

## ClusterView Application Help

ClusterView is a program which allows a MS-Windows user to browse through individual files and groups of files (named clusters). The files can have any size as they are never entirely stored in main memory and they can be search with approximative patern and/or regular expressions.

ClusterView has been written by Yves Roumazeilles and is available as shareware. You are invited to read now the user license.

To learn how to use help, press F1.

### Introduction to ClusterView (short tutorial):

What is ClusterView?

What is a cluster?

How can I view and search a document?

How can I view and search a few more documents?

Creating a cluster?

Automatic clusters or dynamic clusters?

Why is ClusterView better for handling HTML or Netscape files?

ClusterView integration into Windows 95

### Basic operations:

file operations

cluster operations

find operations

others

keyboard shortcuts

### Other information:

Common questions and features

Copyright information

Requirements

FTP and CompuServe availability

Registering ClusterView

I would like to take the occasion to thank those who have been providing help (willingly or not) to the development of this application.

First, thanks to those who have been testing both ClusterView and the YGrep Search Engine, like Christian Lescuyer (who easily won his free life-long license for it by asking for approximative search and testing it).

Then, thanks to Microsoft for its excellent Visual C++ tools and Martin Heller for his nice "Programming for Windows" book. If you are serious about Windows programming, you need both.

Last but not least, thanks to those who brought the approximative search concept (and algorithm) which is central to today's ClusterView features: Ricardo Baeza-Yates and Gaston H. Gonnet who published the clear and innovative paper "A new approach to text searching" which was the basis of the YGrep Search Engine.

## FTP and CompuServe availability

ClusterView is available through **FTP** (Internet file download). The reference storage is on the famous SimTel server:

ftp.coast.net                      directory: SimTel/win95/txtutil                      file: cl300w95.zip

However, SimTel is a rather famous location and people tend to overwhelm the capacity of the machine there. In consequence, you may have to wait a lot during download operation. I suggest that you use one of the mirror sites (they keep a full copy of the original site among other things). Here are some of my preferred mirror sites:

src.doc.ic.ac.uk (155.198.1.40)                      directory:  
/computing/systems/ibmpc/simtel-win95/txtutil  
nic.switch.ch (130.59.1.40)                      directory: /mirror/simtel/win95/txtutil  
ftp.unicamp.br 143.106.10.54)                      directory: /pub/simtel/win95/txtutil  
plaza.aarnet.edu.au (139.130.23.2)                      directory: /micros/pc/SimTel/win95/txtutil  
romulus.ucs.uoknor.edu (129.15.10.20) directory: /mirrors/Simtel/win95/txtutil  
micros.hensa.ac.uk (194.80.32.51)                      directory: /mirrors/simtel/win95/txtutil  
ftp.jussieu.fr (134.157.0.130)                      directory: /pub7/pc/Simtel/win95/txtutil

Of course, you can also make an Archie search if you have access to it. And you will easily find the most appropriate file server near to you.

ClusterView is also available from **CompuServe**. You should look into the library of the "Windows Shareware Forum" (GO WINSHARE). ClusterView can be found (and downloaded) from the "Windows 95/Win32" section.

## Requirements

ClusterView is an MS-Windows 32-bit program. Consequently, it requires a computer which can run Microsoft Windows 95 or higher. This includes the following general conditions:

an 80386 (or higher level) processor. However, a 80486 is highly recommended for MS-Windows 95.

at least 2 megabyte of RAM. 4 megabytes are recommended for better operation. Many people think that running MS-Windows with less than 4 megabytes is crippling it. ClusterView does not need all of these, but you will appreciate to have them anyway if you're serious about using MS-Windows.

at least 1 megabyte of free disk space to install ClusterView and its support files. This can be reduced to 500 kilobytes if you really need it.

a screen monitor compatible with MS-Windows. Most standard screens meet this condition (Hercules, EGA, VGA, most SVGA resolutions, XGA, TIGA, etc.); check with your hardware manufacturer or consult the MS-Windows compatibility list provided by Microsoft upon request.

ClusterView has been tested compatible with MS-Windows NT v3.51. Please report if you see any problem there because I have not permanent access to Windows NT and I may have introduced a bug by inadvertance.

This Windows 95 package is still backward compatible with Windows v3.1 or Windows for WorkGroups v3.11 if you provide the additonal WIN32S package from Microsoft. This way, you can still profit from the 32-bits executable by installing (or having already installed) WIN32S on your MS-Windows machine. I suggest you avoid installing the v1.1 of WIN32S which proved riddled with bugs but can still be found almost everywhere (ClusterView can live with it, but...) and try and get WIN32S v1.30 or higher.

Note: ClusterView is only be available as a 32-bits program; The 16-bits program has been removed from distribution and the 32-bits one is the only one left.

## **New Features in ClusterView v3.00**

### **New features in versions 3.00**

Addition of the Web pages viewing mode with searching capability.

A major improvement in search speed has been obtained by changing the way the cursor is handled during the search operation.

ClusterView no longer has a 16-bit version. If you want to run it over Windows 3.1, users should now use the WIN32S package to emulate a 32-bit Operating System. It is suggested that they use either Windows 95 or Windows NT 3.51 (or higher).

### **New features in versions 2.04**

Corrected a small bug in the YGrep Search Engine which prohibited a match when comparing the regular search expression "."\* (any character in any number including none) against an empty line. Minor but it was unpleasant to some people, for theoretical reasons.

Improved the manual (particularly the common questions and problems section which is now much better indexed).

Corrected a few idiosyncrasies in the part handling the long file names and the international file names.

This one was never released and has been kept at a development stage up to arrival of v3.00.

### **New features in versions 2.02 and 2.03**

Performance was improved by about 30% in all fields when switching to true 32-bit programming. This means also that the same executable is usable in one of the following configurations : Windows 3.1 (with WIN32S extensions), Windows 95, Windows NT.

A number of improvements were added to the on-line Help file.

Addition of a new support address through Compuserve (101233,1032).

### **New features in version 2.01**

Version added because of potential problems with a buggy 2.00 version which may be left on some servers.

### **New features in version 2.00**

Handling of [Intl] section of the WIN.INI file for file info dialog box.

Minor code improvements.

On-line help minor extensions (mainly to Common Questions and Features).

Addition of the Edit menu to copy parts of the documents.

Search is now able to optionally wrap lines (at a small performance cost).

Users found 5 bugs, and (at my surprise :-)) I could correct them.

Small improvements in the Help file.

### **Features in the future releases**

I'm currently thinking of yet another way of searching data in files with the YGrep Search Engine. It then will be automatically applied to ClusterView. Keep on line.

You can ask.

## Exiting ClusterView

To exit ClusterView, you can select the Exit option in the File menu or the Close option in the System menu.

Either way, in a dialog box, you will have to confirm that you indeed want to exit, and whether you want to save the currently open cluster (if there is one) and whether you want to save the configuration to the initialization file. The proposed default checked options take into account whether there is a need to save anything.

If you accept to save the present configuration, ClusterView will automatically go back to it next time you run it.

### Notes

When there is no need to confirm quitting the ClusterView application (when the cluster and the configuration are already saved), the dialog box may not be displayed at all before quitting if the QuietQuit option is set to TRUE in the CLUSTER.INI file.

To save the current cluster under another name than the one offered automatically by ClusterView, click on the Cancel button and then call the Cluster/Save As... menu option.

The selected set of options is dependent on the need to make the save. E.g. if the current cluster is modified but not saved, you will be automatically proposed to save it. Similarly, if some configuration or preferences (either internal or external) has been modified, the corresponding button will be crossed to propose a saving. You can select any other combination than the proposed one.

## Cluster File Format

Cluster files are standard text files with a structure similar to Windows initialization files (see also help about the ClusterView initialization file [CLUSTER.INI](#)). However, some sections and entries are used or necessary for such a file to qualify for a Cluster file. Its file format is described here. However, remember that ClusterView is the best tool to generate legal Cluster files (using its create/edit/save capability).

A Cluster file is a special ASCII file that contains entry-value pairs representing run-time options for the applications.

The format of the file is following the general rule:

```
[section]
entry=value
...
```

### Example

The following is the content of an example CLUSTER.INI file as it may be provided on the ClusterView distribution disk.

```
[Information]
Creator=ClusterView
Description=Any kind of text is welcome here.
Check=OK

[Contents]
Number of files=2
File1=DOC1.TXT
File2=C:\USER\JOHN\DOC2.DOC
```

### Explanation

Each of the entries shown above will be now described.

```
[Information]      Creator=<string>
```

This entry is necessary for ClusterView to recognize that this is a Cluster file. The exact <string> is left to application and user choice, but it must not be empty. ClusterView fills it automatically on Cluster creation with a string beginning with "ClusterView". Any file not containing this entry is automatically refused as non cluster.

If you manually create a cluster (using a text editor like Notepad), you are advised to insert a line similar to: Creator=MyName

```
[Information]      Description=<string>
```

This entry is not necessary for ClusterView to recognize that this is a Cluster file. The <string> value can be any string. It is used as the description string of the Cluster. There is no checking done by ClusterView on this string, but ClusterView let you edit it.

The use of this field is left to the user (or another application) appreciation.

```
[Information]      Check=<OK|string>
```

This entry is not necessary for ClusterView to recognize that this is a Cluster file. The value must be different from "OK" if the creator has a reason to believe that the Cluster file format is corrupted for some reason. This may be the consequence of a writing error detected by ClusterView when saving the Cluster. In this case, the value is set to "KO". However, this is not necessarily recognized by tools reading the cluster.

```
[Contents]  Number of files=<number>
```

This entry is not necessary for ClusterView to recognize that this is a Cluster file. The value must be a valid integer describing the number of available file entries shown next. ClusterView will accept Cluster files with invalid values there. However, to insure that other applications work well with it, ClusterView fills this field with the correct value when saving a Cluster.

```
[Contents]  File1=<file_name>
```

This entry is necessary for ClusterView to recognize that this is a Cluster file. Only empty cluster can have no File1 entry.

The document list of the Cluster is built from the list of File<i> entries. If there are N documents, all entries from File1 to FileN must be present. E.g. for three documents all File1, File2, and File3 entries must be present (even if they are not in numeric order).

