Texinfo Primer

How to get started in Texinfo

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1 Intro

This document introduces you to the hypertext-like texinfo info system that can be found within the GNU system. Being meant for texinfo writers the printed form of this document, although readable, is also to be used next to the electronic form in order to see how texinfo is converted to a more a human readable format.

1.1 TeX Basics

Texinfo is a markup language, much like, and actually based on TEX (the first line in a texinfo file is `\input texinfo`). An immediate visual difference is that the backslash (\), that TEX uses to signify commands, has been replaced with the at (`@`) symbol. For TeX users texinfo is hence nothing more than a (simple) TeX macro package. The text you are reading now originates from a file '`tip.texi`'[1], where `texi` is a frequently used extension name, though `tex` would perhaps be more convenient since the `tex` program will be run on this file:

```
% tex tip.texi
```

creates a `tip.dvi` file that can be previewed or printed:

```
% xdvi tip                       # preview; or something like that
% dvips tip.dvi ; lpr tip.ps     # convert and print; ...
```

1.2 Info Basics

A texinfo file can also be converted to an info file:

```
% makeinfo tip.texi
```

which creates a file called '`tip.info`'. This info file is a hypertext file, and to view it as such you need smart readers. There are various programs available to do this:

- info: a simple ASCII-oriented (works on your plain vanilla VT100) browser. Your terminal will be put in "raw" mode, such that single character keystrokes become commands to browse around. To test your local info file:

  ```
  % info -f tip.info
  ```

- xinfo: X-windows based version of the ASCII info reader. It also understands the single character commands used in `info`
- ivinfo: Interviews based version of the ASCII info reader
- para: an info reader and writer within the emacs environment
- emacs: within emacs there is
  - an info reader: `M-x info`
  - an info writer: `M-x texinfo-mode` to switch to texinfo mode

The environment variable INFOPATH is normally used by the info browsers to find directories with info files.

[1] `tip` is short for TexInfo Primer...

2 More on info

The essential difference between a texinfo file and a classical tex-based manual is it's hypertext feature. They are implemented as nodes in the text, such that readers can jump to these locations in an organized manner. Nodes are typically structured in an hierarchical way, often following the manual-chapter-section-subsection tree structure. It is however up to the author to define this structure: a node is defined with a unique name, and will also need to know what it's 'previous', 'next' and 'up' nodes are. Obviously the printed manual will not show any of this hypertext structure, since it is a simple linear chain of text. All of the online info readers described earlier (See Section 1.2 [info basics], page 1) allow the user to browse information in this hypertext way. In texinfo this appears in two forms: menus and cross references.

1. A menu typically appears at the top of a unit (manual/chapter/section/...) to show it's underlying structure. The user can then linearly browse the material, or select sub-parts thereof.
2. A cross-reference may appear at any random point in the text, but must point to a node anywhere (including other manuals) in your info system. The user can select to visit that node and quickly come back to the previous location. This work to a fair degree of depth.

3 Finally

Of course texinfo contains much more the few highlights given here. The best way to advance is use your favorite browser (I prefer `xinfo`, though `ivinfo` is not bad either), perhaps find an example text that is close to what you want, and compose while using the online info on texinfo itself to get familiar with reading as well as writing these texinfo files.