The `udunits2` Program

Steven R. Emmerson

Copyright © 2007 University Corporation for Atmospheric Research

Permission to use, copy, modify, and distribute this software and its documentation for any purpose without fee is hereby granted, provided that the above copyright notice appears in all copies, that both that copyright notice and this permission notice appear in supporting documentation, and that the name of the University Corporation for Atmospheric Research (UCAR) not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. UCAR makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. It is provided with no support and without obligation on the part of UCAR to assist in its use, correction, modification, or enhancement.

Table of Contents

1 Synopsis 1

2 Options 2

3 Description 3

4 See Also 4

Index 5

1 Synopsis

```
udunits2 [-A|-L|-U] [-hr] [XML_file]
```

2 Options

The following options and arguments are supported:

`-A` Use the ASCII character-set.

`-L` Use the ISO Latin-1 (ISO-8859-1) character-set.

`-U` Use the full Unicode character-set with UTF-8 encoding.

`-h` Print a help message.

`-r` Reveal any problems with the units database (by default, no error messages are printed during import of the database).

`XML_file` The pathname of the XML-formatted units database. If not specified, then the default, compile-time pathname is used.

3 Description

When successfully started, the program will print the prompt

```
You have:
```

At this point you can exit the program by entering the end-of-file character (usually control-D) or continue by entering either a value or a unit. (a value comprises a numerical value and a unit. For example,

```
You have: 80 km/h
You want:
```

At this point, if you enter a blank line, then the program will assume that you entered a unit in the previous line and will print the definition of that unit in terms of the base units of the unit-system that it imported on startup. For example,

```
You have: 80 km/h
You want:
    22.2222222222222 m.s-1
You have:
```

Details of the formatting depend on the character-set being used. See Chapter 2 [Options], page 2.

Alternatively, at the "*You want:*" prompt you can enter the unit in which you want the previously-entered value. For example,

```
You have: 80 km/h
You want: mi/h
    80 km/h = 49.7097 mi/h
    x/(mi/h) = 0.621371*(x/(km/h))
You have:
```

The first line after "*You want:*" shows the "have" value in the desired "want" unit.

The second line shows the transformation between numerical values in the "have" unit to numerical values in the "want" unit. The symbol "`x`" represents the physical quantity in question. See `http://physics.nist.gov/Pubs/SP811/sec07.html`.

4 See Also

See Section "UDUNITS-2" in *The UDUNITS-2 C API Guide*, for information on the UDUNITS-2 library, which is used by this program.

Index

O

options 2

S

synopsis 1