The value for a FileX entry must be a valid file name. If it is not, the Cluster cannot be recognized properly. The only exception is when you want to build **dynamic clusters**. You will then use file names including either of the MS DOS wild characters (\* or ?). The following is an example of a dynamic cluster designed to include all TXT files as documents.

```
[Information]
Creator=Manual
Description=Test of a dynamic cluster
```

```
[Contents]
Number of files=1
File1=C:\DOCS\NEW\*.TXT
```

## Note

It is generally considered harmless to build your own Cluster files by hand. However, it is often easier to use the ClusterView application and its Cluster Edit capability. But, please notice that building **dynamic clusters** is not possible with ClusterView (you must use a separate text editor).

For more about the Cluster file format, you can have a look at the examples which are on the distribution disk. Often, looking at an example gives you more useful information than any reference documentation. Don't miss the opportunity. It will save you many minutes looking for those silly little problems.

Even more to the point, or if you don't have the examples in the distribution disk you got from your BBS (in case of a partial distribution), you can write static clusters using the cluster create/edit/save capability of ClusterView. It will automatically create static cluster files which are following the building rules as strictly as possible.

For dynamic clusters, you can easily modify a static cluster with a text editor (e.g. MS Windows Notepad editor).



## What is ClusterView?

ClusterView is a Windows 95 application designed to help handle text searching tasks in a group of large files. They can be either plain text files (like documentation files) or HTML source files (like those you can get back from Internet with the help of the "save page" feature of Netscape, Mosaic or the Internet Explorer). It's often difficult to handle all these different files, ClusterView allows to view them (for HTML files it provides a fast viewing mechanism with none of the flashy features of the full-fledged programs but with a lot of flexibility), and then to search in the group of files.

The most prominent features are:

- grouping of documents in a structure named cluster. This allows to consult simultaneously various files you decide to link together according to your needs. Various operations (other than mere viewing) can be applied to the documents of a cluster. It's easy to build a cluster for all HTML documents of the cache directory for NetScape or Mosaic.
- approximative search based on Baeza-Yates algorithm to find a pattern which is only partly known (also known as search with erroneous patterns). For example, you can search for "pattern" with 1 error (at most) and it will match "pattern", "pittern" and "Pattern" while stepping over "lantern" (2 errors).
- regular expression search modelled on the Unix utility named GREP. It is particularly useful for complex searching with the help of its specific search "language" to describe the pattern you look for. For example, you can search for "^pattern" to look for "pattern" at the beginning of a line; Or for "[p]a[nt]ern" to look for either "pattern" or "lantern". Look into the Help file for an extensive description of the pattern language.
- files viewing is not limited by any constraints of size. You can be viewing anything you want (even gigabytes files if your computer has them readable - e.g. from a network).
- capability of using ClusterView with Windows 3.1 using the Win32S wrapping. This allows to get the 32-bit performance without upgrading to Win95 or WinNT.
- some display processing allows to filter/modify the presentation of data to the document window.
- most of the keyboard commands are similar to / compatible with the ones from the Unix utilities named MORE and LESS.

### See also

[Cluster description](#), [Fundamentals of ClusterView text searching](#), [Preprocessing lines](#), [Preprocessing HTML files](#).

## What is a cluster?

A cluster is a group of files which are handled simultaneously by ClusterView. These files can be shown to the user with ClusterView. You can manipulate them as a group (browsing into them, searching a word into them, etc.)

When you have opened a cluster, the ClusterView window will show its name in the caption bar, followed by :: and the name of the document currently opened. For example, if you are viewing the file DOCUMENT.TXT in the cluster CLUST.CLU, the caption bar will show "CLUST.CLU::DOCUMENT.TXT".

### See also

[Cluster file format](#), [cluster operations](#).

## How can I view and search a document?

The first step is to open the document with the menu command Document>Open... and select the document with the standard dialog box.

Then, the document is automatically displayed and you can select a find/search command with the menu command Find! or the menu option Find>Find...

You could also have opened the document the **easy way**: by dropping the file into the ClusterView window. ClusterView will automatically open any file dropped this way.

### See also

[Opening a few more files](#), [the find dialog box](#).

## How can I view and search a few more documents?

I suggest you first check that you open a group of documents the **easy way**: by dropping them onto the ClusterView window. But first, you will have to check into the preferences dialog box (from the Options>Preferences... menu option) that "Add file to current cluster" is checked.

Check it and then drop a few document files onto ClusterView.

Then, the first document is automatically displayed and you can select a find/search command with the menu command Find! or the menu option Find>Find...

Actually, what you've been doing is creating a cluster (your first cluster, maybe?).

### **See also**

The find dialog box, cluster operations.

## Creating a cluster

Basically, there are three ways of creating a cluster. They are shown here in the order of decreasing convenience in day to day operation and of increasing flexibility for power users:

### Creation of a cluster by drag and drop

First, you will have to check into the preferences dialog box (from the Options>Preferences... menu option) that "Add file to current cluster" is checked.

Then, you will drop all the documents at once onto the ClusterView window.

Last, you will save the cluster you just built. Use the menu option Cluster>Save As...

### Creation of a cluster by hand building

It is a common way of creating and modifying a cluster by calling the menu option Cluster>Edit... With the help of the dialog box which is presented to you, it's simple to add files in the document list, add a textual description at your convenience and save the resulting cluster with a name using the save buttons.

### Creation of a cluster with an external file editor

Last but not least, a power user will find useful to have direct easy access to the cluster structure. It is stored into a textual file whose extension is commonly .CLU and whose format is left public. This is the only way you can build a dynamic cluster.

### See also

[Modifying a cluster](#), [Format of a cluster file](#), [Cluster operations](#), [Dynamic clusters](#).

## **Automatic clusters or dynamic clusters?**

A dynamic cluster is a special cluster which will permit to select documents not from a fixed list like all clusters, but with a file description like \*.TXT (all documents whose file suffix is TXT). This is very convenient to easily open a large group of files (a full directory of text files from a CD-ROM or from a network directory) or when the file names are not known beforehand (when they are changed at irregular intervals like the files in the Netscape cache directory).

In all cases, you will have to create this special type of clusters with a text editor (ClusterView will recognize them but cannot build them).

### **See also**

[Dynamic cluster file format.](#)

## **Why is ClusterView better for handling HTML or Netscape files?**

On the Internet you can collect a few thousand documents in HTML format with the help of your web browser (be it Netscape, Mosaic, Internet Explorer or any other one). The sheer number reduces the ability you have to retrieve the useful information you know is here but is near to unfindable.

Drop all these documents onto ClusterView and start searching. ClusterView has the advantage (over other file viewers and file finders) of being able to wipe out/filter out/clean up the displayed HTML documents if you ask for it in the Options>Preprocess>HTML Tags... This allows a better search (ClusterView avoids finding hits into these strange codes designed for machine reading (and not for human reading)).

Check Options>Preprocess>HTML Tags..., drop a few Netscape documents onto ClusterView and start searching around.

## **ClusterView integration into Windows 95**

### **File Explorer**

ClusterView gives you the choice of installing itself into the File Explorer menus. This would allow you to hasten the search of data into some files.

If you click on the right mouse click over the Explorer or over the File Manager, a file menu will pop up. ClusterView installs a new entry at the top of this menu. It will contain a new entry named "YGrep Search..." and will allow you to immediately open a ClusterView instance to search a pattern into the selected file.

### **Install/Uninstall**

As you may already have noticed, there is no installation procedure for ClusterView. You only have to uncompress the ZIP file into the appropriate directory (wherever you prefer, probably into one subdirectory of C:\Program Files). Anyhow, when first run, ClusterView will push proper uninstall information into the Registry database of your computer, in order to allow an easy uninstall process as all Windows 95 applications should do.

Uninstall will not delete the files (in the current version), but it will clean the Registry up behind itself to avoid leaving erroneous information into the Registry.

### **Windows 95 optimizations**

ClusterView is now fully optimized for 32-bit operation and for inclusion into a 32-bit world like Windows 95. It takes full advantage of this environment by an improved speed of search operation and of all operations (like menu handling, file handling, etc.)





## YGREP

The YGrep Search Engine (YGREP.DLL) is the name of a Dynamic Library built for MS-Windows by Yves Roumazeilles and which can be found bundled with some applications like *ClusterView*.

The YGrep Search Engine hosts Approximative Search. The notion has been brought to light - at least mine - by Ricardo Baeza-Yates and Gaston H. Gonnet under the name of Shift-Or (or Shift-Add) search method. To my knowledge, the name of **agrep** (the YGrep Search Engine was first known as the AGrep Search Engine) was originally adopted by Sun Wu and Udi Manber for a Unix utility implementing a similar algorithm.

On the other hand, Regular Expression Search is based on old work by many researchers on automaton logic. Many implementations have already been found on Unix systems (under the application names of **ed(1)** and **grep(1)**) and others including Vax-VMS, DOS, CP/M, etc. They often differ from the original one from Unix, but most power users now recognize easily the common syntax and appreciate its powerful capabilities.

I added some extensions which were not in the original Unix version. In that I was following the interface specification of various authors including David Conroy (original author of the superb MicroEmacs editor which I advise you to use in its more recent version by Daniel Lawrence for your MS Windows editing tasks), Ozan S. Yigit and Karl Hoorsfish. To that I had to add my own salt and pepper to get a working interface.

I apologize for omitting many of the other sources of my little knowledge in the field of programming.

## **Approximative Search**

The approximative search is allowing you to find a text without knowing the exact form of what you are looking for. For example, you can look for text without taking into account the case of the letters (without making a difference between uppercase and lowercase letters).

The operation is centered on the fact that in most cases you know a text string which is "approximately" what you are looking for in your files. Additionally, you are able to say that you expect this text string to have a certain number of errors.

For example, the string 'East' is approximately identical to 'West', but there are 2 errors (the first two letters of the words) and 2 matches (the last two letters of both words: 's' and 't').

## **Basic Operations**

Searching for non-cased text

## Searching for Approximative Text

The YGrep Search Engine offers to search for text even if the pattern you give is not exactly what you look for (you only have a faint idea of the exact spelling of the text). YGREP allows you to select an error level (the maximum number of errors you can accept when looking for the pattern in the text).

