

# Folderscope 1.0 Manual

Andrew Tomazos, Tomazos Software Labs

September 2, 2009

## Contents

<b>1</b>	<b>What is Folderscope?</b>	<b>2</b>
<b>2</b>	<b>What is Folderscope used for?</b>	<b>2</b>
<b>3</b>	<b>Who makes Folderscope?</b>	<b>2</b>
<b>4</b>	<b>How much does Folderscope cost?</b>	<b>2</b>
<b>5</b>	<b>How do I view a folder with Folderscope?</b>	<b>3</b>
<b>6</b>	<b>What do the different columns in the listing mean?</b>	<b>3</b>
6.1	Created . . . . .	3
6.2	Modified . . . . .	3
6.3	Size . . . . .	3
6.4	Type . . . . .	3
6.5	Link . . . . .	4
6.6	Content . . . . .	4
6.7	[ ] (Marked Column) . . . . .	4
6.8	Path / Filename . . . . .	4
<b>7</b>	<b>How do I sort the file listing?</b>	<b>4</b>
<b>8</b>	<b>How do I find the files taking up the most space on my hard drive?</b>	<b>5</b>
<b>9</b>	<b>How do I find and delete files with duplicate content?</b>	<b>5</b>
<b>10</b>	<b>What is a Deep Scan?</b>	<b>6</b>
<b>11</b>	<b>How do I find files with a certain text string in their path?</b>	<b>6</b>
<b>12</b>	<b>How do I copy, move or delete marked files?</b>	<b>7</b>
<b>13</b>	<b>When Folderscope copies files onto an existing folder, is the existing folder overwritten?</b>	<b>7</b>
<b>14</b>	<b>Further Questions?</b>	<b>8</b>

## 1 What is Folderscope?

Folderscope is a software utility for analyzing and reorganizing folders of any size. It is designed to work efficiently even with extremely large folders, and has been tested on a folder containing 800,000 files and 400 gigabytes of data. Folderscope presents the user a flat sortable list of all the files contained within a folder (including the files in any of its subfolders). Files and subfolders can then be browsed and marked in a variety of ways. Marked files can be copied, moved or deleted all-at-once. All changes are added to a scrollable Pending Changes list for inspection before being committed.

## 2 What is Folderscope used for?

Folderscope is a general-purpose folder and disk management tool. Some common tasks are...

- Get a quick and complete overview of the hierarchical structure and content of a new folder you have received.
- Find the most recently modified files anywhere in a folder hierarchy of documents.
- Find the files and folders taking up the most space on your hard drive, and move them to a different drive.
- Find duplicate files (files with identical content) in your documents folder and delete them.
- Reliably copy the entire content of one external hard drive to another.
- Backup the files from your main hard drive to an external drive.
- Search for files of a particular name (or partial path) quickly in a big hierarchy of files.
- Extract files of a particular type (for example image files) out of a hierarchy and move them to a different root folder.

## 3 Who makes Folderscope?

Folderscope is developed by Tomazos Software Labs and produced by Andrew Tomazos. The product web site is [www.folderscope.com](http://www.folderscope.com) and we offer free email technical support at [support@folderscope.com](mailto:support@folderscope.com). We also welcome comments about Folderscope and feature suggestions at the same email address.

## 4 How much does Folderscope cost?

Folderscope 1.0 is a free software tool. You may use it and distribute it free of charge.

## 5 How do I view a folder with Folderscope?

1. Launch Folderscope
2. Select the menu command  
`Folder -> Open Folder`
3. Choose the folder and click Open
4. Folderscope will scan the folder and present the listing

## 6 What do the different columns in the listing mean?

Each column is described below...

### 6.1 Created

- For a file: this is the date the file was created.
- For a subfolder: this is the oldest file anywhere within the subfolder. If you hover the mouse over an entry it will also show the time.

### 6.2 Modified

- For a file: this is the modified timestamp of the file.
- For a subfolder: this is the most recently modified timestamp of any file within it. If you hover the mouse over an entry it will also show the time.

### 6.3 Size

The size in bytes of the file or the total size of a subfolder. Measurements are rounded in standard metric units:

- k = 1,000 bytes
- M = 1,000,000 bytes
- G = 1,000,000,000 bytes
- T = 1,000,000,000,000 bytes

If you hover the mouse over an entry it will show the exact number of bytes.

### 6.4 Type

- For a file: this is the first three characters of the file extension.
- For a subfolder: This will display Folder(x of y files) where x is the number of marked files and y is the number of total files within that subfolder.

If you hover the mouse over an entry it will show you the full name of that type as it appears in the registry and in Windows Explorer.

## 6.5 Link

This column is only filled out after a Deep Scan. See “What is a Deep Scan?” below.

- For a file: This displays the Hard Link group of the file. Files in the same Hard Link group point to the same file. If you change one file from a Hard Link group, the other files change too. This is because they all point to the same physical file on the disk. If you hover the mouse over an entry the exact Volume Number and File Index of the file is shown.
- For a subfolder: This is overrun by the Type column, see above under “Type”.

## 6.6 Content

This column is only filled out after a Deep Scan. See “What is a Deep Scan?” below.

- For a file, this displays the Content Signature Group of the file. Files with an identical Content Signature Group have the exact same content.
- For a folder, this is overwritten by the Type column. See above “Type” subsection.

