Cerca

by Carlo Todeschini

Chi cerca, trova. *He who searches, finds.*

1 Introduction

1.1 Motivation

When Amiga appeared first the only storing-device was the floppy with its 880k of space for datas: hard-drives, flopticals, CDs were unknown.

Nowadays the situation is very different: the most recent Amigas come equipped with data storage units bigger than the original double-density drive... the powerful A3000 comes with a hard-disk (from 50Mb to 100Mb inside, also the little A600 have an internal controller for IDE hard-drives (from 20Mb to 80Mb!), for 'older' models like A500 and A2000 a great number of companies deliver different units, with different features and sizes... also the A1000 owners have hard drives now!

With the increasing of the storage space, a lot of untidy users have been losing their files in the maze of directories, assignments, and devices made by themselves!!

"Where is that document? Where the picture? I'm sure they were here!! I can't find them... HELP!"

CERCA is made to scan a unit/path given by the user looking for a file-name or for a pattern, which indicates the matches with the full path. Besides CERCA can display some information on file found, like name, size, protection flags, date and file type from a list of about 70 types (see Section 4.2 [Recognized file types], page 10), and it gives the opportunity to make operations on the indicated file simply by programming 4 user-gadgets.

> **NOTE:** CERCA is the imperative form of the Italian verb 'cercare', whose meaning is 'to search'.

1.2 Basics

CERCA is a 2.04-only utility that tries to take advantage of some important features of the new system software (like pattern matching).

You can't use it under 1.x Amigas!

I drew the interface making it as simple as possible, all the functions have a key short-cut and the program offers a quite flexible configurability.

CERCA is font sensitive: it uses the WorkBench font in whatever it makes.

The program can also be run from Shell (dropping some functions...:-( ).

2 Running

2.1 Installation

You can install CERCA by double clicking on the icon `Install`. CERCA needs two files to run:

`Cerca.config`
> (not obligatory) that is the configuration file (I supply a file for example in the archive). It must be placed in the `envarc:` directory.

`Cerca.guide`
> (not obligatory) that is the AmigaGuide© format of this documentation (to view it press the help key). So, if you have the library, you must set the environment variable `AmigaGuide/Path` to search in the directory where `Cerca.guide` is placed. Open a shell and type `SetEnv AmigaGuide/Path "S: Sys:My_Docs"`.

Besides, if you want, you can enable ALL the pattern matching routines (e.g.: `*`, `*.??`, etc.) with `StarBurst`, a program by W.G.J. Langeveld & Sebastiano Vigna that enables the ∗ wildcard (you can find the program in the CERCA's archive).

2.2 From Workbench

Couldn't be easier. Open the drawer where CERCA is placed in, double click on CERCA's icon and wait for the loading (Wow, which newness!!).

2.3 From CLI

You can run CERCA from CLI but in this manner you will lose some important features of the program. In fact the line command is

> `P=Pattern/A,D=Dir/A,F=Files/S,I=Dirs/S,B=Both/s,R=Root/S,X=Recursively/S`

> where:

`P=Pattern/A`
> is the search pattern specified by wildcards (obligatory);

`D=Dir/A` is the device/volume/assign where CERCA will search the file (obligatory);

`F=Files/S`
> is a switch to specify that you want to search only files;

`I=Dirs/S` is a switch to specify that you want to search only dirs;

`B=Both/s` is a switch to specify that you want to search both files and dirs;
> > **Note:** Only one of the three switches above can be specified or you will get an error!.

`R=Root/S` is a switch to specify that you want to search only in the directory specified with `Dir`;

`X=Recursively/S`

> is a switch to specify that you want to search for the file in all the subdirectories of the one specified with `Dir`;
>
> > **Note:** Only one of the two switches above can be specified or you will get an error!.
> >
> > If you don't specify any switch, Cerca uses the built-in configuration: Files Recursively.
>
> Examples:
>
> `Cerca #? SYS:`
>
> > Search all the files in the SYS: directory and in all of its subdirectories;
>
> `Cerca #?.info Ram: F R`
>
> > Search all the files with `.info` as suffix only in the `Ram Disk` directory;
>
> `Cerca Amiga dh2:data F`
>
> > Search the file `Amiga` in `dh2:data` and in all of its subdirectories;
>
> `Cerca Amiga dh2: F I X`
>
> > Cerca will generate an error because you can't specify F and I togheter.

