Introduction to DocBook for newbiedoc

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A gentle introduction to DocBook for newbiedoc writers

1. Introduction

This document was written when Will asked me to look into the possibility of using the SGML format for writing our documentation.

1.1. Credits

Thanks to Rudi Borth for pointing out some spelling errors.

1.2. Feedback

Feedback is most certainly welcome for this document. Without your submissions and input, this document wouldn't exist. Please send your additions, comments and criticisms to the following email address : `<tomhuckstep@bigfoot.com>`.

This file is very young. Please help it mature by submitting small/large corrections, links to useful information, etc..

2. What is SGML/DocBook?

SGML is a language for defining document structures. It uses tags enclosed in angled brackets <likethis> to give meaning to the text which they surround, just like HTML. In fact HTML is defined using SGML.

2.1. DocBook

DocBook is also an implementation of SGML. A DocBook document type declaration defines all the tags which are allowed in a DocBook document, just as the HTML DTD defines the tags allowed in a web page.

The DocBook documentation (package: `docbook-doc`) says that

> The DocBook DTD defines structural and content-based SGML markup for computer documentation, with a primary emphasis on software documentation and related classes of technical documents.

3. Why use DocBook?

3.1. Formatting

So far the contributions to the newbieDoc project have been submitted in text and HTML formats. The structure and layout of these documents has varied widely. The newbieDoc project does not have a consistent look and feel.

Writing documentation using the DocBook SGML DTD will give all the newbieDoc documents a highly polished, 'professional' appearance. What is more, an SGML document can be rendered to more formats than just HTML. It is possible to produce plain text and postscript files from the same SGML source.

3.2. Contents

The Linux Documentation Project stylesheet automatically generates a contents section for DocBook documents.

> LDP-Author-Guide (http://www.linuxdoc.org/LDP/LDP-Author-Guide/index.html)
>
> SGML provides for more than just formatting. You can automatically build indexes, table of contents, and links within the document or to outside. The Jade and OpenJade packages also let you render to LaTeX, info, text, HTML, and RTF. From these basic formats, you can then create other formats such as MS Word, PostScript, PDF and so on … In the end, SGML is more concerned about the way elements work instead of the way they look. A big distinction,and one that will let you write faster, since you don't have to worry about placement of paragraphs, font sizes, font types, and so on.

4. How do I get DocBook?

This is for Debian systems only. Users of other GNU/Linux distributions should consult the LDP-Author-Guide (http://www.linuxdoc.org/LDP/LDP-Author-Guide/index.html).

4.1. The DTD

The DocBook DTD describes which elements are allowed in a DocBook SGML file.

Install the package `docbook`.

4.2. The DSSSL stylesheets

The DSSSL (Document Style and Semantics Specification Language) stylesheets describe how the output should be formatted, e.g. what font to use, line spacing, etc..

Install the package `docbook-stylesheets`.

You also need the file www.linuxdoc.org/authors/tools/ldp.dsl (http://www.linuxdoc.org/authors/tools/ldp.dsl). Place it in `/usr/lib/sgml/stylesheet/dsssl/linuxdoc/ldp.dsl` on your local system.

Once you have the file, you will need to do some editing of the first few lines based on the location of your DocBook DSSSL files.

Open up `/usr/lib/sgml/stylesheet/dsssl/linuxdoc/ldp.dsl` in your favourite text editor. You should see something like this:

```
<!DOCTYPE style-sheet PUBLIC "-//James Clark//DTD DSSSL Style Sheet//EN" [
<!ENTITY % html "IGNORE">
<![%html;[
<!ENTITY % print "IGNORE">
<!ENTITY docbook.dsl SYSTEM "docbook.dsl" CDATA dsssl>
]]>
<!ENTITY % print "INCLUDE">
<![%print;[
<!ENTITY docbook.dsl SYSTEM "docbook.dsl" CDATA dsssl>
]]>
]>
```

Change the first "docbook.dsl" to read `/usr/lib/sgml/stylesheet/dsssl/docbook/nwalsh/html/docbook.dsl` and the second to read `/usr/lib/sgml/stylesheet/dsssl/docbook/nwalsh/print/docbook.dsl`. The start of the file should now look like this:

```
<!DOCTYPE style-sheet PUBLIC "-//James Clark//DTD DSSSL Style Sheet//EN" [
<!ENTITY % html "IGNORE">
<![%html;[
<!ENTITY % print "IGNORE">
<!ENTITY docbook.dsl SYSTEM "/usr/lib/sgml/stylesheet/dsssl/docbook/nwalsh/html/docbook.dsl"
]]>
<!ENTITY % print "INCLUDE">
<![%print;[
<!ENTITY docbook.dsl SYSTEM "/usr/lib/sgml/stylesheet/dsssl/docbook/nwalsh/print/docbook.dsl
]]>
]>
```

4.3. The tools

You need some tools to export the SGML to other formats.

Install the packages `jade`, `jadetex` and `cygnus-stylesheets`. You will also need my **ndb2html** wrapper, which is available on my home page (http://www.huckstep.uklinux.net/mle/ndb2html.tar.gz).

4.4. Quick command line

This command line should install all the packages for you:

apt-get `install docbook docbook-stylesheets jade jadetex cygnus-stylesheets`

but you will still need my wrapper (http://www.huckstep.uklinux.net/mle/ndb2html.tar.gz) (unless you are brave), and the LDP stylesheet at www.linuxdoc.org/authors/tools/ldp.dsl (http://www.linuxdoc.org/authors/tools/ldp.dsl).

4.5. Installing ndb2html

The file `ndb2html.tar.gz` contains two files: a shell script wrapper for jade (**ndb2html**) and a man page (`ndb2html.1`)

- **ndb2html** should be installed somewhere on your `PATH`, preferably `/usr/local/bin`
- `ndb2html.1` should be placed in `/usr/local/man/man1`.

4.6. Other useful packages

You might find the packages `docbook-doc` and `docbook-stylesheets-doc` useful.

5. How do I use DocBook?

5.1. Tutorial

Watch `docbook-guide.*.sgml` in CVS.

Have a look at `docbook-template.*.sgml` in CVS.

Perhaps you could consult the LDP-Author-Guide (http://www.linuxdoc.org/LDP/LDP-Author-Guide/index.html).

5.2. ndb2hml

Try **ndb2html** `single foo.sgml` to create a single file, or **ndb2html** `multiple foo.sgml` for multiple files. See `ndb2html(1)` for further information.

6. Further information

If you have installed `docbook-doc` and `docbook-stylesheets-doc` have a look at `/usr/doc/docbook-doc/index.html` and `/usr/doc/docbook-stylesheets-doc/index.html` on your system.

DocBook: The Definitive Guide: www.docbook.org/tdg/html/ (http://www.docbook.org/tdg/html/)

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