

μ ls_eng

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COLLABORATORS

	<i>TITLE :</i> μ ls_eng		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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Chapter 1

μls_eng

1.1 μls Manual

\$\mathrm{\mu}\$ls 1.3

by Matteo Cortese

\$\mathrm{\mu}\$ls (ie micro-ls) is a fast and optimized alternative to the beloved Dir and list commands. It has been specifically designed for ergonomomy, with the shell-user in mind.

Introduction

Distribution

Requirements & installation

Usage

Notes

1.2 Introduction

\$\mathrm{\mu}\$ls is inspired by the UNIX command "ls", but has features which are peculiar to the Amiga philosophy, in the first place the modest size of the executable, its ability to be made resident and the speed of use. On the other hand, \$\mathrm{\mu}\$ls inherits from the UNIX world the ease of combining options together, as it supports those "-ldx..." switches UNIX wizards love so much. So I am proud to say that \$\mathrm{\mu}\$ls takes "The best of both worlds".

You want a list of μ ls's features, don't you? So here it is:

- Two formats are available:
 - short-format (multicolumn) and
 - long-format . (one file per line).
- Everything is alphabetically sorted and dirs always come before files.
- Dirs can be shown in white, to emulate the "visual impact" of file requesters.
- μ ls can adapt its output to the current console width.
- You can tell the type (dir, link...) of each entry from the suffix appended to the entry's name.
- You can hide or filter out some files. By default μ ls hides icons and backups.
- You can use wildcards.
- You can use both Amiga (template) and UNIX style (eg "-ld") for options.
- For every XPK-compressed files, μ ls shows packed and unpacked sizes, method and whether a password is required.
- μ ls is pure and quick.

1.3 Distribution

This program is PUBLIC DOMAIN or, if you prefer, FREeware. You can copy, use and modify it as you like. If you want to sell it (should you find someone fool enough to buy it) you can.

If you want to suggest some enhancements, please contact the author. If you want to talk about Amiga programming, contact the author. If you are not satisfied with this proggy, hit the first passer-by and leave the author in peace. The author will not be responsible for psychic disease caused by excessive use of this program. If you are still reading, you definitively need a psychiatrist. If you need a psychiatrist, do not contact the author.

The source

is included.

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1.4 Requirements & installation

μ ls requires AmigaOS 3.0 (V39). If you have at least 68020 you can use the more optimized version μ ls_020. The XPK or "-x" option will be ignored if μ ls cannot find the xpkmaster.library.

No special installation is required.

On my A1200 (with a little UNIX flavour) I have copied μ ls to the SYS:bin directory, with the name "ls" and the h bit set, while the User-Startup defines the alias "ll" as "ls -l".

1.5 Usage

This command can be launched from the shell only and accepts the parameters in both Amiga and UNIX style. The standard template is:

```
DIR/M,P=PATTERN/K,ITSELF/S,FILES/S,DIRS/S,ALL/S,LONG/S,  
SS=SHELLSIZE/S,WHITE/S,XPK/S
```

but please note that the "/M" after DIR is a "trick" to handle UNIX-style options and that you cannot examine more than one directory.

DIR indicated the name of the files or the directory to be examined. You can use standard AmigaDOS wildcards. If omitted, μ ls examines the current directory.

With the PATTERN keyword you can limit the list to only those entries that match a certain pattern, typically to hide some types of files. If omitted, μ ls uses the default (hardwired) pattern:

~(#?(.info|.bak|,b)|.#?)

ie: it hides icons (#?.info), backups (#?.bak and #?,b) and files starting with a dot (.#?). The ALL switch cancels whatever pattern set.

The remaining options are boolean switches and have a corresponding flag in the standard UNIX style. If you prefer the latter, please remember that more flags can be specified in a single option, like "-lw" instead of "-l~w" and that flags are case-sensitive. Note also that unlike UNIX commands \$μls accepts the options in any order.

Valid options are:

ITSELF/S

-d or -i

show informations about the directory DIR instead of its contents. It is of no use if used in the short format. It is identical to the "-d" option of the UNIX command "ls".

DIRS/S

-D

only show the directories, which includes hardlinks to dirs and softlinks.

FILES/S

-F

only show the files. Please note that in the UNIX command "ls", the option "-F" has a different meaning.

ALL/S

-a or -A

cancel whatever pattern was set, either via the PATTERN keyword or the default one.

LONG/S

-l

use the long~format . If omitted μls uses the short~format .

SS=SHELLSIZE/S

-s

set the output width (in the short format) according to the width of the current console window. If omitted the width defaults to 78 chars per row.

WHITE/S

-w

show the directories in white.

XPK/S

-x

every file is analysed: if it is a xpk-compressed file μ ls ←
 shows
 additional info such as the compression method, etc. This option, no
 matter if there actually are compressed files, forces the

long-format

.

Short format

Long format

Suffix

1.6 Short format

In the short format, the list is split into columns whose ←
 width is
 dynamically determined, according to the longest name in the list and to
 the width of the current console window, if the SHELLSIZE option is used.
 The entries are sorted by column (à la UNIX), not by row (like Dir) and
 all the directories are listed before the files. The name of the dirs can
 be followed by a
 suffix
 that indicates the type of that entry.

EG:

```

archives/      obj/          tmp#
bin/           sources/     working/
includes/      tests/
abort.c        main.c       x.o
Art.iff        startup.o
az             x.c
```

1.7 Long format

In the long format each entry takes an entire line. Various ←
 details are

shown:

cpppppppp ssssssss dddddddd ttttt n...nx

The first character tells the type of the entry:

- = file
- d = directory
- D = hardlink to a directory
- l = symbolic link (softlink)
- r = root directory
- p = pipe
- x = XPK file (only with -x or XPK)

Then come the protection bits (p), the filesize (s), the date (d) and time (t) of the last modification and lastly the name (n), optionally followed by the

suffix

.

When you specify the -x or XPK option, the compressed files are shown in a slightly modified format:

cpptpppppp ssssssss/uuuuuuuu mmmme n...nx

The actual size (s) of the file is followed by the size of the uncompressed file (u), the four characters that identify the method (m) used optionally followed by an asterisk (e) if a password is required touncompress that file.

1.8 Suffix

Each entry can be followed by a character which indetifies the type of that entry:

- / = directory
- # = hardlink to a directory
- @ = symbolic link (softlink)
- : = root directory
- | = pipe

The files and the hardlinks to a file do not have any suffix.

1.9 Notes

h bit

Source

1.10 h bit

Many Amiga users think that the h flag stands for "hidden" (doing so they tremendously confuse the AmigaDOS protection bits with the MS-DOS attributes) and that it is not used by the system. That's not true! The h flag stands for "hold" and its function is that of a "delayed Resident": the executable flagged with "h" will be made resident when it will be called the first time.

1.11 Source

The included source is very badly commented, in a mixture of English and Italian and so very hard to understand. However you should not have trouble if what you want is just to change the hardwired default pattern or -perhaps- the color of the directories...