

L_YXBook

LyXBook

Layouts for Typesetting Books with LyX

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THE EDITORIUM

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For LyX users everywhere

“Uncle Cosmo, why do they call this a word processor?”

“It’s simple, Skyler. You’ve seen what food processors do to food, right?”

—*Jeff MacNelley*, *Shoe*

Contents

Read This!	xi
I A Part Title, Just for Illustration	1
1 Installing L ^A T _E XBook	3
2 Using L ^A T _E XBook	9
Acknowledgments	23

Read This!

L^AT_EXBook is a collection of layouts and customizations designed specifically for typesetting books in L^AT_EX, the what-you-see-is-what-you-mean document (not *word*) processor:

www.lyx.org

This documentation was written not just to *tell* you how to use L^AT_EXBook but also to *show* you how to use it. The L^AT_EX file of this documentation (L^AT_EXBook.lyx) is itself an example of how to put together a (very short) book. It uses the default L^AT_EXBook layout (L^AT_EXBook-Default.layout), which *must* be installed before the L^AT_EX file of this documentation will work correctly.

L^AT_EXBook is compatible with L^AT_EXConverter, a Microsoft Word add-in that converts Word documents into L^AT_EX documents. L^AT_EXConverter includes additional L^AT_EXBook layouts along with various modules and customized keyboard shortcuts for use with L^AT_EX. You can learn more here:

www.editorium.com/lyxconverter.htm

Part I

A Part Title, Just for Illustration

Chapter 1

Installing L^AT_EXBook

Before installing L^AT_EXBook, you'll need to have L^AT_EX (including a T_EX distribution) installed on your computer. You can download everything you need here:

www.lyx.org/Download#toc2

- If you're using a Windows computer, install the version of L^AT_EX that's bundled with T_EX: L^AT_EX-2.x.x-Bundle-2.exe or similar. If T_EX is already installed on your computer, the L^AT_EX installer is all you need: L^AT_EX-2.x.x-Installer-2.exe or similar.
- If you're using a Macintosh or Linux computer, follow the requirements listed on the web page. Many Linux distributions already include L^AT_EX and T_EX.

After installing L^AT_EX, you should do the following:

1. If you haven't used L^AT_EX before, read the L^AT_EX Introduction and Tutorial (both under the Help menu). If you need more information, read the User's Guide.

2. Make sure that L^AT_EX can produce a typeset PDF version of a document (try one of the Help files) by clicking View > [PDF (pdflatex)].

If you need help, consult the L^AT_EX wiki and mailing lists:

wiki.lyx.org/
www.lyx.org/MailingLists

The Editorium cannot help you with L^AT_EX but will try to help you with L^AT_EXBook if necessary:

editor@editorium.com

Suggestions for improvements, additional layouts, more modules, and so on, are welcome.

Layout Files

After installing L^AT_EX, you can install the L^AT_EXBook layout files:

- L^AT_EXBook–Default.layout
- L^AT_EXBook–Archaic.layout
- L^AT_EXBook–Plain.layout (included with L^AT_EXConverter)
- L^AT_EXBook–Deco.layout (included with L^AT_EXConverter)
- L^AT_EXBook–Ruled.layout (included with L^AT_EXConverter)
- L^AT_EXBook–RuledThick.layout (included with L^AT_EXConverter)

You'll find detailed instructions for installing layout files here:

wiki.lyx.org/Layouts/Layouts

Basically, you just put the files into your user directory under $\sim\backslash\text{LyX}2.0\backslash\text{layouts}$. You can find out where that is on your computer by starting L^AT_EX and then clicking Help > About L^AT_EX. On my Windows computer, the path to the directory looks like this:

C:\Users\Jack\AppData\Roaming\LyX2.0\layouts

Those who are interested can open the layout files in a text editor to see how they're constructed. L^AT_EX and T_EX experts should feel free to modify the layouts to their liking.

