Faster Find File Indexer Group 11 Stellar Software Solutions User Manual



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1. Introduction

With the increase of hard disk size on common PCs, file hierarchy structures are getting more complex, and data is getting harder to locate. The Faster Find File Indexing Tool was designed to aid the user in locating files with specific data content.

The Faster Find File Indexing Tool consists of the following two main parts:

Indexing: This is what allows the content-based searching. File content is copied into an index file that can be used for searching.

Searching: File index is searched for the search query string. Results are displayed.

The user must understand that indexing will be a slightly longer process and will use up significant amounts of system resources so this should be scheduled to be done during the night, or at a time when computer is not in heavy use. Also, the index should be kept up to date as files are being added and deleted from the system.

1.1 Statement of Purpose

The Purpose of this document is to provide the user with instructions for using the Faster Find File Indexing Tool. This document can be used as reference or for initial usage instructions.

This document will describe the Faster Find File Indexing Tool, and explain its use.

1.2 Targeted Reader

It is assumed that the reader has some familiarity with Microsoft Windows.

2. Quick Start

Here are the steps to getting started using the Faster Find File Indexing Tool:

- 1. Insert disk and run *ff_setup*.
- 2. Choose YES when asked if you want to index all files on your system. NOTE: This will take about 30 minutes to an hour.
- 3. Now click on the Program Icon and you are ready to begin searching.
- 4. Place a check next to the file types you want to search for.
- 5. Enter your search query.

3. System Overview

This Software was developed as a solution to a problem.

3.1 The problem

A common problem with search functions is that the user will type in a word to search and then the software will access all the files every time a search is performed to check the data for that word. The user has to wait long periods of time for the results and there is a possibility of a failed search where no data with that word is found. If the word was not found then the user has wasted their time.

3.2 The solution

3.2.1 Indexing

The Faster File Indexer goes through the data and compiles a file with all the words and their relation to the data. This means that the Data is only checked through once unless updated.

3.2.2 Searching

The index allows the user to check through the data on the fly without having to go through every file each time a search is performed. This makes searching considerably faster then the common search function.

3.3 High-level design

There are three main modules to the Faster Find File Indexing Tool: Search Tool, Indexing Tool, and the Graphical User Interface (GUI). The GUI interacts with the Search tool and the Indexing tool to provide an easy way to effectively use the tools.





3.3.1 *Swish-E*

The Faster File Indexer is built on the indexing power of Swish-E, an open source command line indexing tool.

3.3.1.1 Usage

Swish-E can be used from the command line. It uses arguments on the command line to specify its usage. Swish-E was used to power much of the Search Tool and the Indexing

Tool. For more details on this part of the software you can visit the Swish-E web site (http://sunsite.berkeley.edu/SWISH-E/).

3.3.1.2 Credits

Swish-E was developed at the University of California at Berkeley and San Francisco.

3.3.2 Configuration Files

Configuration files provide a more advanced feature that the users could use to more specifically define their indexes. There is one configuration file for each file type. The filenames of the configuration files are: *txt.config*, *html.config*, *pdf.config*, *doc.config*, *cpp.config*, and *java.config*. (Note: Only advanced users should edit configuration files)

3.3.2.1 Automatic

The software automatically changes and set the configuration files. The default is set to find all physical partitions on the local system and index all *.txt*, *.doc*, *.pdf*, *.html*, *.cpp*, and *.java* files on all partitions.

3.3.2.2 User Defined

The configuration files can be edited using any text editor. The first line of each configuration file specifies the directories to be indexed:

IndexDir C:\ D:\ E:\ F:\

In the above example, all files on the C, D, E, and F drives will be indexed. These can be set to specific drives or directories to limit the index.

This is the only line of the configuration files that should be edited.

4. Tutorial

4.1 Search Tab

4.1.1 Drag and Drop

To use the drag and drop first click and hold on the file that you want to drop.

Name	Location
REDIST.TXT	C:\Prog
WIN32API.TXT	C:\Prog
setuplog.txt	C:\WIN:
TEMPLATE.XT	C:\Prog
WDREAD9.TXT	C:\Prog
Hinkle.txt	C:\My D
WIN32.TXT	C:\Prog
Rar_FAQ.txt	C:\WinF
FTP SITE RULES - YO	C:\My D
SchedLgU.Txt	C:\WIN
REDIST.TXT	C:\Prog
Leerene	

Then move the arrow to the location where you want the file then release.



4.1.2 Viewing in Preview Pane

To preview in the preview pane all that has to be done is to click on a file in the list view once.

