

How to add bookmarks to a PDF document on Linux

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Categories : [Publishing](#), [Utilities](#)

Tagged as : [cli](#), [ghostscriptpdf](#)

Question: I would like to add bookmarks to a PDF file, so that the bookmarks appear in the left hand side bookmarks panel. Is there a command-line approach to create bookmarks and embed bookmark links in a PDF file on Linux?

In a PDF document, bookmarks can be added as a navigational tool to allow readers to locate and quickly move to particular sections in the document by clicking on bookmark links. If a PDF file is a very long document with hundreds of pages, adding properly organized bookmarks can be essential to guide users to browse the document effectively.

PDF bookmarks can be implemented with the `pdfmark` operator, which is part of a PostScript language extension. Among other things, `pdfmark` can be used to add a hotlink to a small piece of text in a PDF, which is pretty much a bookmark function.

`pdfmark` can be embedded into a PDF file with Ghostscript. Here is **how to add PDF bookmarks from the command line with Ghostscript on Linux**.

Add Bookmarks in a PDF file with Ghostscript

To add PDF bookmarks, first create an index file (`index.info`) in the format of:

`"/Page"` indicates the page number to the bookmark jumps to, and `"/Title"` represents the name of the bookmark.

Once you created `index.info`, use the following command to add the bookmarks in the PDF file `input.pdf`. `output.pdf` will have the bookmarks embedded.

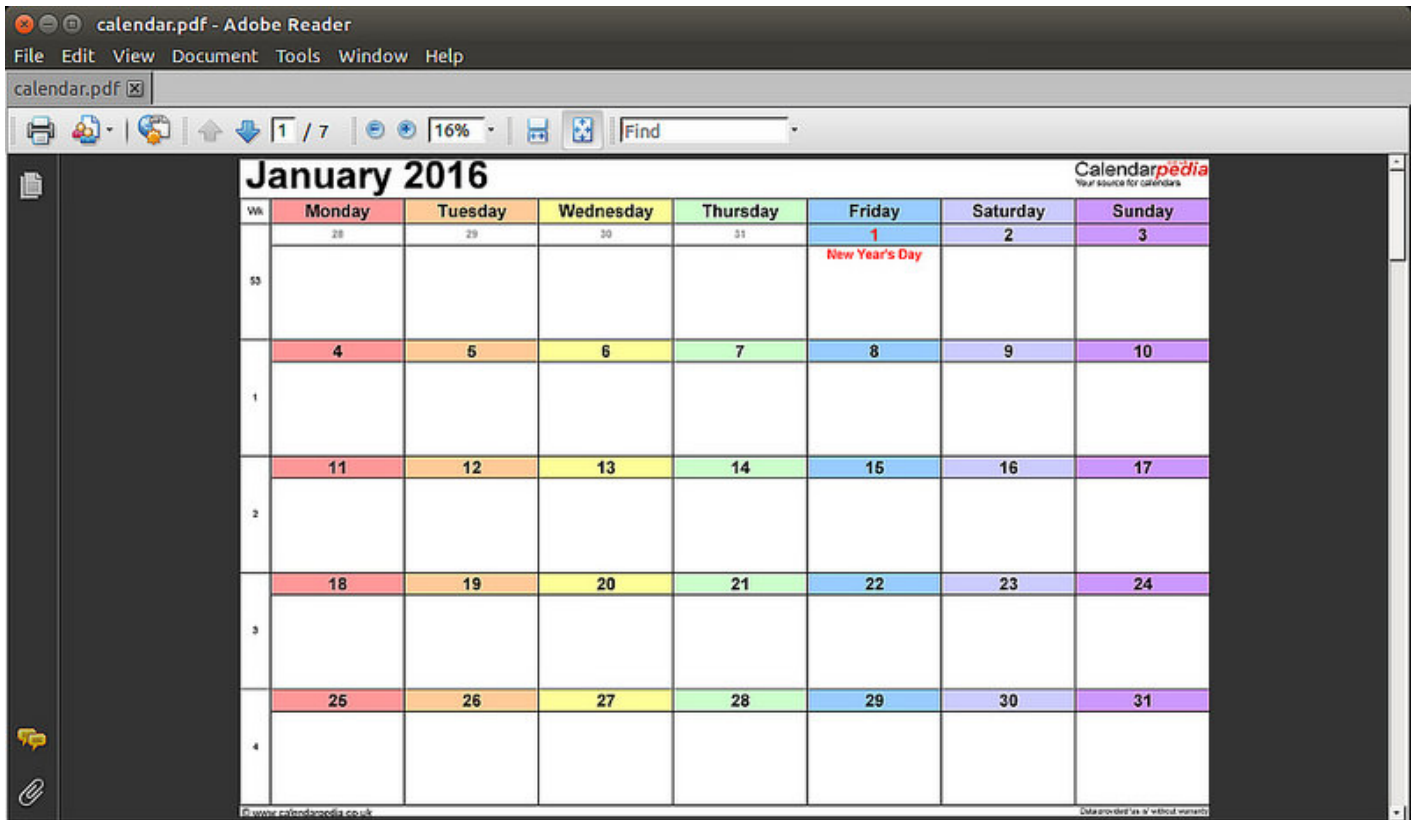
```
$ gs -sDEVICE=pdfwrite -q -dBATC -dNOPAUSE -sOutputFile=output.pdf -dPDFSETTINGS=/prepress  
index.info -f input.pdf
```

