

XINORBIS

XCOM

User Manual

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XinorbisCOM (xcom) is the command-line version of Xinorbis, the awesome, and powerful, storage analysis tool. It was designed to be a simple-to-use companion to its big brother, the Windows GUI version. If you have any suggestions on how to improve this software or identify any bugs, then please email me at the address on the credits page.

The software is capable of giving you a quick analysis of how the space on the folder or drive is used. For desktop users and network administrators it should make finding unwanted content much easier.

Once a folder or drive has been scanned then you have the ability to create many reports from that data.

Xinorbis is a powerful program so please read (and print if possible) the whole of this manual; you'll find lots of interesting information on features that allow you to make the most of the application.

Conventions

When dealing with file sizes Xinorbis uses the following conventions;

1 kilobyte (1K)	= 1024 bytes
1 megabyte (1MB)	= 1048576 bytes (1024 x 1024)
1 gigabyte (1GB)	= 1073741824 bytes (1024 x 1024 x 1024)
1 terabyte (1TB)	= 1099511627776 bytes (1024 x 1024 x 1024 x 1024)

Not all applications follow this convention but as well as being the most commonly used throughout the industry it's also how Windows reports file sizes.

It's worth noting that hard disk manufacturers tend to use a slightly different method when reporting hard disk sizes;

1 gigabyte (1GB)	= 1000000000 bytes (1000 x 1000 x 1000)
1 terabyte (1TB)	= 1000000000000 bytes (1000 x 1000 x 1000 x 1000)

Installation

xcom doesn't need installing in the normal sense. Either add the folder where XinorbisCOM is located to the "path" environmental variable or refer to it by its full path in batch files (etc.).

Ideally Xinorbis and xcom should be on the same PC. The database can be anywhere, but a local install is best (if possible) as it will increase write/read performance. Writing to a local database (sqlite or odbc) is also kinder to the network.

There should be ten files in the root of the XinorbisCOM folder. The 9 ".txt" files contain associations that Xinorbis uses to decide which category a file belongs to. Each file contains a list of file extensions (without leading .) one per line. Feel free to edit these!

If you're planning on using XinorbisCOM with Xinorbis (by doing all the scanning automatically or through batch files, for example) then I suggest putting both of them in the same folder. This will allow them to share config settings (eg. odbc connection string) and will make things a bit easier. It'll also stop them getting lonely.

Command Line Parameters

The first parameter is always the path to scan

```
xcom.exe <folder>
```

If XinorbisCOM is executed with just this one parameter then it will output a simple summary of the scan to the console.

All comments and suggestions are gratefully received; please email them to me at freeware@freshney.org

Miscellaneous Commands

```
*nothing*
```

Outputs version and basic "about" information" (web address and email etc.)

```
/? or /h
```

Simple help stuff and a few stats.

```
/o
```

Disables status output.

```
/p
```

Show scan and processing progress

```
/u
```

Open this document.

Database Access

XinorbisCOM can update a Xinorbis database if required to do so (this is probably its most powerful and useful feature). Use XinorbisCOM to update the database (e.g. automatically through a batch file or scheduled task) and then use Xinorbis to view reports, graphs etc.

```
/odbc
```

Updates an ODBC compliant database with all file and folder information.

XinorbisCOM will expect a config.ini file with a "connectionstring" parameter in the same format as Xinorbis.

Ideally Xinorbis and XinorbisCOM should live in the same folder; they'll be much happier and can share config information.

connectionstrings are database-*voodoo*, for more help on creating them see this excellent website: <https://www.connectionstrings.com/>.

```
/sqlite
```

Updates an SQLite 3 database with all file/folder details.

XinorbisCOM will read the config.ini file and use the same database as Xinorbis. If no config.ini file is present then the default path will be used. Depending on which version of Windows is installed:

```
C:\documents and settings\\xinorbis\folderhistory\database\xinorbis.db
```

```
C:\users\\xinorbis\folderhistory\database\xinorbis.db
```

```
/updatescanhistory
```

Updates the Xinorbis Scan History. Only useful if you use Xinorbis on the same PC as XinorbisCOM (this is recommended!).

The command below will scan "somefolder" and update the Xinorbis database via ODBC and update the Xinorbis scan history:

```
xcom somefolder /odbc /updatescanhistory
```

If somefolder contains spaces then use quotes around the folder path:

```
xcom "some folder" /odbc /updatescanhistory
```

Optimisations

```
/nouser
```

Don't gather user details; this will improve scan performance, however it will mean that reports will not be able to show user usage statistics.

```
/noprocess
```

If you only plan on producing file lists, or updating a database, then use this option as it will stop Xinorbis from unnecessarily processing file data.

Report Output

If no report options are selected then a basic summary of the directory scan will be output to the console.

The configuration options in the braces {110} are OPTIONAL. The defaults are specified where appropriate.