Technical Note: The content signature is the SHA2-512 hash code of the file, calculated during a Deep Scan. If you hover the mouse over an entry you can see the full hexadecimal listing of the SHA2-512.

## 6.7 [ ] (Marked Column)

This column is a series of checkboxes. Individual files may be marked or unmarked by clicking on the entry in this column with the mouse. Subfolders containing some marked files and some unmarked files will appear as half-marked. Clicking on a subfolders checkbox will mark all or mark none of the files it contains.

## 6.8 Path / Filename

This entry is the relative file path from the root folder (the folder that was scanned) to the item in the listing. There are two sets of Sorter Buttons below this column. This first sorts by the entire relative path. The second sorts by only the Filename (also known as the “basename”).

## 7 How do I sort the file listing?

Each column heading has two Ordering Triangle Buttons under it. They allow you to sort the list (in ascending or descending) order according to that columns criteria. You can sort by mutiple columns. For example first by Type, and then by Size. This is achieved by first pressing one Ordering Triangle Button and then pressing the other one. The order is numbered and shown on the buttons.

To turn off sorting by some column, click on the Ordering Triangle until it becomes unlit.

NB: When dealing with a large list (hundreds of thousands of files), it can take several seconds (depending on your computers processing power) to sort the list. An hourglass cursor is displayed while Folderscope is working.

## **8 How do I find the files taking up the most space on my hard drive?**

1. Launch Folderscope
2. Select the menu command  
`Folder -> Open Folder`
3. Choose  
`My Computer -> Local Disk (C:)`  
and click Open
4. Folderscope will scan your hard drive and present the listing
5. Click on the downward pointing arrow below the Size column header
6. The largest subfolders and files will appear at the top of the list
7. Optional: You can mark the ones you dont want and then select Delete Marked Files to remove them.

## **9 How do I find and delete files with duplicate content?**

1. Launch Folderscope
2. Select the menu command  
`Folder -> Open Folder`
3. Select the folder you want to remove duplicates from.
4. Click the Deep Scan button.
5. Select the menu command  
`Mark -> Mark Duplicate Files`
6. Select the menu command  
`Modify -> Delete Marked Files`

7. The Transfer window will appear, click Enqueue
8. Click the Commit All Changes button in the lower right of the Pending Changes screen.

Note that when Mark Duplicate Files is selected, all but the first of each set of duplicate files is marked. The first file left unmarked is the highest in the current sort order. This means that by sorting the list according to a certain sort order (for example in ascending order of Created timestamp), you can effect which of the set is kept (keep the version that was created the longest ago).

## 10 What is a Deep Scan?

Folderscope can analyse the content of files to discover which files contain identical content. Each file in the list is read, and a checksum is calculated on the file content. (The technical term for this checksum is called a SHA2-512 hash.) Files with an identical checksum have identical content. This can take a long time for large folders (several minutes or several hours), so it is not done automatically when a file is scanned. It is necessary to do if you want to see the Link or Content column and to use the Mark Duplicate Files feature.

## 11 How do I find files with a certain text string in their path?

You can use the

`Mark -> Find/Mark Paths Containing...`

menu command to search for file paths and subfolder paths containing a certain text string. Enter the search term (you can include one or more \ path separators), and you can use the Find Next or Find Previous buttons to find them one at a time - or you can use the Mark Matches button to mark them all-at-once. In any case, appearances of the search term is highlighted in yellow in the listing.

For example: if you open a folder

`G:\folder1`

and it contains a file

`G:\folder1\folder2\myfile.txt`

it would be shown as

`folder2\myfile.txt`

in the listing. If you search for

`der2\my`

it would find this file.

## 12 How do I copy, move or delete marked files?

Once you have a set of files marked you can then plan changes to those files. From the Modify menu you can select...

- Delete Marked Files: to delete them
- Move Marked Files: to move them to another location
- Copy Marked Files: to make a copy of them in another location

After one of these commands is selected the Transfer Window will open. Click the Enqueue button, and the planned changes will be shown in the Pending Changes screen. Once the changes are reviewed you can then click the Commit All Changes button.

In the case of moving or copying files you can only do so into a scanned folder. If the destination folder is not open you can use the "Add Another Folder..." link to scan it in. This is just another way to open a folder.

Note that the folder listings will not automatically reflect any planned or committed changes. They are simply a scan of the folder at the time they were made. You need to use the Refresh button to get the latest image as it is on disk - however they will not reflect pending changes.

## 13 When Folderscope copies files onto an existing folder, is the existing folder overwritten?

When sets of files are moved or copied, this is done one-file-at-a-time. In the event of an error in transferring a file, that particular file is skipped, and the queue continues. Note, because the files are transferred one-at-a-time, that files from the source folder hierarchy are "merged" into the destination hierarchy.

For example, if you copy the following folder "C:\src":

```
C:\src\A\B
C:\src\A\C
C:\src\D
```

into the following folder "C:\dest"

```
C:\dest\A\E
C:\dest\F
```

The result will be:

```
C:\dest\A\B
C:\dest\A\C
C:\dest\A\E
C:\dest\D
C:\dest\F
```

In the event that a file exists at a conflicting path in the destination, the file operation is skipped, and the queue will continue.

Any empty directories that result from a copy or move operation are automatically deleted.

## 14 Further Questions?

If you have further questions about Folderscope, or think we should include something else in this document, please send us an email at [support@folderscope.com](mailto:support@folderscope.com). Thanks for your support.