3 Using Cerca

3.1 The interface

CERCA's interface presents three string fields, a list gadget with its scrollers and two banks of four buttons.

- In the first field you can type the file to look for or the pattern to use.
- The next one displays the device/path you want to look in.
- The last one contains the name (with path) of a file to operate on, selected from the above list which presents all the found matches.
- The first bank of buttons is that of CERCA actions:

  GO   Start scanning the path indicated in `Path` gadget looking for `File to search` contents.

  STOP   Abort the GO operation in any moment of the scan.

  INFO   Give information about the file selected in the listview.

  SELECT   Clicking on it a file requester will open. The path selected will be inserted in the `Path` gadget and used in searching.

The above four gadgets are customizable by the user: you can associate the program you want to each button (see Section 3.4.2 [Settings Menu], page 6, for more info).

CERCA has menus which reproduces every first bank action and permits you to configure the other four and to save/load the configuration file. CERCA's window is resizable, that means that if you drag the bottom-right border of it, it will resize on your favourite dimensions in any moment.

3.2 Mouse Usage

Using CERCA with the mouse isn't hard at all. The only thing you must do with the keyboard is typing the file pattern, the other operations have their button or menu to be activated.

3.3 Keyboard Usage

Every CERCA action can be accessed by keyboard: the key short-cuts for actions are indicated in the buttons themselves by an underlined letter or in the relative menu.

To activate the string fields press once the `f` key: the cursor will prompt in the `File to search` gadget, pressing `Tab` you will move to the next string-gadget, pressing `Shift-Tab` to the previous.

By pressing the help key you'll invoke AmigaGuide© with this document displayed in hypertext. (`Cerca.guide` must be in your `envarc:AmigaGuide/Path` description).

3.4 Menus

Being an Amiga program, CERCA offers a couple of pulldown menus...

3.4.1 Project Menu

Go   Same as the `GO` button, will start the searching. (short-cut `RAmiga-G`)

Stop   Same as the `STOP` button, will stop scanning the path. (short-cut `RAmiga-S`)

Info   Same as the `INFO` button, will give information about the found file. (short-cut `RAmiga-I`)

Select   Same as the `SELECT button`, will open a requester to indicate the path. (short-cut `RAmiga-E`)

About   Some information on the author and on the program.

Quit   Guess... (short-cut `RAmiga-Q`)

3.4.2 Settings Menu

Search mode
            By this mutual exclude submenu you can establish the searching mode of the program.

   Only files
                to specify that you want to search only files;

   Only dirs to specify that you want to search only dirs;

   Both   to specify that you want to search both files and dirs;
                note: Only one of the three menu items above can be specified!

   Only root to specify that you want to search only in the directory specified in the `Search path` gadget;

   All recursively
                to specify that you want to search the file in all the subdirectories of the one specified in the `Search path` gadget;
                note: Only one of the two menu items above can be specified!

Configure #n...
            (Where n is a number from 1 to 4)

            Opens a window with three string-gadgets: the first (`Command name`) contains the text that will be displayed in one of the four custom buttons in the main window, the second is the program name to run, to which CERCA passes a file name selected from the list (for example if your command is `c:Delete`, the resulting command will be `c:Delete` *file_selected_in_the_listview*). The last one contains the parameters for the console window.

