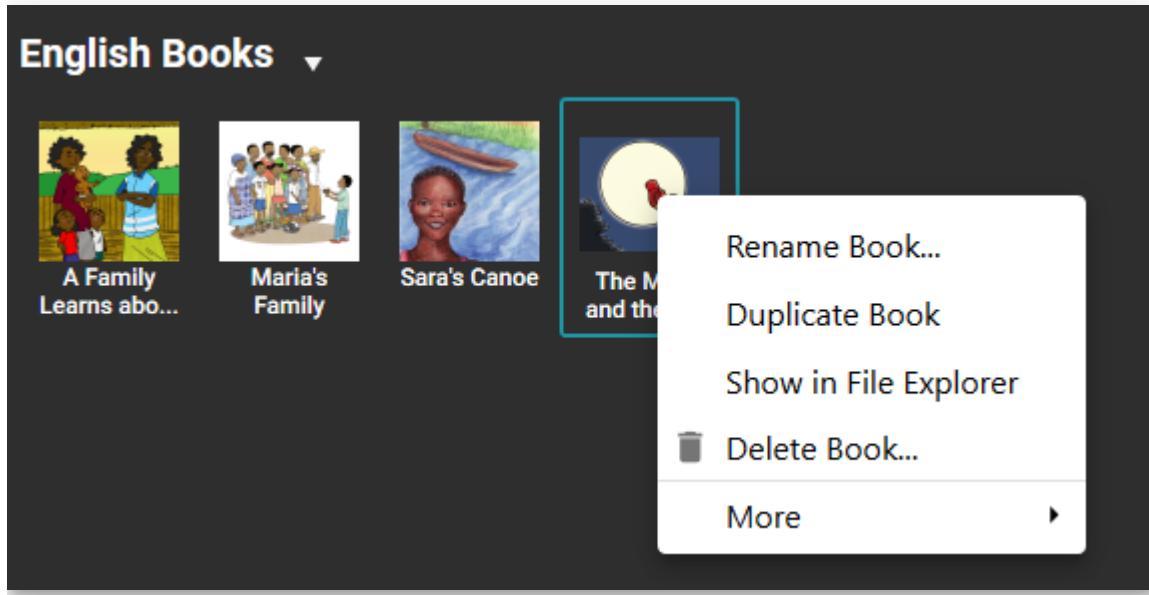
1. Mouse: click and right-click
2. Shell Book

 **CAUTION**

This page is a work in progress.

# Mouse: click and right-click

One example in Bloom where a right-click is needed is when you want to Duplicate or Delete a Book. To access these commands in Bloom, you need to right-click on the book's thumbnail. Doing so will reveal these commands (and others).



# Shell Book

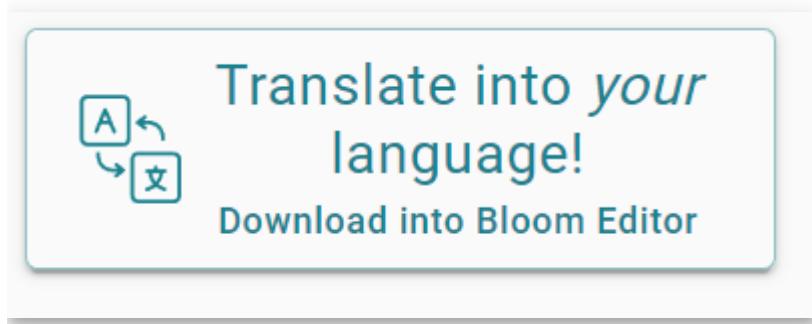
"Shell Books" (sometimes called "Shells") are books that have been intentionally designed by their authors to be translated into other languages.

Generally, Shell Books are first made available in languages of wider communication in order to facilitate and encourage easy and simple book production in local languages.

Most of the books uploaded to Bloom Library are "shell books" because the authors of these books have published them using Creative Commons licensing. This means they can be freely adapted or translated into other languages.

The Bloom Desktop Editor is designed to work well with Shell Books.

When you explore Bloom Library and you see a book that you like, there is a very high chance that you will see a button like this:



This button means this is a Shell Book and can be translated into your language.

When you click on this button, the shell book will be downloaded into the Bloom desktop editor. Once it is downloaded, you can choose to make a new book from that shell book by clicking the button "MAKE A BOOK USING THIS SOURCE":



MAKE A BOOK USING THIS SOURCE

# Don the Dirty Dog



PNG - Decodables v1.0

English

On each page of this shell book, you will see the original text in some majority language (the example below has English), as well as an empty space for you to type in your translation:

Change Layout

Empty space to type in your translation of the English text

English

Don the dog digs.  
Don the dog digs a pit.  
Don the dog digs up.  
Don the dog digs down.

Original text in a majority language such as English

1

Turka

# **PDF Downloads**

[PDF of English Docs in A4](#)