For example, given the input PDF file:

Ask Xmodulo

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<http://ask.xmodulo.com>

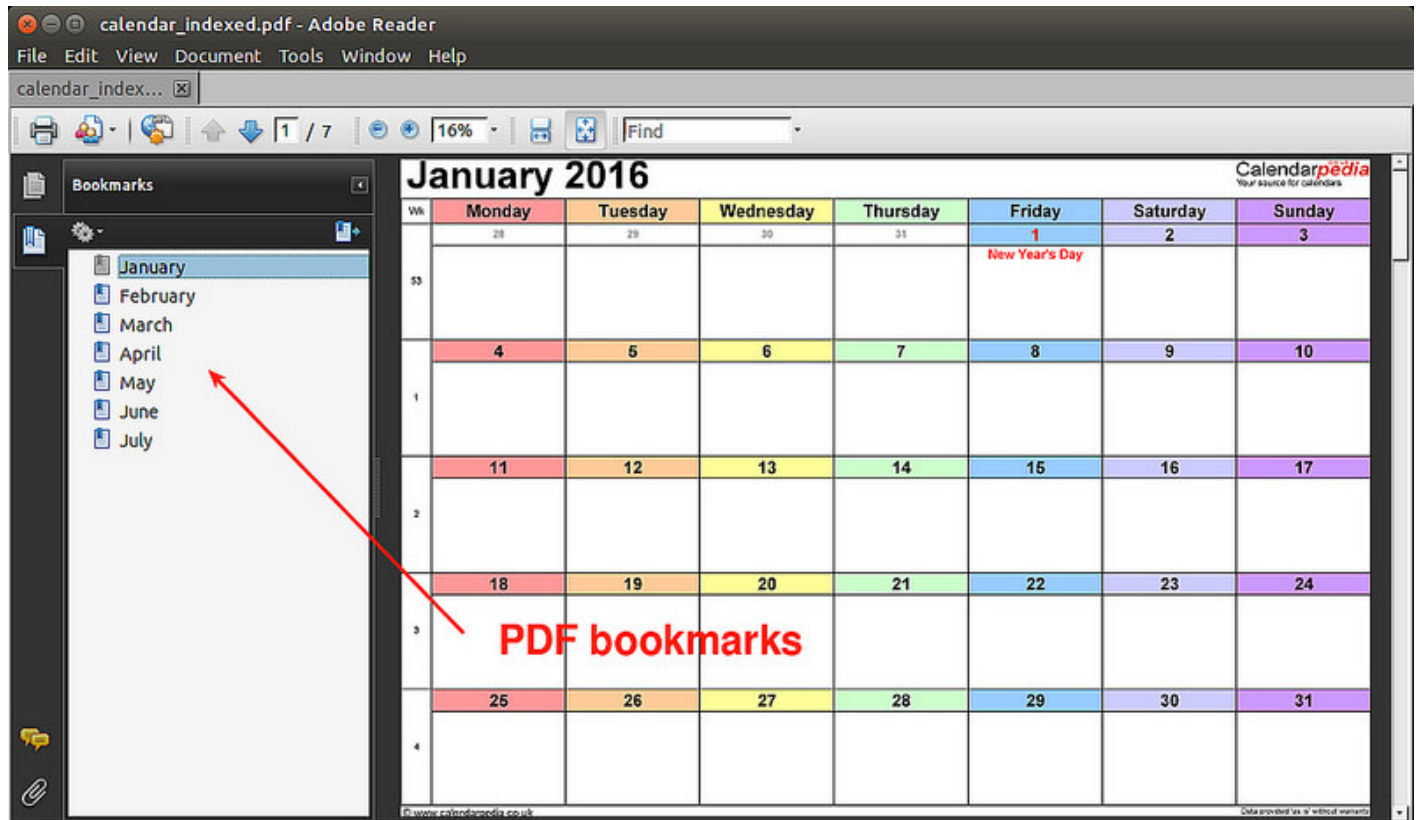


The output PDF file will look like:

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Add Nested Bookmarks in a PDF file with Ghostscript

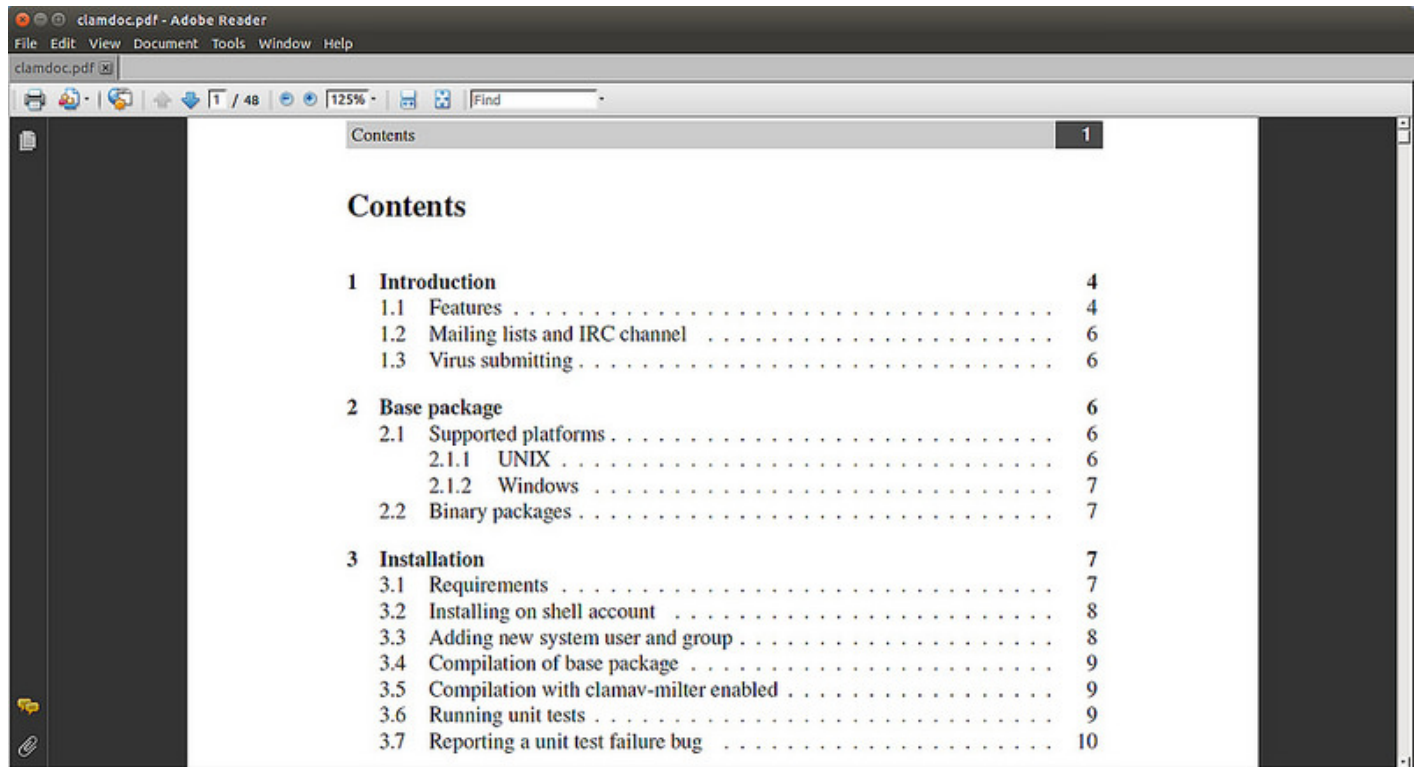
If you have a structured PDF document with chapters, sections, subsections, etc., you may want to add "nested" bookmarks in the PDF file. In that case, use `"/Count N"` attribute with `pdfmark` to represent nested levels. The argument 'N' corresponds to the number of immediately subordinate bookmarks. For example, if the first chapter has three sections, you can add `"/Count 3"` in that chapter's bookmark, and if a given section has two subsections, include `"/Count 2"` in the section's bookmark.

