directory 1.00 User's Guide

Christophe Geuzaine[(p. 7)]

March 4, 1998

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1 Introduction

directory[1] is a macro package for LaTeX 2_ε and BibTeX that facilitates the construction, the maintenance and the exploitation of an address book like database. It consists of five BibTeX style files (address.bst, phone.bst, email.bst, birthday.bst and letter.bst) designed to be used in conjunction with the LaTeX 2_ε style file directory.sty. According to the bibliographical style used, the package has two main applications:

1. the construction of a list of informations (address, phone number, etc) about selected persons, companies or places;

[1] directory home page: http://www.montefiore.ulg.ac.be/~geuzaine/directory.html. directory is also available on the CTAN in the bibliography/bibtex/contrib/directory/ subdirectory.

2. the inclusion of selected informations concerning a person, a place or a company at a desired location in a document.

In the first case, `directory` behaves just like standard bibliographical styles: while standard bibliographical styles handle lists of information concerning books, articles, proceedings, etc, `directory` handles lists of informations relative to people, companies or places. For example, the name in the title of this guide refers to the corresponding entry in the directory listed in section 5.2. The first four BibTeX files permit several handlings of these informations.

In the second case, the package enables bits of the database to be put in your document. It can for example be used to put the address of your correspondent in the address field of a letter.

Two special BibTeX style files (`address-html.bst` and `email-html.bst`) are also provided for an easy generation of HTML versions of your directories.

2 General description

2.1 Package inclusion and options

The package is included by the usual `\usepackage[`*option*`]{directory}` command at the top of the document, where *option* stands for one of the following:

`symbol`: a symbol is produced in the text after a directory cited key. The labels are typeset in the default document font;

`underline`, `bold` or `emphase`: the directory entries are underlined, typeset in bold format or emphasized (both in the main text and in the directory);

`bracket`: the directory entries are enclosed in brackets, just the way they are in the standard BibTeX formats.

The directory is produced by the `\directory[`*extension*`]{`*filename*`}` command, where *filename* represents the name of the `bib` file (without the `bib` extension) and where the optional argument *extension* represents, if necessary, the extension of the file output by BibTeX (see section 3). As usual, multiple `bib` files can be included, a comma separating the different file names.

2.2 Making a citation

An entry is cited in the text by a `\dir{`*key*`}`, `\pdir{`*key*`}`, `\rdir{`*key*`}` or `\wdir{`*key*`}` command, equivalent to the standard `\cite{`*key*`}` command, where *key* is used in the same way as ever (referring to an entry in a `bib` file). The differences between the four citation commands will be explained in the next section. A `\nodir{`*key*`}` command exists and acts exactly like `\nocite{`*key*`}` for standard bibliographies.

2.3 The `bst` styles

The style of the directory is chosen by a `\directorystyle{`*style*`}` command, where *style* is one of the following:

`address`: full listing in the directory of all fields corresponding to the *key* entry. The `\dir{`*key*`}` command also prints the `name` field of the entry in the document;

`phone`: only the phone and fax fields corresponding to the cited entry are displayed in the directory. The `\dir{`*key*`}` command acts in the same way as with the `address` style, except that the names are abbreviated;

`email`: only e-mail addresses are displayed in the directory. The `\dir{`*key*`}` command acts in the same way as with the `address` style;

`birthday`: only the birthdays are displayed, sorting the entries in chronological order. The `\dir{`*key*`}` command acts in the same way as with the `address` style;

`letter`: acts in a slightly different way than the four preceding styles. No directory is produced with the `\directory` command. The `\dir{`*key*`}` command results in the `name` field of the *key* entry to be printed in the document. The `\pdir{`*key*`}` (respectively `\rdir{`*key*`}` or `\wdir{`*key*`}`) command prints the name and the private (respectively residence or work) address in the document in a tabular way.

2.4 The `bib` file fields

In all entry types, `name` is the only obligatory field, since it serves as a key for sorting the entries.

`person`: besides the `name`, `nickname`, `birthday`, `birthyear` and `note` fields, the available fields for the `person` entry in a `bib` file are divided in three main categories. The first one (its associated keys begin with '`p.`', which stands for 'private') refers to the person's private information: `p.address`, `p.phone`, `p.fax`, `p.email`, `p.url` and `p.account`. The second one (for which all the keys begin with '`r.`') refers to stuff relative to a person's residence (i.e. a secondary or temporary address, which is for example useful for students): `r.address`, `r.phone`, `r.fax`, `r.email` and `r.url`. The last one (associated keys begin with '`w.`', standing for 'work') refers to professional informations: `w.title`, `w.name`, `w.address`, `w.phone`, `w.fax`, `w.email`, `w.url` and `w.account`.

