



DROPBOX AND GOOGLE DRIVE INVESTIGATION

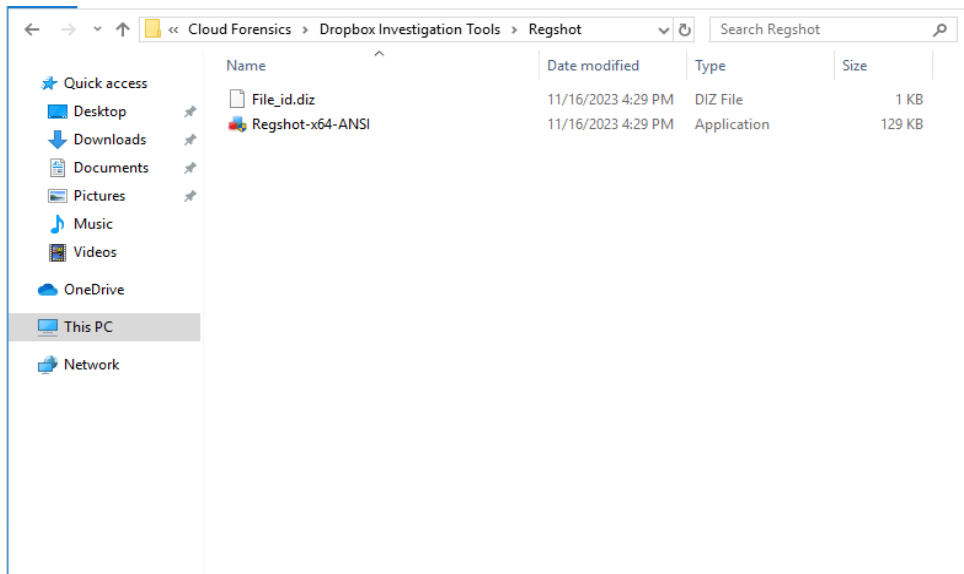
By



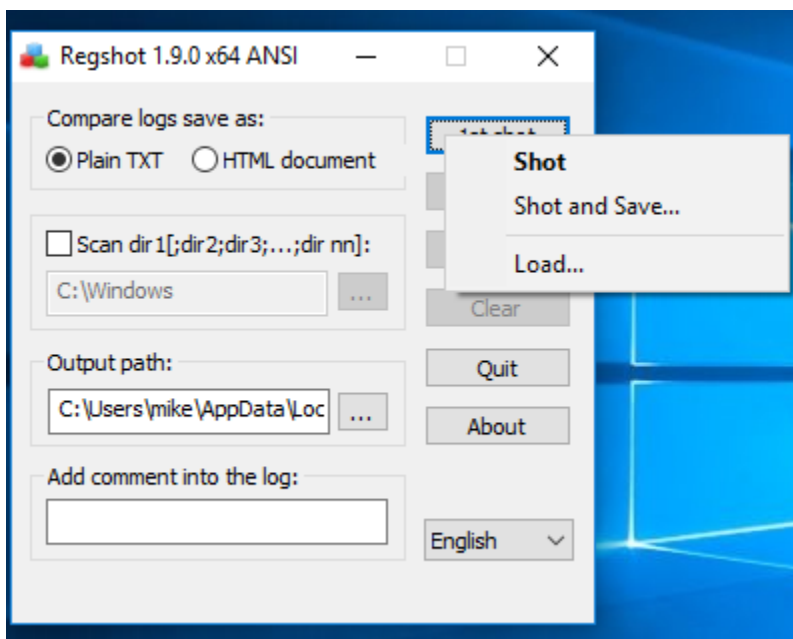
MICHAEL EDMOND ODONGO

DROPBOX INVESTIGATION

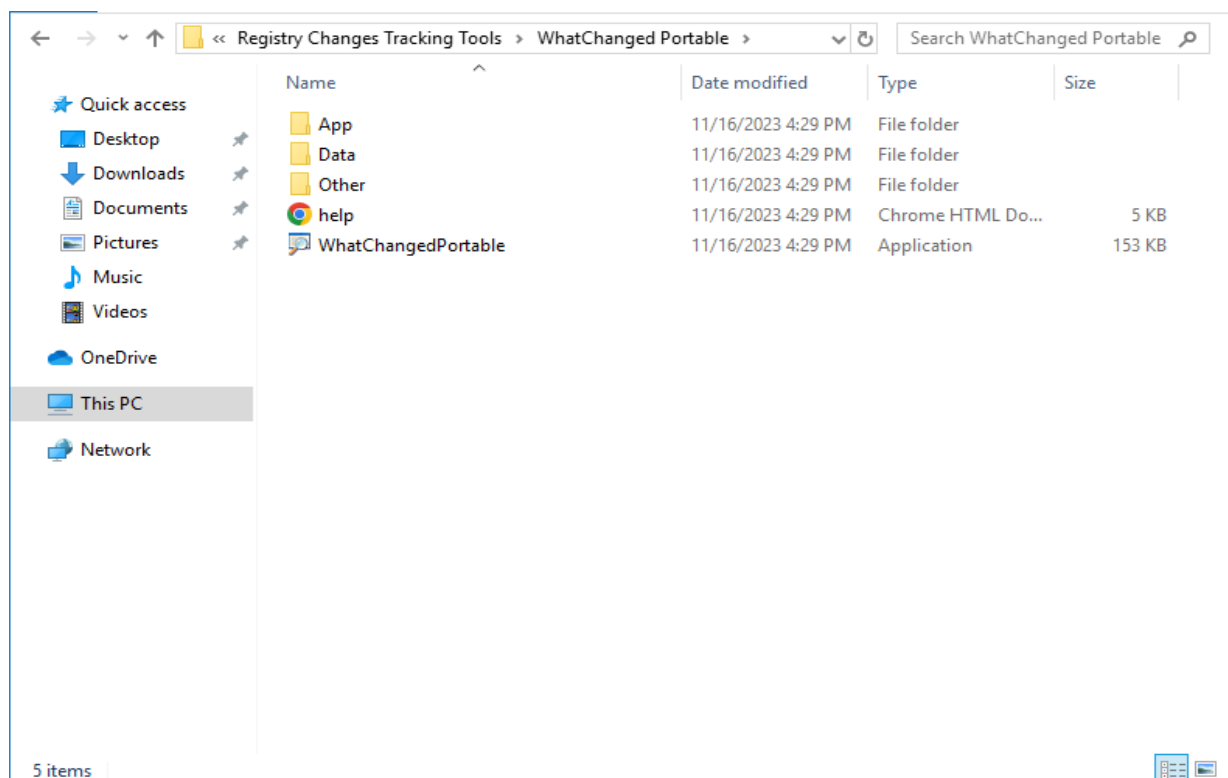
- **Navigate to the folder and double click the .exe file for the Regshot to launch the application.**



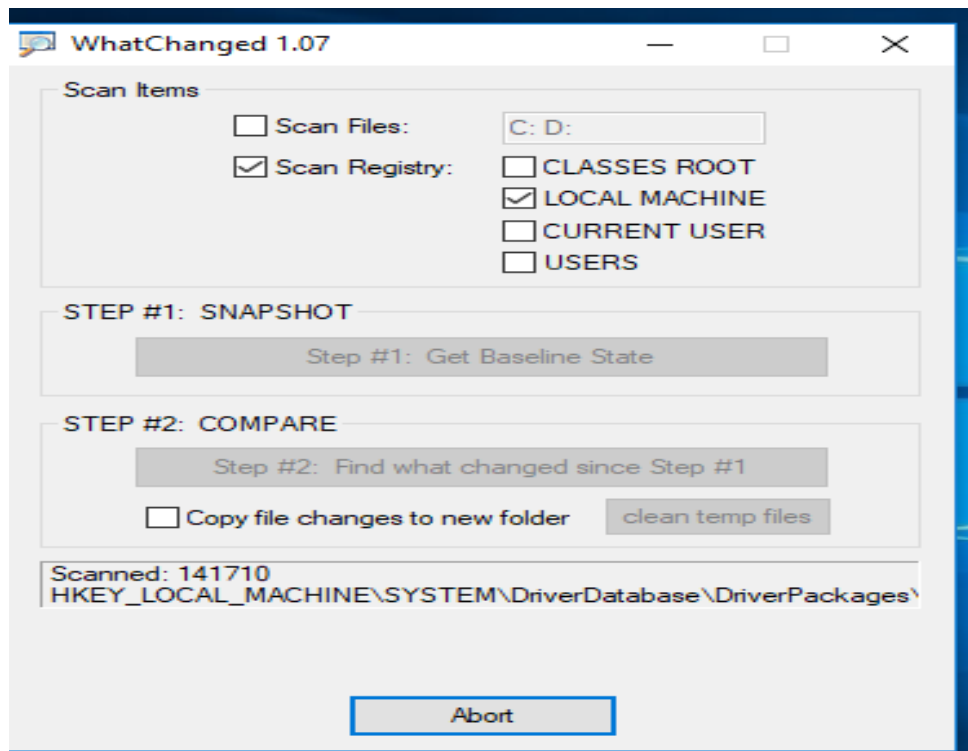
- **Once launched the window below is displayed, click on 1st shot then from the drop down click on shot.**



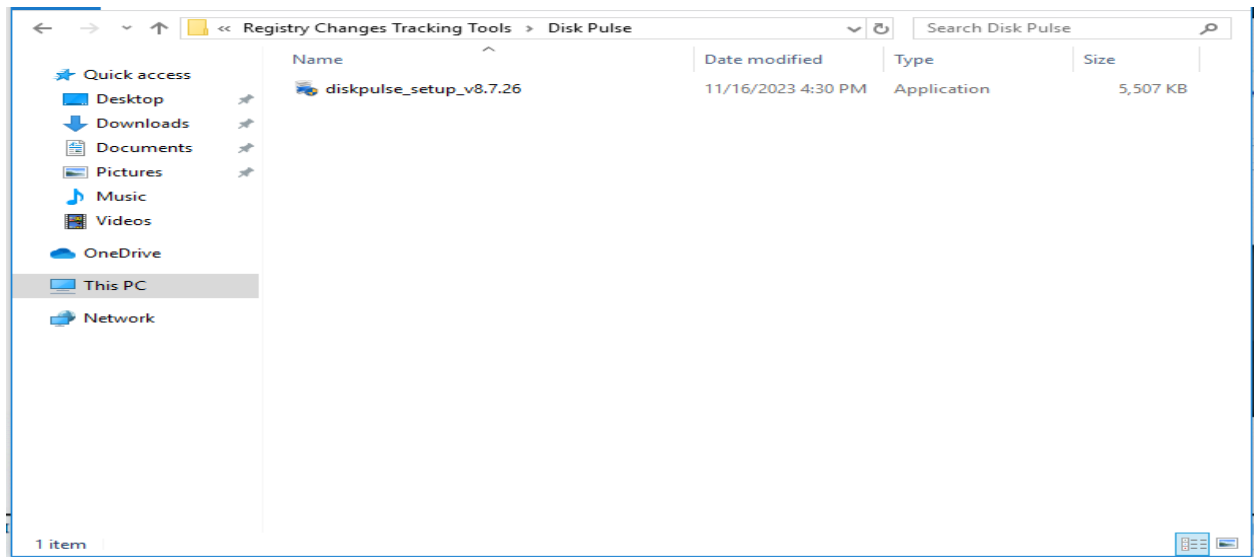
- **Navigate to the folder containing the WhatChangedPortable and double click the .exe file to launch it.**



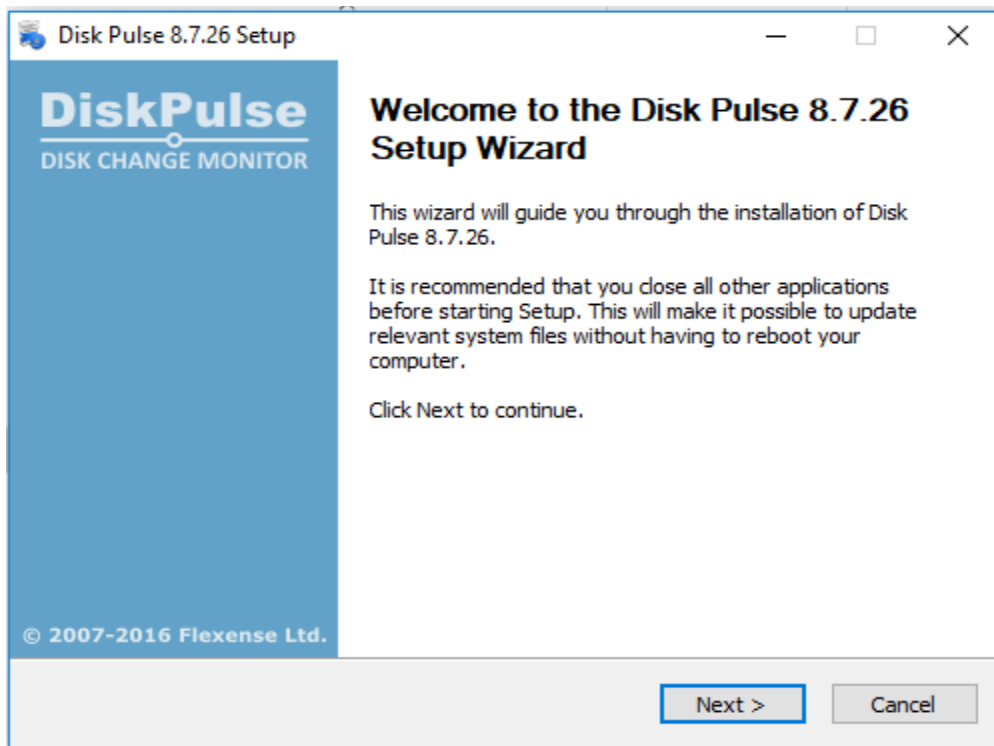
- Once *WhatChangedPortable* has launched as below, check the boxes for *scan registry* and *LOCAL MACHINE*. Click on *step #1: SNAPSHOT*.



- Navigate to the folder containing the Disk pulse executable, double click to launch it.

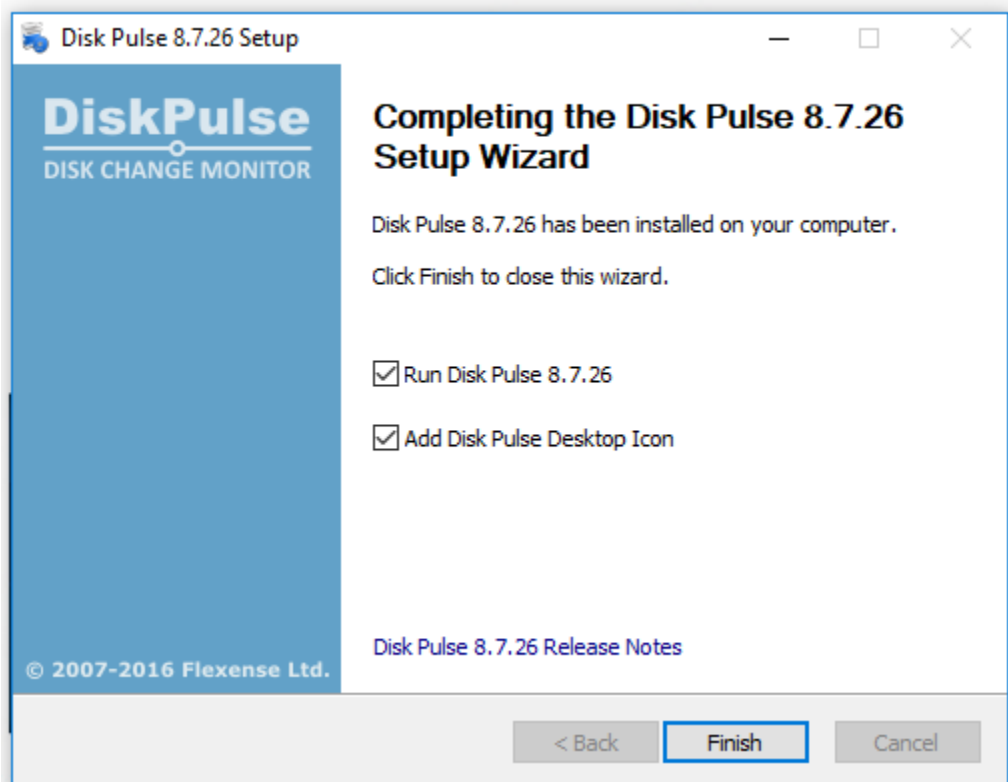


- The following wizard is displayed.

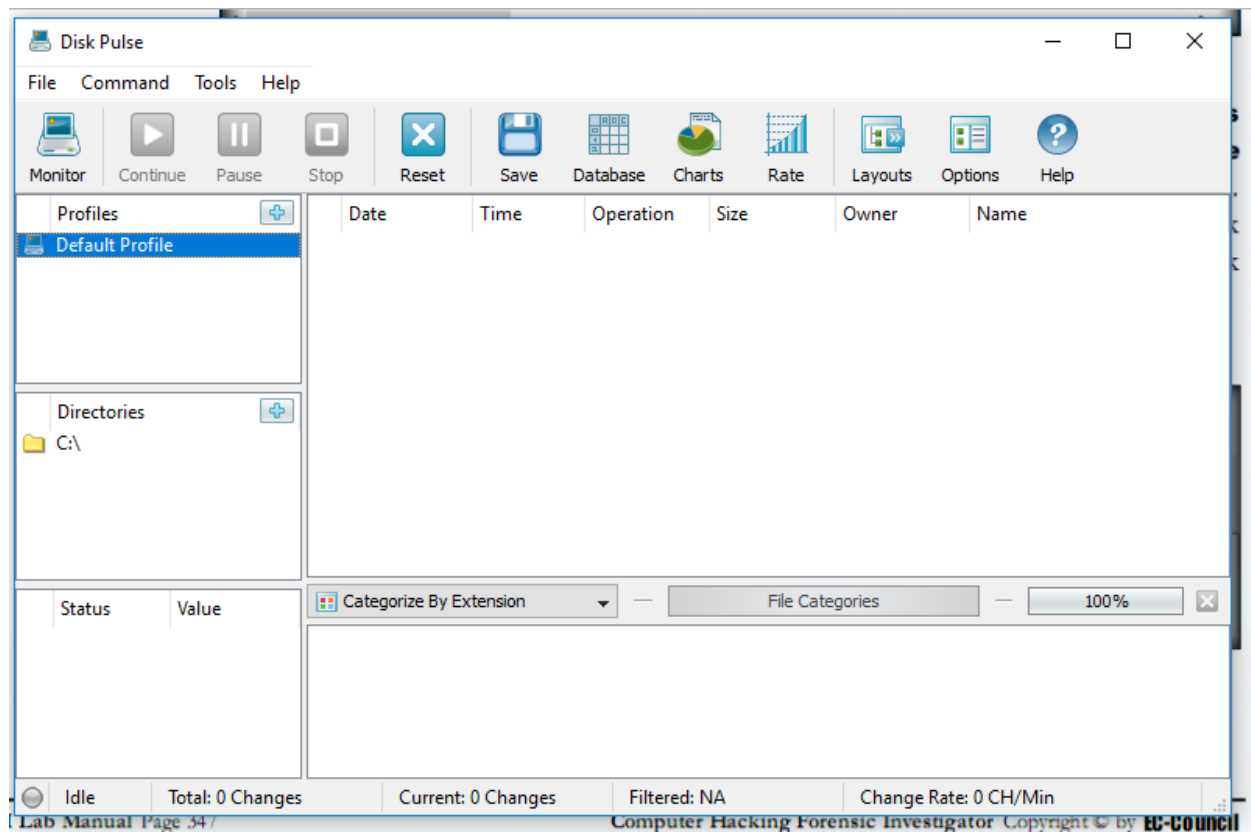


- Check the boxes for the *Run Disk Pulse* and *Add Disk Pulse Desktop icon* before clicking on the finish.

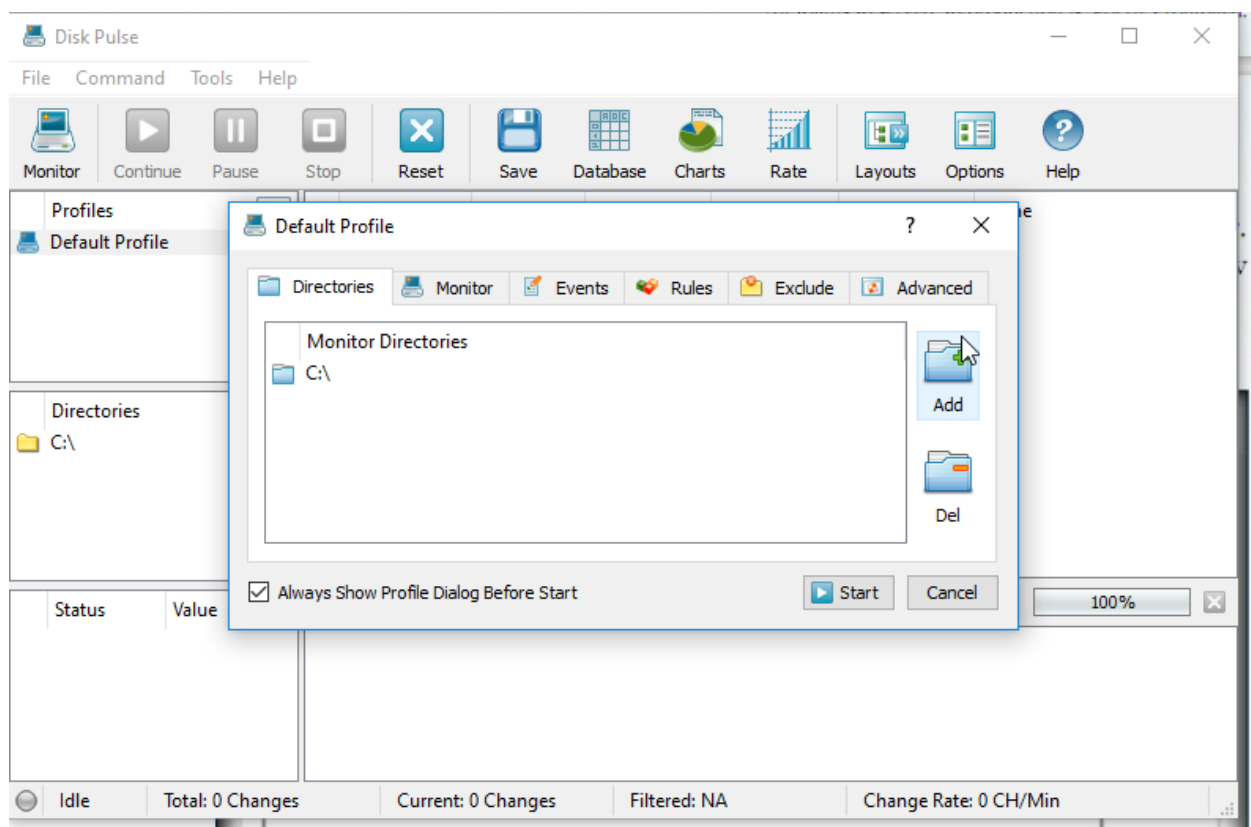
FIGURE 1.3: Notepad file containing all the local machine addresses



- Disk Pulse graphical user interface is displayed as below once launched.