Module Files

If you have L^AT_EXConverter, you can also install the L^AT_EXBook module files:

- LB–UseArabicNumbersWithParts.module
- LB–OmitPartNumbers.module
- LB–OmitChapterNumbers.module
- LB–NumberSections.module
- LB–IncludeSectionsInContents.module
- LB–IncludeSectionsInHeaders.module
- LB–IncludePartsInHeaders.module
- LB–OmitRunningHeads.module
- LB–ChangePartToNothing.module

- LB–ChangeChapterToNothing.module
- LB–IndentFirstParagraphs.module
- LB–AllowRaggedBottoms.module
- LB–SetLeading1.4.module
- LB–SetLeading1.5.module
- LB–UseHangingPunctuation.module

Put them in the “layouts” folder along with the layout files.

Customized Keyboard Shortcuts

If you have L^AT_EXConverter, you can also install L^AT_EXBook’s keyboard file, user.bind. Put the file into your user directory under $\sim\backslash\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}2.0\backslash\text{bind}$. Note that this file replaces some of L^AT_EX’s default keyboard shortcuts (see “Keyboard Shortcuts,” below). If you don’t want that to happen, you shouldn’t install user.bind.

Reconfigure and Restart

After installing the layout files or other files, you’ll need to reconfigure and restart L^AT_EX:

1. In L^AT_EX, click Tools > Reconfigure.
2. Wait for Reconfigure to finish.
3. Close and then restart L^AT_EX.

At this point, L^AT_EXBook’s features will be available in L^AT_EX.

Uninstalling L^AT_EXBook

If you install L^AT_EXBook and later decide you don't want it, just remove its files (discussed above) from the directories where you put them. Then reconfigure and restart L^AT_EX.

A Sample Book!

L^AT_EXBook includes *The Merry Adventures of Robin Hood*, already styled and ready to typeset as a PDF. It's a good example of how to set up a book using L^AT_EXBook, and it's fun to try using it with the different layout files. (See "Layouts," below.) By default, this book uses the L^AT_EXBook–Archaic layout.

Check out those automatically generated chapter “numbers” in the PDF! Try doing *that* in Microsoft Word.

Chapter 2

Using L^AT_EXBook

Using L^AT_EXBook is simple (if you don't count the actual writing of your book):

1. Create a new document in L^AT_EX by clicking File > New.
2. Apply one of the L^AT_EXBook layouts by clicking Document > Settings > Document Class and selecting a layout from the Document Class dropdown list. The L^AT_EXBook layouts are listed under “book,” like this: “book (L^AT_EXBook—Default).”
3. Write your book in L^AT_EX. Unlike working in a word processor, writing in L^AT_EX is clean, fast, and reliable.
4. As you write, use the L^AT_EXBook styles to format your text. You'll find the styles in the dropdown style list at the upper left of your L^AT_EX window. You can access the list with your mouse. If you've installed L^AT_EXConverter's user.bind keyboard file, you can also access the list by pressing the F5 key.
5. Typeset your book as a PDF by clicking View > [PDF (pdf_lat_ex)].

LyXBook Styles

By default, LyX includes several useful styles, mainly for writing technical articles. LyXBook, on the other hand, includes all the styles you'll need to format a regular book (novel, biography, family history), with a title page, chapters, running heads, page numbers, and everything else you'd expect to see in a professionally typeset book. If you apply the styles as explained in this documentation, LyX will automatically create and paginate your book.

Most of the styles are self-explanatory; use Chapter to designate a chapter title, Section to designate a subheading within a chapter, and so on. This document provides many examples. A few of the styles, however, need further explanation.

Styles That Format Text

<i>Style</i>	<i>Purpose</i>
Standard	The regular body text in your book.
Standard 2	An additional kind of body text, if you need it, which you almost never will.
Text Break	Used to style a break in the text. Such breaks are used in novels to mark a change of scene (often with three spaced asterisks: * * *).
Chapter*	The same as Chapter, but chapter titles styled with this starred version won't be numbered or included in the table of contents. The same is true for Part* and Section*. You'll hardly ever need to use these.