For example, you want the strings to look for are 'EAST', 'CAST' and 'FAST', but the following strings must not be matched: 'WEST', 'EMIT', 'COST'. This can be solved by increasing the number of errors accepted. Just propose the pattern 'EAST' with an error level of 1.

### Operation

- 1 Position the window at the place you want to start your search.
- 2 From the Find menu, choose Find.
- 3 In the Find dialog box, type the pattern ('EAST').
- 4 To search the whole cluster (and not only the currently open file), select the Search Whole Cluster check box.
- 5 To search forward or backward from the cursor position, select the appropriate radio button.
- 7 To avoid the program taking into account the difference between upper and lower case letters, unselect the Check Upper/Lower Case button.
- 6 Ensure that the error level is 1, either by typing this value in the error level window or by selecting it in the pull down menu at the right of the number little window.
- 7 To avoid the program taking into account the difference between upper and lower case letters, unselect the Check Upper/Lower Case button.
- 8 To start the search operation, choose the OK button.
- 9 To close the Find dialog box without searching, choose the Cancel button.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Find! menu (or to press Ctrl+F).

### To search without the Find dialog box

- 1 Use the Find command, as in the preceding procedure, to find the first occurrence of the search text.
- 2 To find the next occurrence of the search text, choose Again from the Find menu.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Again! menu (or to press F3).

## Searching for Non-Cased Text

The YGrep Search Engine is limited in the maximum number of errors it accepts.

You can overcome this limitations (and use a lower error level) if you know that most of the errors will be in lettercase mismatch between the pattern and the text.

For example, you want to look for the strings 'West', 'WEST' and 'west', but the following strings must not be matched: 'East', 'east', 'EAST'. This cannot be solved by increasing the number of errors accepted. Just propose the pattern 'west' with an error level of 0 and do not check for upper/lower case.

During the search, the program does not take into account differences between an upper case letter ('A') and its lower case equivalent ('a').

### Operation

- 1 Position the window at the place you want to start your search.
- 2 From the Find menu, choose Find.
- 3 In the Find dialog box, type the pattern ('west').
- 4 To search the whole cluster (and not only the currently open file), select the Search Whole Cluster check box.
- 5 To search forward or backward from the cursor position, select the appropriate radio button.
- 6 Ensure that the error level is 0.
- 7 To avoid the program taking into account the difference between upper and lower case letters, unselect the Check Upper/Lower Case button.
- 8 To start the search operation, choose the OK button.
- 9 To close the Find dialog box without searching, choose the Cancel button.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Find! menu (or to press Ctrl+F).

### To search without the Find dialog box

- 1 Use the Find command, as in the preceding procedure, to find the first occurrence of the search text.
- 2 To find the next occurrence of the search text, choose Again from the Find menu.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Again! menu (or to press F3).

## Regular expression search

The regular expression search is allowing you to find a text based on a description which will help you be more precise than with [Approximative Search](#), but also more difficult to handle before you get used to it.

To give you a first look at what can be done (without going too far into the regular expressions syntax), here are a few of the possibilities.

You can search for pattern in the beginning (or in the end) of the lines, ignoring the similar patterns which appears in the middle. You can search for telephone numbers (XXX-X-XXX-XXXX), dates (XX/XX/XX), times (XX:XX), three-figure-numbers (XXX), or any other strictly formed field of numbers. but you can also look for patterns a little more evasive like: four letter-words containing no figures, but beginning with an S letter either in lower- or uppercase and in the end of a line (that is defined by the pattern '`\<[Ss][^0-9_][^0-9_]\>$'`).

For an extended specification of the regular expression used, see also [Regular Expressions](#)

## YGrep Search Engine regular expressions

The YGrep Search Engine regular expression routines support the full range of Unix regular expressions as defined in **ed(1)** and in **grep(1)**.

### Specification

- ^ A circumflex as the first character of the pattern forces matches to beginning of lines.
- \$ A dollar as the last character of the pattern forces matches to end of lines.
- .
- A period anywhere in the string matches any single character.
- \* An expression followed by an asterisk matches zero or more occurrences of that expression.
- + An expression followed by a plus sign matches one or more occurrences of that expression.
- An expression followed by a minus sign optionally matches that expression.
- [] A string enclosed in square brackets matches any character in that string, but no others. If the first character of the string is a circumflex the expression matches any character except the characters in the string. A range of characters may be specified by two characters separated by a -.
- \< A backslash followed by an opening < matches the beginning of a word.
- \> A backslash followed by a closing > matches the end of a word.
- \ A backslash followed by any other character quotes that character. This allows a search for a character that is usually a regular expression specifier.

### Examples

- ^Windows matches all lines starting with *Windows*
- Grep\$ matches all lines ending with *Grep*
- H..p matches all lines containing *Help, Hoop, Harp, etc.*
- ^W.n matches all lines starting with *Win, Won, etc.*
- \\$ matches a dollar sign
- fo\* matches *f, fo, foo, etc.*
- fo+ matches *fo, foo, etc.*
- [xyz] matches *x, y and z*
- a[^xyz]c matches *abc, arc* and *aXb* but not *axb*
- ([0-9]) matches *(0), (1), (2), (3), (4), (5), (6), (7), (8) and (9)*
- ([0-9]\*) matches *( ), (0), (123), (2512), etc.*
- \<[Aa].\*\> matches any non-empty word beginning with either *a* or *A*

## YGrep Search Engine Limitations

The YGrep Search Engine is limited in both the length of the pattern it can manage and in the maximum number of errors it accepts.

The length of the pattern is limited to 512 letters maximum.

The number of errors is limited to 256 maximum.

Both of them are limited by the following formula:

$$\text{length\_of\_pattern} \leq 512 / (\log_2(\text{number\_of\_errors}) + 1)$$

The simple meaning of this formula is that if you have a long pattern, you cannot have a large number of errors. For example, with a 256 character pattern you must limit yourself to 1 error only. In most cases, this is not too limiting, but it should be noticed.

To partly overcome that constraint it is also possible to use the non-cased text search functionality.

Should you need to have a limitation placed higher or lower, please, contact the [author](#) for a customized version (this is not much more expensive than a standard package) or a source code license.





## Cluster Operations

ClusterView is written to handle clusters and documents.

A cluster is a group of files which are handled simultaneously by ClusterView. These files can be shown to the user with ClusterView. You can manipulate them as a group (browsing into them, searching a word into them, etc.)

### How to...

[Open an existing cluster](#)

[Find a text in a cluster](#)

[Create a cluster](#)

[Modify an existing cluster](#)

[Copy an existing cluster](#)

[Browse in a cluster](#)

## Opening an Existing Cluster

To open a cluster:

- 1 From the Cluster menu, choose Open... .
- 2 Type or select the filename.
- 3 Select the OK button.

The selected file must have the appropriate format for a cluster file or it will be refused and a message box will pop open. The easiest way to create a valid cluster file, is to use the cluster edit capability of the ClusterView application.

## Creating a Cluster

To create a cluster

- 1 First, create an empty cluster choosing New... from the Cluster menu.
- 2 Second, edit the cluster using the Edit... from the Cluster menu.

## Modifying an Existing Cluster

To modify an existing cluster, you first need to open one (see "[Opening an existing cluster](#)"). Then, you can modify it, choosing Edit... from the Cluster menu.

The dialog box displays the name of the cluster (Cluster Name field - which can be modified directly or using the Save As... button), the description string (Cluster Description field - which may be filled or not, and is modified directly), and the List of Documents.

- To empty the cluster under scrutiny, choose the New button.
- To start modifying another cluster, choose the Open... button.
- To save the modified cluster, choose the Save button (if the Cluster Name is appropriate), or the Save As... button (to change the Cluster Name before saving).
- To exit the Cluster Edit dialog box, choose the Exit button.

## Changing the List of Documents

- To add one file to the List of Documents, select the position where you want to insert the new file in the List (if the List is empty this step is unnecessary), choose the Add File... button, then select the file in the file dialog box.
- To remove a file from the List of Documents, select the file to remove in the List, then choose the Remove File button.
- To move up or down a file in the List of Documents, select it in the List, then choose either the Up button, or the Down button according to your will. The list is immediately updated according to the choice you made.

## Related topics

The Cluster menu contains some commands which allow to trigger the equivalent commands shown in the Cluster Edit dialog box. This is most interesting to apply commands to cluster you don't want to modify as when you want to copy a cluster.

See also [copying a cluster](#).

## Copying a Cluster

To copy a cluster without modifying its contents:

- 1 From the Cluster menu, choose Open... .
- 2 Type or select the filename.
- 3 Select the OK button.
- 4 From the Cluster menu, choose Save As... .
- 5 Type or select the new filename.
- 6 Select the OK button.

The new cluster will have the same contents (the same document list) as the original cluster, but is stored under a different name.

## **Browsing in a Cluster**

You can browse in a cluster (i.e. jump from one file to another) using one of the four available commands.

[Going to the first file](#)

[Going to the previous file](#)

[Going to the next file](#)

[Going to the last file](#)

## **Going to First File**

This allows to jump back to the first file in the document list of the cluster.

This command is available both in the File menu (choose First File) and in the Cluster menu (choose First File).

See also [Going to previous file](#), [Going to next file](#), [Going to last file](#).



## **Going to Previous File**

This allows to jump back to the previous file in the document list of the cluster. Using repetitively this command you can reach the first file of the cluster.

This command is available both in the File menu (choose Previous File) and in the Cluster menu (choose Previous File).

See also [Going to first file](#), [Going to next file](#), [Going to last file](#).

## **Going to Next File**

This allows to jump forth to the next file in the document list of the cluster. Using repetitively this command you can reach the last file of the cluster.

This command is available both in the File menu (choose Next File) and in the Cluster menu (choose Next File).

See also [Going to first file](#), [Going to previous file](#), [Going to last file](#).

## **Going to Last File**

This allows to jump forth to the last file in the document list of the cluster.

This command is available both in the File menu (choose Last File) and in the Cluster menu (choose Last File).

See also [Going to first file](#), [Going to previous file](#), [Going to next file](#).