- Click on the monitor tab and click on Add to add a directory. Otherwise C:\ is added by default. Select start.



- Once the start button is clicked, the following is displayed.

The screenshot displays the Disk Pulse application window. The interface includes a menu bar (File, Home, Share, View, Manage), a toolbar with buttons for Monitor, Continue, Pause, Stop, Reset, Save, Database, Charts, Rate, Layouts, Options, and Help. The main area is divided into several sections:

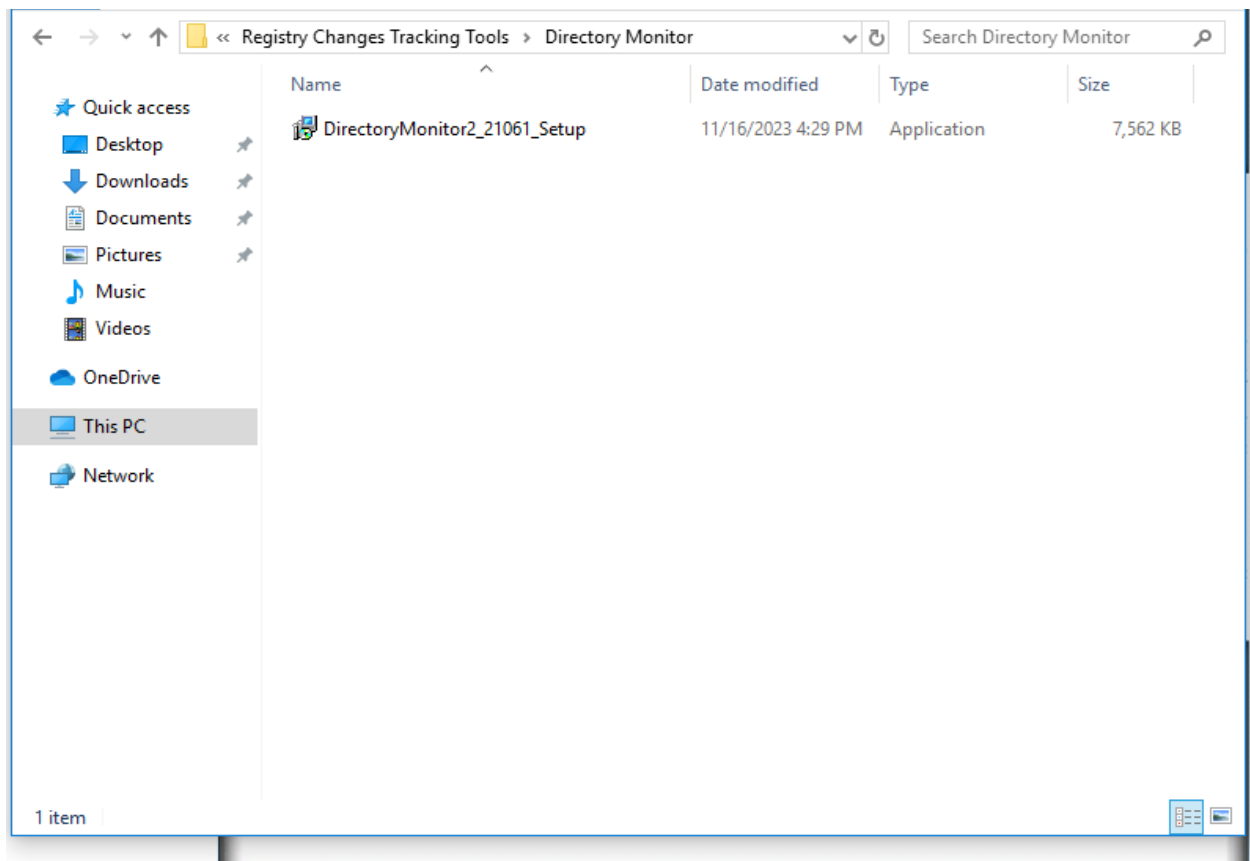
- Profiles:** A list containing "Default Profile".
- Directories:** A list containing "C:\\".
- File Operations Table:** A table with columns: Date, Time, Operation, Size, Owner, and Name. It lists various file modifications and creations on 17-Nov-2023.
- Status and Value Table:**

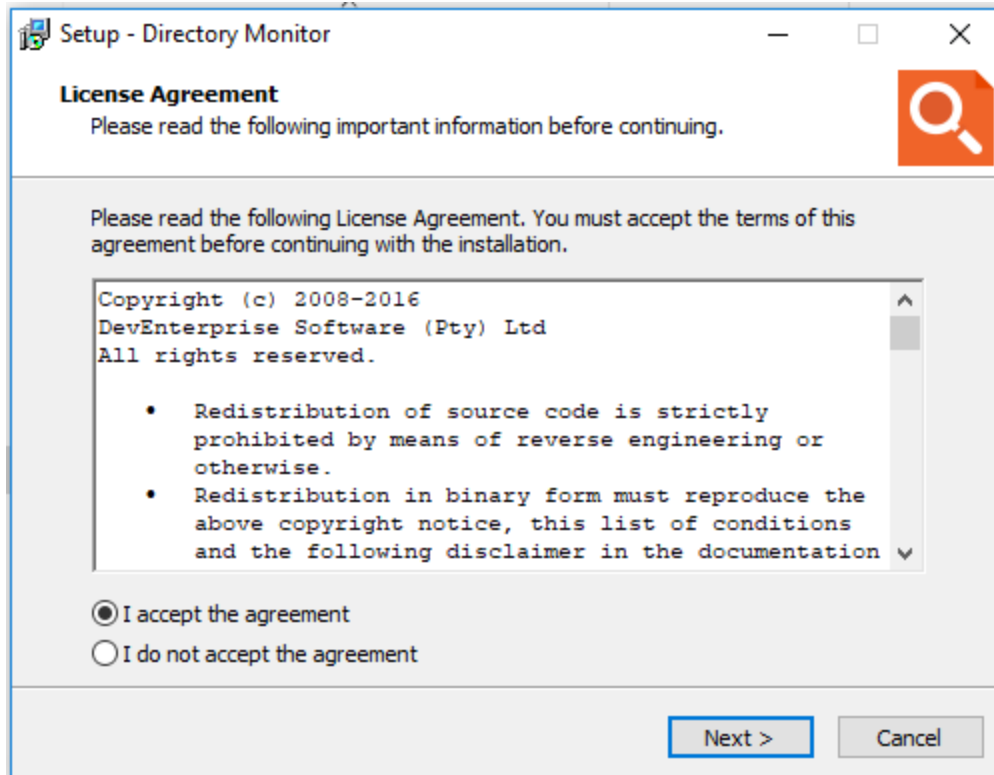
Status	Value
Total Chan...	66
Excluded Fi...	0
Change Rate	474 CH/Min
Process Ti...	8.36 Sec
- File Categories Table:**

File Categories	Count	Percentage
NOEXT Files	53	75.71 %
TMP Files	8	11.43 %
PIECESHASH Files	4	5.71 %
DLL Files	4	5.71 %
DB Files	1	1.43 %

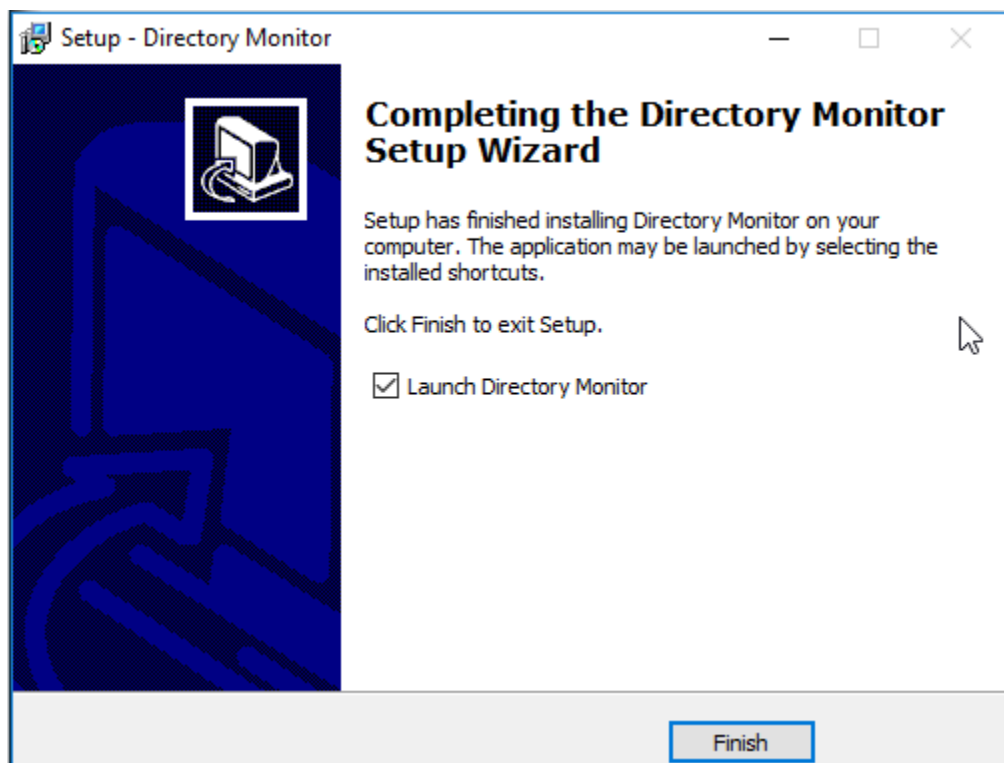
The bottom status bar shows: Active, Total: 66 Changes, Current: 66 Changes, Filtered: NA, Change Rate: 474 CH/Min. The bottom-most bar indicates 1 item selected, 5.37 MB.

- **Navigate to the folder containing the Directory Monitor set up executable file and double click the file to launch as set up wizard for the Directory monitor tool.**

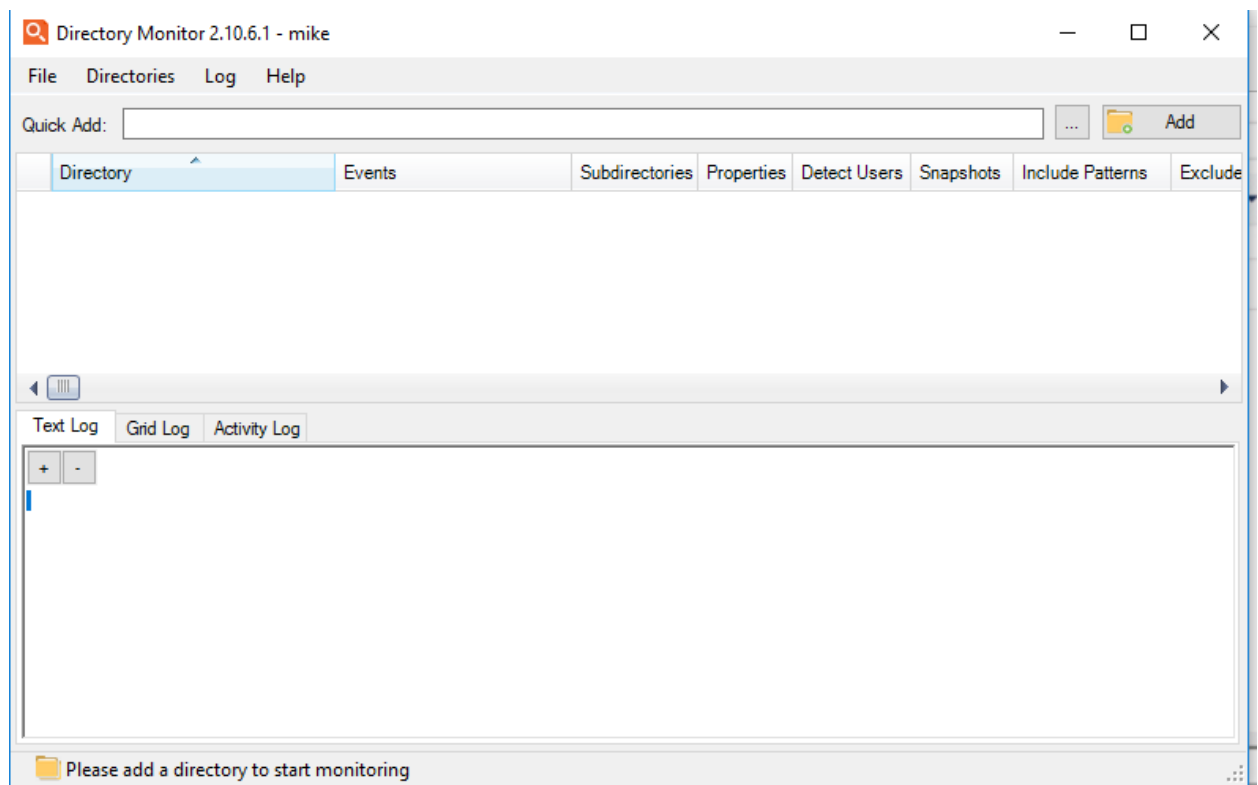




- Follow the wizard below.



- The GUI for the Directory Monitor tool is displayed below.



- The window below is displayed once you click on Add.

The image shows a Windows File History configuration window. It is divided into three main sections: Directory, Options, and Filters. The Directory section has fields for Directory, Username, Password, and Description. The Options section contains checkboxes for Events (New Files, Modifications, Deletions, Renames, File Access) and Options (Monitor events of subdirectories, Monitor changes to attributes and security settings). It also has two locked settings: 'Try get the user and process information that made the change' and 'Try determine changes while directory was offline using snapshots every 10 minute(s)'. The Types section has radio buttons for 'Directories and Files' (selected), 'Files only', and 'Directories only'. The Filters section has two empty list boxes for 'Exclude patterns' and 'Include patterns'. At the bottom are 'Save' and 'Cancel' buttons.

Directory

Directory: ...

Username:

Password:

Description:

Options

Events: ☒ New Files ☐ Modifications ☐ Deletions ☐ Renames ☐ File Access

Options: ☒ Monitor events of subdirectories

☐ Monitor changes to attributes and security settings

Try get the user and process information that made the change

Try determine changes while directory was offline using snapshots every minute(s)

Types: ☒ Directories and Files ☐ Files only ☐ Directories only

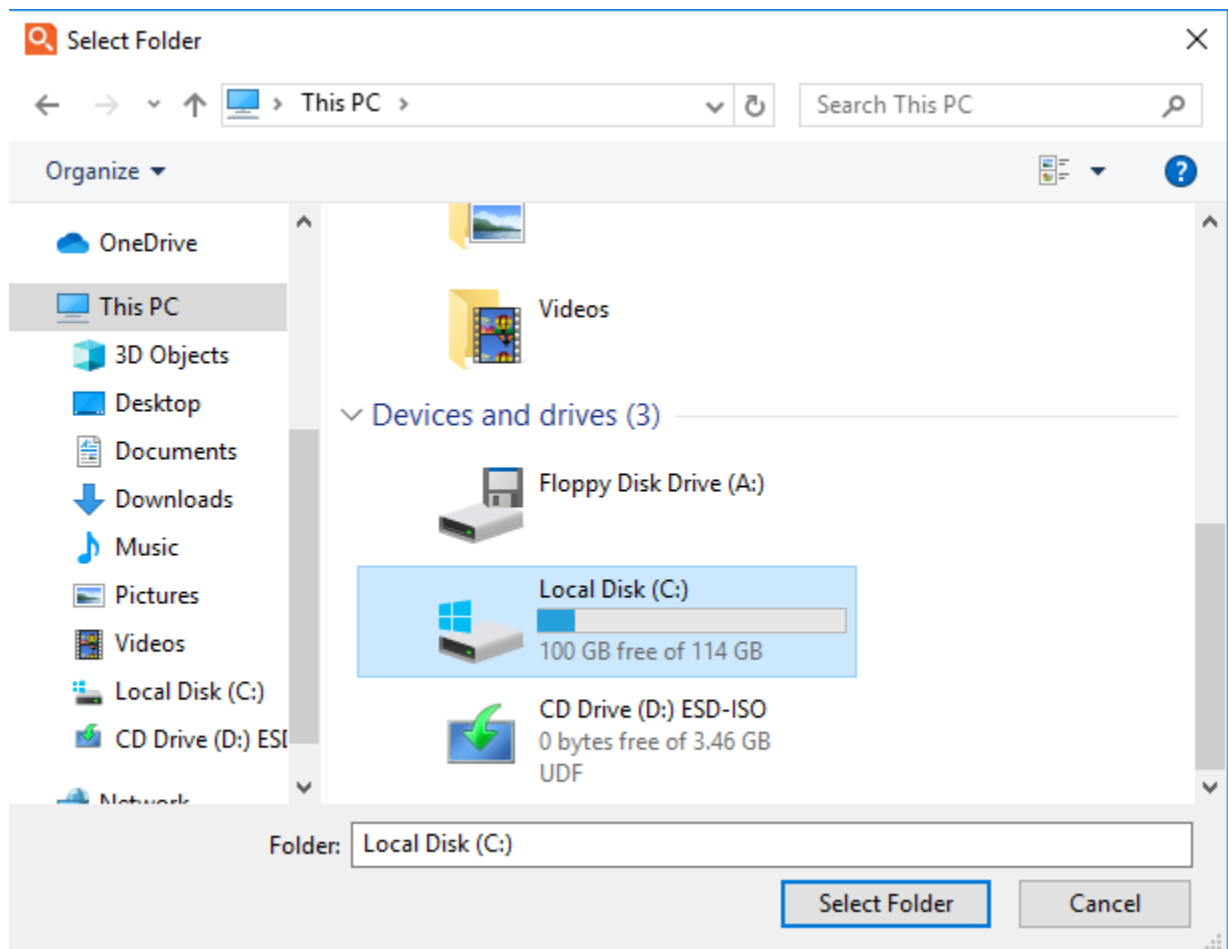
Filters

Exclude patterns

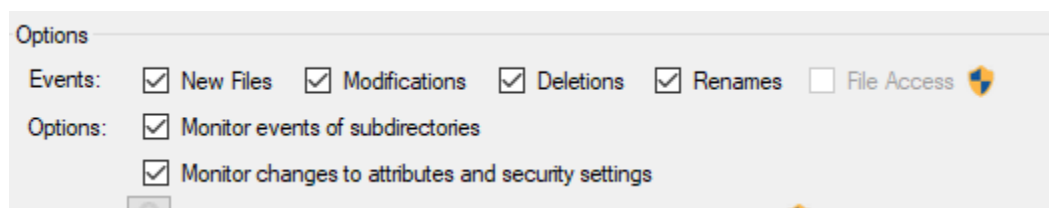
Include patterns

Save Cancel

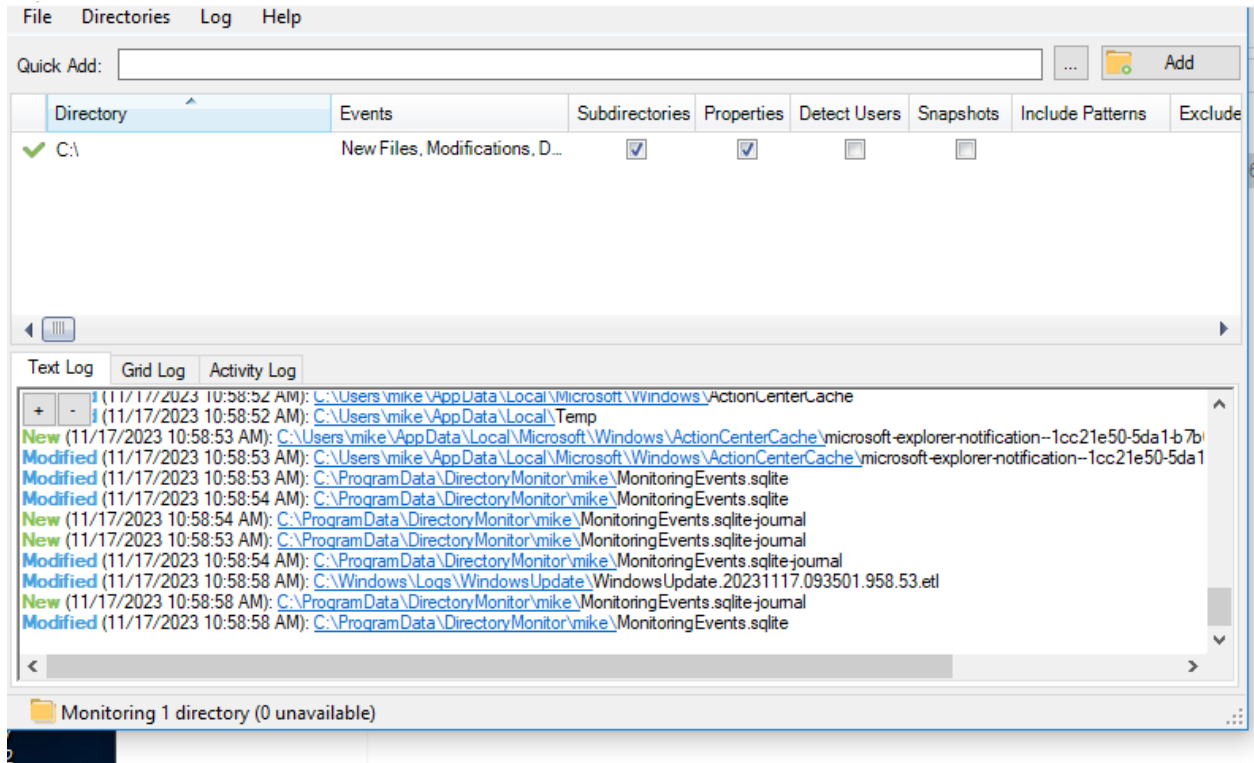
- Select the C:\ and click on select folder.



