BSDCon 2002

The FreeBSD Documentation Project:
using, modifying, and joining

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What does the Documentation Project do?

- responsible for FAQ, Handbook, other books, articles
- shared responsibility for man pages
- shared responsibility for www.freebsd.org

presentation focus: the FAQ, Handbook, books, and articles
presentation goal: to update FAQ during presentation

Who works on the Project?

The readers and participants in doc@freebsd.org

- committers commit work discussed there
- contributors submit patches

Tasks of presentation

- install and build documentation from source
- recognize DocBook on sight
- basic DocBook editing
- submitting changes back to DocProj
DocBook vs HTML

- **HTML:**
  The `<bold>`send-pr(1)`</bold>` command

- **DocBook:**
  The `<command>`send-pr(1)`</command>` command

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DocBook vs HTML, part 2

- All tags with closes must close!
- HTML lets you be sloppy, i.e.:
  - `<p>` doesn’t require a trailing `</p>`
  - `<p>Welcome to my Home Page!</p>`
  - `<p>Please give me your credit card number.</p>`

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Return to the Planet of DocBook vs HTML

- In DocBook, this same text must be:
  - `<para>Welcome to my Home Page!</para>`
  - `<para>Please give me your credit card number.</para>`

- Some DocBook tags have no close.

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DocBook/SGML: Content & Elements

- Content: what you actually write
  - "type ‘rm /etc/rc.conf’ to make your life difficult"

- Elements: identifiable sections of what you write.
DocBook/SGML: Elements

Elements:
"type rm /etc/rc.conf to make your life difficult"

► Whole unit is a paragraph.
► rm is a command
► /etc/rc.conf is a filename
► "run, to make your life difficult" is text
► rm /etc/rc.conf is the sample command

Entities

An entity is shorthand for other text.
They begin with an ampersand and end with a semicolon.

&man.fdisk.8;
► current OS revision
► man pages
► chapters of books
► any frequent search-and-replace victim

Actually changing the documentation

► choose your language
► cd books/faq

sample FAQ entry in DocBook:

```xml
<qandaentry>
  <question id="reread-rc">How do I re-read <filename>/etc/rc.conf</filename> and re-start <filename>/etc/rc</filename> without a reboot?</question>
  <answer>Go into single user mode and then back to multi user mode.</answer>
</qandaentry>
```

book.sgml setup

► first few lines are DocBook and SGML setup.

```xml
<DOCTYPE BOOK PUBLIC ".(/FreeBSD/DTD/DocBook V4.1-Based Extension/EN)"
  "ENTITY % man PUBLIC "/FreeBSD/ENTITIES DocBook Manual Page Entities/EN">
```

► then book opening

```xml
<book
  <corpusauthor>The FreeBSD Documentation Project</corpusauthor>
  mwlucas Exp $<pubdate>
```

Don't worry about these things

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Important tags, part 1

```xml
<qandaentry>
  <question id="reread-rc">
    <para>How do I re-read</para>
    <filename>/etc/rc.conf</filename> and re-start
    <filename>/etc/rc</filename> without a reboot?</para>
  </question>
</qandaentry>
```

important tags here:

- `qandaentry`: this is a question-and-answer pair
- `question`: this is the question part
- `id`: label, shows up as `<a name="...">` in HTML
- `para`: this is a paragraph
- `filename`: this is a filename

Important tags, part 2

```xml
<answer>
  <para>Go into single user mode and then back to multi
  user mode.</para>
</answer>

<para>On the console do:</para>

- `answer`: the answer begins here
- `para`: this is a paragraph
**Important tags, part 3**

```xml
<screen>&prompt.root; <userinput>shutdown now</userinput>
(Note: without -r or -h)
&prompt.root; <userinput>return</userinput>
&prompt.root; <userinput>exit</userinput></screen>
</answer>
</qandaentry>
```

- **screen**: this is text that appears on the screen
- **&prompt.root**: the root system prompt entity
- **userinput**: this is what the user types

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**Tag overlaps**

**Important note:**

All elements that start within an element must end before you can close the element.

- **Wrong:**

```xml
<para>Just use <port>net/cvsup.</port></para></port>
```

- **Correct:**

```xml
<para>Just use <port>net/cvsup</port>.</para>
```

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**More Common DocBook tags**

Most listed in FreeBSD Documentation Project Primer.

- `<emphasis>` italics
- `<devicename>` device
- `<command>` in-line
- `<programlisting>` text from file
- `<varname>` variable value, i.e., YES in rc.conf
- `<erromname>` literal errors

- Many other tags: `<chapter>`, `<sect>`, for large changes and chapter additions.

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**How to learn tags**

- Like learning to read source code: read DocBook code to learn DocBook.

- If you have a problem, find an example of something similar.
Linking to other documents

Links have two parts:

► where you link to
► what you link from

Link targets

link targets:

► any area linked to must have an id=tag

<chapter id="rebuilding-kernel">
<question id="too-much-detail">

if target is within text, use <anchor>

<anchor id="kernelpanic-example">

Link Source

where you put the link

link: within same document

See the <link linkend="rebuilding-kernel">Kernel Building</link> section.

xref: within same document, but text is auto-generated

<para>See <xref linkend="rebuilding-kernel">.</xref></para>

Linking to Web Pages

Linking to a web page

use <ulink>


► be sure link names work in non-HTML docs!
Writing a new FAQ

► Find appropriate section
  people must be able to find your FAQ!
► Find correct answer
► mark up your answer

The Ideal FAQ

should be short, to-the-point, and refer to elsewhere if more info is needed.
► question: What is X?
► answer: X is blah blah blah. For more detail, please see Y.

Bad FAQ! Naughty FAQ!

► Tutorials should be part of Handbook, or stand-alone articles.
► Generalized FAQs are bad: “Why does compiling latest ISC BIND fail?”
► Project plans to “start anew” with 5.x FAQ.

FAQ Template

```xml
<qandaentry>
<question id="string-describing-question-here">Put your question here</question>
<answer>Put your answer here. For more information, see <ulink url="websiteURL">name of site</ulink>.</answer>
</qandaentry>
```
editing book.sgml

- Copy existing book.sgml to book.sgml.original
- Edit book.sgml
- build part of documentation that you patched
- verify change

Submitting your Patch

diff -c book.sgml.original book.sgml
send-pr(1), or use FreeBSD web form to submit PR

- do not use web form to submit patches; reply to email from GNATS!

Perfect Patches

- correct markup
- correct information
- apply cleanly
- politeness

Thanks!

Thanks for coming!
Now get out there and submit some docs