## Common Questions and Features

If you have some problem while using the ClusterView application, it's the right place to look for a solution. The most common problems encountered by users (both end users and developers) are stored in this unstructured database.

- Note 001 I am continuously bothered by this dialog box at starting of Clusterview
- Note 002 Clusterview never opens my clusters as clusters (it reads them as documents)
- Note 004 ClusterView does not recognizes the changes I put into CLUSTER.INI
- Note 005 After the end of a search, I get a "busy" cursor during some time- ClusterView has nothing more to do!
- Note 008 I dont know where to get the latest version of ClusterView
- Note 009 My portable computer does not have the + and - numeric keys (no numeric keypad)
- Note 010 When I try selecting text, nothing appears to be highlighted
- Note 011 The Document>Browse menu command appears to select the wrong document when there are several of them with the same name
- Note 012 ClusterView sometimes appears not to find the files in the cluster
- Note 013 How do I get ClusterView 32-bits program working under MS-Windows 3.1?
- Note 014 How do I change the way a command is called (keyboard commands)?
- Note 015 My text documents are missing some parts
- Note 016 My HTML documents do not look the same in ClusterView and Netscape

If the ordinal numbers of the notes is revealing missing numbers in this list, this means that old bothering events have been removed in the life of the ClusterView application. This is certainly NOT because we are hiding some problems we would prefer not to reveal. This list is containing ALL the technical notes of significance for the current version of ClusterView.

## **I am continuously bothered by this dialog box at starting of Clusterview**

The ClusterView application shareware edition package is distributed for an evaluation period of 30 days. The software tries and help you remember that you should register to have this dialog box removed.

Just register, and you'll get the License number to feed into the dialog in order to have it disappear.

### **See also**

[Registering ClusterView.](#)

## **Clusterview never opens my clusters as clusters (it reads them as documents)**

You certainly have built them "by hand" with an external file editor (maybe you tried to build dynamic clusters). In that situation, the most obvious error that we all do is to forget about the `Creator` field. Remember that this is used by ClusterView to differentiate between a document and a cluster. Include the following in your cluster description:

```
[Information]
Creator=Manual
```

The contents of the `Creator` field have no importance. But it must not be empty or absent. Clusters built by ClusterView contain its name in this field in order to recognize easily this origin.

Another direction you should look is whether you decided to remove the preference "Try open as Cluster first" in the Options>Preferences menu option.

## **ClusterView does not recognize the changes I put into CLUSTER.INI**

You probably mean that you're twiddling the CLUSTER.INI file right from a text editor. You are advised avoiding it since all the entries can be modified from ClusterView itself.

Anyhow, remember that CLUSTER.INI must be in the same directory as CLUSTER.EXE (the executable file) and not in the Windows directory (e.g. C:\WINDOWS). This was made to avoid cluttering your Windows directory and to help you remove all traces of ClusterView if you need/want to extract it.

Saving the options from ClusterView is safe in that ClusterView always finds its way to the only correct version of CLUSTER.INI.



**After the end of a search, I get a "busy" cursor during some time - ClusterView has nothing more to do!**

I apologize for the apparent contradiction! ClusterView has still some internal structures to clear. So it needs a little time for that. On most computers you will hardly notice it after hours of use of ClusterView. Most users never do. However, on computers with (simultaneously) low processing power (the older ones) and low memory conditions (enough memory to run but not the amount suggested), you can observe the phenomenon if you ask for approximative search. This is due to the amount of time needed by MS-Windows to clear some of the structures. ClusterView is set waiting during 10 to 100 ms normally (barely noticeable), but can be forced in waiting up to 1 second (80386SX with less than 2 megabytes of RAM).

## **ClusterView has "memory leaks"**

**You don't need to read that one! The problem has disappeared...**

This is only a place-holder. ClusterView has currently not a single memory leak, while some of the previous versions had. It was cumbersome to find. Now, I will avoid that creepy guy coming back on you. I stand by you!

### **What does that mean?**

In certain circumstances, ClusterView manages to eat up MS-Windows memory. This will certainly lead to memory exhaustion if the circumstances are repeated enough times (many hundred times at least).

### **When does it happen?**

It happens when ClusterView is run multiple times. The second and following instances will eat up about XXXX bytes of memory. These can total to a fair amount if you really try and run a lot of ClusterView instances. However, in the most usual situation, the user (you!) will not notice the situation.

### **What can you do about it?**

You cannot do much. It is a programmer's problem to solve. I acknowledge I have not been able to identify it precisely enough to solve the problem. It will certainly be improved in a future release of ClusterView.

For the moment, and if you hit the wall of "not enough memory" you should quit Windows (and run it again to clear it off).

## **I dont know where to get the latest version of ClusterView**

**You can register and get it right from me!**

Just kidding! But you can do it. Of course!

**You can get it from a set of Internet FTP sites and various BBS**

Consider the following article:

### FTP availability

Many shareware libraries on CD-ROM now hold ClusterView. The SimTel CD-ROM you can get from Walnut Creek is one of these. Walnut Creek address is **4041 Pike Ln Ste D-386, Concord, CA 94520, USA**. You can call at 1-800-786-9907 and +1-510-674-0783 (I try to keep this information up-to-date, but they may be moving some day or another...).

And, many BBS around the world keep updated copies of them (I keep on receiving messages from people telling ClusterView was either downloaded from or uploaded to some obscure (but active) BBS far from Europe.)

## **My portable computer does not have the + and - numeric keys (no numeric keypad)**

### **Problem**

This means that you don't have access to the very nice + (resp. -) commands used to jump from one document to the next (resp. the previous).

### **Solution**

You could force the insertion of these commands through the specific personal commands of the ClusterView application, by creating a file named CLUSTER.KEY in the directory where you put the ClusterView executable file (CLUSTER.EXE).

It should contain the following lines:

```
+ next-file  
- previous-file
```

For those of you unsure of the way to do this, the registered version of the ClusterView application contains a PORTABLE.KEY file in the .OTHERS directory which only needs to be copied up into the ClusterView directory.

## **When I try selecting text, nothing appears to be highlighted**

This only means that the current version of ClusterView does not mark the selection but it is working OK. Just copy it to the clipboard... Sorry!

## **The Document>Browse menu command appears to select the wrong document when there are several of them with the same name**

When the cluster contains two or more documents with the same name, it appears that Document>Browse will always select the first one independently of the actual position in the cluster. This is either a "known bug" or a "feature" depending on the way you look at it. Anyhow, the cause of the problem comes from Windows handling of "ComboBoxes" and I cannot do anything about it for the time going.

## **ClusterView sometimes appears not to find the files in the cluster**

This most certainly comes from the fact you build it (or modified it) without ClusterView. I guess you used a standard text editor. The most common situation appears when you insert relative file names (e.g. `.\file.txt`) instead of absolute file names (e.g. `C:\usr\cluster\samples\file.txt`).

The obvious solution is "rebuild the cluster from the Cluster>Edit menu command" or "use your text editor again to correct the misspelling or so".

### **How do I get ClusterView 32-bits program running under MS-Windows 3.1?**

You need to add to your system the standard Microsoft WIN32S package. Most notably it can be installed (semi-transparently) by many applications which need it. ClusterView shareware package does not include WIN32S in order to reduce redundancy and to reduce the cost of downloading the package through paying channels.

You should install WIN32S v1.1 or higher (preferably higher, because v1.1 was riddled with bugs even though ClusterView does not stumble over them).



## **How do I change the way a command is called (keyboard commands)?**

You should look into the special help section about keyboard assignement of functions.

### **See also**

[Keyboard default assignements](#), [List of commands](#), [Use of CLUSTER.KEY file](#).

## **My text documents are missing some parts**

The most common case is when you left ClusterView in the "HTML tags out" mode. This mode is specific to Web Page display and should be used with caution on other files.

You can jump to this dialog box by calling the menu "Options>Preprocess>HTML tags". There is a help button on this dialog box.

### **See also**

[Filter HTML options box.](#)

## **My HTML documents do not look the same in ClusterView and Netscape**

That is true for all web browsers (Netscape, Mosaic, Internet Explorer and others). ClusterView is not a full-fledged HTML browser. It only tries to provide a sound approximation of HTML-built appearance in order to ease the search operations.



## **File Operations**

ClusterView can deal with clusters, but it also accepts any kind of files (even non-text files).

### **How to...**

Open an existing file

Get information about an open file

## Opening an Existing File

To open a file:

- 1 From the File menu, choose Open... .
- 2 Type or select the filename.
- 3 Select the OK button.

The document file can be of any kind (text files or non-text files). However, non-text files may be displayed with some characters replaced with the special Ū sign.

## **Getting Information about an Open File**

To get the full name, the size (in bytes), the last modification date and time of the currently open file:

- 1 From the File menu, choose File Info.
- 2 Select the OK button when finished.

The dialog box displays the requested information. You can close it pressing the OK button.





## Find/Search Operations

ClusterView is intended to allow easy searching in the documents and the clusters of documents. In the find dialog box all the useful options are grouped and available to the user.

The following information can be entered:

### Find What:

Provide the text to search (usually described as the <pattern ). If the **Regular Expression** item is checked, the pattern is interpreted as a Regular Expression string.

### Forward/Backward Search:

Select the direction of the search. Forward means from the top to the end of the documents. Backward means from the end to the beginning of the documents.

### Begin at First Line, First File:

Forces ClusterView to start search as indicated and NOT at the current viewing location.

### Search Whole Cluster:

Forces ClusterView to jump over the documents limits. Allowing to search a whole cluster rather than a single document.

### Wrap Search Over Line:

For hyphenated text, allows to search a pattern which may be cut between two lines.

### Regular Expression:

Forces ClusterView to use the Regular Expression Search language in the pattern to describe the search. This is incompatible with the Approximative Search.

### Match Case:

Forces a search with exact case match (the pattern `Case` will match the text `Case` , but neither the text `case` nor `<CASE` ).

### Search For Lines Which Do NOT Match the Pattern:

Self explicit.

### Approximation Errors:

When set with a value different of 0, will allow an Approximative Search with the specified number of tolerated errors.