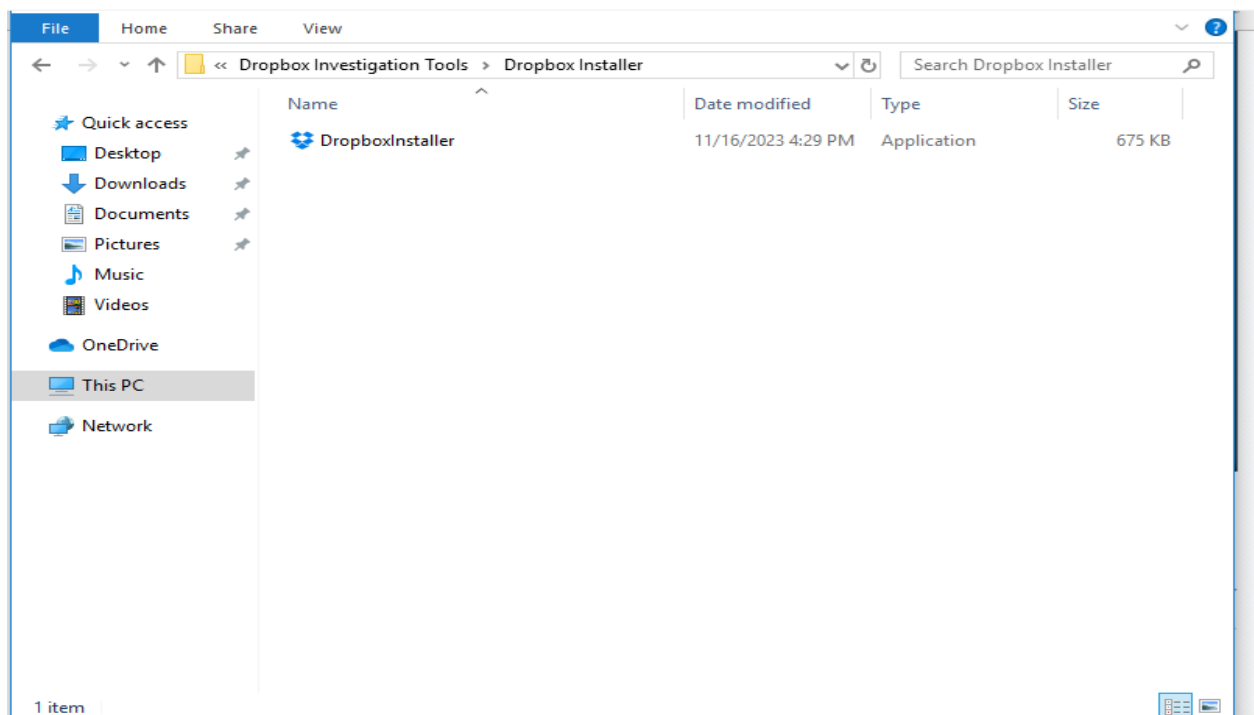
- Check the boxes in the options section for the events and options.

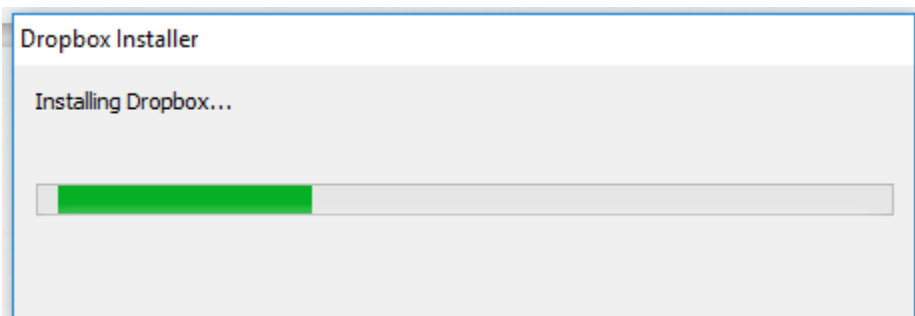


- Once you select the directory, monitoring is initiated as below.

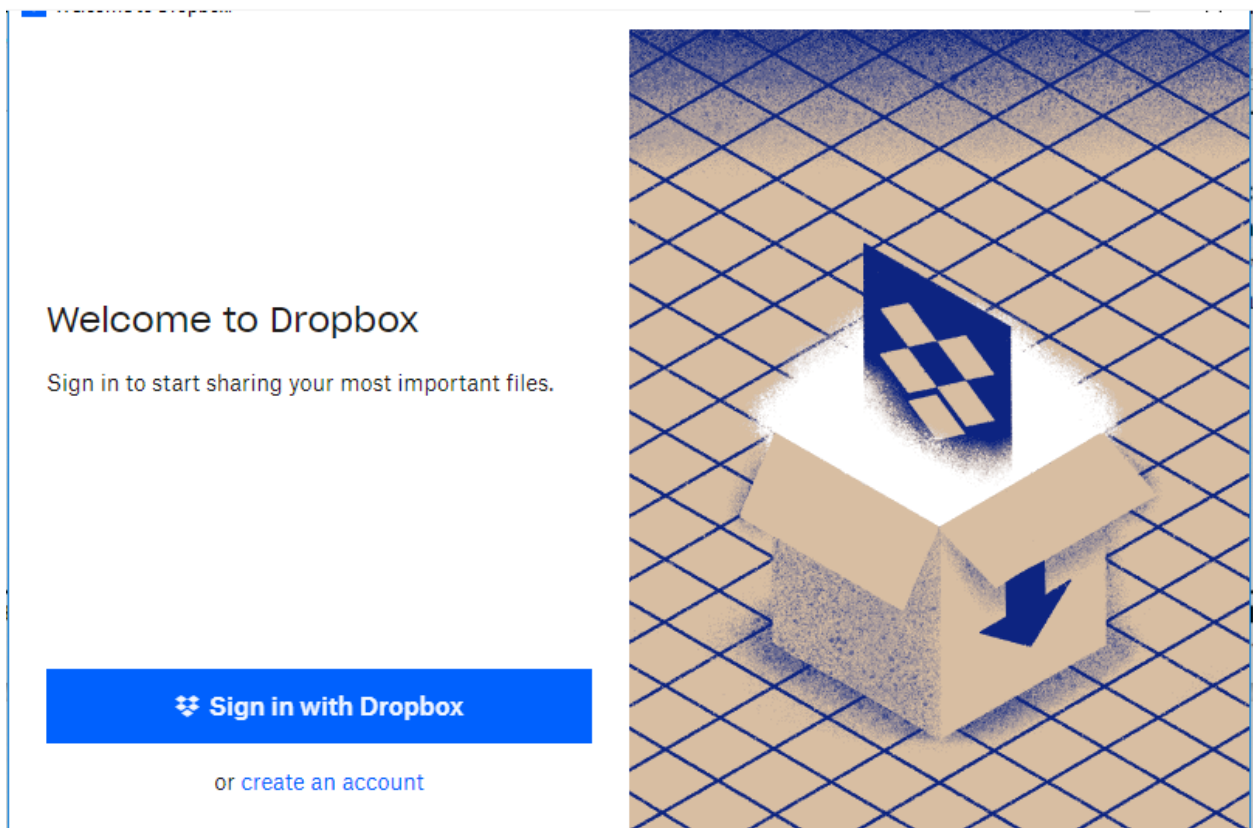


- To install Dropbox, navigate to the folder containing the Dropbox installer.





- **Sign into Dropbox.**



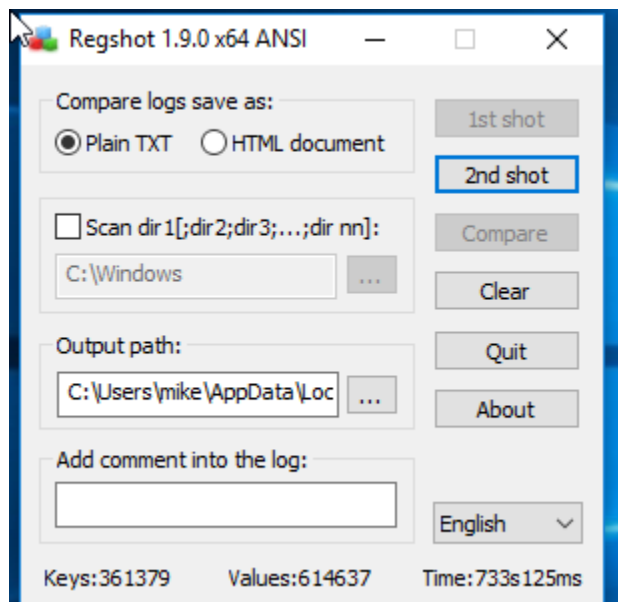
- Once signed in Dropbox, pause the Disk Pulse.

	Pause	Stop	Reset	Save	Database	Charts	Rate	Layouts	Options	Help
	+									
		Date	Time	Operation	Size	Owner	Name			
		17-Nov-2023	12:36:41	Deleted	0 Bytes	---	C:\ProgramData\Directo...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\ProgramData\Directo...			
		17-Nov-2023	12:36:41	Created	8.52 KB	mike	C:\ProgramData\Directo...			
		17-Nov-2023	12:36:41	Modified	8.52 KB	mike	C:\ProgramData\Directo...			
		17-Nov-2023	12:36:41	Modified	3.00 MB	mike	C:\ProgramData\Directo...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Modified	245.94 KB	mike	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Created	0 Bytes	---	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	---	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Created	0 Bytes	---	C:\Users\mike\AppData\...			
		17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\...			

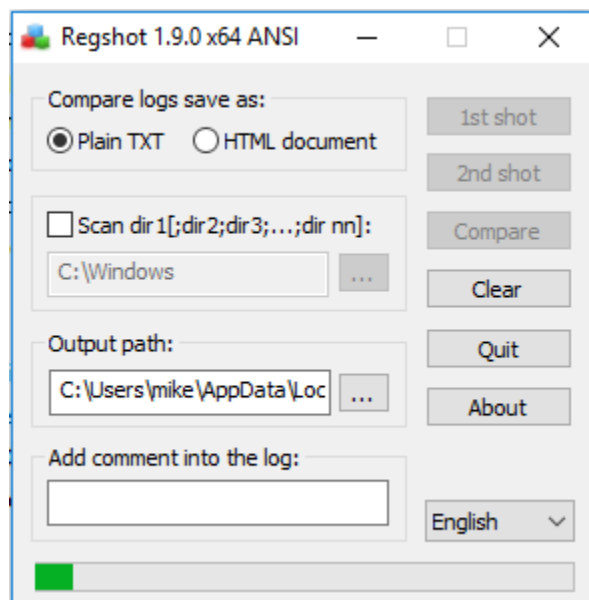
- Select all changes and copy them to a text file for easier analysis.

File	Machine	View	Input	Devices	Help
17-Nov-2023	12:36:30	Modified	3.00 MB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\ProgramData\DirectoryMonitor\mike
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\...
17-Nov-2023	12:36:30	Modified	28.00 KB	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\...
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\...
17-Nov-2023	12:36:30	Modified	323.32 KB	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\...
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\...
17-Nov-2023	12:36:30	Modified	48.00 KB	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\...
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\...
17-Nov-2023	12:36:30	Deleted	0 Bytes	---	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-journal
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\ProgramData\DirectoryMonitor\mike
17-Nov-2023	12:36:30	Created	8.52 KB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-journal
17-Nov-2023	12:36:30	Modified	0 Bytes	---	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-
17-Nov-2023	12:36:30	Modified	0 Bytes	mike	C:\ProgramData\DirectoryMonitor\mike
17-Nov-2023	12:36:30	Created	0 Bytes	---	C:\Users\mike\AppData\Local\Temp\{73454A84-0C5C-4BB3-8AE0-A883599D443}
17-Nov-2023	12:36:30	Modified	0 Bytes	---	C:\Users\mike\AppData\Local\Temp\{73454A84-0C5C-4BB3-8AE0-A88}
17-Nov-2023	12:36:39	Created	2.01 KB	mike	C:\Users\mike\AppData\Local\Microsoft\OneDrive\logs\Personal\FileCoAu
17-Nov-2023	12:36:41	Modified	2.01 KB	mike	C:\Users\mike\AppData\Local\Microsoft\OneDrive\logs\Personal\
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Microsoft\OneDrive\logs\Personal\
17-Nov-2023	12:36:41	Modified	8.52 KB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-
17-Nov-2023	12:36:41	Deleted	0 Bytes	---	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-journal
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\ProgramData\DirectoryMonitor\mike
17-Nov-2023	12:36:41	Created	8.52 KB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-journal
17-Nov-2023	12:36:41	Modified	8.52 KB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite-
17-Nov-2023	12:36:41	Modified	3.00 MB	mike	C:\ProgramData\DirectoryMonitor\mike\MonitoringEvents.sqlite
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\H
17-Nov-2023	12:36:41	Modified	245.94 KB	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\D
17-Nov-2023	12:36:41	Created	0 Bytes	---	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\Network\4
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default
17-Nov-2023	12:36:41	Modified	0 Bytes	---	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\N
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\N
17-Nov-2023	12:36:41	Created	0 Bytes	---	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\Network\T
17-Nov-2023	12:36:41	Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\Chrome\User Data\Default\N

- Launch the already running Regshot and take a 2nd shot.



- Click on compare.



WhatChanged 1.07

Scan Items

☐ Scan Files: C: D:

☒ Scan Registry: ☐ CLASSES ROOT

☒ LOCAL MACHINE

☐ CURRENT USER

☐ USERS

STEP #1: SNAPSHOT

Step #1: Get Baseline State

STEP #2: COMPARE

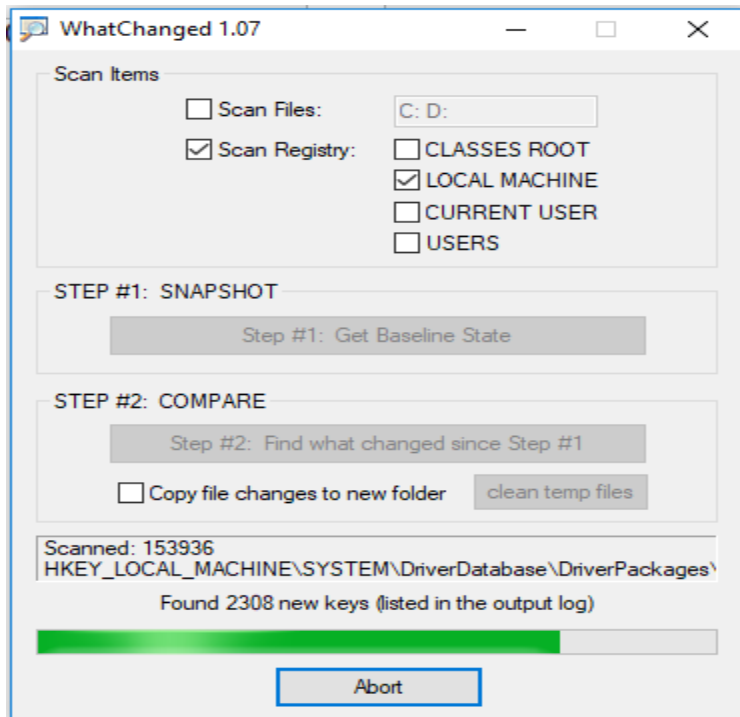
Step #2: Find what changed since Step #1

☐ Copy file changes to new folder clean temp files

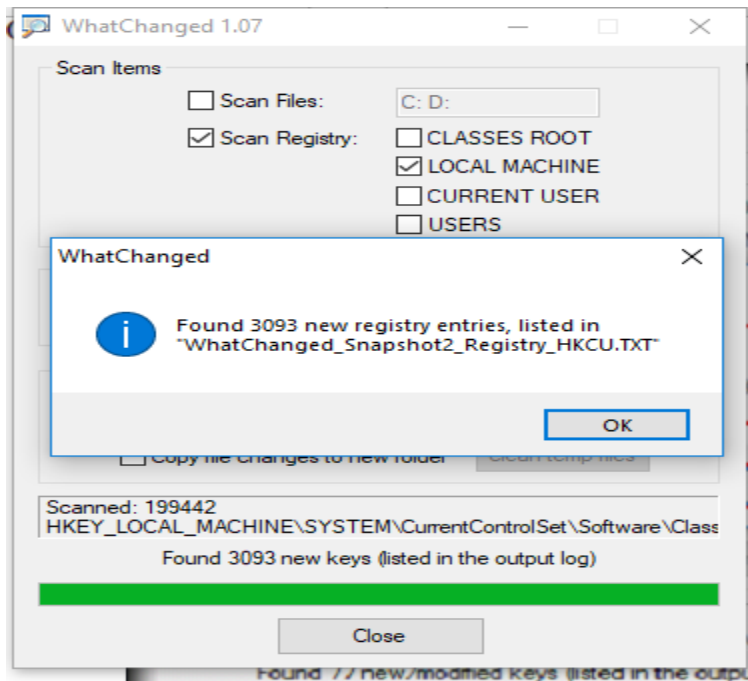
Scanned: 248
HKEY_LOCAL_MACHINE\SOFTWARE\DropboxUpdate\Update\Usage

Found 82 new/modified keys (listed in the output log)

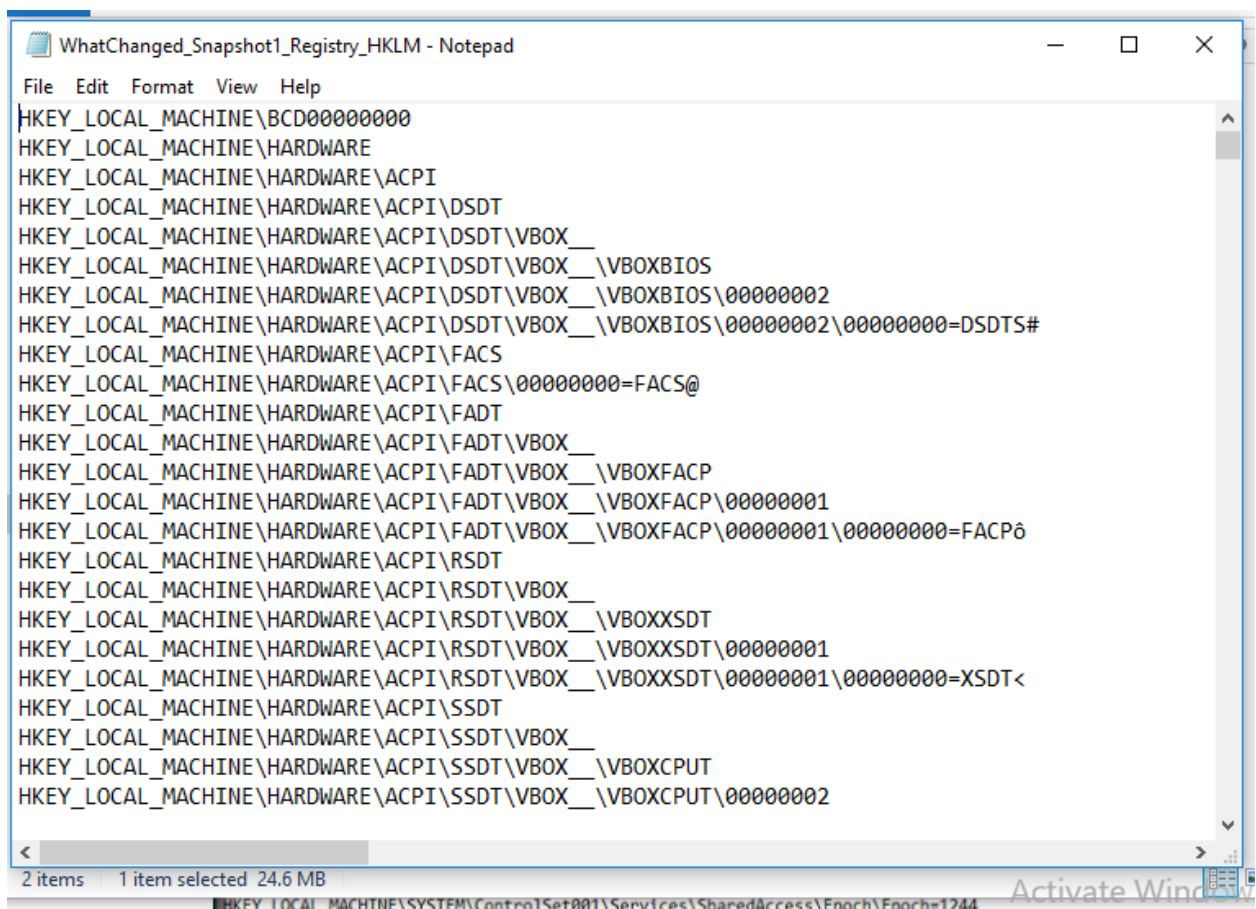
Abort



- Number of changes observed.