Half-Title	Used on the first page of a book (the half-title page) to display the book's title—and that's all. The half-title page comes <i>before</i> the actual title page. To see an example, look at any professionally published book.
Pretitle	A line that appears on the title page <i>above</i> the book's title, if needed (“The Merry Adventures of”).
Title	The title of the book as it appears on the title page (“Robin Hood”).

Styles That Provide Special Functions

Don't use the following styles to format text; instead, use them *on their own line* to provide special functions. For example, the Contents style automatically generates a table of contents (as it does in this document; see above).

<i>Style</i>	<i>Purpose</i>
Contents	Automatically generates a table of contents, based on the book's part and chapter titles.
Start Two Columns	Sets the following text in two columns rather than one.
End Two Columns	Returns the text to one column (the default).

Front Matter	This should be the <i>very first</i> style in your document. Front matter includes the half-title page, title page, copyright page, contents page, and so on. L ^A T _E XBook sets page numbers in front matter as Roman numerals (i, ii, iii). Both running heads include the chapter-level title (for example, “Preface”). Chapter-level titles in front matter are not numbered.
Main Matter	Marks the end of the front matter and the beginning of the actual chapters. L ^A T _E XBook sets page numbers in main matter as Arabic numbers (1, 2, 3). The left running head includes the part or chapter title; the right running head includes the chapter or section title. Chapters are automatically numbered.
Back Matter	Marks the end of the main matter and the beginning of such items as bibliography and index. Both running heads include the chapter-level title (for example, “Bibliography”). Chapter-level titles in the back matter are not numbered.

L^AT_EX is *not* WYSIWYG; what you see is *not* what you get. In fact, that’s half the point of using L^AT_EX. Don’t worry about how your text looks; just use the styles to mark up your text. L^AT_EX will do the final formatting when it creates the typeset PDF.

As you apply styles to text, you’ll notice that some of them make the text a certain format and color. For example, block

quotes appear in blue. That's so you'll *recognize* them as block quotes while you're writing your book. Similarly, chapter-level headings are centered in blue. Part headings appear in red. Section headings appear in green. And so on. But don't worry—later, when your book is typeset, everything will be in good old black and white. Also, even though part and chapter numbers aren't displayed when using L^AT_EXBook, they *will* be appropriately displayed in the typeset PDF.

Adjusting Document Settings

Ordinarily when using L^AT_EX, you can adjust many different settings under Document > Settings. However, using the L^AT_EXBook layouts, certain things under L^AT_EX's document settings simply don't work. For example, you can still set the level of section numbering under Document > Settings > Numbering & TOC, but your settings will have no effect. If you change line spacing under Document > Settings > Text Layout > Spacing to anything but "Single," you'll get an error message. But the whole point of using L^AT_EXBook is to let L^AT_EXBook control the formatting. If that's not what you want, you should try some of the other document classes under Document > Settings > Document Classes.

Basically, using L^AT_EXBook, you can (and *should*) adjust the following under Document > Settings:

- *Document Class*: Select a L^AT_EXBook document class (layout). No matter which L^AT_EXBook layout you select, the appearance of your text in L^AT_EX will remain the same. But when you typeset your document, the appearance of your text in the PDF will depend on the formatting specified in the layout. To typeset your text and view the PDF, click View > [PDF (pdflatex)].

- *Fonts*: Adjust as needed. LyX has access to several good Roman fonts, but the following are particularly well suited for typesetting books: Bitstream Charter, Bookman, Century Schoolbook, and Palatino. *If you want to use other fonts on your computer*, check the box labeled “Use non-TeX fonts (via XeTeX/LuaTeX)” and select the font you want to use for Roman. If you’re going to use this option, you’ll need to typeset your text and view the PDF by clicking View > View (Other Formats) > PDF (XeTeX). Set the base font size to 10 or 11, with a maximum of 12.
- *Page Layout*: Set a custom size as needed. For books, height and width should usually be 9 by 6 inches; other common sizes are 8.5 by 5.5 and 10 by 7. Don’t change the Headings style!
- *Page Margins*: Adjust as needed. For books, set the inner margin at about an inch, which will provide enough space to bind the pages when printed. Try a bottom margin of 1.25 inch.