The following buttons can be pressed:

### OK:

To accept the changes. They will be preserved in the CLUSTER.INI initialization file only when quitting the application.

### Cancel:

To abandon the changes.

### Help:

To jump to the text youre just reading now.

## **How to...**

[Find a text in a cluster](#)

[Fundamentals of text searching with ClusterView](#)

## Finding Text in a Cluster

It is possible to use ClusterView to look for a character, word, or group of words (or a specific pattern) into all the files of a cluster. Two basic commands can be used.

### To find text

- 1 Position the window at the place you want to start your search.
- 2 From the Find menu, choose Find.
- 3 In the Find dialog box, type the search text.
- 4 To search the whole cluster (and not only the currently open file), select the Search Whole Cluster check box.
- 5 To search forward or backward from the cursor position, select the appropriate radio button.
- 6 To force the search to take into account the exact casing of letters, select the Check Upper/Lower Case button.
- 7 Select an error level for approximative search (0 is exact search).
- 7 To start the search operation, choose the OK button.
- 8 To close the Find dialog box without searching, choose the Cancel button.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Find! menu (or to press Ctrl+F).

### To search without the Find dialog box

- 1 Use the Find command, as in the preceding procedure, to find the first occurrence of the search text.
- 2 To find the next occurrence of the search text, choose Again from the Find menu.

For the users who want a command as short as possible, it is also possible to avoid using even the Find menu, and to go to the Again! menu (or to press F3).

### To search with the mouse

When you double-click on a word in the displayed text, ClusterView immediately starts a search for that word using the others conditions as they were left by the previous search (e.g. if you were searching across a whole cluster, double-clicking will select a new pattern/text to search, but also across the whole cluster).

### To cancel a search while it is running

If you decide that a long search operation must be cancelled (e.g. when searching something in a very large Cluster), you can press the ESC key. The search is stopped and a message box gives a confirmation of the cancellation.

## **Fundamentals of Text Searching in ClusterView**

ClusterView is using a specific set of search operation whose fundamentals are most interesting for large search applications as it is often the case with large Clusters of Documents.

It is based on two different techniques: Approximative Search (also called YGREP search) and on Regular Expression Search.

For more information about these and the YGREP Dynamic Link Library used internally by ClusterView, select the topics in the preceding paragraph.



## Initialization File and ClusterView Configuration

The CLUSTER.INI file is used by ClusterView to optimize its operation in various fields. It is a special ASCII file that contains entry-value pairs representing run-time options for the ClusterView application.

The format of the file is following the rule of the other MS-Windows INI files:

```
[section]
entry=value
...
```

Various sections (and entries in each section) are defined for ClusterView.

### Example

The following is the content of an example CLUSTER.INI file as it may be provided on the ClusterView distribution disk.

```
[ClusterView]
Yield=16
TabSize=8
DisplayStatusBar=TRUE

[Font]
Name=Arial
Size=12

[Directories]
Documents_Init=C:\usr\cluster
Clusters_Init=C:\usr\cluster
```

### Lists

List of sections.

Hierarchical list of entries.

Alphabetical list of entries.

## **Initialization Sections**

The definable sections are the following:

[ClusterView]

[Font]

[Directories]

[Preprocess Display]

[Drag and Drop]

If other sections are defined, they are ignored by ClusterView during its operation.

## Initialization Entries (hierarchically sorted)

The definable entries (with their corresponding sections) are the following:

<u>CursorWait</u>	in [ClusterView]
<u>Yield</u>	in [ClusterView]
<u>TabSize</u>	in [ClusterView]
<u>QuietQuit</u>	in [ClusterView]
<u>Editor</u>	in [ClusterView]
<u>LicenseNumber</u>	in [ClusterView]
<u>DisplayStatusBar</u>	in [ClusterView]
<u>Name</u>	in [Font]
<u>Size</u>	in [Font]
<u>Documents Init</u>	in [Directories]
<u>Clusters Init</u>	in [Directories]
<u>In Char</u>	in [Preprocess Display]
<u>Out Char</u>	in [Preprocess Display]
<u>Filter At Start</u>	in [Preprocess Display]
<u>Filter At End</u>	in [Preprocess Display]
<u>Wrap Lines on Search</u>	in [Preprocess Display]
<u>Preprocess HTML Tags Out</u>	in [Preprocess Display]
<u>TryAsClusterWhenSingleDrop</u>	in [Drag and Drop]
<u>AddFilesToCurrentClusterWhenDropped</u>	in [Drag and Drop]

If other entries are defined or if these ones are defined in another section, they are ignored by ClusterView during its operation.



## Initialization Entries (alphabetically sorted)

The definable entries (with their corresponding sections) are the following:

AddFilesToCurrentClusterWhenDropped in [Drag and Drop]

Clusters Init in [Directories]

CursorWait in [ClusterView]

DisplayStatusBar in [ClusterView]

Documents Init in [Directories]

Editor in [ClusterView]

Filter At End in [Preprocess Display]

Filter At Start in [Preprocess Display]

In Char in [Preprocess Display]

LicenseNumber in [ClusterView]

Name in [Font]

Out Char in [Preprocess Display]

Preprocess HTML Tags Out in [Preprocess Display]

QuietQuit in [ClusterView]

Size in [Font]

TabSize in [ClusterView]

TryAsClusterWhenSingleDrop in [Drag and Drop]

Wrap Lines on Search in [Preprocess Display]

Yield in [ClusterView]

If other entries are defined or if these ones are defined in another section, they are ignored by ClusterView during its operation.

## **[ClusterView] Section**

This section allows to optimize the performance of the ClusterView application in various fields.

The definable entries are:

CursorWait

Yield

TabSize

DisplayStatusBar

QuietQuit

LicenseNumber

Editor

If other entries are defined, they are ignored by ClusterView during its operation.

## **[Font] Section**

This section allows to modify the display font which is used by ClusterView when showing the contents of a Document in its main window.

The definable entries are:

Name

Size

If other entries are defined, they are ignored by ClusterView during its operation.

## **[Directories] Section**

This section allows to modify the operation of ClusterView when the application needs to access files on disk.

The definable entries are:

Documents Init

Clusters Init

If other entries are defined, they are ignored by ClusterView during its operation.

## **[Preprocess Display] Section**

This section allows to configure the filtering/preprocessing options of the document display.

The definable entries are:

Preprocess HTML Tags Out

In Char

Out Char

Filter At Start

Filter At End

Wrap Lines On Search

If other entries are defined, they are ignored by ClusterView during its operation.

## **[Drag and Drop] Section**

This section allows to optimize the behaviour of the ClusterView application in Drag and Drop operation.

The definable entries are:

TryAsClusterWhenSingleDrop

AddFilesToCurrentClusterWhenDropped

If other entries are defined, they are ignored by ClusterView during its operation.

## **Yield Entry - in [ClusterView] section**

When ClusterView is executing a long operation (e.g. a search operation in a whole cluster), it may lock the system until the end of the operation. To reduce the inconvenience, ClusterView tries to allow other MS-Windows application get control of the machine at internally defined times. This is called cooperative multitasking.

The Yield entry allows the user to modify the default yield value in order to increase ClusterView performance (increasing the Yield value) or the MS-Windows performance (decreasing the Yield value).

Minimum value is 1, maximal value is 32767. Default value is 64.

Small values are advisable for systems with low-powered CPU (like an 80286) or with small available memory.

### **Example**

To set the Yield value to a "very cooperative" level:

```
[ClusterView]  
Yield=4
```

This allows other applications to get access to the processor at very frequent intervals.

## **CursorWait Entry - in [ClusterView] section**

When ClusterView is executing a long operation (e.g. a search operation in a whole cluster), it may lock the system until the end of the operation. To allow the user (you!) to know that it is still working, the cursor is changed to a changing image cursor.

The CursorWait entry allows the user to modify the waiting time between changes of the cursor in terms of explored lines.

Minimum value is 1, maximal value is 32767. Default value is 4.

Small values are advisable for systems with low-powered CPU (like an 80286) or with small available memory.

### **Example**

To set the Yield value to a "very cooperative" level:

```
[ClusterView]
CursorWait=4
```

This allows fast redisplay of the changing cursor.



## **QuietQuit Entry - in [ClusterView] section**

When quitting ClusterView, if there is no need to ask the user for a confirmation, and this entry is set to TRUE, the quit dialog box is not displayed.

Default value is FALSE.

### **Example**

To allow a "fast quit" procedure:

```
[ClusterView]
QuietQuit=TRUE
```

## **Modify Right-Click File Menu Entry - in [ClusterView] section**

No longer used.

## **Editor Entry - in [ClusterView] section**

Describes the default editor to be used by the ClusterView application when calling the visual command.

There is no default value.

### **Example**

To direct calling the standard MS-DOS editor (with version 5.0 or higher):

```
[ClusterView]  
Editor=EDIT
```

### **LicenseNumber Entry - in [ClusterView] section**

This entry is a text entry for storing the user license number. This should not be modified. Please use the dialog box at program start up to enter this license number when prompted.

There is no default value.

## **TabSize Entry - in [ClusterView] section**

For displaying of the Tab character (or ASCII 0x09), ClusterView is able to handle various tabulation sizes. They are specified in number of middle-sized characters. The default is 8 (for 8 characters wide tabulations).

Minimum value is 1, maximal value is 32767. Default value is 8.

Values of 2, 3, 4 or 8 are advised in most cases.

### **Example**

To set the TabSize value to a usual non-default value:

```
[ClusterView]
TabSize=4
```

## **DisplayStatusBar Entry - in [ClusterView] section**

ClusterView allows to display a status bar at the bottom of the main window. It will show the position of various indicators as "CapsLock", "NumLock", etc. This profile entry allows to select the presence of this bar.

Value can be either TRUE or FALSE. Default value is FALSE.

### **Example**

To force display of the built-in status bar:

```
[ClusterView]  
DisplayStatusBar=TRUE
```

## **Name and Size entries - in [Font] section**

When ClusterView displays the contents of a Document in the main window of the application, it uses a specific font which can be customized with these entries.

The Name entry is the alphanumeric name of an existing font (even True-Type fonts are allowed).

The Size entry is the numeric value of the point size of the display font. The allowed values depend on the selected font.