- WhatChanged shot1

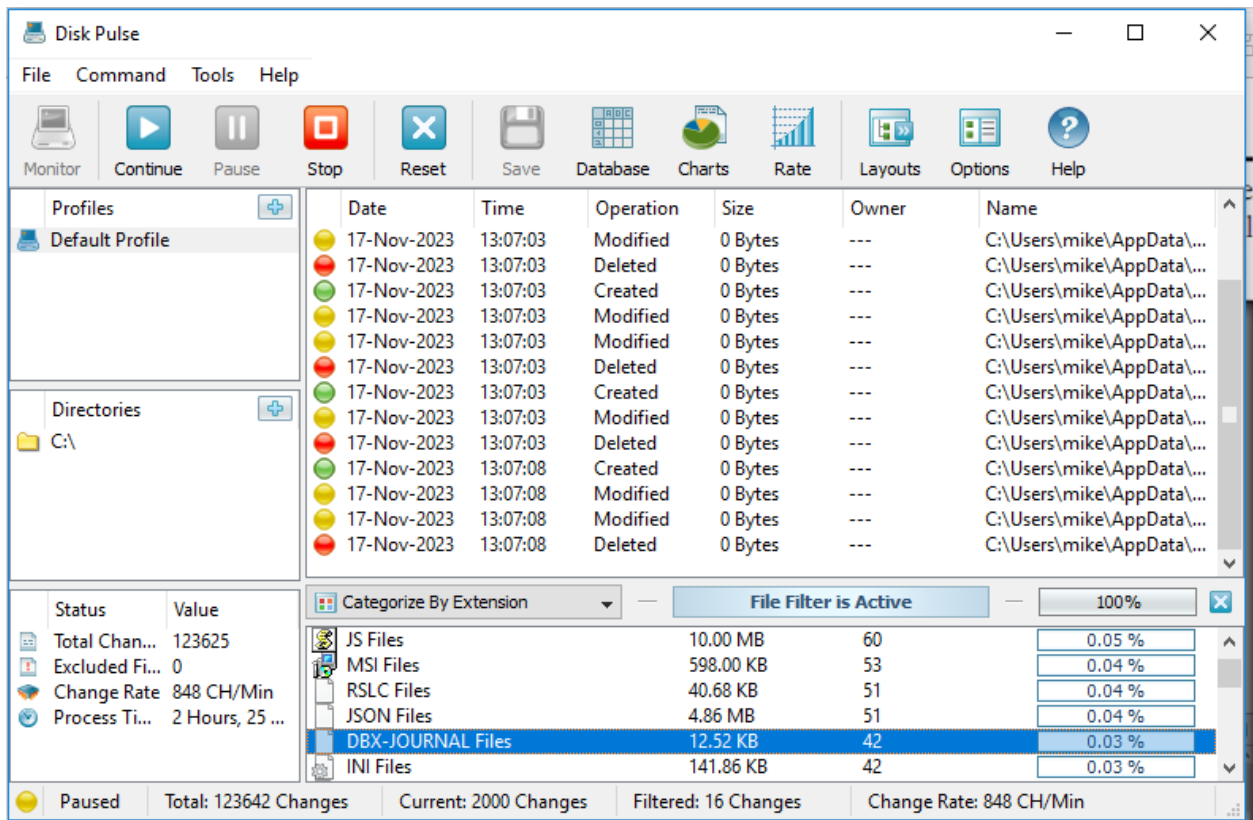


```

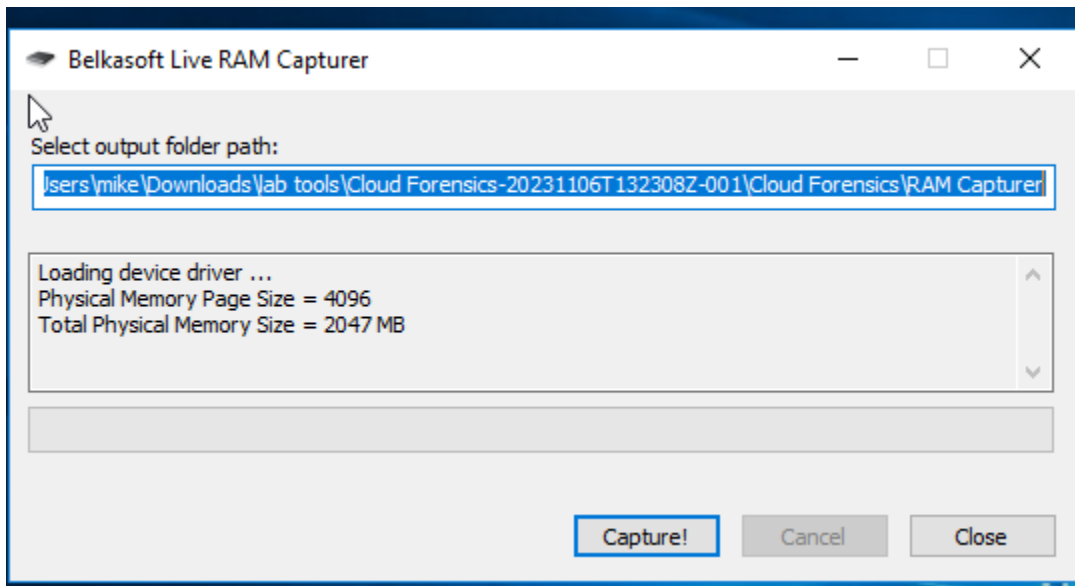
WhatChanged_Snapshot1_Registry_HKLM - Notepad
File Edit Format View Help
HKEY_LOCAL_MACHINE\BCD00000000
HKEY_LOCAL_MACHINE\HARDWARE
HKEY_LOCAL_MACHINE\HARDWARE\ACPI
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\DSDT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\DSDT\VBOX__
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\DSDT\VBOX__\VBOXBIOS
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\DSDT\VBOX__\VBOXBIOS\00000002
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\DSDT\VBOX__\VBOXBIOS\00000002\00000000=DSDTS#
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FACS
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FACS\00000000=FACS@
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FADT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FADT\VBOX__
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FADT\VBOX__\VBOXFACP
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FADT\VBOX__\VBOXFACP\00000001
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\FADT\VBOX__\VBOXFACP\00000001\00000000=FACP6
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\RSMT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\RSMT\VBOX__
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\RSMT\VBOX__\VBOXXSMT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\RSMT\VBOX__\VBOXXSMT\00000001
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\RSMT\VBOX__\VBOXXSMT\00000001\00000000=XSMT<
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\SSDT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\SSDT\VBOX__
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\SSDT\VBOX__\VBOXCPUT
HKEY_LOCAL_MACHINE\HARDWARE\ACPI\SSDT\VBOX__\VBOXCPUT\00000002
2 items 1 item selected 24.6 MB
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\SharedAccess\Firewall\Firewall1244
Activate Windows

```

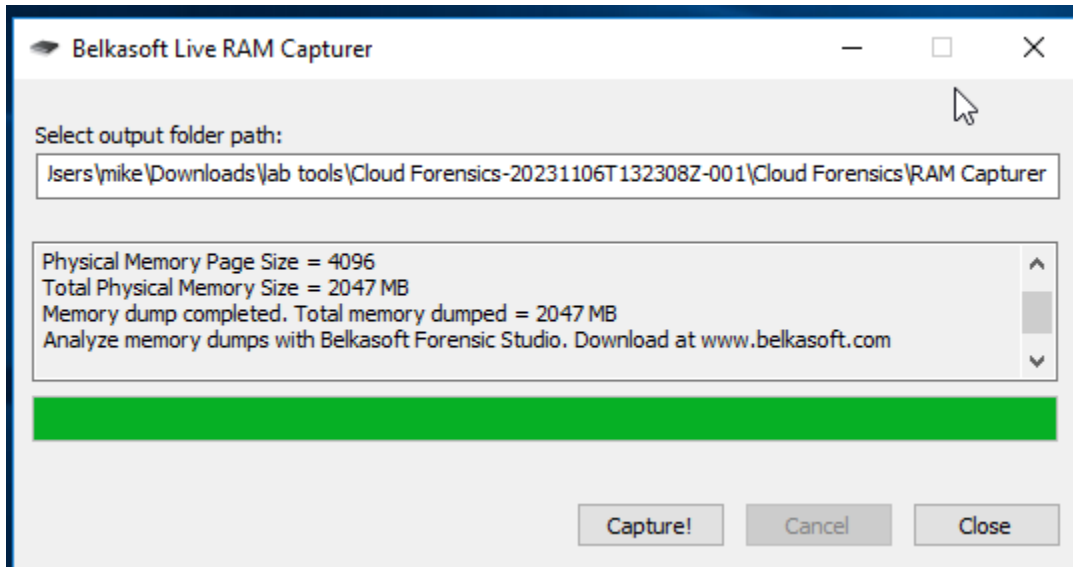
- WhatChanged shot 2



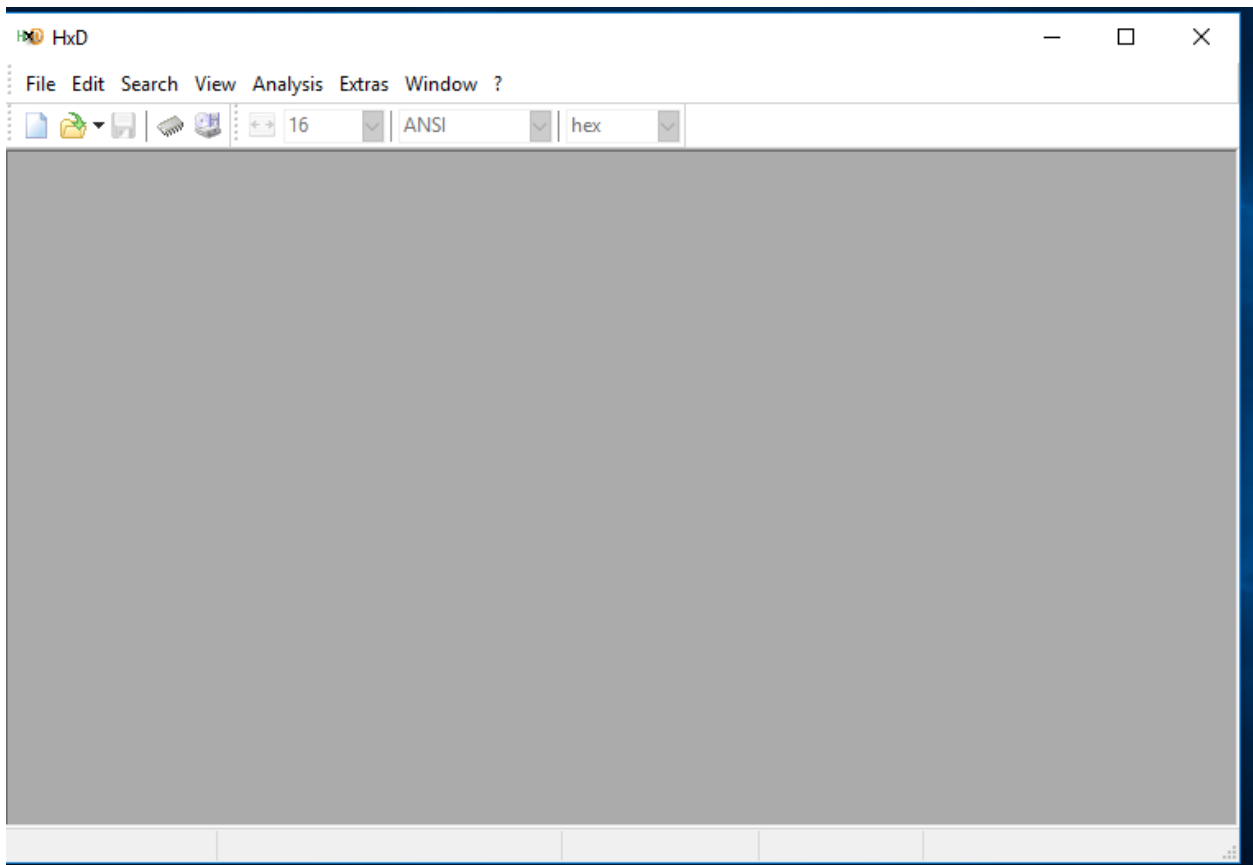
- Launch the RAM capturer and specify the output folder path.



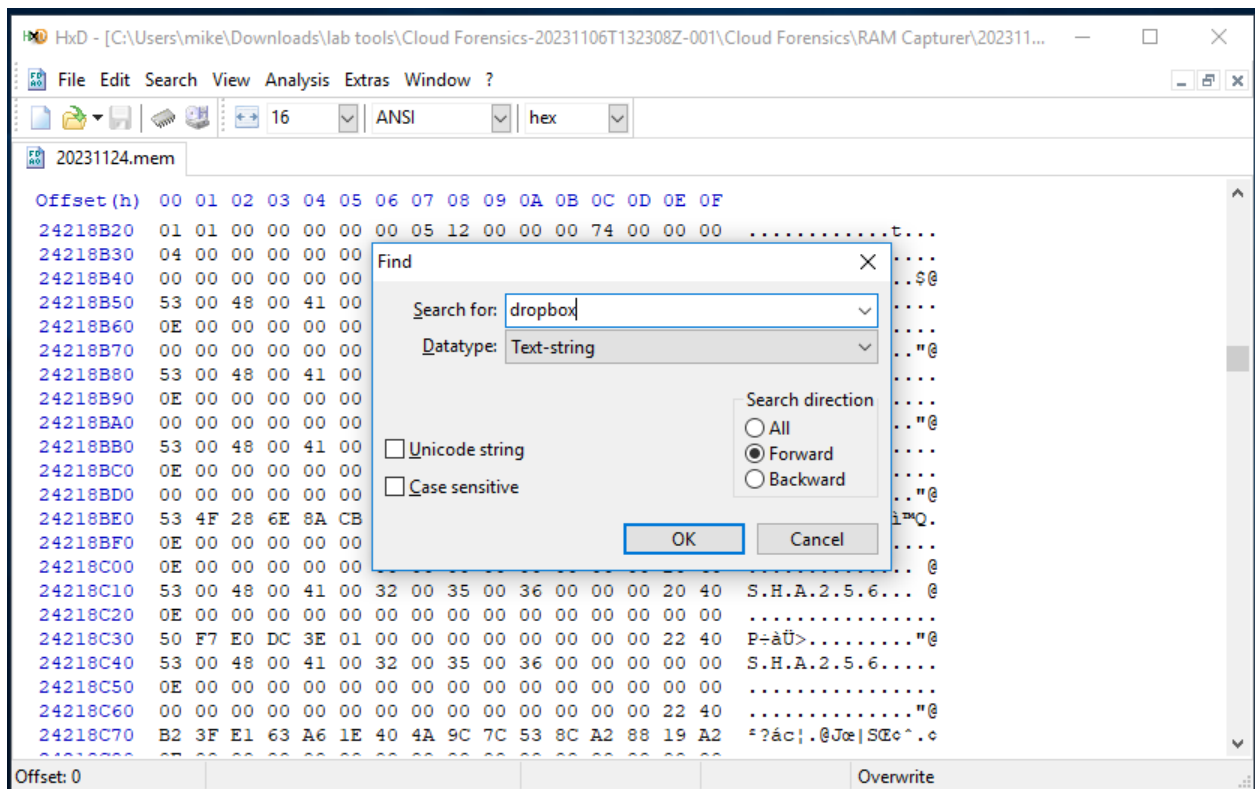
- Once the scan completes click on close.



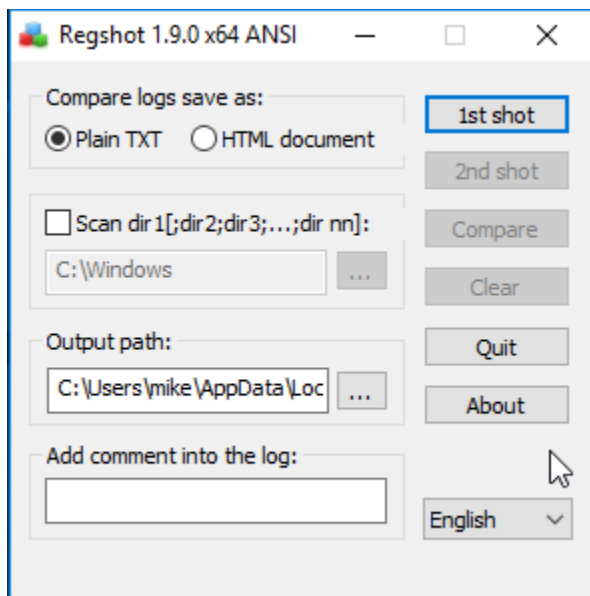
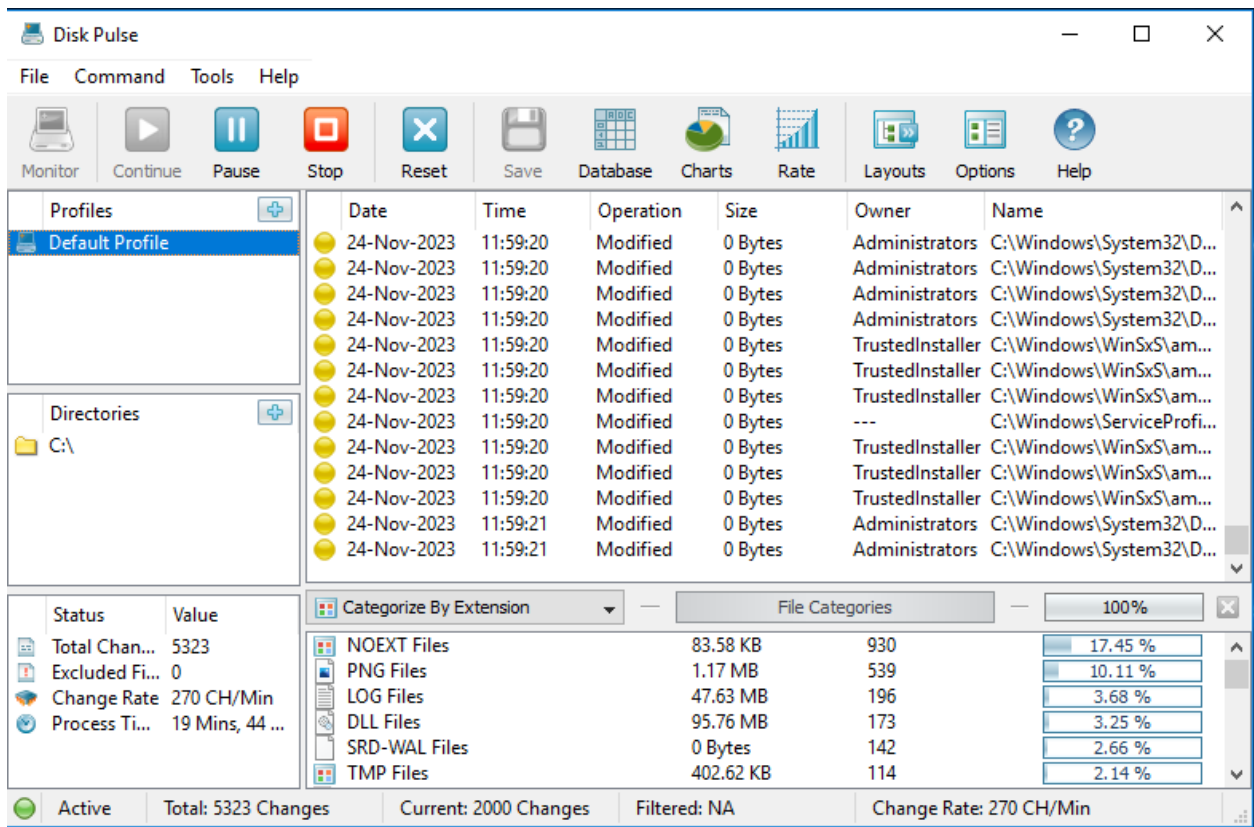
- Once the hex editor is launched, the following GUI is displayed.



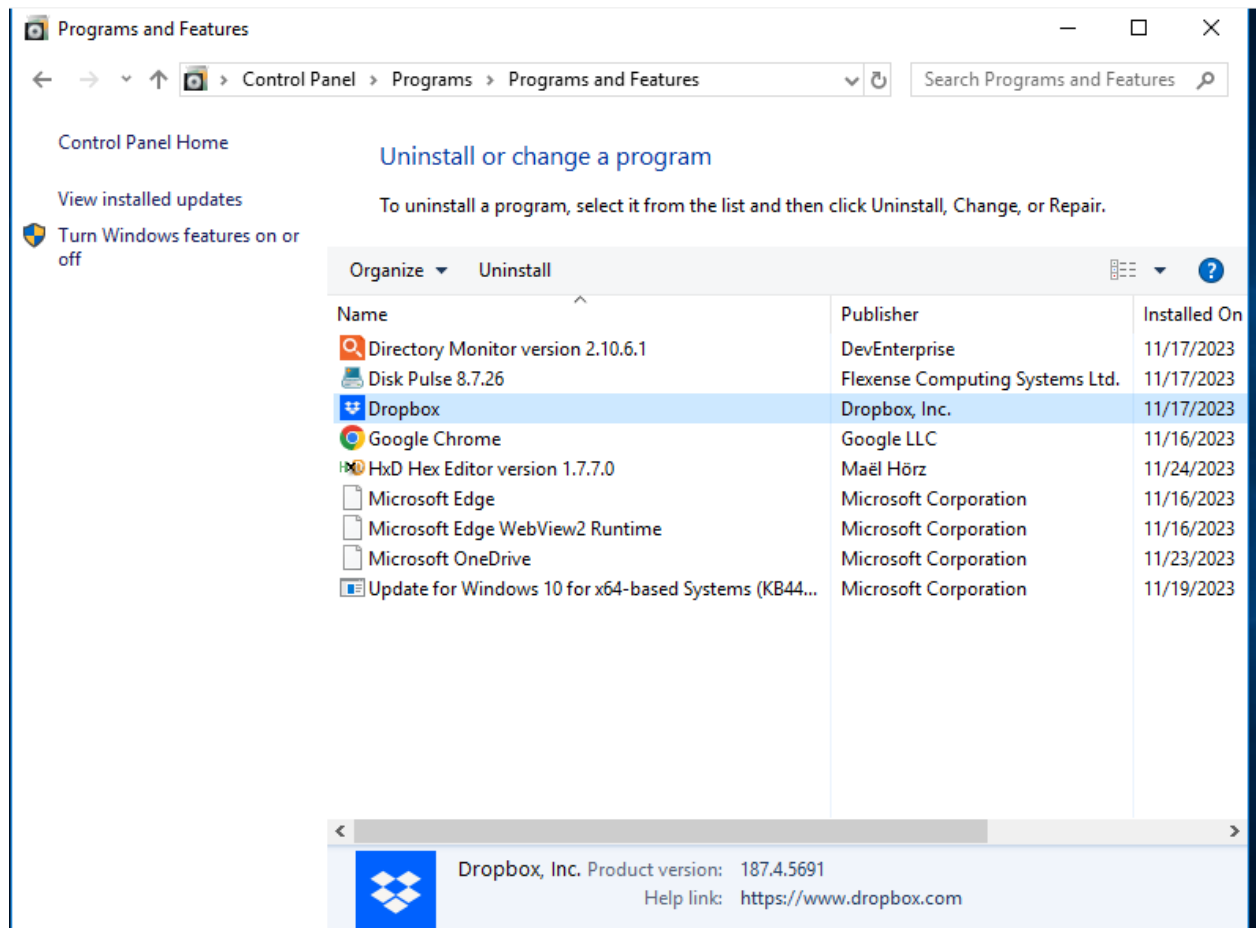
- Using Ctrl + F displays the following pop up window, such for dropbox in the search for section.