`company`: the available fields for the `company` entry are: `name`, `address`, `phone`, `fax`, `email`, `url`, `account` and `note`.

`place`: the available fields for the `place` entry are: `name`, `address`, `phone`, `fax` and `note`.

2.5 Customization

The symbol produced in the text after a directory label when the `symbol` option is chosen can be easily redefined. The value used in this user's guide is:

```
\renewcommand{\dirsymbol}
   {\raisebox{1ex}{\tiny\textit{(p.\pageref{directory})}}}
```

The flags marking the beginning of the different fields are easily customizable, as well as the 'and' symbol. The values used in this user's guide are:

```
\renewcommand{\dirbirthday}{\footnotesize$\heartsuit$}
\renewcommand{\dirprivate}{\emph{home}}
\renewcommand{\dirresidence}{\emph{residence}}
\renewcommand{\dirwork}{\emph{work}}
\renewcommand{\dirnote}{\emph{note}}
\renewcommand{\dirnickname}{}
\renewcommand{\dirphone}{}
\renewcommand{\dirfax}{fax: }
\renewcommand{\diremail}{}
\renewcommand{\dirurl}{}
\renewcommand{\diraccount}{}
\renewcommand{\dirand}{ \& }
```

Two new dimensions defining the indentation of the fields and the amount of space between two entries have been introduced. The values used in this user's guide are:

```
\setlength{\dirindent}{6em}
\setlength{\dirsep}{3ex}
```

3 Using both `directory` and `bibliography`

Since BIBTEX always produces an output file of the form '*filename*`.bbl`', it is necessary—in order to use *both* directory and bibliography entries—, after generating the `bbl` file corresponding to the directory, to rename it with a new extension (for example `dir`), and to give this new extension as an optional argument to the `\directory` command. The normal procedure can then be followed during the rest of the bibliography processing. Remember that changing the directory (adding an entry or suppressing one) forces you to restart from the beginning.

4 Generating HTML directories

Two special BIBTEX style files (`address-html` and `email-html`) allow the easy generation of HTML versions of your directories:

`address-html`: full listing in the HTML directory of all fields corresponding to the *key* entry. The output formatting is similar to that produced by LaTeX 2ε with the `address` style.

`email-html`: only e-mail addresses are displayed in the HTML directory.

Since BibTeX directly outputs a `bbl` file in HTML format, no additional program is needed to make the HTML conversion. The `bbl` file directly contains the HTML code, ready to be included in any HTML document.

This method presents nevertheless a little drawback: after BibTeX'ing your LaTeX 2ε file, running LaTeX 2ε on the same file (even with another non-HTML `\directorystyle`) would produce errors, since the `bbl` file is not understandable by LaTeX 2ε. You have either to delete the `bbl` file or to override the error messages (and to change the `\directorystyle`) before any subsequent successful LaTeX 2ε run.

The handling of special characters in the HTML directories is also quite imperfect: any special LaTeX 2ε character sequence in the `name` field is output the way it is in the `bib` file. This implies for example that `{\'e}` is printed in the HTML document as `{\'e}`, and not as `é`. In all other fields, any special LaTeX 2ε character sequence is dropped. This implies for example that `{\'e}` is printed in the HTML document as `e`, or that a new line command `\\` is ignored.

5 Example

Despite the option described in section 3, one of the most interesting way of using `directory` is to build a separate address book, including several `bib` files referring to several categories of people, companies or places, as in the example shown in this document:

```
\nodir{*}
\directory{family,business}
```

A second interesting way of using `directory` is to use it in your faxes or letters. Using the standard LaTeX 2ε class `letter.cls` with the directory style `letter`, you may for example begin a letter by the following command (`\wdir` must be `protect`'ed since the argument of the `letter` environment is a moving argument):

```
\begin{letter}{\protect\wdir{c.geuzaine}}
```

Take a look at the example `tex` and `bib` files—`directory.tex`, `family.bib` and `business.bib`—and try the few options out. The source files are commented and easy to customize. I would be very happy to get your suggestions to improve this helpful little package.