### **Example**

To change the display font to a MS-Windows True-Type font like "Times New Roman" in 12 points:

```
[Font]
Name=Times New Roman
Size=12
```

## **Documents Init Entry - in [Directories] section**

When ClusterView opens a dialog box to get access to a Document stored on disk, it uses this entry to select the default directory to search for Documents.

The Documents Init entry must be the alphanumeric name of a valid disk directory.

Default value is the directory where ClusterView was run from.

This entry can be changed at run time (between opening of each dialog box).

### **Example**

To set the default initial directory for Documents to C:\ directory:

```
[Directories]
Documents Init=C:\
```

### **See also**

[Clusters Init](#)



## **Clusters Init Entry - in [Directories] section**

When ClusterView opens a dialog box to get access to a Cluster stored on disk, it uses this entry to select the default directory to search for Clusters.

The Clusters Init entry must be the alphanumeric name of a valid disk directory.

Default value is the directory where ClusterView was run from.

This entry can be changed at run time (between opening of each dialog box).

### **Example**

To set the default initial directory for Documents to E:\cluster directory:

```
[Directories]
Clusters Init=E:\cluster
```

### **See also**

[Documents Init](#)

## **In Char Entry - in [Preprocess Display] section**

ClusterView will be able to modify the appearance of the displayed documents. Any characters defined in the In Char entry and conveniently described in the other entries of the [\[Preprocess Display\]](#) will be replaced with a character given by the [Out Char](#) entry.

The In Char entry must be a single character.

There is no default value.

### **Example**

```
[Preprocess Display]
In Char=+
```

### **See also**

[Out Char](#)

## **Out Char Entry - in [Preprocess Display] section**

ClusterView will be able to modify the appearance of the displayed documents. Any characters defined in the [In Char](#) entry and conveniently described in the other entries of the [\[Preprocess Display\]](#) will be replaced with a character given by the Out Char entry.

The Out Char entry must be a single character.

There is no default value.

### **Example**

```
[Preprocess Display]
Out Char=-
```

### **See also**

[In Char](#)

## **Filter At Start Entry - in [Preprocess Display] section**

The filtering/preprocessing feature of ClusterView can occur at the start/beginning of all lines if this entry is set to TRUE.

The Filter At Start entry must be either TRUE or FALSE.

Default value is FALSE (do not filter character at start of line).

### **Example**

```
[Preprocess Display]
Filter At Start=TRUE
```

### **See also**

[Filter At End](#)

## **Filter At End Entry - in [Preprocess Display] section**

The filtering/preprocessing feature of ClusterView can occur at the end of all lines if this entry is set to TRUE.

The Filter At End entry must be either TRUE or FALSE.

Default value is FALSE (do not filter character at end of line).

### **Example**

```
[Preprocess Display]
Filter At End=TRUE
```

### **See also**

[Filter At Start](#)

## **Wrap Lines On Search Entry - in [Preprocess Display] section**

ClusterView can search over the end of line characters, when this entry is set to TRUE.

The Wrap Lines On Search entry must be either TRUE or FALSE.

Default value is FALSE (do not wrap).

### **Example**

```
[Preprocess Display]
Wrap Lines On Search=TRUE
```

## **Preprocess HTML Tags Out Entry - in [Preprocess Display] section**

ClusterView can filter out HTML tags from the web pages source text (i.e. clean up the pages yuo get out of Internet with Netscape, Mosaic or Internet Explorer), when this entry is set to TRUE.

The Preprocess HTML Tags Out entry must be either TRUE or FALSE.

Default value is FALSE (do not modify pages).

### **Example**

```
[Preprocess Display]
Preprocess HTML Tags Out=FALSE
```

## **TryAsClusterWhenSingleDrop Entry - in [Drag and Drop] section**

When a single file is dropped on the ClusterView main window, it can be handled in two ways. The first being to open it as a document in all case, the second being to try opening it as a cluster before using it as a document, this entry allows to choose between these two strategies. One means that you expect the dropped items to be documents, the second that you expect them to be clusters.

The TryAsClusterWhenSingleDrop entry must be either TRUE or FALSE.

Default value is TRUE.

### **Example**

```
[Drag and Drop]
TryAsClusterWhenSingleDrop=FALSE
```



## **AddFilesToCurrentClusterWhenDropped Entry - in [Drag and Drop] section**

When files are dropped on the ClusterView main window, they can be handled either as a documents to create a new cluster, or as an addition to the open cluster. This entry allows to choose between these two behaviours. Setting it to TRUE allows to build a cluster by successively adding files to an open cluster by drag and drop operation. Setting it to FALSE forces to build the cluster in one operation (bringing all its files in a single drop).

The AddFilesToCurrentClusterWhenDropped entry must be either TRUE or FALSE.

Default value is TRUE.

### **Example**

```
[Drag and Drop]
AddFilesToCurrentClusterWhenDropped=FALSE
```



## Keyboard Shortcuts

The following table shows the keyboard shortcuts and their corresponding menu and options. To help you remember them, the shortcuts are shown on the right part of the pull-down menus (when appropriate).

<b>Shortcut</b>	<b>Menu</b>	<b>Option</b>
F1	Help	Help
Ctrl+F2		Read Profile (CLUSTER.INI file) information
Ctrl+Shift+F2		Write Profile (CLUSTER.INI file) information
Alt+F3	Find	Find...
Alt+F3	Find!	
F3	Find	Repeat Last Find
F3	Again!	
-	File	Previous File
+	File	Next File
Home	File	First File
End	File	Last File

## **Mouse Operation**

Double clicking on a word, trigger an automatic find forward operation for the word which was under the cursor.

## Mouse Options

Not implemented... And may never be.

By choosing the Options menu, then selecting the Mouse... option, you access to a dialog box which allows to specify the exact meaning of the mouse clicks (both single and double). The user may be able to select its preferred operation for the use of the mouse in ClusterView.

The available options are the following:

**Find!** opens the find dialog box to start finding after selecting a set of options.

**Again!** search again with the already choosen find options.

**(Nothing)** no action is associated with this mouse operation.

To modify the associated mouse action, make the convenient set of selections, and choose the OK button.

To exit without changing the options, choose the Cancel button.



## **Keyboard operations compatible with the Unix utilities MORE and LESS**

### **History and context**

A very common set of tools for viewing files in Unix Operating System on a character terminal is known as MORE and its follower LESS (improving on MORE). They share a common set of keyboard commands and LESS adds some commands which are compatible with what is known in a rather large number of utilities ranging from file viewers to text editors (like Emacs or VI).

While Windows is not specifically keyboard oriented, it allows its use for power users. Therefore, ClusterView has a set of keyboard commands which should be interesting to these users of high expectations in terms of usability and performance.

### **See also**

[Keyboard default assignments](#), [List of commands](#), [Use of CLUSTER.KEY file](#).

## CLUSTER.KEY file

### What is it?

You can create a simple CLUSTER.KEY file which will automatically redefine the operation of the keyboard and the [Keyboard default assignments](#) for you.

There is a sample (and very simple) file for you to test it under the name PORTABLE.KEY. Simply rename it CLUSTER.KEY, and it will solve the problem of portable PC which do not have the + and - key on a separate numeric keyboard. So it creates a correspondence between \*any\* + or - key on the keyboard to the normal function **next-file** and **prev-file**.

### Basic syntax of the CLUSTER.KEY file

Here is the content you should expect to find in the PORTABLE.KEY file. It is the best example of the syntax to be used:

```
+ next-file
- prev-file
```

First the key sequence (any key sequence not including a space character or a tab), then a [command name](#).

### Syntax of the CLUSTER.KEY file

When you know that, you know everything you should. But there are a few cases when you will need slightly more. Therefore, here comes the detailed syntax description:

Each line of the CLUSTER.KEY file is independent from the others. It contains a correspondence between a keyboard command (a sequence of keys) and a command name. They are separated by a space character.

```
<CLUSTER.KEY line> =<keyboard_command> [space] <command_name>
```

A **<keyboard\_command>** is built from any characters less the space character. Only two other characters have a special meaning: '\' (the backslash character) and '^' (circumflex).

'\' (the backslash character) followed by an octal number allows to introduced any key value (for power users only).

'^' (circumflex) gives an appropriate shortcut for Control-expanded characters (when you press the Ctrl key before a letter).

```
^A      is Ctrl-A
^B      is Ctrl-B
etc.
```

A **<command\_name>** is one of the command names described in the [command list](#).



## Keyboard default assignments

At start time, independently from the possible re-assignment by the user key file, Clusterview has a default table for keyboard commands.

Here is the list of all the commands which are bound to certain keyboard sequences.

<CR>	forw-line
<LF>	forw-line
e	forw-line
j	forw-line
n	forw-line
^E	forw-line
^N	forw-line
k	back-line
y	back-line
^Y	back-line
^K	back-line
^P	back-line
J	forw-line-force
K	back-line-force
Y	back-line-force
d	forw-scroll
^D	forw-scroll
u	back-scroll
^U	back-scroll
,	back-scroll
<Space>	forw-screen
f	forw-screen
^F	forw-screen
^V	forw-screen
b	back-screen
^B	back-screen
<Esc>v	back-screen
z	forw-window
w	back-window
R	repaint
r	repaint
^R	repaint
^L	repaint
g	goto-line

< goto-line  
<Esc>< goto-line  
p percent  
% percent  
G goto-end  
<Esc>> goto-end  
> goto-end  
P goto-end  
= status  
^G status  
:f<Ret> status  
/ forw-search  
? back-search  
<Esc>/ forw-search-all  
<Esc>? back-search-all  
n repeat-search  
N reverse-search  
<Esc>n repeat-search-all  
<Esc>N reverse-search-all  
m set-mark  
' goto-mark  
^X^X goto-mark  
E examine  
:e examine  
^X^V examine  
:n<Ret>next-file  
:p<Ret>prev-file  
:x<Ret>index-file  
-f font-option  
-d directory-option  
-l line-option  
-p preference-option  
-q exit  
-F font-option  
-D directory-option  
-L line-option  
-P preference-option

-Q exit  
^X^C exit  
v visual  
! shell  
H help  
h help  
V version  
q exit  
Q exit  
:q<Ret>exit  
:Q<Ret> exit  
ZZ exit  
<Esc><Esc> exit  
:q!<Ret> destroy  
:Q!<Ret> destroy

**See also**

List of ClusterView [keyboard commands](#) (alphabetically sorted).