Name	Location
REDIST.TXT	C:\Prog
WIN32API.TXT	C:\Prog
setuplog.txt	C:\WIN
TEMPLATE.	C:\Prog
WDREAD9.TXT	C:\Prog
Hinkle.txt	C:\My D
WIN32.TXT	C:\Prog
Rar_FAQ.txt	C:\WinF
FTP SITE RULES - YO	C:\My D
SchedLgU.Txt	C:\WIN
REDIST.TXT	C:\Prog
	0.0

The file will load up and be shown in the preview pane.



4.1.3 File type selection

To select a file type all that needs to be done is to click on the file type you would like to index.

File Types T	o Be Searched	For
TEXT	HTM(L)	C/C++ CODE
🗖 DOC	PDF	🗖 JAVA CODE
File Types T	o Be Searched	For
TEXT	HTM(L)	C/C++ CODE
DOC 🗆	PDF	🗖 JAVA CODE

Now these and only these file types will be searched.

4.1.4 Clearing the Query Box

Clicking on the 'Clear Query Box' box can erase a word in the query box.



4.1.5 Search Type Selection

There is the choice of searching on keystroke and searching with a mouse click. Searching on keystroke can be turned by checking the box.



4.1.6 Updating the Index

To index the documents on the hard drive(s) the 'Update Index' button.



This will bring up the option to cancel or continue.



If 'Cancel' is pressed then the search tab is shown again but if 'OK' is pressed then the application will wait until the indexing is done before becoming operational again. A window will pop up to show that the indexing is done.

FasterFin	dFileIndexer X
٩	Indexing Complete! You may now continue searching.
	ок

4.1.7 Query line Command

There are queries can be added together using Boolean.

AND – Finds both words in the document

Enter query:	🔽 Search on keystroke		
help and error		<u>S</u> earch	
	15 hits	out of 328 files	

OR – Finds either word in the document

Enter query:	🔽 Search on keystroke		
help or error	<u>S</u> earch		
	42 hits out of 328 files		

NOT - Finds one word but not the other in the document

Enter query:	🔽 Search on keystroke		
help not error	<u>S</u> earch		
	22 hits out of 328 files		

4.2 Scheduling Tab

To set the scheduling first make sure that the 'Enable schedule' is on. If Scheduling is disabled then time and date is also disable and can not be edited.

Enable Sche	eduling	
Yes	O No	

Select the time and date of when the indexer should be called.

Select Date Day of Week Wednesday Scheduler Frequency C Daily C Weekly
--

When selecting the day of week use the drop down menu (This is only enabled if the Scheduler Frequency is set for Weekly)



After selecting the time and date click on the Set Scheduler button.

<u>S</u>et Scheduler

This will give you confirmation that the scheduler has the most current set of time.

FasterFindFileIndexer	×
The Scheduling File Has Been Writte	en

4.3 Indexing with Windows Task Scheduler

To Use the Windows Task Scheduler first click on the Start Menu then click on settings then the control panel.

🐼 Control Panel						
Eile Edit Yiew Favorites Too	ls <u>H</u> elp					1
📙 🖶 Back 🔻 🔿 👻 🔂 🛛 🥥 Search	🔁 Folders	()History	19 1 8 🗙 🖻) III-		
Address 🐼 Control Panel						
	Accessibility	Add/Remove	Add/Remove	Administrative	Date/Time	
Control Panel	Options	Hardware	Programs	Tools		
Scheduled Tasks Schedules computer tasks to run		Ì	<u> </u>	A	P.	
automatically	Display	Fax	Folder Options	Fonts	Gaming Options	
Windows Update Windows 2000 Support	S	ئ	١	õ		
	Internet Options	Keyboard	Mail	Mouse	Network and Dial-up Co	
		ų	3	3		
	Phone and Modem	Power Options	Printers	Regional Options	Scanners and Cameras	
	ō			S p	•	
	Scheduled Tasks	Sounds and Multimedia	System	Users and Passwords	Wireless Link	
	Schedules	computer tasks	to run automatio	ally		
Schedules computer tasks to run automati	cally					

Then click on Scheduled Task.