Unless you really know what you’re doing, you should leave all other settings alone.

Modules

The LyXBook modules (included with LyXConverter) do allow you to change some of the things you’d ordinarily change through LyX’s document settings, along with many other things as well:

- *LB-UseArabicNumbersWithParts*: By default, Part numbers are set in Roman numerals (I, II, III). This module sets them in Arabic numbers (1, 2, 3).
- *LB-OmitPartNumbers*: Keeps parts from being numbered.

- *LB-OmitChapterNumbers*: Keeps chapters from being numbered.
- *LB-NumberSections*: Numbers sections.
- *LB-IncludeSectionsInContents*: Includes section titles in the table of contents.
- *LB-IncludeSectionsInHeaders*: Includes section titles in the recto (right-hand) running heads, and chapter titles in the verso (left-hand) running heads.
- *LB-IncludePartsInHeaders*: Includes part titles in the verso (left-hand) running heads, and chapter titles in the recto (right-hand) running heads.
- *LB-OmitRunningHeads*: Omits running heads, leaving page numbers only. This might be used in a novel whose only chapter titles are Chapter 1, Chapter 2, and so on.
- *LB-ChangePartToNothing*: Changes the part name “Part” to nothing. Parts are still numbered, however.
- *LB-ChangeChapterToNothing*: Changes the chapter name “Chapter” to nothing. Chapters are still numbered, however.
- *LB-IndentFirstParagraphs*: Adds a first-line indent to body-text paragraphs following headings.
- *LB-AllowRaggedBottoms*: Allows the bottom lines of facing pages to be uneven rather than aligned.
- *LB-SetLeading1.4*: Sets leading (line spacing) at 1.4 the size of the text for the styles Standard, Standard2, Block Quote, Poem, and Letter. (Default is 1.3.)

- *LB-SetLeading1.5*: Sets leading (line spacing) at 1.5 the size of the text for the styles Standard, Standard2, Block Quote, Poem, and Letter. (Default is 1.3.)
- *LB-UseHangingPunctuation*: Enables hanging punctuation (character protrusion) and font expansion using the Microtype package for \LaTeX . Highly recommended!

To use the modules:

1. Click Document > Settings > Modules.
2. Select the module you want to use.
3. Click the Add button to activate the module.
4. Click the OK button.

LyX also includes several modules of its own, which you can explore at your leisure. Modules are activated in the order of their position in the “Selected” list; if there are any conflicts between modules, those lower on the list override those above.

Using Short (Optional) Titles

Sometimes in a book, you want a chapter heading to have different (usually shorter) wording in the table of contents and running heads than at the beginning of the chapter itself. Here’s how to make that happen with LyXBook:

1. Put your cursor in front of the heading.
2. Click Insert > Short Title.
3. In the “opt” box that appears, type the optional wording that should appear in the table of contents.

4. Move your cursor after the “opt” box and in front of the heading.
5. Click Insert > Short Title.
6. In the “opt” (for “optional”) box that appears, type the optional wording that should appear in the running heads.

If you use *two* “opt” boxes, the first one (on the left) will be used in the table of contents, the second one (on the right) in the running heads. If you use just *one* “opt” box, the text you provide will be used in the table of contents *and* the running heads.

This feature is also useful if you need to rebreak an unsightly chapter heading by using a “soft” return (CTRL_ENTER). If you don’t provide an optional title in an “opt” box, the heading will also be broken on the contents page and in the running heads, which you don’t want. The solution is to provide an *unbroken* version in an “opt” box.