            Note: The parameters of a console window are

            `CON:LeftEdge/TopEdge/Width/Height/Name/AUTO/CLOSE/WAIT/`

WINDOW `0xaddr`/ SCREEN `name`, etc

where the last five optional keywords means:

AUTO   don't open CON: window until/unless input or output occurs;

CLOSE   put a close gadget om the CON: window;

WAIT   hold off close until user clicks `Close` or types `CTRL-\`;

WINDOW   Use specified window (may be on a custom screen);

SCREEN   Open on specified public screen;

The additional `CON:` keywords `BACKDROP`, `NODRAG`, `NOBORDER`, `NOSIZE`, `SIMPLE`, and `SMART`, allow control of other attributes of a CON: window.

Example: `"CON:0/0/640/256/My console/AUTO/CLOSE/WAIT"`.

If the `Run Asynch.` gadget is checked you establish that your command will be run in asynchronous mode so you can quit Cerca even if your program is running and you can continue working with it! :-).

If the `Open Console` gadget is checked you establish to open an I/O console (read above) for your application.

The `Select` gadget helps you to find your program by a file requester and will place the command in the `Function` gadget. Click `Ok` to confirm your settings or `Cancel` to forget them. (short-cut `RAmiga-n`, with *n* from 1 to 4)

Open Settings...
Will load a configuration previously saved with `Save Settings` or `Save Settings As...`.

Save Settings
Will save actual string-gadgets' and buttons' content, search mode configuration and actual window's position and dimension in the file `Cerca.config` in the `envarc:` directory.

Save Settings As...
Same as the above menu, but here you can select another name and dir for the configuration file.

4 Appendices

4.1 Pattern matching under 2.0

The `dos.library` v37 (or greater) contains new functions to parse an argument string and to evaluate it. By default search patterns are '`?` `#` `%` `'` `,`' and after installing StarBurst (or equivalent) you find added '`*`'. There are some operators which can be used to bind two or more patterns (a multi-pattern): they are '`~` `|` `(` `)`'.

There are some examples:

Pattern	Meaning
`?`	Matches any single character
`#<C>`	Matches the `<C>` item occurring zero or more times
`%`	Like a null string (same as giving a `""` file name as parameter to a command)
`#?` or `*`	Matches any string
`'`	Remove the effect of the pattern character

Operator	Logical Meaning
`|`	or
`( )`	and
`~`	not

Examples:

`Delete #?`	Will delete all the contents of the actual path
`Delete #?.info`	Will delete any file ending with the string `.info` and starting with any combination of any lenght of characters
`Delete ~(#?.info)`	Will delete any file which doesn't end with `.info`
`Dir *.pic`	Displays all the files ending with `.pic` (same as #?.pic)
`Dir (*.pic|*.iff)`	Displays all the files ending with `.pic` or `.iff`
`CD Sheet'#`	If it exists, the system will assume it as actual directory `Sheet#`
`Dir CG*`	Displays all the files starting with `CG`
`Dir CG*fonts`	Displays all the files starting with `CG` and ending with `fonts`

For more information about the argument read the manual *Using The System Software* chapter *AmigaDos References*, (c) 1990/1991 by Commodore Amiga Inc.

4.2 Recognized file types

Cerca can recognize a lot of file types (listed below):

- Workbench icon file
- ASCII text file
- 'C' source code file
- 'C' header file
- Assembly language source code file
- Assembly language include file
- Modula-2/Oberon source code file
- ARexx script file
- Basic source code
- AmigaGuide© document file
- T_EX document file
- Metafont font file
- Generic font file
- Packed T_EX font file
- T_EX device independent output file
- PasT_EX font library file
- Manx 3.x object code file
- Manx 5.x object code file
- Manx 3.x library file
- Manx 5.x library file
- AmigaDOS object code file
- AmigaDOS object code library file
- AmigaDOS executable file
- System library file
- System device file
- AmigaDOS filing system handler file
- AmigaDOS handler file
- GIF image file
- Degas image file
- MacPaint image file
- SuperPaint image file
- Macintosh PICT image file
- Sun raster image file
- Postscript file
- PCX image file
- TIFF image file