Then Click on Add Scheduled Task



Now you will be in the Scheduled Task Wizard, click on next

Scheduled Task Wizard		×
	Click the program you want Windows To see more programs, click Browse.	s to run.
	Application	Version 🔺
	Accessibility Wizard	5.00.2134.1
	Acrobat Reader 5.0	5.0.1.200103
	ActiveX Control Test Container	6.0.8063
1-1-1	Address Book	5.50.4133.24
	🍳 API Text Viewer	6.00.8169
	Backup	5.00.2195.16
	Coloulator	E 00 2124 1
		B <u>r</u> owse
	< <u>B</u> ack <u>N</u> ext >	Cancel

Then Click on Browse

Select Program t	o Schedule				? ×
Look <u>i</u> n:	🔁 FF File Index	er	• • (🗈 💣 🎟 -	
History Desktop My Documents	Name A	eIndexer		Size 201 KB	Type Applicat
My Computer My Network P	File <u>n</u> ame: Files of <u>type</u> :	FasterFindFileIndexer Programs)pen ancel

Now locate 'FasterFindFileIndexer.exe'. If you do a regular install this should be under C:\Program Files\FF File Indexer\

Scheduled Task Wizard		×
	Type a name for this task. The task name can be the same name as the program name. FasterFindFileIndexer Perform this task: ○ Daily ⓒ Weekly ○ Monthly ○ Dne time only ○ When my computer starts ○ When I Jog on	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Now select how often you want to index

Scheduled Task Wizard		×
	Select the time and day you want this task to start. Start time: 4:26 PM Every 1 weeks Select the day(s) of the week below: Monday Thursday Tuesday Friday Wednesday Saturday Sunday	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Now select what time and day you want to index

Scheduled Task Wizard			×
	Enter the name and pa run as if it were started	ssword of a user. The task will by that user.	
• 9	Enter the user n <u>a</u> me:	MICCHARLIEVAdministrator	
-14	Enter the <u>p</u> assword:		
6	Confirm password:		
1			
200			
			_
	< <u>B</u> ack	<u>N</u> ext > Cancel	

Under Windows 2000 you will be asked for name and password, please enter one.

Scheduled Task Wizard		×
2	You have successfully scheduled the following task: FasterFindFileIndexer Windows will perform this task: At 4:26 PM every Mon of every week, starting 4/30/2001	
	☑ Open <u>a</u> dvanced properties for this task when I click Finish. Click Finish to add this task to your Windows schedule.	
	< <u>B</u> ack Finish Cancel	

Now your schedule is set but you need to go into the advanced properties to set the indexing.

FasterFindFileIndexer	<u>?</u> ×
Task Schedule Settings Security	
C:\WINNT\Tasks\FasterFindFileIndexer.job	
Bun: AProgram Files\FF File Indexer\FasterFindFile	ndexer.exe''
<u>I</u>	Browse
Start in: "C:\Program Files\FF File Indexer"	
Comments:	
Run as: COSMICCHARLIE VAdministr Set pass	sword
Enabled (scheduled task runs at specified time)	
OK Cancel	Apply

After you have finished you will be taken to this properties sheet.

<u>R</u> un:	rogram Files\FF File Indexer\FasterFindFileIn	dexer.exe"(-u	þ
		Browse	I

Add a '-u' at the end of the run command then click OK.

Under win2000		
Set Account Information		×
R <u>u</u> n as:	COSMICCHARLIEVAdministrator]
Password:		
<u>C</u> onfirm password:		
ОК	Cancel	

Use the name and password from before.

5. Reference

5.1 Search Tab

I his tab has all the main functions of the program	This tab has	all the main	functions	of the	program.
---	--------------	--------------	-----------	--------	----------

i anno	Location	Size	Modified	-
EDIST.TXT	C:\Program Files\Microsoft Visual Studio\REDIST.TX	(T 1361 KB	6/10/1998 1:00 AM	
/IN32API.TXT	C:\Program Files\Microsoft Visual Studio\Common\To	ools 654 KB	6/18/1998 1:00 AM	
etuplog.txt	C:\WINXP\setuplog.txt	654 KB	4/9/2001 10:37 PM	
EMPLATE.TXT	C:\Program Files\Microsoft Visual Studio\Common\M	SD 49 KB	6/15/1998 1:00 AM	
/DREAD9.TXT	C:\Program Files\Microsoft Office\Office\WDREAD9.	LTXT 28 KB	3/19/1999 2:51 PM	
inkle.txt	C:\My Documents\Personal\Loeb\Hinkle.txt	2 KB	2/17/2000 12:44 PM	
/IN32.TXT	C:\Program Files\Microsoft Visual Studio\VJ98\Wizar	rds\ 351 KB	4/26/1998 8:00 PM	
ar_FAU.txt	U:\WinBAB\Bar_FAU.txt	16 KB	5/6/1998 11:5/ AM	
IP SITE RULES - YU	C:\My Documents\games\FTP STTE RULES - YUU N	MU 7 KB	3/22/1998 3:21 PM	
Chealgu, i xt	 U:\WINXP\SchedLgU.Txt C:\Decenery Files\Missess(\SchedLgU.Txt) 	CT COKD	4/9/2001 10:46 PM	
	C: VProgram Files (Microsoft Visual Studio (V) 36 (HED):	31 BU NB	772071330 0.00 PM	
ïle Types To Be Searche	d For Enter	query:	V	Search on keystrok
🗸 техт 🗖 нтміl	Clear Query Box			Search
DOC 🔽 PDF	JAVA CODE Update Indexes		118 hit	s out of 605 files