Outline Pane

LyX’s Outline pane helps you see the structure of your document as you write. To activate the pane, click the compass icon (a toggle) on LyX’s standard toolbar. The pane will open on the left side of your document. Click an item in the Outline pane to navigate to that item.

Keyboard Shortcuts

Keyboard shortcuts help you work efficiently, without having to reach for the mouse all the time. If you installed the user.bind keyboard file included with LyXConverter, the following shortcuts are available, in some cases replacing LyX’s default shortcuts (which are explained under Help > Shortcuts):

Editing

The F keys (F2, F3, etc.) are the function keys at the top of your keyboard. *LyXConverter*'s `user.bind` file sets these keys to perform common editorial tasks:

F2	Track changes (toggle)
F3	Find and replace
F4	Reject tracked change
F5	Select styles (from the dropdown style list)
F6	Format with small caps (toggle)
F7	Format with emphasis (italics) (toggle)
F8	Emphasize (italicize) word and move to next word
F9	Capitalize word and move to next word
F10	Lowercase word and move to next word
F11	Transpose words
F12	Transpose characters

Document Formatting

In the following list, C represents the CONTROL key, and S represents the SHIFT key. *LyXConverter*'s `user.bind` file sets the following key combinations to apply some of the most commonly used paragraph styles:

C-S-1	Part
C-S-2	Chapter

C-S-3	Section
C-S-4	Subsection
C-S-5	Subsubsection
C-S-s	Standard
C-S-b	Block Quote
C-S-p	Poem
C-S-e	Enumerate (numbered list)
C-S-i	Itemize (bulleted list)

Paragraph Formatting and Spacing

In the following list, C represents the CONTROL key, and S represents the SHIFT key. *LyXConverter*'s `user.bind` file sets the following key combinations to apply paragraph formatting and spacing. You should hardly ever need to use these; they're for fine-tuning only.

C-S-l	Align left
C-S-c	Align center
C-S-r	Align right
C-S-j	Align justified
C-S-d	Toggle first-line indent (for text styled with Standard, Quotation, and a few others). You can use this to "outdent" (unindent) the first line of a paragraph that is normally indented.

- C-S-h Insert *horizontal* space in the form of an em space, or quad, as some typesetters call it. If you put your cursor in front of this space and right-click, you can change it to some other kind of space. You can use this to indent paragraphs that aren't normally indented, to format poetry, and so on. Use this sparingly; don't go merrily using it to further indent every paragraph in sight.
- C-S-v Insert *vertical* space, or leading, as typographers call it. If you put your cursor in front of this space and right-click, you can change it to some other kind of space. You can also insert vertical space by pressing C-ENTER, which produces a "soft" line break. Again, use these sparingly; LyXBook should take care of most vertical spacing.

Local Formatting

In the following list, C represents the CONTROL key. LyXConverter's user.bind file sets the following key combinations to apply local formatting:

- C-i Toggle emphasis (italics)
- C-u Toggle emphasis (italics rather than underline; underlining is a holdover from the days of the typewriter and shouldn't be used for emphasis in typesetting books)
- C-b Toggle bold

Special Characters

In the following list, C represents the CONTROL key, and M represents the Meta key. In Windows, this is the ALT key; on a Macintosh, it's the Apple key. *LyX*Converter's user.bind file sets the following key combinations to insert these commonly used special characters:

C-M-m	Em dash (—)
C-M-n	En dash (–)
C-M-p	Pound sign (£)
C-M-e	Euro sign (€)
C-M-c	Copyright (©)
C-M-t	Trademark (™)
C-M-r	Registered (®)

If you need other special characters (those not on your keyboard), you'll probably find them under Insert > Special Character.

Other Shortcuts

In addition to the keyboard shortcuts listed above:

- You can make an em dash by typing three hyphens in a row—like this.
- You can make an en dash by typing two hyphens in a row. (En dashes are used to separate a range of numbers, like this: 12–24.)
- If you've installed *LyX*Converter's user.bind file, CTRL-DELETE deletes the current word *even if the cursor isn't at the beginning of the word*.

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