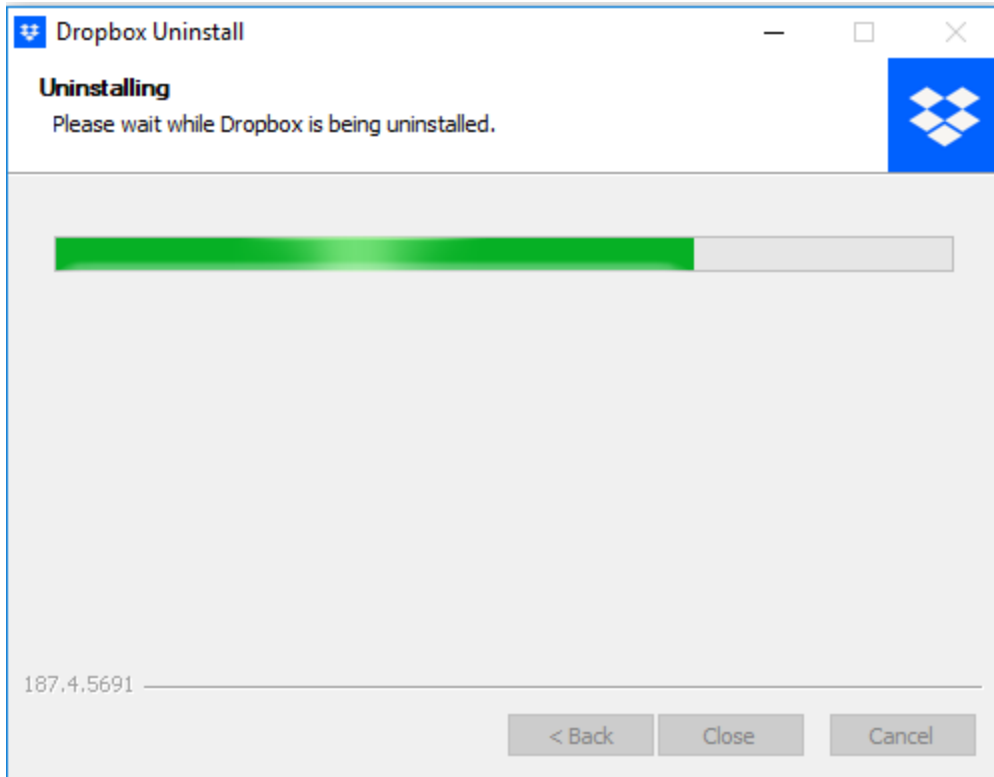


- Launch the Regshot and disk pulse click on 1st shot and monitor respectively.

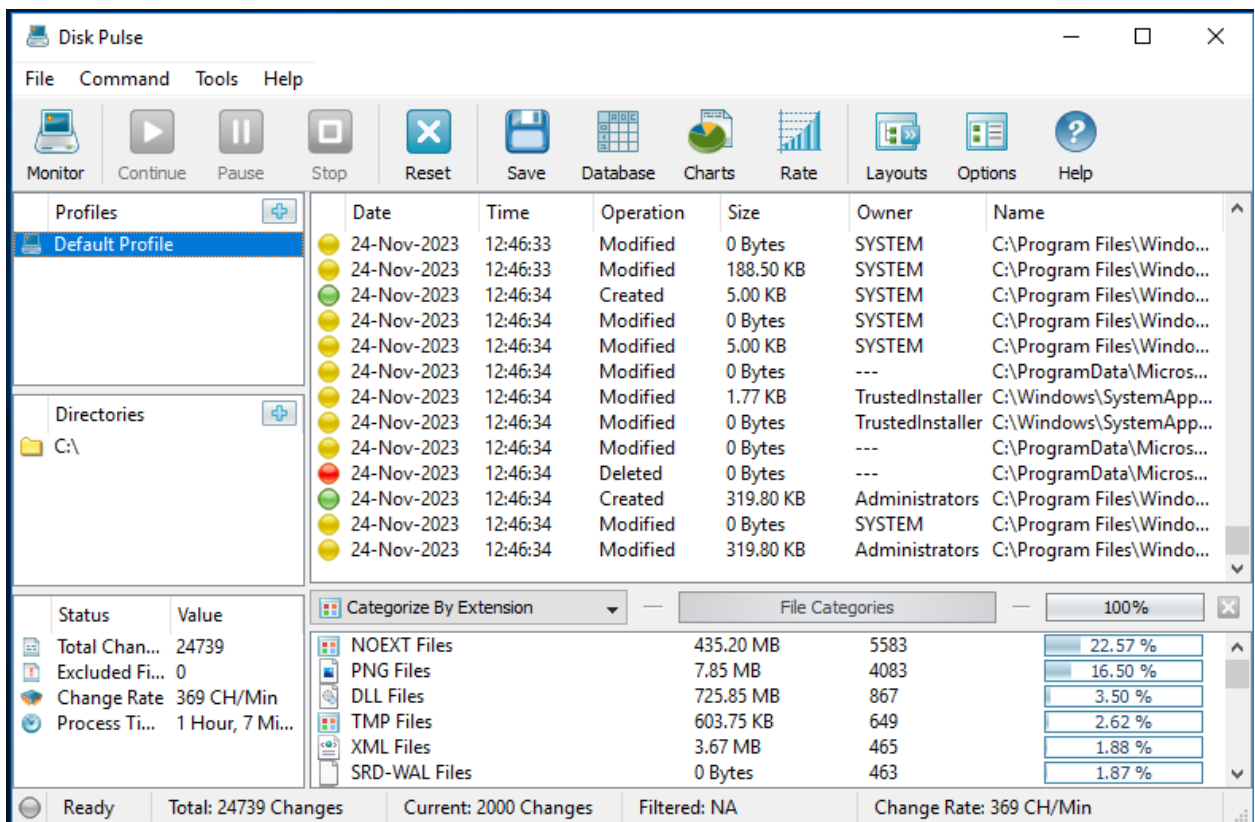


- **Navigate to the control panel, under the programs select the uninstall link and double click on Dropbox to uninstall.**





- On the already running Disk pulse, click on stop



- Select all changes and right click and copy the changes to clipboard.

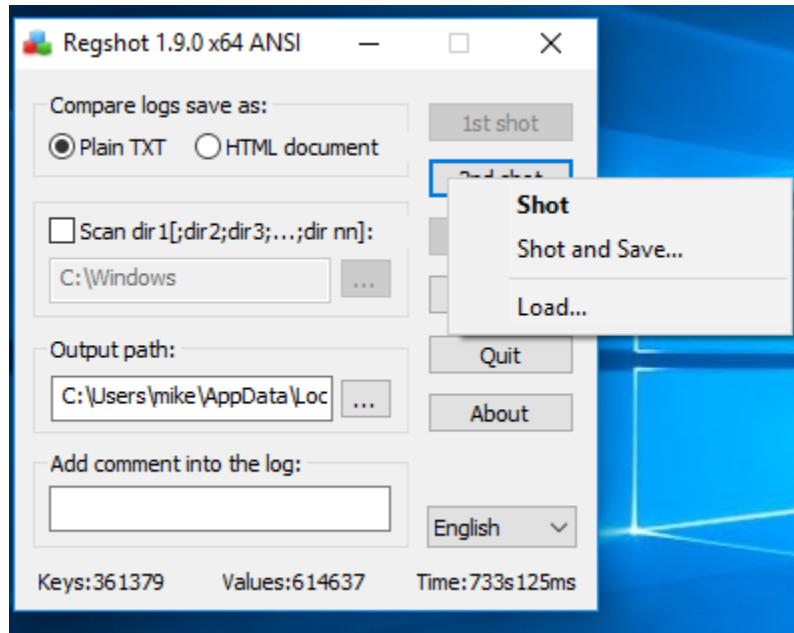
	Date	Time	Operation	Size	Owner	Name
	24-Nov-2023	12:46:33	Modified	0 Bytes	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:33	Modified	188.50 KB	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Created	5.00 KB	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Modified	0 Bytes	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Modified	5.00 KB	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Modified	0 Bytes	---	C:\ProgramData\Micros...
	24-Nov-2023	12:46:34	Modified	1.77 KB	TrustedInstaller	C:\Windows\SystemApp...
	24-Nov-2023	12:46:34	Modified	0 Bytes	TrustedInstaller	C:\Windows\SystemApp...
	24-Nov-2023	12:46:34	Modified	0 Bytes	---	C:\ProgramData\Micros...
	24-Nov-2023	12:46:34	Deleted	0 Bytes	---	C:\ProgramData\Micros...
	24-Nov-2023	12:46:34	Created	319.80 KB	Administrators	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Modified	0 Bytes	SYSTEM	C:\Program Files\Windo...
	24-Nov-2023	12:46:34	Modified	319.80 KB	Administrators	C:\Program Files\Windo...

- Paste the changes to a text file for easy analysis.

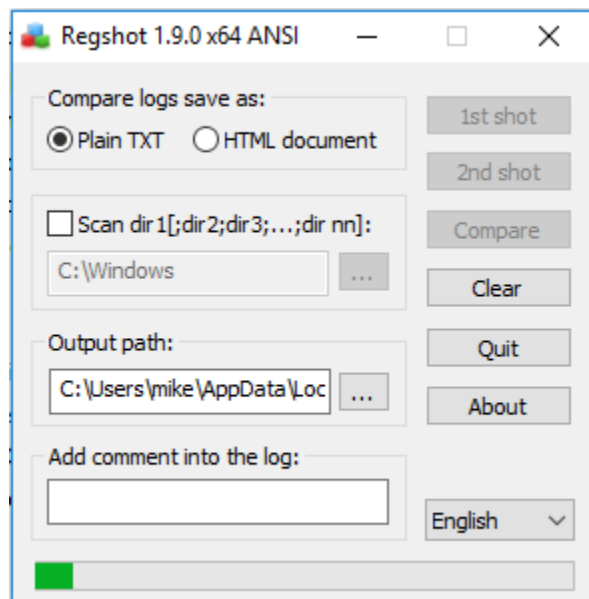
Untitled - Notepad

File	Edit	Format	View	Help
24-Nov-2023	12:46:21	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp ^
24-Nov-2023	12:46:22	Modified	6.72 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:22	Created 4.75 KB	Administrators	C:\Program Files\WindowsApp
24-Nov-2023	12:46:22	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:22	Modified	4.75 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:22	Modified	2.90 KB	TrustedInstaller C:\Windows\
24-Nov-2023	12:46:22	Modified	0 Bytes	TrustedInstaller C:\Windows\
24-Nov-2023	12:46:23	Created 3.77 KB	Administrators	C:\Program Files\WindowsApp
24-Nov-2023	12:46:23	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:23	Modified	3.77 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:23	Created 4.15 KB	Administrators	C:\Program Files\WindowsApp
24-Nov-2023	12:46:23	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:24	Modified	4.15 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:25	Created 5.40 KB	Administrators	C:\Program Files\WindowsApp
24-Nov-2023	12:46:25	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:25	Modified	5.40 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:25	Created 5.72 KB	Administrators	C:\Program Files\WindowsApp
24-Nov-2023	12:46:25	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:26	Modified	5.72 KB	Administrators C:\Program Files\Wi
24-Nov-2023	12:46:26	Modified	3.36 KB	TrustedInstaller C:\Windows\
24-Nov-2023	12:46:26	Created 0 Bytes	SYSTEM	C:\Program Files\WindowsApps\Micros
24-Nov-2023	12:46:26	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:26	Created 0 Bytes	SYSTEM	C:\Program Files\WindowsApps\Micros
24-Nov-2023	12:46:26	Modified	0 Bytes	SYSTEM C:\Program Files\WindowsApp
24-Nov-2023	12:46:26	Created 9.83 KB	Administrators	C:\Program Files\WindowsApp

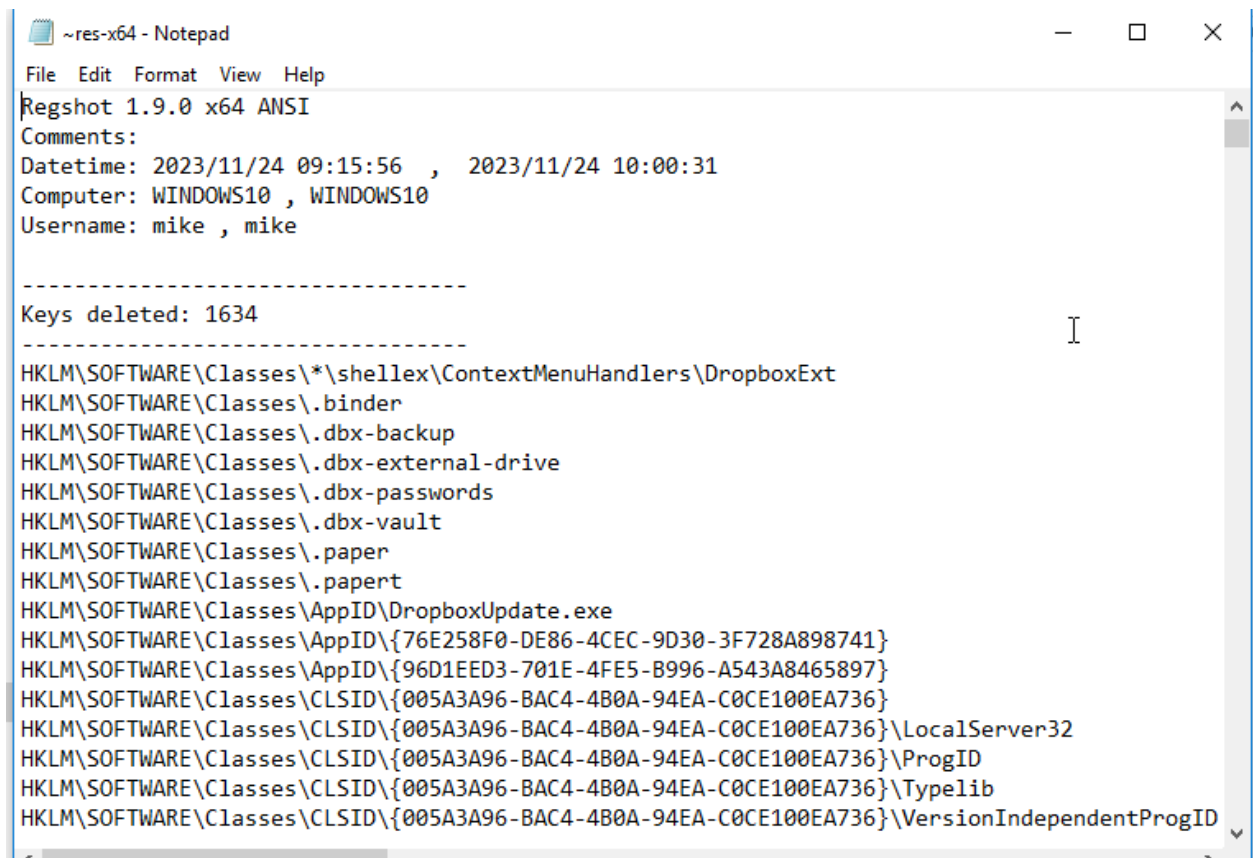
- Launch the Regshot and select 2nd shot, then shot.



- Click on the compare.



- The tool prompts a notepad file after comparing first and second shot.

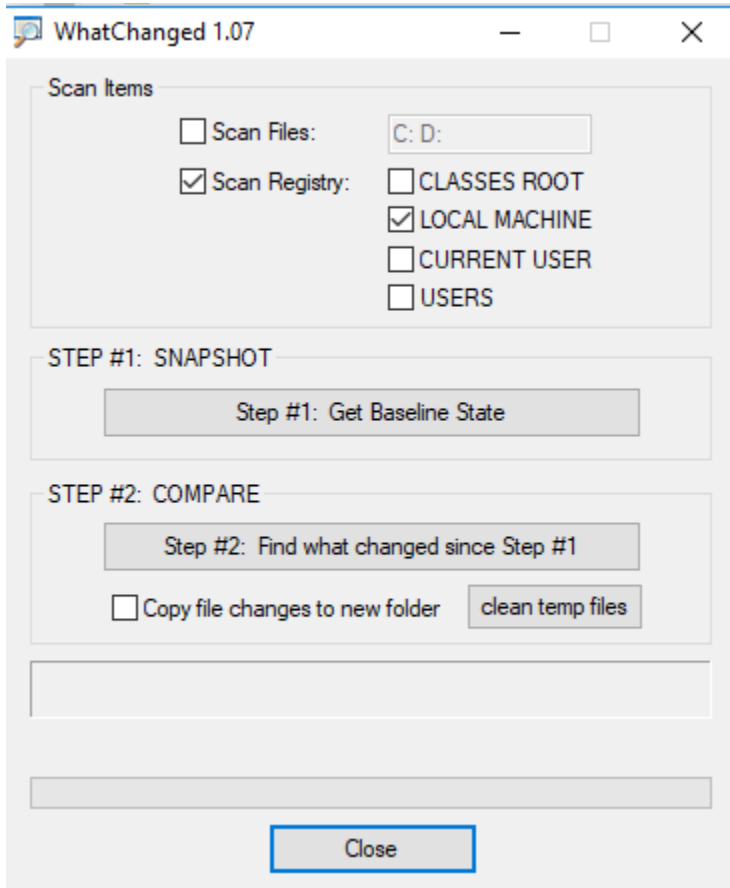


```
~res-x64 - Notepad
File Edit Format View Help
Regshot 1.9.0 x64 ANSI
Comments:
Datetime: 2023/11/24 09:15:56 , 2023/11/24 10:00:31
Computer: WINDOWS10 , WINDOWS10
Username: mike , mike

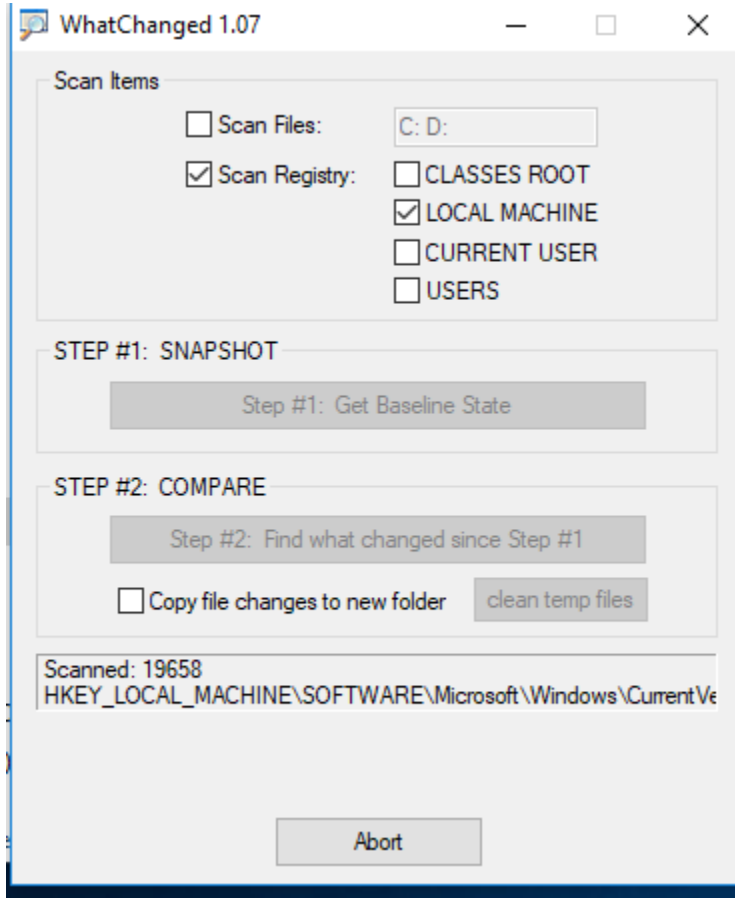
-----
Keys deleted: 1634
-----
HKLM\SOFTWARE\Classes\*\shellex\ContextMenuHandlers\DropboxExt
HKLM\SOFTWARE\Classes\*.binder
HKLM\SOFTWARE\Classes\*.dbx-backup
HKLM\SOFTWARE\Classes\*.dbx-external-drive
HKLM\SOFTWARE\Classes\*.dbx-passwords
HKLM\SOFTWARE\Classes\*.dbx-vault
HKLM\SOFTWARE\Classes\*.paper
HKLM\SOFTWARE\Classes\*.papert
HKLM\SOFTWARE\Classes\AppID\DropboxUpdate.exe
HKLM\SOFTWARE\Classes\AppID\{76E258F0-DE86-4CEC-9D30-3F728A898741}
HKLM\SOFTWARE\Classes\AppID\{96D1EED3-701E-4FE5-B996-A543A8465897}
HKLM\SOFTWARE\Classes\CLSID\{005A3A96-BAC4-4B0A-94EA-C0CE100EA736}
HKLM\SOFTWARE\Classes\CLSID\{005A3A96-BAC4-4B0A-94EA-C0CE100EA736}\LocalServer32
HKLM\SOFTWARE\Classes\CLSID\{005A3A96-BAC4-4B0A-94EA-C0CE100EA736}\ProgID
HKLM\SOFTWARE\Classes\CLSID\{005A3A96-BAC4-4B0A-94EA-C0CE100EA736}\Typelib
HKLM\SOFTWARE\Classes\CLSID\{005A3A96-BAC4-4B0A-94EA-C0CE100EA736}\VersionIndependentProgID
```


INVESTIGATION OF GOOGLE DRIVE

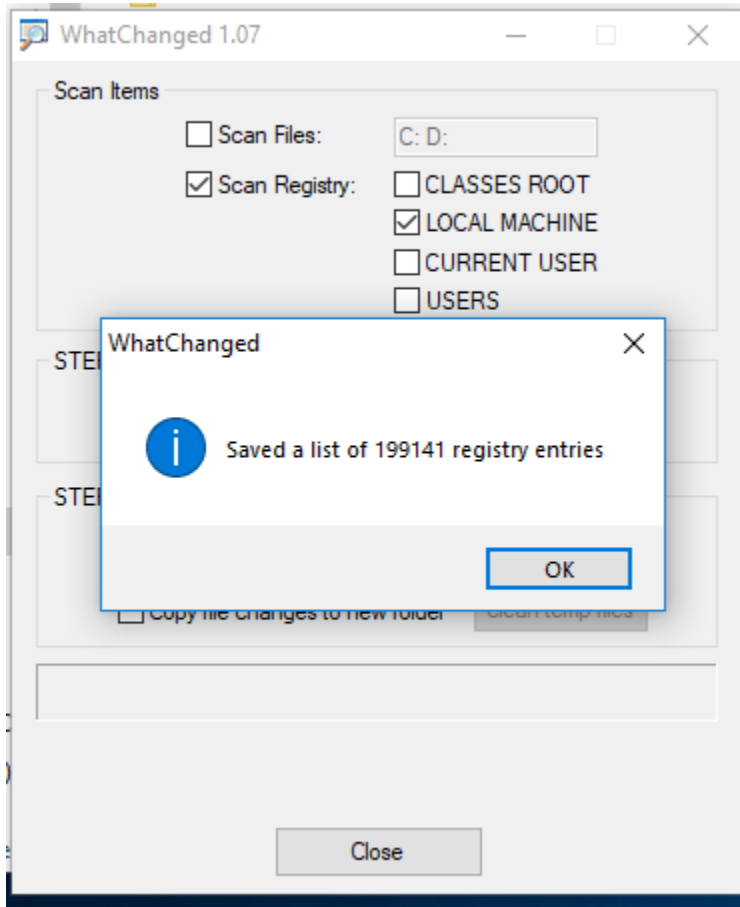
- Launch the WhatChanged and select the *scan Registry* and *LOCAL MACHINE*.