5.1.1 Document List Pane

This is where the results from a query are shown. The file name, size of the file, location of the file and the date modified are also shown.

Name	Location	Size	Modified	•
REDIST.TXT	C:\Program Files\Microsoft Visual Studio\REDIST.TXT	1361 KB	6/10/1998 1:00 AM	
WIN32API.TXT	C:\Program Files\Microsoft Visual Studio\Common\Tools	654 KB	6/18/1998 1:00 AM	
setuplog.txt	C:\WINXP\setuplog.txt	654 KB	4/9/2001 10:37 PM	
TEMPLATE.TXT	C:\Program Files\Microsoft Visual Studio\Common\MSD	49 KB	6/15/1998 1:00 AM	
WDREAD9.TXT	C:\Program Files\Microsoft Office\Office\WDREAD9.TXT	28 KB	3/19/1999 2:51 PM	
Hinkle.txt	C:\My Documents\Personal\Loeb\Hinkle.txt	2 KB	2/17/2000 12:44 PM	
WIN32.TXT	C:\Program Files\Microsoft Visual Studio\VJ98\Wizards\	351 KB	4/26/1998 8:00 PM	
Bar_FAQ.txt	C:\WinRAR\Rar_FAQ.txt	16 KB	5/6/1998 11:57 AM	
FTP SITE RULES - YO	C:\My Documents\games\FTP SITE RULES - YOU MU	7 KB	3/22/1998 3:21 PM	
SchedLgU.Txt	C:\WINXP\SchedLgU.Txt	13 KB	4/9/2001 10:46 PM	
REDIST.TXT	C:\Program Files\Microsoft Visual Studio\VJ98\REDIST	60 KB	7/28/1998 8:00 PM	•

There are some features from the list view.

- Single click => Takes the document and opens it in the preview pane at the bottom of the search tool.
- Double click => Opens the document in the default viewer.

- Focus => When focus is on the document list pane, the arrow keys can be used to go up and down.
- Drag and Drop => Can take a document outside of the application and drop onto another application.

5.1.2 *Preview Pane*

The preview pane can be used to view the document with out opening another application.

DOC PDF JAVA CODE Update Indexes	118 hits out of 605 files
	<u> </u>
0,"ActivateKeyboardLayout","_User32.java","User32"	
0,"AdjustWindowRect","_User32.java","User32"	
0,"AdjustWindowRectEx","_User32.java","User32"	
0,"AnyPopup","_User32.java","User32"	
0,"AppendMenu","_User32.java","User32"	
0,"ArrangeIconicWindows","_User32.java","User32"	
0,"AttachThreadInput","_User32.java","User32"	
0,"BeginDeferWindowPos","_User32.java","User32"	
0,"BeginPaint","_User32.java","User32"	
0,"BringWindowToTop","_User32.java","User32"	
0,"BroadcastSystemMessage","_User32.java","User32"	-
1	

A single click from the list view can open files in the preview pane.

5.1.3 File Type Selection

This gives you the ability to select what file types you would like to search for.



The example above has only *.txt files label but any combination of the six can be used.

5.1.4 *Entering the Query*

The query can be entered using the query box.

Enter query:	
help	

Depending on the search setting the query can be sent automatically while typing or after a mouse click.

5.1.5 Clear Query Box

This allows you to clear the query box.



5.1.6 Search Selection

This allows you to search either on keystroke or on a mouse click. If keystroke is selected then mouse click search is disabled.

Search on keystroke
Search

5.1.7 Status Information

On the search Tool tab there are two ways to see the success of a search, one is the progress bar and the other is the number of files found from the total set of files.



The Progress bar is logarithmic showing useful information while the search narrows.

118 hits out of 605 files

The number of hit from the total number of files searched shows you how often a word appears in the total set of files.

5.1.8 Update Index

When this button is click then you want to index your computer.



After this button is pressed then you are given an option from a pop up screen.