- Windows bitmap image file
- JFIF image file
- IFF-ILBM image file
- IFF-ANIM animation file
- IFF-8SVX sound file
- IFF-SMUS score file
- IFF-FTXT text file
- IFF-PREF preferences file
- IFF-TERM `term` configuration file
- IFF file
- AmigaVision flow file
- Imploder data output file
- PowerPacker data output file
- LhPak self extracting archive
- LhASFX self extracting archive
- Arc archive file
- ARJ archive file
- Compress output file
- CPIO archive file
- Freeze output file
- MacCompress archive file
- Compact archive file
- Diamond archive file
- LhArc archive file
- LHA archive file
- Zoo archive file
- PKZip archive file
- Stuff It! archive file
- Pack It! archive file
- DMS disk archive file
- Warp disk archive file
- Zoom disk archive file
- SPARC object code
- SPARC executable
- MS-DOS executable
- Atari-ST/TT executable
- Macintosh executable

I think they should be enough `;-)` !!!

4.3 To Do

Here are some plans for future expansion of Cerca. Comments and additions are welcome.

- Becoming a commodity: resident, little, with a key pop-up.
- Configurable list of most used patterns.
- Possibility to iconify the program.
- Multiple dir/volume search.
- Localization.
- Arexx port to communicate with other applications.

  ... to be continued ...

4.4 Known Bugs

The actual version (37.75) was tested very hardly with `Enforcer` and `Mungwall` for a long time. If you find a bug, please contact me.

4.5 History

- Cerca V1.0 (37.69) : First release.
- Cerca V1.1 (37.75) : Now, the configuration file is saved in `envarc:Cerca.config` instead of `S:Cerca.config`. Note that the old configuration file is still good.

  Fixed a bug when opens a window with small fonts (like topaz 8-9). Now works with all fonts.

  Fixed a bug when loads a configuration more 'large' then the actual selected. Now the window will modify their dimensions.

  Now AmigaGuide© is not necessary to run the program. However, if you have the library, you must now set the environment variable `AmigaGuide/Path` to search in the directory where `Cerca.guide` is placed. Open a shell and type `SetEnv AmigaGuide/Path "S: Sys:My_Docs"`.

  Now the menus are compatible with the NewLookMenus of OS 3.0 (black pen on white background).

  Now Cerca's error messages appear on the workbench window.

4.6 Greetings

Finally, I want to thank

- Finardi Dario for suggestions, first & hard testing and part of the manual.
- Barthel Olaf (the author of 'Term') for the base utility of the file type identification.
- Vigna Sebastiano for suggestions and beta testing.
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- Reinhard Spisser for converting the documentation in TEXinfo format.
- Di Giuseppe Fabrizio for the beautiful icon.
- The beta testers: Attias Roberto, Gentile Giovanni, Lodi Fabrizio, Ruocco Sergio, Santagostino Carlo, Silvera Paolo, Zandonadi Marco.

4.7 The Documentation

The documentation files for CERCA are given in four different formats:

`Cerca.doc`

> The documentation for CERCA in ASCII;

`Cerca.guide`

> The documentation for CERCA in AmigaGuide hypertext format;

`Cerca.dvi`

> The documentation for CERCA in TEX's device-independent format;

`Cerca.texinfo`

> The documentation for CERCA in TEXinfo format; using `makeinfo` you can produce the `.doc` and `.guide` files.

4.8 Program and distribution notes

CERCA is © 1992 Carlo Todeschini and it's freely distributable as long as all of its files are included in their original form without additions, deletions, or modifications of any kind, and only a nominal fee is charged for its distribution.

CERCA is a *DonationWare* program. If you like and so use CERCA, make a donation to a public institution or foundation like **Fight Against Cancer**, **WWF**, **Amnesty International**, **UNICEF** etc...and write me to tell that you like my work.

This software is provided "AS IS" without warranty of any kind, either expressed or implied. By using CERCA, you accept either the whole risk or the quality and performance of the program.

4.9 How to reach the author

If you have some additional ideas and/or bug reports, feel free to send a letter (e-mail preferred) or to give me a call (you're advised: letters or e-mail costs less `:-)`).

You can reach me via

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