Let's create nested bookmarks for the following document.

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The created index file looks like the following.

Use the same command as above to add nested bookmarks in the input PDF file.

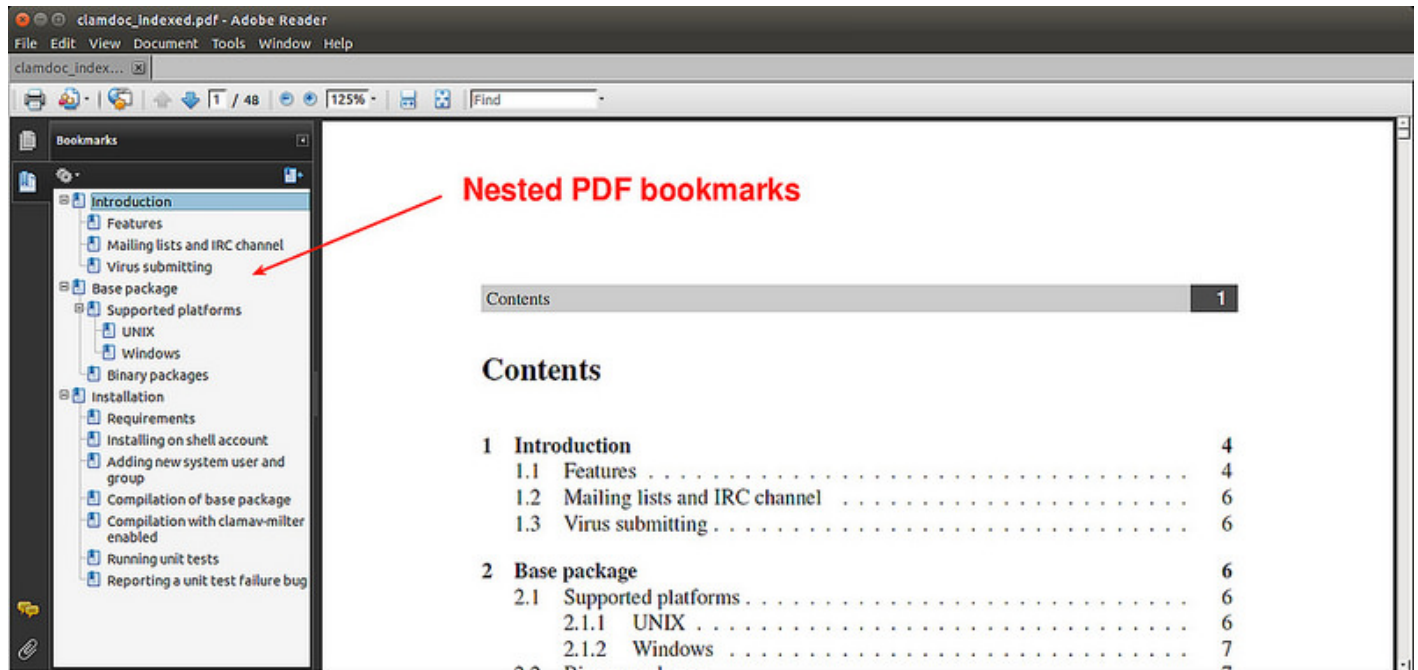
```
$ gs -sDEVICE=pdfwrite -q -dBATC -dNOPAUSE -sOutputFile=output.pdf -dPDFSETTINGS=/prepress index.info -f input.pdf
```