The majority of options are either on or off, toggling an option is simply a matter of replacing the letters (a, b, c etc.) with either;

0 to disable the option

1 to enable the option

Where an option has many settings then this is specified separately.

Generate CSV report

Outputs a CSV file to the path specified in <filename>.

Usage: /CSV{abc};<filename>

Default: /CSV{110}; %temp%\xcom_YYYYMMDD_hhmmss.csv

option a; 0 - category output only
1 - full file list (default)

option b; 0 - Don't add "heading row"
1 - Add "heading row" (default)

option c; 0 - File sizes in most convenient format (1MB, 400bytes etc.)
1 - All file sizes in bytes
2 - All file sizes in kilobytes
3 - All file sizes in megabytes

If a file name is not specified then it will be saved to; %temp%\xcom_YYYYMMDD_hhmmss.csv

Example:

```
/CSV{1}
```

Create only a list of files in the scan

```
/CSV{10}
```

Create only a list of files in the scan and don't add a heading row.

Generate HTML report

Outputs an HTML report file to the path specified in <filename>.

Usage: /HTM{{111111111120}}

Default: /HTM{abcdefghijkl};%temp%\xcom_yyyymmdd_hhmmss.htm

option a;	graphs on (1 default) or off (0)	
option b;	include File Attributes section	(default is 1)
option c;	include Category section	(default is 1)
option d;	include Directories section	(default is 1)
option e;	include Magnitude section	(default is 1)
option f;	include File Extension list section	(default is 1)
option g;	include Null Files section	(default is 1)
option h;	include File Dates section	(default is 1)
option i;	include Top 50 section	(default is 1)
option j;	include Users section	(default is 1)
option k;	0 - report is 800 pixels wide	
	1 - report is 1024 pixels wide	
	2 - report is 1280 pixels wide	(default)
option l;	0 - File sizes in most convenient format (1MB, 400bytes etc.)	
	1 - All file sizes in bytes	
	2 - All file sizes in kilobytes	

If a file name is not specified then it will be saved to; %temp%\xcom_yyyymmdd_hhmmss.htm

Generate a simple summary of findings

Outputs a summary to the console.

Usage: /SUM

Default: /SUM

Generate an ASCII text report

Outputs an ASCII text report file to the path specified in <filename>.

Usage: /TXT{1111111111};<filename>

Default: /TXT{abcdefghij};%temp%\xcom_yyyymmdd_hhmmss.txt

option a;	UNUSED	
option b;	include File Attributes section	(default is 1)
option c;	include Category section	(default is 1)
option d;	include Directories section	(default is 1)
option e;	include Magnitude section	(default is 1)
option f;	include File Extension list section	(default is 1)
option g;	include Null Files section	(default is 1)
option h;	include File Dates section	(default is 1)
option i;	include Top 50 section	(default is 1)
option j;	include Users section	(default is 1)

If a file name is not specified then it will be saved to; %temp%\xcom_yyyymmdd_hhmmss.txt

Generate an XML report

Outputs an XML 1.0 compliant report file to the path specified in <filename>. Report can either be a complete list of files along with properties, or, category usage data.

Usage: /XML{abcdefghij};<filename>

Default: /XML{0111111111};%temp%\xcom_yyyymmdd_hhmmss.xml

- option a; file list (1) or summary of results (default is 0)
- option b; include File Attributes section (default is 1)
- option c; include Category section (default is 1)
- option d; include Directories section (default is 1)
- option e; include Magnitude section (default is 1)
- option f; include File Extension list section (default is 1)
- option g; include Null Files section (default is 1)
- option h; include File Dates section (default is 1)
- option i; include Top 50 section (default is 1)
- option j; include Users section (default is 1)

If a file name is not specified then it will be saved to; %temp%\xcom_yyyymmdd_hhmmss.xml

Generate an XML file list report

Usage: /XFL;<filename>

Default: /XFL

Outputs an XML 1.0 compliant report file to the path specified in <filename>.

If a file name is not specified then it will be saved to;
%temp%\xcom_yyyymmdd_hhmmss.xml

Dynamic filename generation

For use in all options that take a filename as a parameter.

- \$XD The drive where XinorbisCOM was run from
- \$XF The folder where XinorbisCOM was run from

- \$PC The name (network) of the PC XinorbisCOM is executed on
- \$User The name of the user that executed XinorbisCOM

- \$yyyy Current year (e.g. 2009)
- \$YY Last two digits of current year (e.g. 08)
- \$mm Current month (01 for January, 02 for February etc.)
- \$MM Current month as short word (Jan, Feb, Mar, Apr etc.)
- \$dd Current day (01 through 28, 29, 30 or 31 depending on month)
- \$DD Current day as short word (Mon, Tue, Wed etc.)