5.1 Source file

Here are four bib entries (taken from `family.bib` and `business.bib`):

```
@Person{c.geuzaine,
  name      = "Christophe Geuzaine",
  w.title   = "Ir., Research Assistant",
  w.name    = "University of Li\`ege \\
               Department of Electrical Engineering",
  w.address = "Institut Montefiore (B28, P32, I21) \\
               Sart Tilman, B-4000 Li\`ege, Belgium",
  w.phone   = "+32-(0)4-366.37.10",
  w.fax     = "/29.10",
  w.email   = "Christophe.Geuzaine@ulg.ac.be",
  w.url     = "http://www.montefiore.ulg.ac.be/~geuzaine",
  birthday  = "06 02",
  p.email   = "Christophe.Geuzaine@advalvas.be",
}

@Person{d.d.knu,
  name      = "Knudson, Daffy D. and Bugs Bunny",
  nickname  = "gnat and gnu",
  birthday  = "10 02 and 05 11",
  p.address = "Haight Street 512, 80214 Novosibirsk, Gnuland",
  p.phone   = "+01-(0)2-765.43.21",
  p.account = "010-1234567-05",
  r.address = "Manor Lane 2, 80214 Novosibirsk, Gnuland",
  r.phone   = "+01-(0)2-876.54.32",
  w.name    = "University of Novosibirsk \\
               Department of Octopus Parthenogenesis",
  w.address = "Planck Institut (V1-V2, Park. U-67) \\
               Hessenberg Road, 80214 Novosibirsk, Gnuland",
}

@Company{knudsoft,
  name      = "The Knudsoft Company",
  email     = "knud@knudsoft.com",
  url       = "http://knudsoft.com/hole/gates.htm",
}

@Place{knudsoft:rs.2,
  name      = "Knudsoft (RS.2 Cmptr Room)",
  phone     = "+01-(0)2-434.23.23",
}
```

5.2 Output

The output resulting from the `\directory{family,business}` command is shown below (all entries are listed, thanks to the `\nodir{*}` command):

Christophe Geuzaine (*geuz*)
⋆ *06.02*
home `Christophe.Geuzaine@advalvas.be`
work Ir., Research Assistant
University of Liège
Department of Electrical Engineering
Institut Montefiore (B28, P32, I21)
Sart Tilman, B-4000 Liège, Belgium
+32-(0)4-366.37.10 (fax: /29.10)
`Christophe.Geuzaine@ulg.ac.be`
`http://www.montefiore.ulg.ac.be/~geuzaine`

The Knudsoft Company
`knud@knudsoft.com`
`http://knudsoft.com/hole/gates.htm`

Knudsoft (RS.2 Cmptr Room)
+01-(0)2-434.23.23

Bip B. Knudson (*road runner*)
⋆ *27.02*
home `bip_bip@free.prov.gnu`
work `bip_bip@novosi.uni.gnu`

Daffy Duck Knudson & Bugs Bunny (*gnat & gnu*)
⋆ *10.02 & 05.11*
home Haight Street 512, 80214 Novosibirsk, Gnuland
+01-(0)2-765.43.21
`010-1234567-05`
residence Manor Lane 2, 80214 Novosibirsk, Gnuland
+01-(0)2-876.54.32
work University of Novosibirsk
Department of Octopus Parthenogenesis
Planck Institut (V1-V2, Park. U-67)
Hessenberg Road, 80214 Novosibirsk, Gnuland

Donald Ernest Knudson
⋆ *29.01*
home +01-(0)2-234.56.78
`duck@novosi.uni.gnu`
note 1952 Permafrost Press Award winner

Microknud Corp.
Haight Street 513, 80214 Novosibirsk, Gnuland
+01-(0)2-465.83.99 (fax: 005.79.00)
`http://microknu.com/ass/bill.html`

6 Versions

0.95 First distributed version.

0.96 New documentation. Introduction of customization commands. New alignment mechanism in the `addressbook` and `phonebook` environments.

0.97 Entries `ccp` and `p.ccp` changed to `account` and `p.account`.

0.98 New style `letter.bst`. New commands `\pdir`, `\rdir` and `\wdir` to produce in-text addresses when used with the `letter.bst` style. New internal key generation.

0.99 Name change of old customization flags (*name*`flag` becomes `\dir`*name*). New flags introduced: `\dirnickname`, `\dirphone`, `\dirfax`, `\diremail`, `\dirurl`, `\diraccount` and `\dirand`.

1.00 New HTML styles (`address-html.bst` and `email-html.bst`).