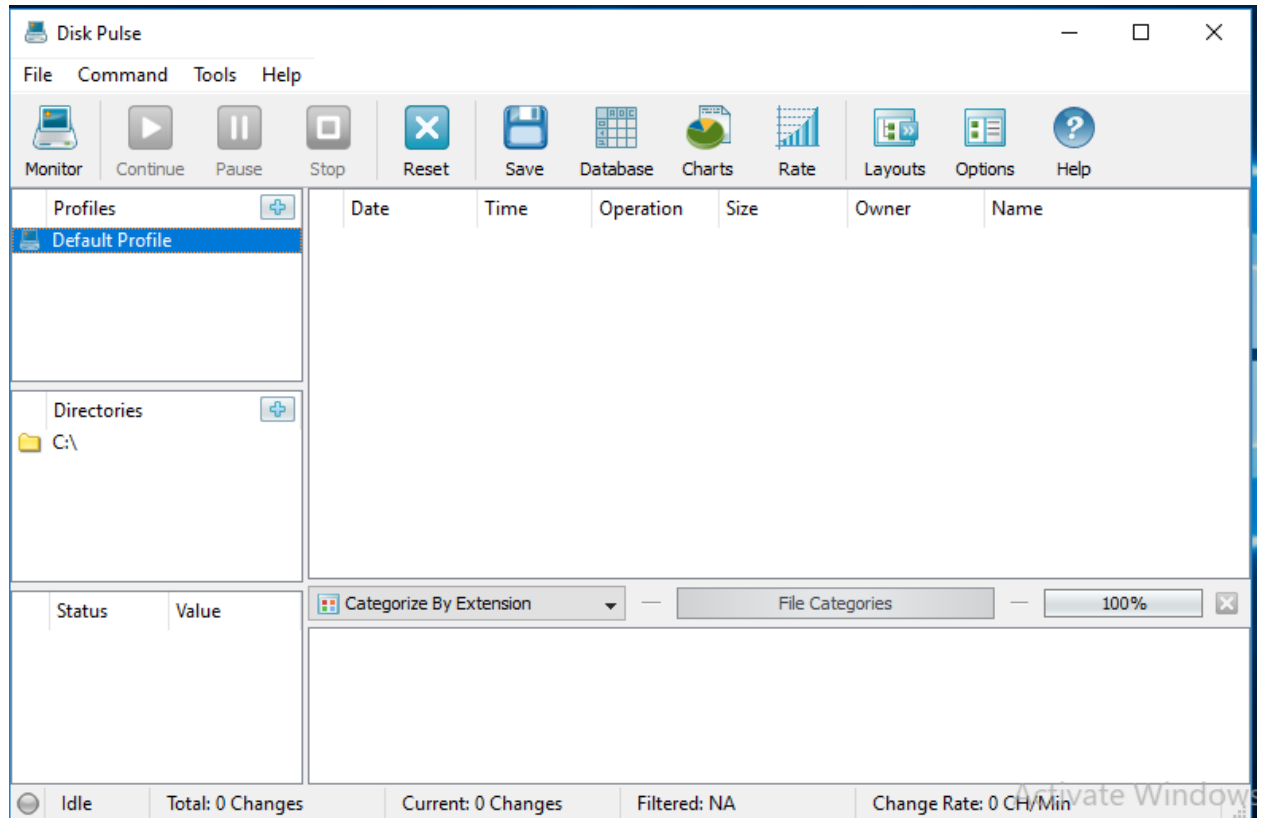
- Click on **step#1: Get Baseline State.**



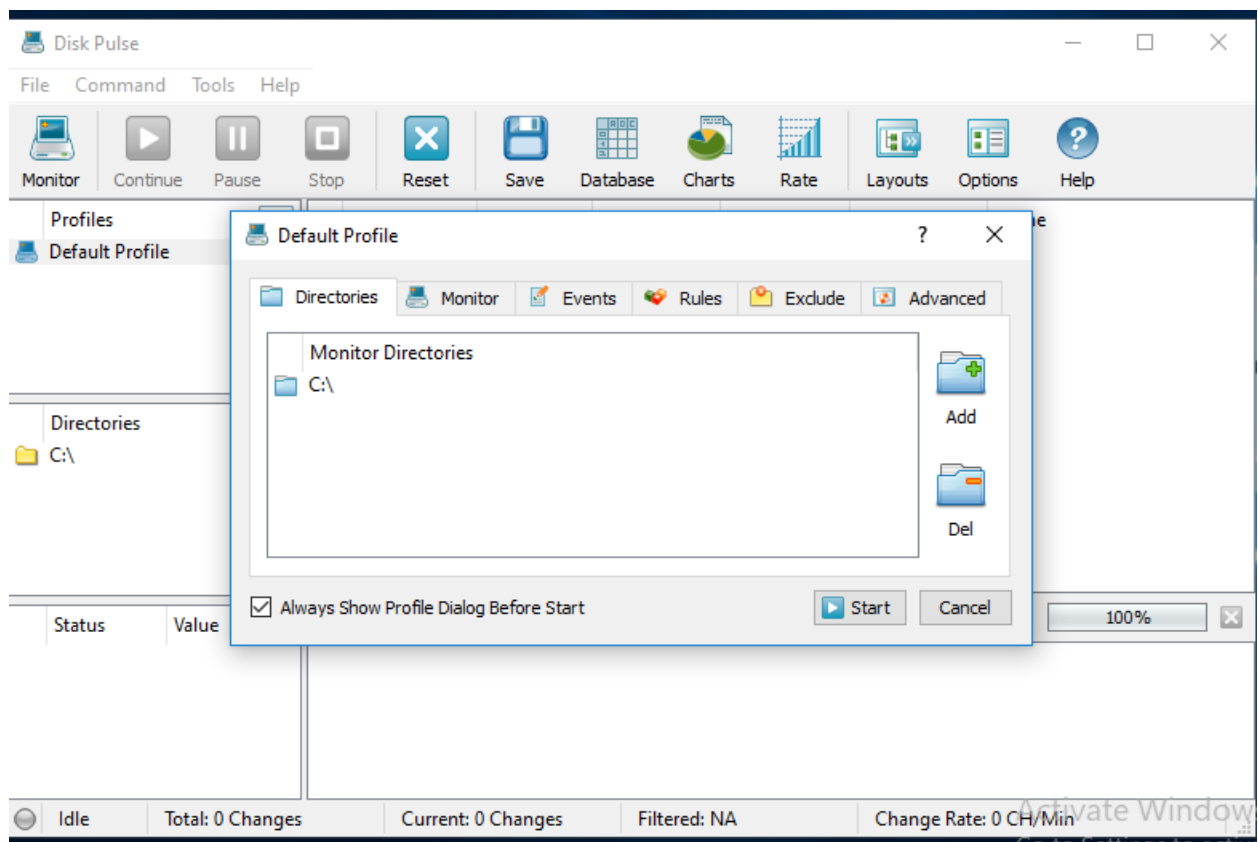
- Dialog box displaying total number of entries recorded.



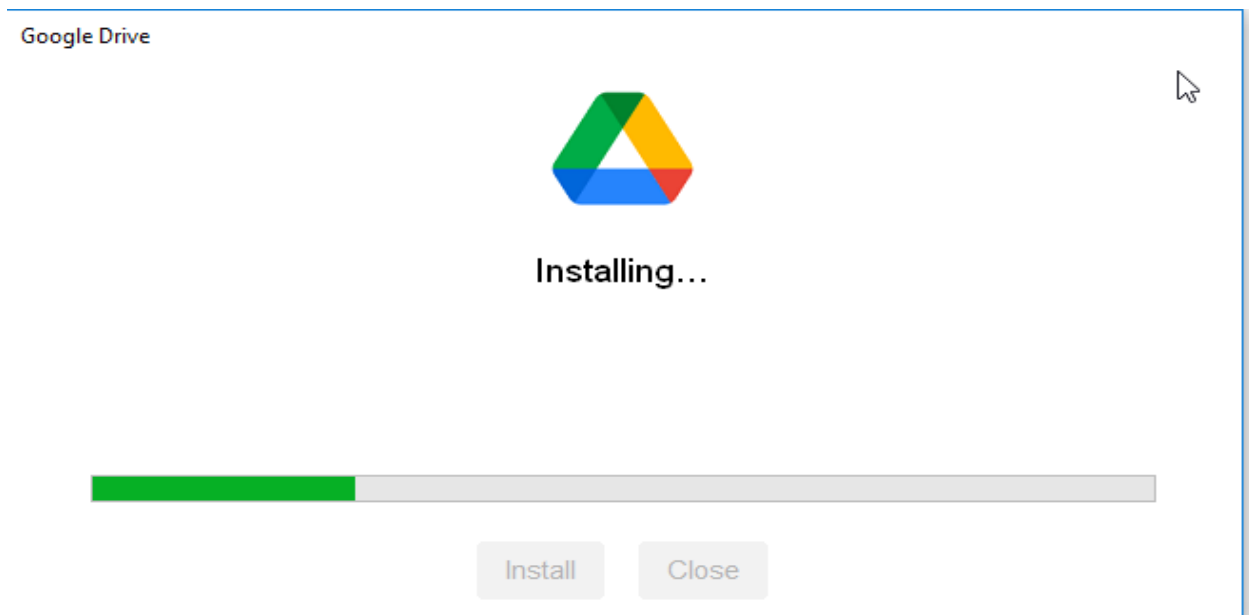
- Launch the Disk Pulse.



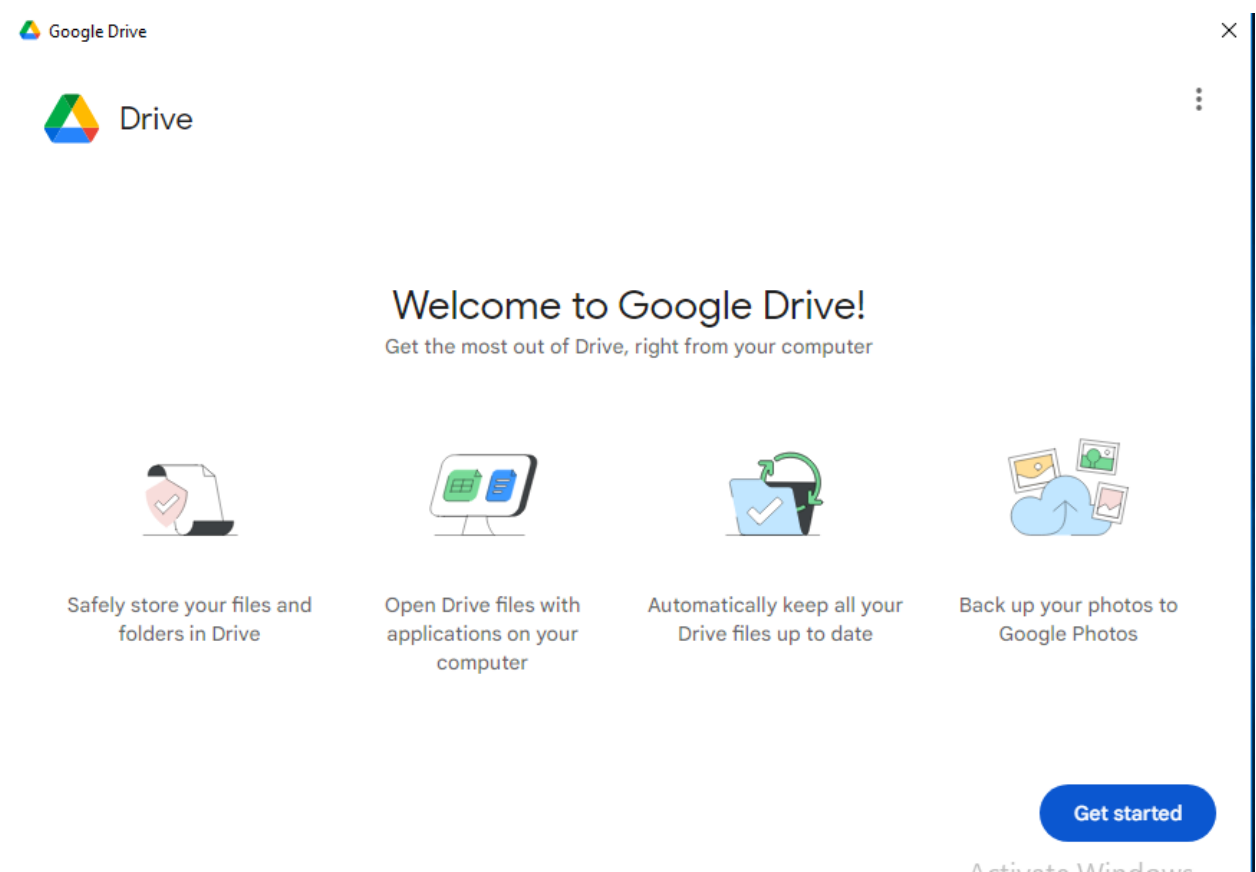
- Click on monitor, the dialog window displays with the C:\ added by default. Click on start.



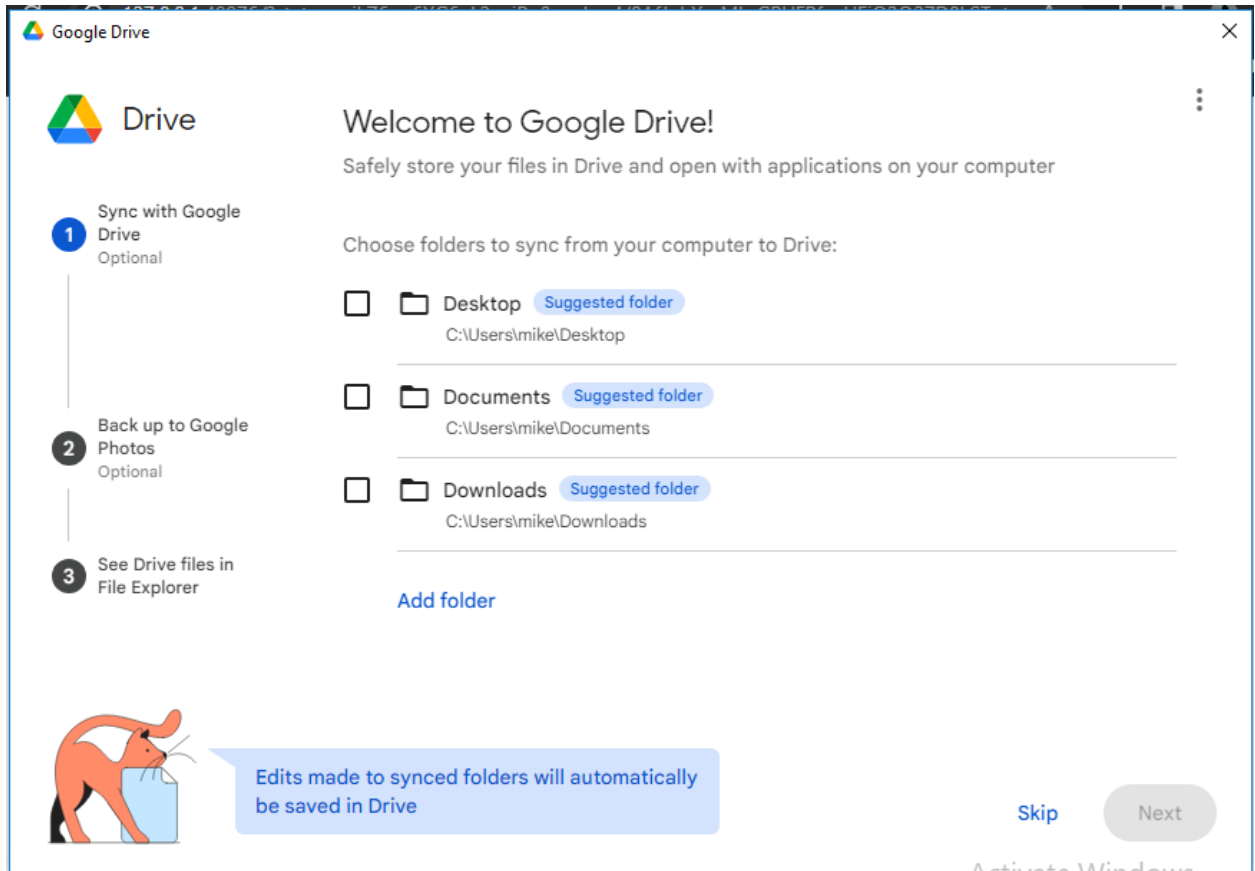
- **Install the google drive client.**



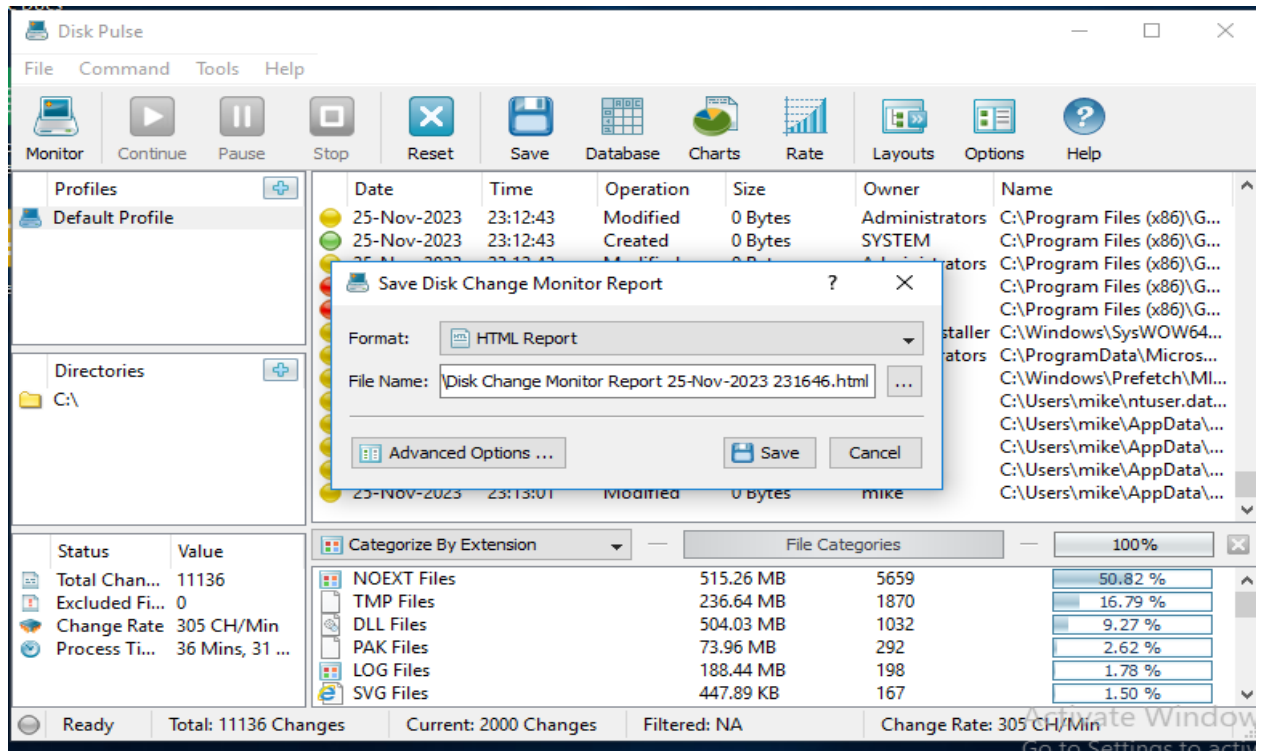
- **Once done, click on the app icon to launch the google drive and click on 'Get started'.**



- Select the folder of choice to sync.