- \$Th Hour part of the current time (00 - 23)
- \$Tm Minute part of the current time (00 - 59)
- \$Ts Second part of the current time (00 - 59)

Examples of usage;

Current date in yyyymmdd format;
/TXT;c:\xinorbis\%\$yyyy\$mm\$dd_dailyscan.txt

Store files in individual folders for month and year;
/TXT;c:\scan\%\$yyyy\$\%\$mm\$\%\$dd_dailyscan.txt

XML Report Structure

Xinorbis outputs fully v1.0 compliant XML.

Structure for XML file list ;

```
<xinorbisfilelist>
  <file>
    <name>          File name
    <path>          Full file path
    <sizewords>     Size represented in most convenient format; 1MB, 500K etc.
    <sizebytes>     Size in bytes
    <sizeondiskwords> Used disk space in the most convenient format; 1MB, 500K etc.
    <sizeondiskbytes> Actual used disk space in bytes
    <owner>         File owner
    <datecreated>   Date file created in DD/MM/YYYY format
    <datemodified> Date file modified in DD/MM/YYYY format
    <dateaccessed> Date file was last accessed in DD/MM/YYYY format
    <category>     File category (1- programs etc.)
    <directory>    1 if folder, 0 if file.
    <readonly>     1 if file is read only
    <hidden>       1 if file is hidden
    <system>       1 if file is system file
    <archive>      1 if file is archive
  </file>
</xinorbisfilelist>
```

Structure for XML report output

```
<xinorbisreport>
<information>
  <directory>      analysed path
  <date>           date of analysis
  <numberoffiles>  number of files included in analysis
  <numberofdirectories> number of folder in analysis
  <sizeoffiles>    total size of the files analysed
  <diskspacefree>  disk space available on target drive
  <diskspacemax>  disk space total on target drive
  <sectorspercluster> number of sectors per cluster
  <bytespersector> number of bytes per sector
  <freeclusters>  free clusters on hard disk
  <totalclusters> total clusters on hard disk
  <volumename>    volume name of hard disk
  <serialnumber>  hard disk serial number
  <filesystem>    file system type (FAT32, NTFS etc.)
</information>
<categorylist>
  <category name=""> one section for each of the 10 file categories
  <numberoffiles>    number of files belonging to relevant category
  <numberoffilesaspercent> number of files as percentage of total analysed
  <sizeoffiles>      size of files analysed, belonging to relevant category
  <sizeoffilesaspercent> size of files as percentage of total analysed, relevant category
</categorylist>
<dirlist>
  <dir name="">     one section for each dir analysed
  <numberoffiles>   number of files in analysed folder
  <numberoffilesaspercent> number of files as percentage of total analysed
  <sizeoffiles>     combined size of files
  <sizeoffilesaspercent> combined size of files, as percentage of total analysed
```

```
</dir>
</dirlist>

<magnitudelist>
  <magnitude name="">           one section for each magnitude category
    <numberoffiles>             number of files in analysed folder
    <numberoffilesaspercent>    number of files as percentage of total analysed
    <sizeoffiles>               combined size of files
    <sizeoffilesaspercent>      combined size of files, as percentage of total analysed
  </magnitude>
</magnitudelist>

<extensiondata>
  <extensioncategory name="">   one section for each extension category
    <numberoffiles>             number of files in analysed folder
    <numberoffilesaspercent>    number of files as percentage of total analysed
    <sizeoffiles>               combined size of files
    <sizeoffilesaspercent>      combined size of files, as percentage of total analysed

    <extension name="">        one section for extension within this category that has more
                                than one file associated with it

    <numberoffiles>             number of files in analysed folder
    <numberoffilesaspercent>    number of files as percentage of total analysed
    <sizeoffiles>               combined size of files
    <sizeoffilesaspercent>      combined size of files, as percentage of total analysed
    </extension>
  </extensioncategory>
</extensiondata>

<top50largest>
  <top50large size="">path to file</top50large>
</top50largest>

<top50smallest>
  <top50small size="">path to file</top50small>
</top50smallest>

<>nullfiles>
  <>nullfile name="">path to</nullfile>
</nullfiles>

</xinorbisreport>
```

If you need any help with the XML output please don't hesitate to contact me.

Credits

Programming	Paul A Freshney
Development Cats	Freeman and Rutherford
Database Engine	SQLite (www.sqlite.org)
ZIP Compression	TZipMaster (www.delphizip.org)
French Translation	Christian Perronnet
Thanks to	Monpelaud, Dave Mahadevan, Damiaan Peeters, Mike Dutch, Robert Pallot, Peter Garrety, Fred de Vries, Glyn Selwyn, Tom Grimes and Ferdie Botha.
Lines of Source Code	6753

A very big thanks for all of those people that have donated, it's very much appreciated.

A big thanks to all those that have sent me bug reports, comments and feature requests, please keep them coming!

www.maximoctopus.com/donate.htm :)