## List of ClusterView commands (alphabetically sorted)

### **back-line**

Move backward N lines along the document. When no argument is provided it defaults to one line of movement. This is equivalent to pressing the Up key.

### **back-line-force**

Move backward one line along the document.

### **back-screen**

Move backward N lines along the document. When no argument is provided it defaults to a full window of movement. This is equivalent to pressing the PageUp key (scrolling backward one window long).

### **back-scroll**

Scroll backward N lines, default one half of the screen size. If N is specified, it becomes the new default size for the subsequent commands.

### **back-search**

Search backward in the document for the N-th line containing the pattern. N defaults to 1.

The function calls the Search/Find dialog box with an initialized backward direction of search.

This is equivalent to calling the menu Find>Find... command then forcing the backward direction of search in the documents.

### **back-search-all**

Search backward in the document for the N-th line containing the pattern. N defaults to 1.

The function calls the Search/Find dialog box with an initialized backward direction of search and an initialized Search Whole Cluster field.

### **back-window**

Like **back-screen**, but if an argument is specified, it becomes the new window size (the argument is taken as the visible client area size measured in character lines (excluding the optional status or tool bars)).

### **choose-file**

Displays the Choose File dialog box which is also available through the document menu.

### **cluster-edit**

Equivalent to the Cluster>Edit... menu command.

### **cluster-new**

Equivalent to the Cluster>New menu command.

### **cluster-open**

Equivalent to the Cluster>Open... menu command.

### **cluster-save**

Equivalent to the Cluster>Save menu command.

### **cluster-save-as**

Equivalent to the Cluster>SaveAs... menu command.

### **destroy**

Fast exit (without asking confirmation as may be needed). See also **exit**.

### **directory-option**

Equivalent to the Options>Directories... command.

**examine**

Examine a new file. If several files are given, they are all examined.

As a matter of fact, this is equivalent to executing a new command line, potentially reading more files in the currently open cluster.

**exit**

Normal exit (asking confirmation as needed).

**file-close**

Equivalent to the Document>Close menu command.

**file-open**

Equivalent to the Document>Open... menu command.

**file-status**

Equivalent to the Document>Status menu command.

**first-file**

Equivalent to the Document>First menu command.

**font-option**

Equivalent to the Options>Font... command.

**forw-forever**

Not yet implemented.

**forw-line**

Move forward N lines along the document. When no argument is provided it defaults to one line of movement. This is equivalent to pressing the Down key.

**forw-line-force**

Move forward one line along the document.

**forw-screen**

Move forward N lines along the document. When no argument is provided it defaults to a full window of movement. This is equivalent to pressing the PageDown key (scrolling forward one window long).

**forw-scroll**

Scroll forward N lines, default one half of the screen size. If N is specified, it becomes the new default size for the subsequent commands.

**forw-search**

Search forward in the document for the N-th line containing the pattern. N defaults to 1.

The function calls the Search/Find dialog box with an initialized forward direction of search.

This is equivalent to calling the menu Find>Find... command then forcing the forward direction of search in the documents.

**forw-search-all**

Search forward in the document for the N-th line containing the pattern. N defaults to 1.

The function calls the Search/Find dialog box with an initialized forward direction of search and an initialized Search Whole Cluster field.

### **forw-window**

Like **forw-screen**, but if an argument is specified, it becomes the new window size (the argument is taken as the visible client area size measured in character lines (excluding the optional status or tool bars).

### **goto-end**

Go to line N in the current document, default to 1 (last/end line of document).

### **goto-line**

Go to line N in the current document, default to 1 (first/beginning line of document).

### **goto-mark**

Followed by a lowercase letter, returns to the position which was previously marked with that letter (using **set-mark**). Followed by a ^, or a \$, returns to the beginning or end of the document respectively. The marks are preserved when changing from one document to another inside a cluster (not if you reload a new document). You can then use the **goto-mark** to jump from one document to another.

### **help**

Equivalent to the Help>Contents... command.

### **help-on**

Equivalent to the Help>Search for Help On... command.

### **help-on-help**

Equivalent to the Help>How to use Help... command.

### **index-file**

Examine the first file/document in the cluster. If an argument N is given, examine the Nth document of the cluster.

### **last-file**

Equivalent to the Document>Last menu command.

### **line-option**

Equivalent to the Options>Line/Hyphen... command.

### **next-file**

Equivalent to the Document>Next menu command.

### **percent**

Go to a line near N percent of the total length of the document. This is equivalent to positioning the vertical ruler in the appropriate position. N should be between 0 and 100 (it is a percentage). If ClusterView receives an argument out of these bounds it will limit itself to 0-100%.

### **prev-file**

Equivalent to the Document>Previous menu command.

### **preferences-option**

Equivalent to the Options>Preferences... command.

### **repaint**

Repaint the full screen. This command is only useful as a compatibility with other tools and to go around display bugs of either ClusterView (I dont know of such a bug in ClusterView today) or the Windows Operating System or drivers.

### **repaint-flush**

same as **repaint**.

### **repeat-search**

Repeat previous search, for the N-th line containing the last pattern. The values of the dialog box fields are all kept for this repeated search.

### **repeat-search-all**

Repeat previous search, but crossing the document boundaries around the full cluster. The effect is as if the previous search had selected the **Search Whole Cluster** option in the dialog box.

### **reverse-search**

Repeat previous search, for the N-th line containing the last pattern, but in the reverse direction. The values of the dialog box fields are all kept for this repeated search except (of course!) the direction of the search operation which is reversed.

### **reverse-search-all**

Repeat previous search, but in the reverse direction and crossing the document boundaries around the full cluster. The effect is as if the previous search had selected the **Search Whole Cluster** option in the dialog box.

### **set-mark**

Followed by any lowercase letter, marks the current position with that letter. To retrieve the position, you should use the **goto-mark**.

### **shell**

Opens a dialog box asking for a command line to type execute.

Windows applications can be run by giving their name. For example, entering WRITE in the dialog box, then pressing the OK button, will run the default minimal word processor of MS-Windows (MS-Write).

MS-DOS applications can also be run, but by giving their **full** file name. For example, entering COMMAND.COM in the dialog box, then pressing the OK button, will run an MS-DOS session under MS-Windows; Entering WRITE.EXE in the dialog box, then pressing the OK button, will run the default word processing application under MS-Windows. Please, note that it is necessary to enter the **full** file name (including the suffix - .COM or .EXE in the examples).

When no application name is given, a shell program is run. It is selected following the above strategy:

First, the environment variable COMSPEC can provide the name of a shell program (usually COMMAND.COM).

Second, the environment variable SHELL can provide the name of a shell program.

Third, the initialization value (in the CLUSTER.INI file) [ClusterView] Editor can provide the name of a shell program.

By default (if none of the preceding possibilities are fulfilled), ClusterView will call the Windows Program Manager. The only advantage of using the Windows Program Manager is that is present on virtually any Windows installation in the world. You are however, invited to use one of the other methods to designate a more appropriate shell program (from a simple COMMAND.COM, to a superb shell program like the PharLap Front Runner shell).

### **status**

Displays the File Status dialog box which is also available through the document menu.

### **version**

Displays the About dialog box (including ClusterView and YGrep Search Engine versions, and your registered license number).

### **visual**

Call a visual editor (a text editor) on the document currently displayed. The text editor program is chosen in the following manner:

First, the environment variable EDITOR can provide the name of a text editor name.

Second, the environment variable VISUAL can provide the name of a text editor name.

Third, the initialization value (in the CLUSTER.INI file) [ClusterView] Editor can provide a text editor name.

By default (if none of the preceding possibilities are fulfilled), ClusterView will call the Windows Notepad. Be warned that if the document is actually a large file, Notepad will be unable to load it (it does not allow more than 64 kbytes documents). The only advantage of using the Windows Notepad is that it is present on virtually any Windows installation in the world. You are however, invited to use one of the other methods to designate a more powerful text editor (from a simple VI, Emacs, MS-DOS Edit, EDLIN, Norton Edit to a full fledged text processor like Word for Windows, WordPerfect or AMI WordProcessor).



## **Shell command dialog box**

In this dialog box, you can enter the command string you are ready to apply. For example, typing "write.exe" then pressing the OK button, will start the standard Windows 3.1 minimal word-processor.

If the command string is empty, the default shell is run (Program Manager, by default).

Some characters in the command string may have a special meaning:

The exclamation point (!) put alone on the string will call back the previously run shell command. If this is the first time you run the shell command, it will be equivalent to an empty command.



## **Initial directories dialog box**

You have the ability to choose where ClusterView will choose its files (clusters and documents) from. You can select a default initial directory for each of them. This is not a limitation of your choice, but the location where you are proposed to look when asking for opening either documents or clusters.

You can enter any directory in the text boxes of this dialog box.

The following information can be entered:

### **Clusters default directory:**

The default location opened when the Cluster>Open... dialog box is called.

### **Documents default directory:**

The default location opened when the Document>Open... dialog box is called.

The following buttons can be pressed:

### **OK:**

To accept the changes. They will be preserved in the CLUSTER.INI initialization file only when quitting the application.

### **Cancel:**

To abandon the changes.

### **Help:**

To jump to the text you're reading now.

## Line display options dialog box

ClusterView is able to do some minor preprocessing on each line before displaying it. The objective was to allow to replace some characters either in special position (beginning or end of line) or anywhere in the line.

You may give a single character as the hyphen as produced by the OCR software ( `Text Hyphen` field), another single character to replace the hyphen with a more useful (or easy to read) character ( `Display Char` field), and furthermore you can indicate where to search for the hyphen (in the beginning of the line, the end of the line), or you can disable the hyphenation option ( `nowhere` button).

For example, replacing the hyphen text - with the display character \* at the end of all lines, will allow the following document line:

*how surprising this process may be, it co-*

to be displayed as:

*how surprising this process may be, it co\**

The difference is small but may be very useful to some users. Honestly, most will never use this feature, but it is necessary for some.