- **Navigate back to the already running disk pulse and click on 'Stop' to stop monitoring the process**



- Click on save icon to save all entries. From the 'save disk change monitor report' prompt, select the text format from the drop-down list and click on save button.

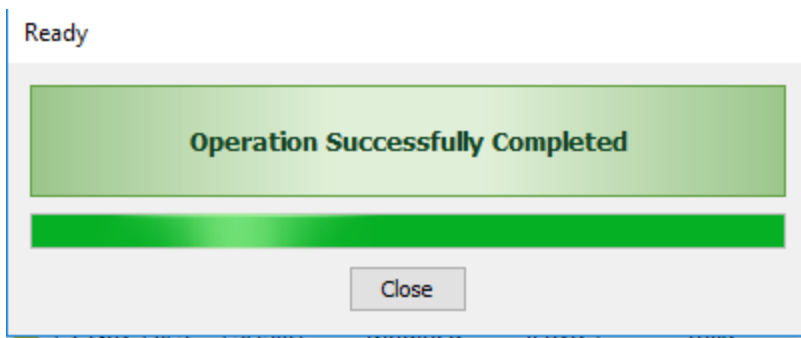
The screenshot shows the Disk Pulse application window. A warning dialog box is displayed in the center, asking "Monitor is active, do you want to stop?" with "Yes" and "No" buttons. The background interface includes a menu bar (File, Command, Tools, Help), a toolbar with icons for Monitor, Continue, Pause, Stop, Reset, Save, Database, Charts, Rate, Layouts, Options, and Help. The main area is divided into several sections: Profiles (Default Profile), Directories (C:\), a table of file changes, File Categories, and a status bar at the bottom.

Date	Time	Operation	Size	Owner	Name
25-Nov-2023	23:12:27	Modified	20.24 KB	TrustedInstaller	C:\Windows\SysWOW64...
25-Nov-2023	23:12:27	Modified	26.77 KB	TrustedInstaller	C:\Windows\SysWOW64...
25-Nov-2023	23:12:27	Modified	987.75 KB	TrustedInstaller	C:\Windows\SysWOW64...
25-Nov-2023	23:12:27	Modified	34.00 KB	TrustedInstaller	C:\Windows\SysWOW64...
25-Nov-2023	23:12:27	Modified	60.00 KB	TrustedInstaller	C:\Windows\SysWOW64...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:27	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:32	Modified	60.00 KB	mike	C:\Users\mike\AppData\...
25-Nov-2023	23:12:32	Modified	0 Bytes	mike	C:\Users\mike\AppData\...

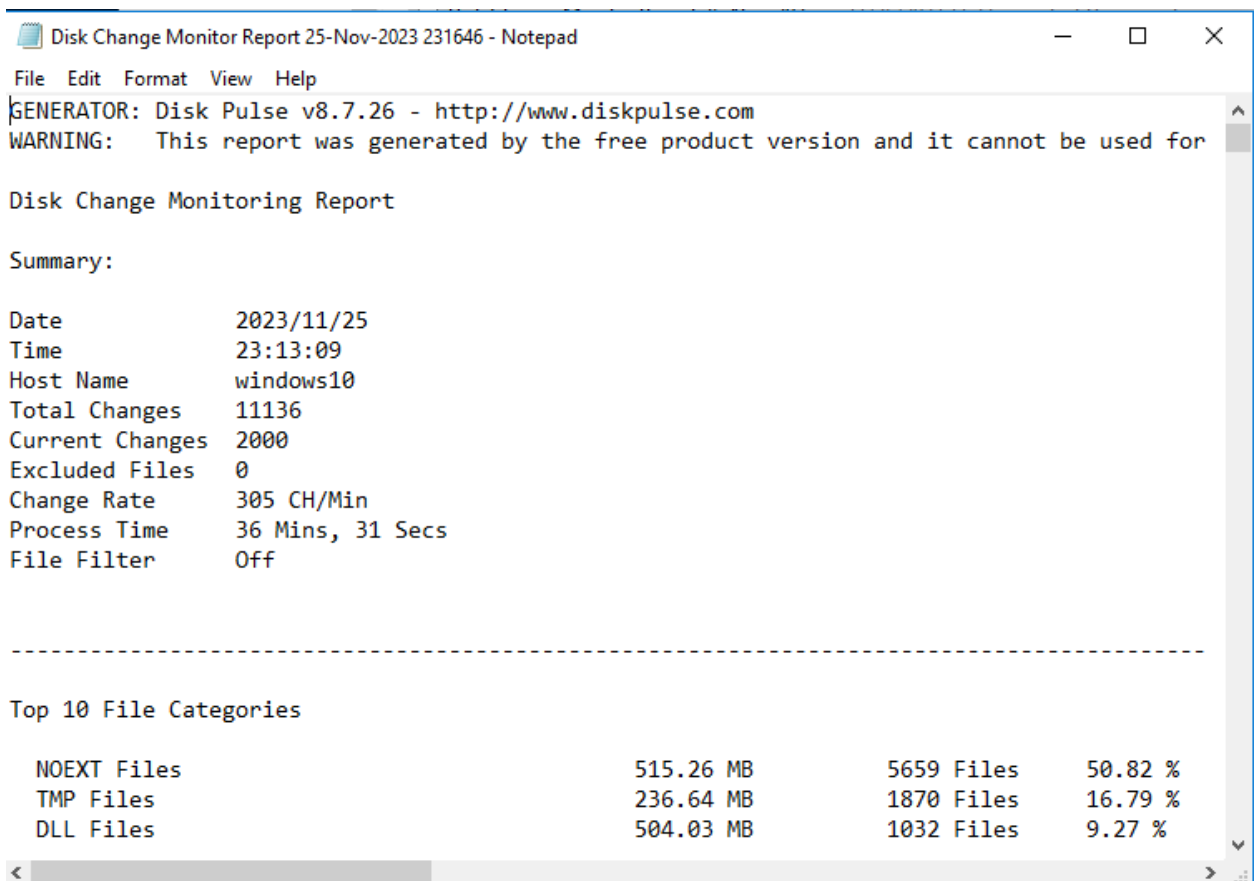
File Categories	Count	Percentage
NOEXT Files	5636	50.81 %
TMP Files	1859	16.76 %
DLL Files	1029	9.28 %
PAK Files	292	2.63 %
LOG Files	197	1.78 %
SVG Files	167	1.51 %

Status: Active | Total: 11093 Changes | Current: 2000 Changes | Filtered: NA | Change Rate: 309 CH/Min

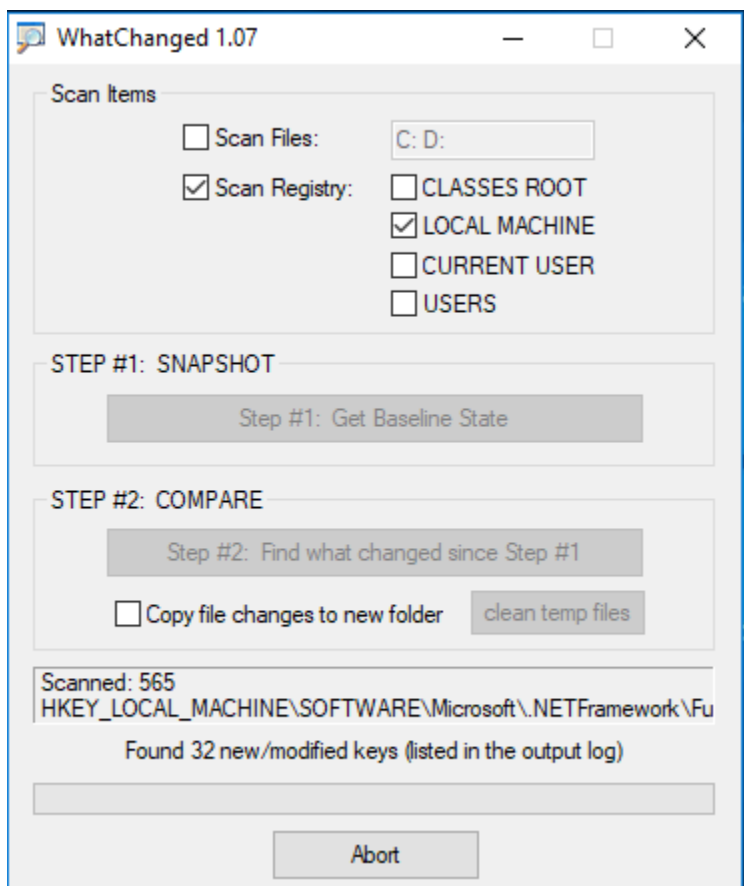
The screenshot shows a dropdown menu for selecting the report format. The options are: Text Report, HTML Report, HTML Summary, PDF Report, PDF Summary (highlighted), Text Report, Text Summary, CSV Report, CSV Summary, XML Report, and XML Summary.



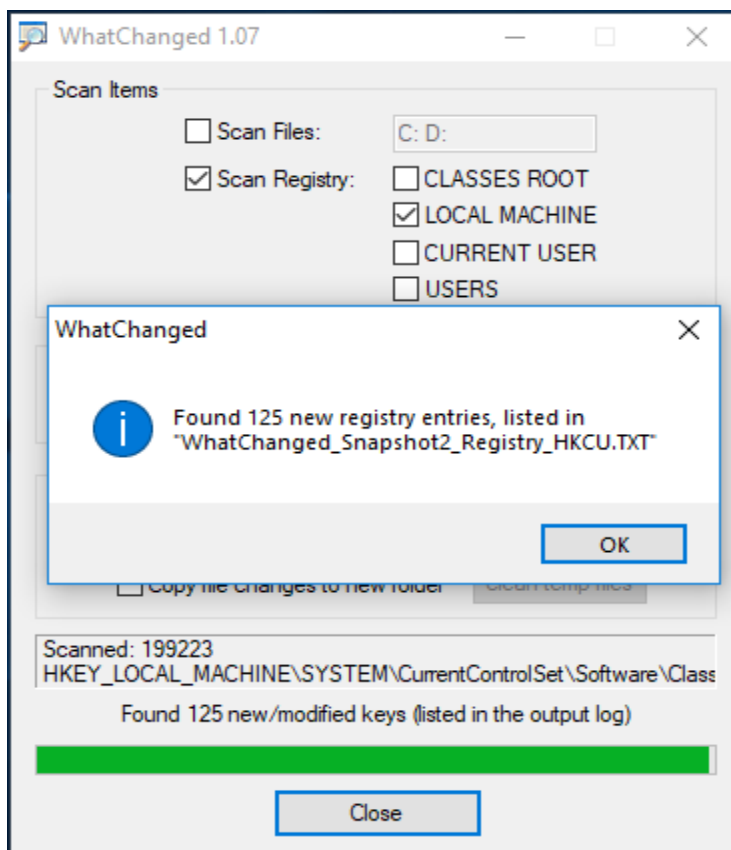
- A text file with all changes listed on it generated by disk pulse.



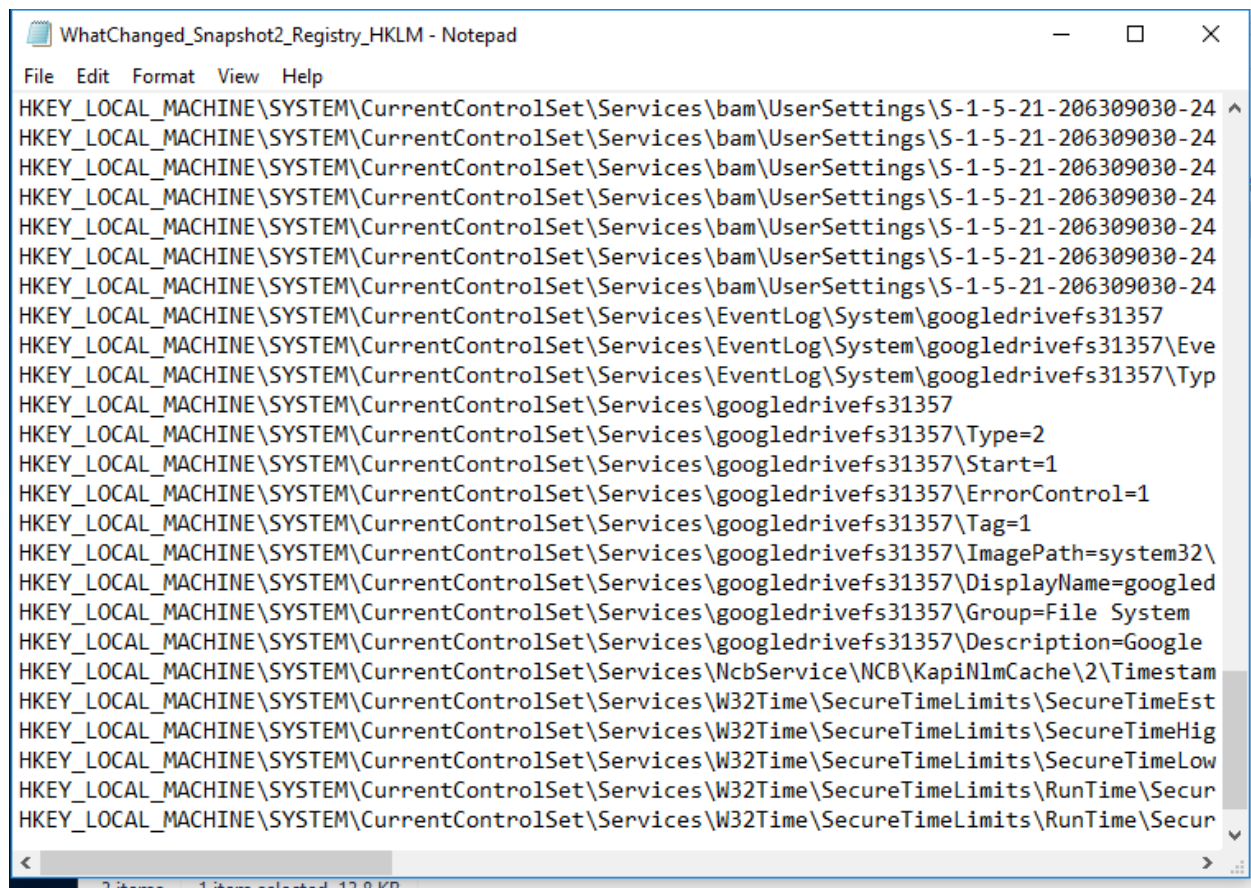
- **Navigate back to WhatChanged and click on 'step#2: find what changed since step#1'.**



- After the scanning, WhatChanged tools displays a dialog box listing new entries.



- List of all entries changed saved on a text file by WhatChanged.

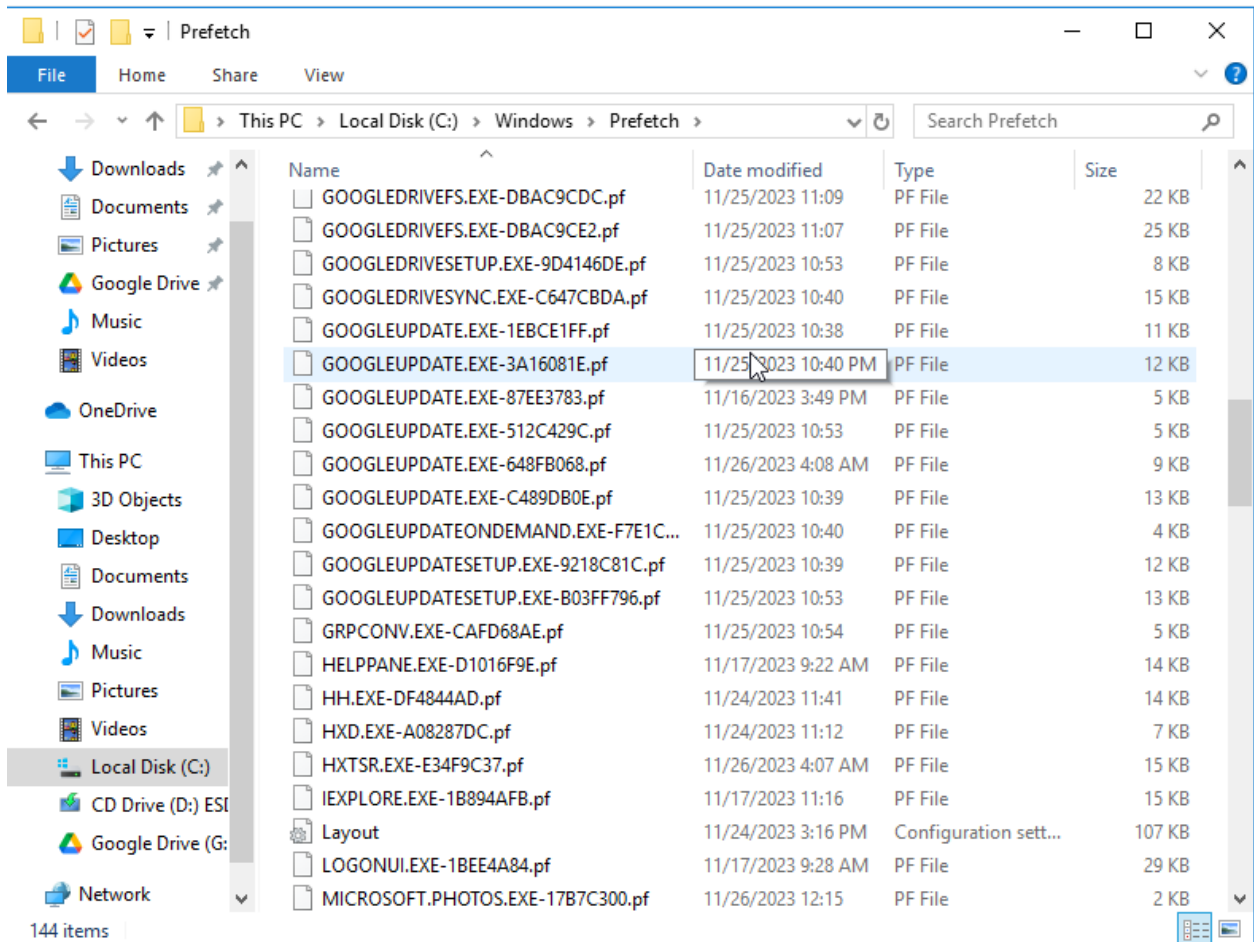


```

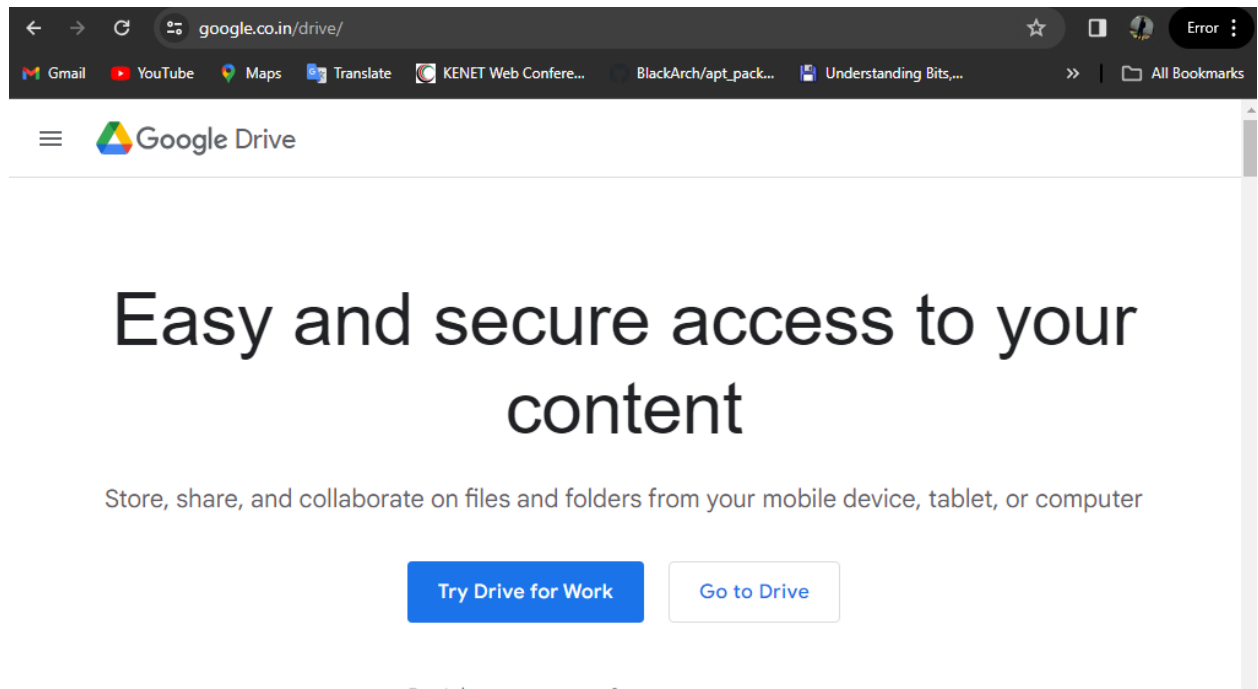
WhatChanged_Snapshot2_Registry_HKLM - Notepad
File Edit Format View Help
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\bam\UserSettings\S-1-5-21-206309030-24
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\EventLog\System\googledrives31357
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\EventLog\System\googledrives31357\Eve
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\EventLog\System\googledrives31357\Typ
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\Type=2
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\Start=1
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\ErrorControl=1
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\Tag=1
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\ImagePath=system32\
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\DisplayName=googled
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357\Group=File System
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\googledrives31357>Description=Google
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\NcbService\NCB\KapiNlmCache\2\Timestam
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\SecureTimeLimits\SecureTimeEst
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\SecureTimeLimits\SecureTimeHig
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\SecureTimeLimits\SecureTimeLow
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\SecureTimeLimits\RunTime\Secur
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\SecureTimeLimits\RunTime\Secur

```

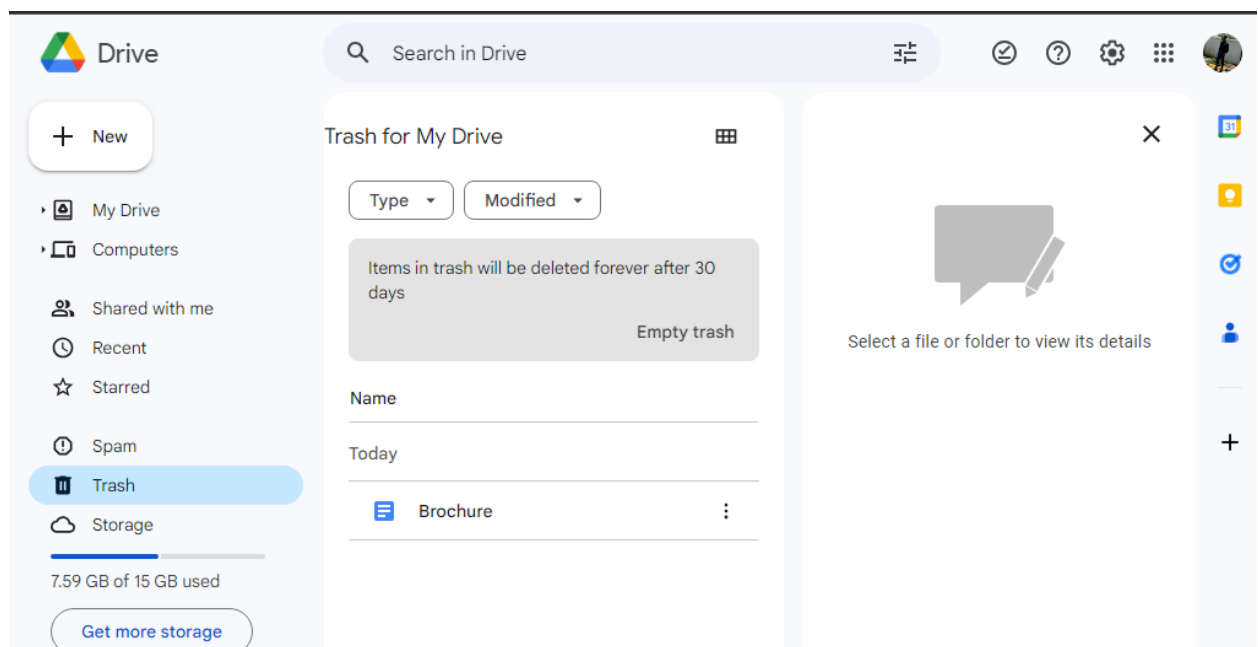
- Other files created during installation by google drive.