The output PDF file with nested bookmarks will look like the following.

Ask Xmodulo

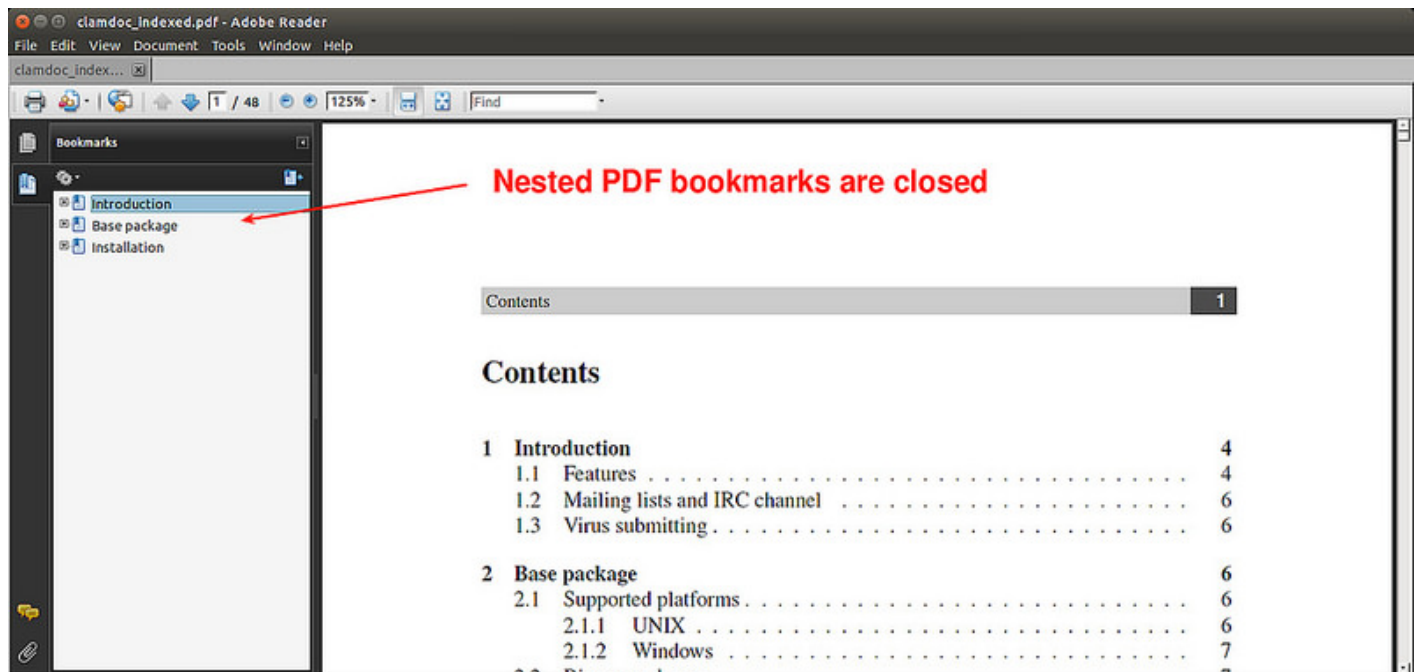
Find answers to commonly asked Linux questions

<http://ask.xmodulo.com>



All nested bookmarks are expanded by default. If you want nested bookmarks to be collapsed initially, use "[/Count -N]" format (i.e., add '-' sign in front of the number).

With that, the output will look like the following.



You will need to click on each closed bookmark to expand it.