The following information can be entered:

### **Text Hyphen:**

Character to be found in text and to be replaced by:

### **Display char:**

Replacement character.

### **Location of the hyphen character:**

Select where the text hyphen is to be expected by ClusterView.

The following buttons can be pressed:

### **OK:**

To accept the changes. They will be preserved in the CLUSTER.INI initialization file only when quitting the application.

### **Cancel:**

To abandon the changes.

### **Help:**

To jump to the text you're just reading now.

## HTML filtering options dialog box

By default, ClusterView is configured to filter out any HTML tag in the documents it displays and searches. This means that you can read them more easily even if that's not up to displaying them in full. Here is part of a HTML file without filtering:

```
<HTML>
<HEAD>
<Title>My nice Home Page</Title>
</HEAD>
<BODY>
<p>
<CENTER><H2>Enter my home page</H2></CENTER>
```

No fun at all for us non-HTML freaks, isn't it? After filtering out the HTML tags, you'll read the following:

```
My nice Home Page
```

```
Enter my home page
```

Not very different, but readable (and usefully searchable).

The following information can be entered:

**Filter HTML tags out:**

Check this to "clean up" the HTML text.

The following buttons can be pressed:

**OK:**

To accept the changes. They will be preserved in the CLUSTER.INI initialization file only when quitting the application.

**Cancel:**

To abandon the changes.

**Help:**

To jump to the text you're just reading now.

## Preferences dialog box

This dialog box is intended to select the options the user may want to modify in order to optimize the operation of the ClusterView application. This is considered as information for the power user. Most users will not find use of this data. Anyhow, both of them will find this dialog box more convenient than modifying by hand the CLUSTER.INI initialization file.

The following information can be entered:

### **Multitasking priority:**

Is the way for the user to interact with machine performance during long operations (mainly search operations). With a low value (e.g. 2), ClusterView will search faster, but the rest of the Windows applications will have less CPU time left for background operations like modem download or background printing. With a high value (e.g. 100), ClusterView will behave more smoothly (and more politely) with other Windows applications.

This is less important for true multitasking environments like Windows NT or OS/2.

### **Tabulation size:**

Is the number of characters used as the default size for the tabulation (Tab or ASCII 0x09) character. The default value of 8 involves using the standard size of the tabulation character as defined in the original character font. It is usually equivalent to 8 medium-sized characters.

### **Mobile cursor waiting time:**

Describes the time between each rotating cursor change. A higher value will reduce the speed of the cursor. The actual unit is a number of explored lines, but you are advised to try different values in order to find the best one for your computer (and your personal taste).

### **Display status bar:**

When checked, this will allow the display of the status bar at the bottom of the client window of ClusterView.

### **Try open as cluster:**

When checked this button will allow ClusterView to try opening dropped files (or files given on the command line) first as clusters. If the file cannot be recognized as a valid cluster file, it is opened as a normal document.

When not checked, dropped files (and files given on the command line) are always opened as documents.

### **Add file to current cluster:**

When checked, this button allows ClusterView to add dropped documents to the current open cluster rather than simply opening it as a document.

When not checked, dropped files are simply opened as documents rather than adding them to the already open cluster.

The following buttons can be pressed:

### **OK:**

To accept the changes. They will be preserved in the CLUSTER.INI initialization file only when quitting the application.

### **Cancel:**

To abandon the changes.

### **Save:**

To immediately save the changes to the CLUSTER.INI initialization file. If you want to quit the dialog box AND save to the CLUSTER.INI initialization file, you should first save, then press OK.

**Help:**

To jump to the text youre reading now.





## **Other Operations**

Some of the ClusterView capabilities are less obvious and grouped here.

[ClusterView configuration](#)

[Registration file](#)

[Drag and drop operation](#)

[Command line arguments](#)

Furthermore, you can get direct access to the help capabilities either through the Help Contents option of the Help menu (this leads you to the introduction of this help file) or through the Search for Help On... option of the same Help menu (this leads you to the Search command of this help file).

## **Easter Egg Operation**

An easter egg is the traditional name for these non-documented nice/funny features of an application. It must not be confounded with undocumented functions of the application. These would have some utility. On the contrary, the egg is of no use at all, but is generally either nice or funny but never useful (at least not willingly).

In all cases, the egg is hidden.

Try and find the one in ClusterView. If you EnAbLe it, you may like it.

## **ClusterView Configuration**

ClusterView is configurable both through the use of its initialization file (whose name is CLUSTER.INI) and through the use of the Options menu. This allows you to easily optimize its operation and its performance.

The initialization file interface is more powerful (provides more options to the user) but is more difficult to use than the Options menu. The preferred interface for the user is the Options menu because it is more user friendly and providing all necessary information to avoid confusion.

The modifications made through the Options menu are automatically saved back to disk into the CLUSTER.INI file at the normal end of the execution of the application (when you choose Exit in the File Menu or in the system menu).

For more information on these, please select either one of the keywords shown here.

## Registration File

A default registration file is provided with ClusterView. To install it, follow the procedure:

- 1 Run the File Manager if it is not already running. To do this, you need to double click on the FileManager icon.
- 2 Switch to the drive and directory where the registration file is. Normally, you will find it on the distribution disk in the root directory (**A:\**).
- 3 Double click on the **CLUSTER.REG** registration file.

The ClusterView registration data is automatically added to your registration database. Next time you will run File Manager, all file whose suffix is CLU will be considered as ClusterView clusters. By double clicking on them, you will immediately open them with a new ClusterView application.

## **Drag and Drop Operation**

This is an alternative to using the File Open... command and the Cluster Open... command from the application menu followed by the Open dialog box.

ClusterView is a Drag'n Drop client for File Manager. This means that if you take a file from the File Manager (selecting it with the mouse), drag it accross the desktop (keeping the left button pressed while moving the mouse pointer) and drop it on the ClusterView icon or window (when clicking up on the ClusterView main window), then, ClusterView will automatically open the file. If it can recognize a Cluster file, it will be opened as such. If not, the file will be opened as a Document.

ClusterView also allows multiple files to be dropped at the same time. They will be dropped as documents in a cluster to group them.

For more about Drag'n Drop operation, you may consult your Windows 3.1 User's guide and File Manager Help menu. You may also want to consult the help on configuring ClusterView for drag and drop operation with the help of the CLUSTER.INI file.

### **See also**

Cluster File Format

## Command Line Arguments

If a file name is found on the command line at start time, ClusterView interpret it as a cluster name to open.

This, with the help of the registration file, allows to open automatically the cluster whose name suffix is CLU. In the File Manager, you only have to double click on the cluster to open it in a new session of ClusterView.

## **Font Selection**

The display font can be chosen by the user through the Font choice in the Options menu. The dialog box allows to choose a character font, if it must be normal, bold or italics, and its point size.

When the description of the font is finished you can click on the OK button. If you want to exit without altering the font currently selected, click on the Cancel button.

## **Line/Hyphen Options**

ClusterView has a specific option for OCR hyphenated texts. It is able to modify automatically at display time the characters inserted at the start or the end of a line. The normal use is to modify the visual aspect of the hyphen which is often an unusual character added by OCR software.

The Line/Hyphen dialog box allows to select the hyphen character position in a line (either at start of line or at end of line), to show the hyphen character used in documents, to select the hyphen character to be used by ClusterView at display time.

Moreover, find operations are able to understand what an hyphen is and consequently it is optionally possible to wrap hyphenated words when searching for a pattern. This is done to allow the recognition of an hyphenated word (split to two different lines) as a single word and to allow an efficient search even in heavily hyphenated texts.

The modification process searches for the "In Character" at the specified position in lines, and replaces it with the "Out Character". The selections in the dialog box are fairly self-explanatory, but you have to remember that the character fields must contain one and only one character each for correct operation.





**Non-text Files**

Non-text files are files which contains not only standard printable characters. They can be data files, non-ASCII files, non-Windows files, etc.

**MS-Windows**

MS-Windows is a trademark of Microsoft Corporation.

## **MS DOS wild characters**

Two characters have a special meaning when inserted in a file name (two wild characters):

The asterisk (\*) represents a whole word or a group of characters.

The question mark (?) represents a single character.

For more, read your MS DOS manual ("Using wildcards" or "wild characters definition").

**Single User Registration Fee**

Yes! We remind you the single user license fee is only a mere 95FF or US\$20.

## Registering ClusterView

ClusterView is distributed as ShareWare. It is not free or public domain. This means you may copy and distribute it freely but should you find it useful and use it beyond an initial evaluation period of 30 days you are both legally and morally obliged to pay the registration fee or license fee.

Registrations should be sent to the author. Registered users will be sent a registration number and the ClusterView Professional edition, and will be informed of upgrades.

### Yes, I want to register now!

<u>Yves Roumazeilles - the author</u>	France - money transfers / no credit cards
<u>Public (Software) Library</u>	US - credit card orders
<u>Compuserve SWREG registration</u>	Worldwide - CIS customers

### What you get when registering

This is the important question. Here is the list:

- updated ClusterView application (the latest version anyhow) with single user license.
- an immediate notice when a new release is ready on the market.
- sample Cluster files with sample data.
- a registration number to identify yourself when contacting us.
- support through fax, phone and Email.
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### Acknowledgments

I will be pleased to receive any comments, bugs reports or suggestions for future releases.

I would like to thank the following people whose help has been invaluable during the development of ClusterView:

Christian Lescuyer provided the original idea and a large amount of time for product testing (even in alpha version).

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Kalou was obviously my best beta-tester ever. Smack!

Martin Heller for his excellent book "Advanced Windows Programming" published by John Wiley & Sons. This is the most useful book about Windows programming I ever found. If you intend to do Windows programming, you NEED it.

The whole WIN3-L@UICVM.BITNET Internet mailing list who provided help when I was stopped in the development process. Not all the subscribers (more than 2000) provided help, but a dozen of them are very proficient and helpful. I can remember and thank Walter Knopf, Yossi Oren, Yoav Chernobroda and

Vance Gloster, and many others... It's a pity this list is no longer in operation. The next best thing to it is the WIN95-L sequel.

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