FasterFir	ndFileIndexer
?	Would you like to begin indexing? While indexing, system resources will be EXTREMELY LOW and the process will take a subsatntial amount of time
	Cancel

This will check if you want to continue because as soon as indexing starts then the application cannot be used until it has finished. After the indexing is finished you will be notified by a pop up window that the indexing has finished.



After Clicking 'OK' the application is ready for use.

5.2 Scheduling tab

Scheduling of the index can be set so that the indexing can go on while the computer is not being used. To do this the scheduler tab gives you the ability the set the scheduling.

🗍 Faster Find File Indexer	
D Search Tool C Schedule Indexing	
Select Date	
Day of Week Hour and minutes	
Wednesday	
Scheduler Frequency	
Using The Scheduler	
1. Select the the frequency of when you want the indexes updated.	
2. Select the day of the week if you selected weeky. 3. Select the hour, minute and time of day that the indexes will be	
	Set Scheduler

5.2.1 Using the Scheduler

You have the option of having the scheduler on and off. The Scheduler can be turned off and on using the "Enable Scheduling" box. If "No" on the "Enable Scheduling" box then everything in the "Select Date" box will be disabled.

Enable Scheduling		
• Yes	O No	

5.2.2 Setting the Date

You have four options to set the date.

5.2.2.1 Scheduler Frequency

You have "Scheduler Frequency" to set how often you want the in indexing done. You have the choice of Weekly or Daily.



5.2.2.2 Day of Week

The "Day of Week" is used to set the day of the week if weekly is selected from the "Scheduler Frequency" box. If daily is selected then "Day of Week" is disabled. This is a drop down menu, select the day then click on it.



The following box will appear to confirm your select, click OK for it to go away.



5.2.2.3 Hours and Minutes

"Hours and Minutes" is used to set the time at the indexing should begin. The hour is set using the box on the right and the minutes are set using the box on the left. The arrows going up increment the values by one and the arrows going down decrement the values by one.



5.2.2.4 Time of Day

"Time of Day" selects the time of day since the "Hour and Minutes" box only uses a 12-hour clock.

5.3.3 Set Scheduler

When the scheduler is set then the "Set Scheduler" button is pressed.



This will give you confirmation that the scheduler has the most current set of time.

FasterFindFileIndexer 🛛 🗙	
The Scheduling File Has Been Written	
[OK]	

Note: Scheduling can also be done from the command line and can be called from the Operating System's scheduler.

5.3 Command Line Scheduling

Indexing can be done from the command line without even opening the application. To do this the FasterFindFileIndexer.exe with its path is typed into the command line then add the argument '-u' at the end. This will start the indexing.

```
C:\>Program Files\FF File Indexer\FasterFindFileIndexer -u_
```

5.4 Minimized Icon

After the application is minimized it goes into the system tray.



This will leave the circled icon in the system tray. By right clicking on this icon a menu pops up.



You have the option to restore which will maximize the application. You can Shutdown which will close the application or you can click on the 'about...' item. The about item will pop up a box with information about the product.



Clicking 'OK' will make this box disappear.

Appendix A: System Requirements

In order for Faster Find File Indexing Tool to run optimally, certain hardware and software is required.

Hardware Required: Pentium II 300Mhz, 128 MB RAM, 20 MB free hard disk space (*more or less hard disk space could be required depending on the system)

Software Required: Windows NT/2000

Appendix B: Installation

- 1. Insert disk
- 2. Run *ff_setup*
- 3. Setup will ask you to index all files on your system. This is a long process that could require up to an hour. Choose YES to begin indexing. If you choose NO, then you must create before you can begin searching.
- 4. Installation Complete!

Appendix C: Troubleshooting

Problem: Search doesn't return files of different file types.

Solution: Make sure you have all desired file types checked.

Problem: Certain files that you know should show up in the results are not there.

Solution: These files were probably added since the index was last created. Recreate the Index and search again.

Problem: Index is taking too long to create. I want to quit the indexing.

Solution: To do this you must first close the Faster Find File Indexing Tool, then press **ALT + CTRL + DEL**. Now click on **Task Manager**. Find the process called *ff_index.exe* and click on **End Process**. Then answer **YES**. The Index has now been aborted. You must re-create the Index before you can search. It may be more convenient to schedule the Index to run at night or at a time when you are not using your computer. See the section on "Scheduling an Index."

Problem: Memory referencing error while indexing.

Solution: Un-install the Install Shield Developer program that comes with Microsoft Visual Studio. Go to the Windows **Control Panel**. Click on **Add/Remove Programs**. Highlight the Install Shield for Visual Studio. Click **Remove**.

Appendix D: Contact Information

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