- In the URL address bar, enter ; <https://www.google.co.in/drive> once the homepage appears, click on go to drive.

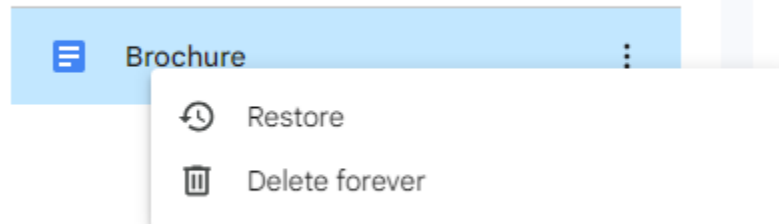


- Click on trash on the left pane to view deleted files.

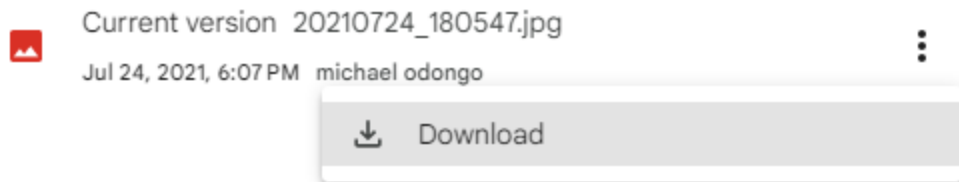


- In the trash section, right click on any image to see options such as: Restore and Delete Forever.

Today



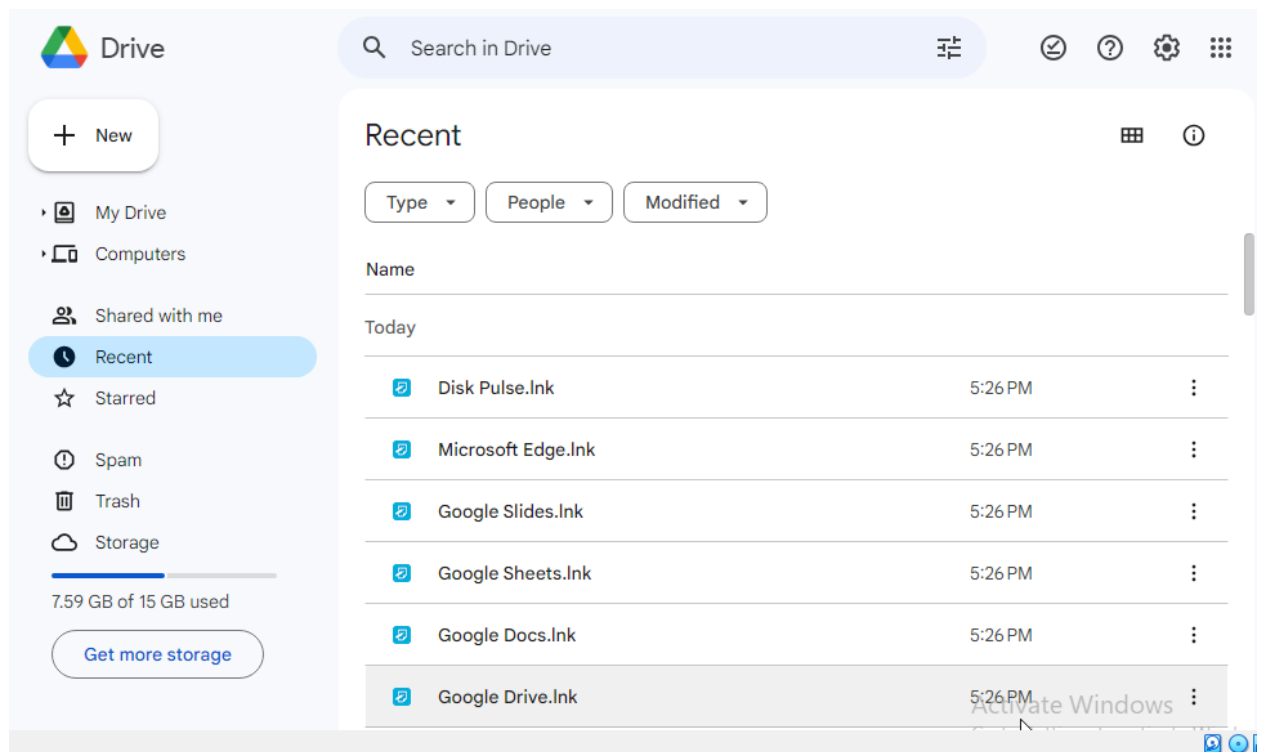
- In my drive section, right click on any image and click on manage versions option to see its versions. In the manage versions, click on the ellipsis on the far right to download the file.



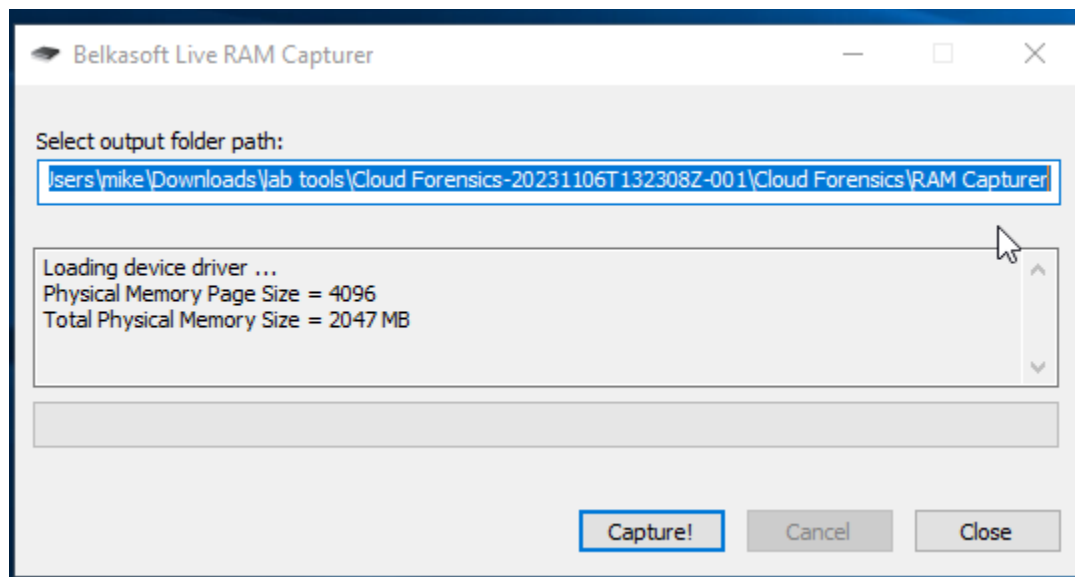
Close

Act
-

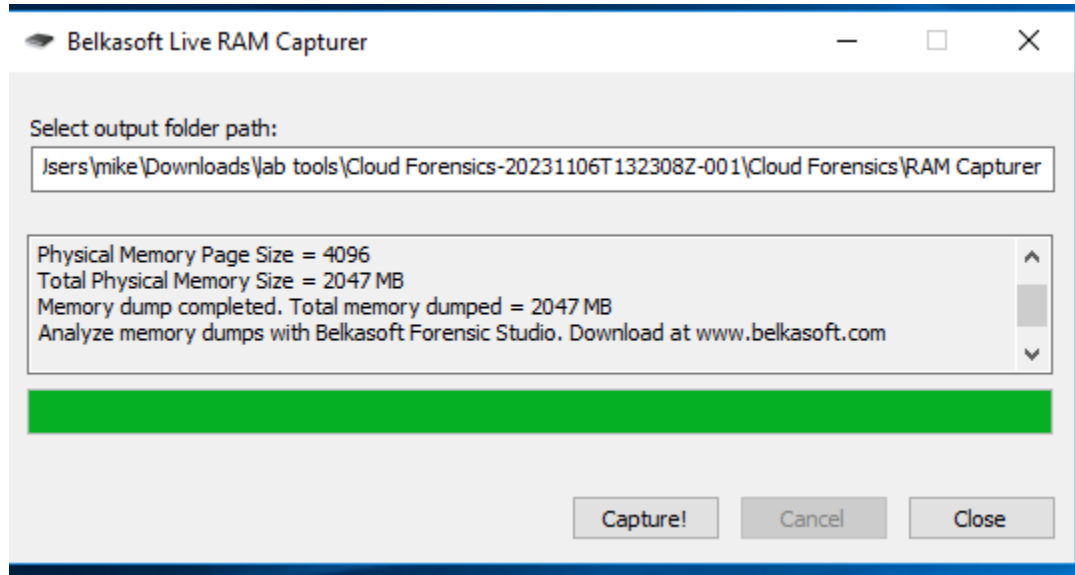
- Click on the recent in the left pane to view the recently accessed files.



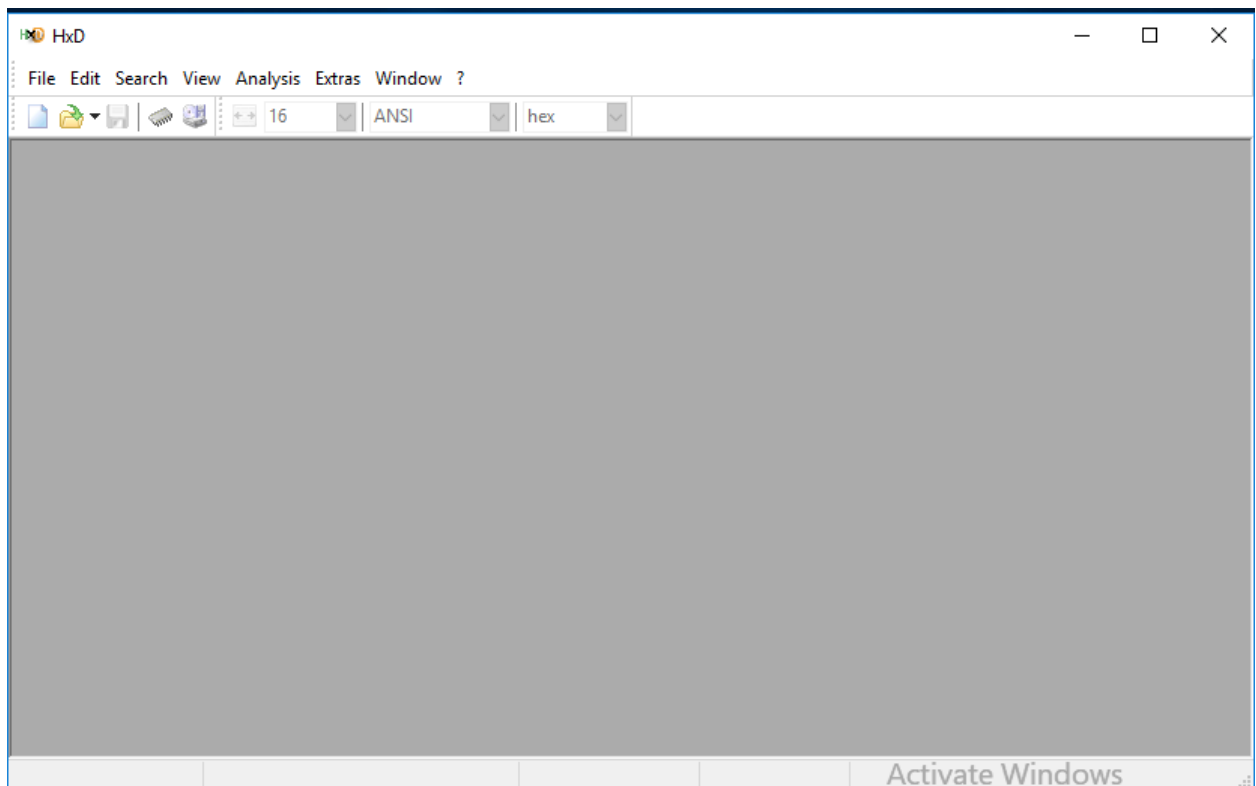
- Launch the RAM capturer.



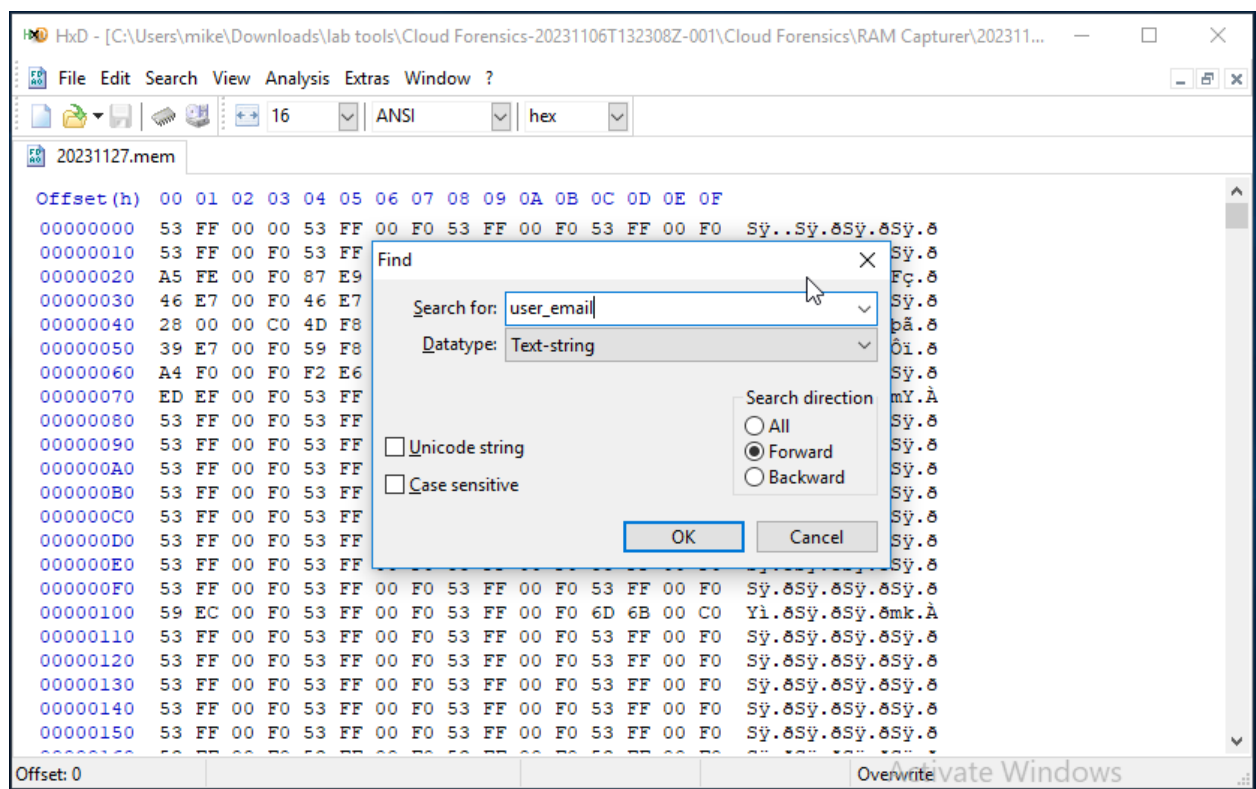
- Click on the capture button and once done click on close.



- Launch the HxD tool and click on open icon to view hex value of captured RAM data.



- Access the find dialog box using Ctrl + F.



- Launch disk pulse and click on monitor.

The screenshot shows the Disk Pulse application window. The interface includes a menu bar (File, Command, Tools, Help), a toolbar with icons for Monitor, Continue, Pause, Stop, Reset, Save, Database, Charts, Rate, Layouts, Options, and Help. The main area is divided into several sections:

- Profiles:** A list containing "Default Profile".
- Directories:** A list containing "C:\".
- Status/Value Table:**

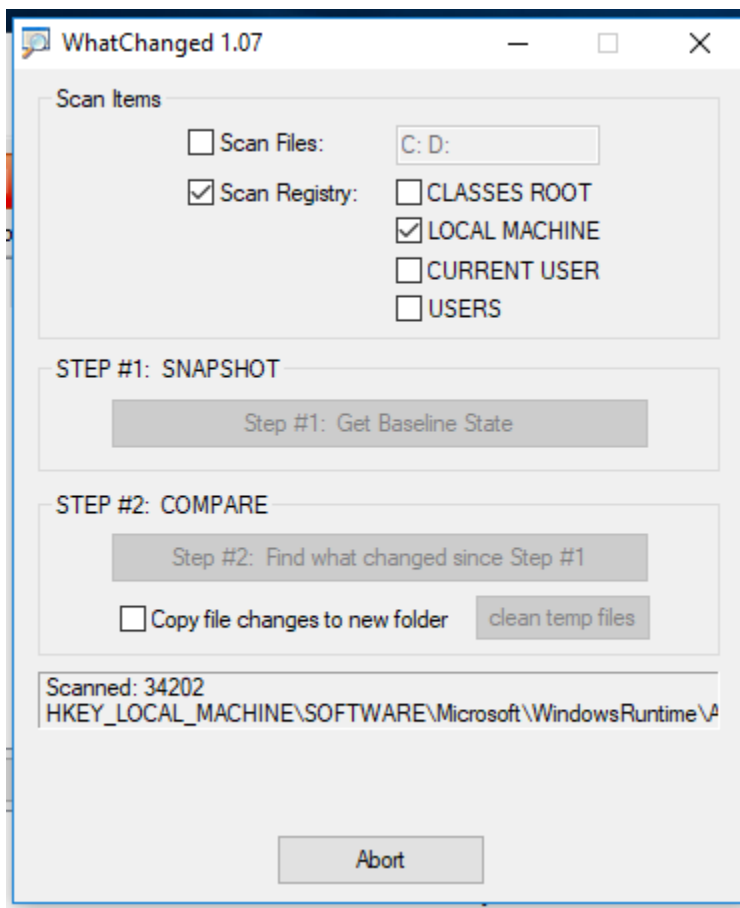
Status	Value
Total Chan...	67
Excluded Fi...	0
Change Rate	484 CH/Min
Process Ti...	8.31 Sec
- File Operations Log:** A table with columns: Date, Time, Operation, Size, Owner, Name.

Date	Time	Operation	Size	Owner	Name
27-Nov-2023	12:33:19	Created	0 Bytes	---	C:\ProgramData\Micros...
27-Nov-2023	12:33:19	Modified	0 Bytes	---	C:\ProgramData\Micros...
27-Nov-2023	12:33:19	Created	0 Bytes	---	C:\ProgramData\Micros...
27-Nov-2023	12:33:19	Modified	0 Bytes	---	C:\ProgramData\Micros...
27-Nov-2023	12:33:21	Modified	0 Bytes	SYSTEM	C:\Windows\Prefetch\A...
27-Nov-2023	12:33:22	Deleted	0 Bytes	---	C:\Users\mike\Downloa...
27-Nov-2023	12:33:22	Modified	0 Bytes	mike	C:\Users\mike\Downloa...
27-Nov-2023	12:33:22	Created	0 Bytes	mike	C:\Users\mike\Downloa...
27-Nov-2023	12:33:22	Modified	0 Bytes	mike	C:\Users\mike\Downloa...
27-Nov-2023	12:33:23	Modified	0 Bytes	SYSTEM	C:\Windows\Prefetch\C...
27-Nov-2023	12:33:23	Created	0 Bytes	mike	C:\Users\mike\AppData\...
27-Nov-2023	12:33:25	Modified	0 Bytes	mike	C:\Users\mike\AppData\...
27-Nov-2023	12:33:25	Modified	28.22 KB	mike	C:\Users\mike\AppData\...
- File Categories:** A table showing the distribution of file types.

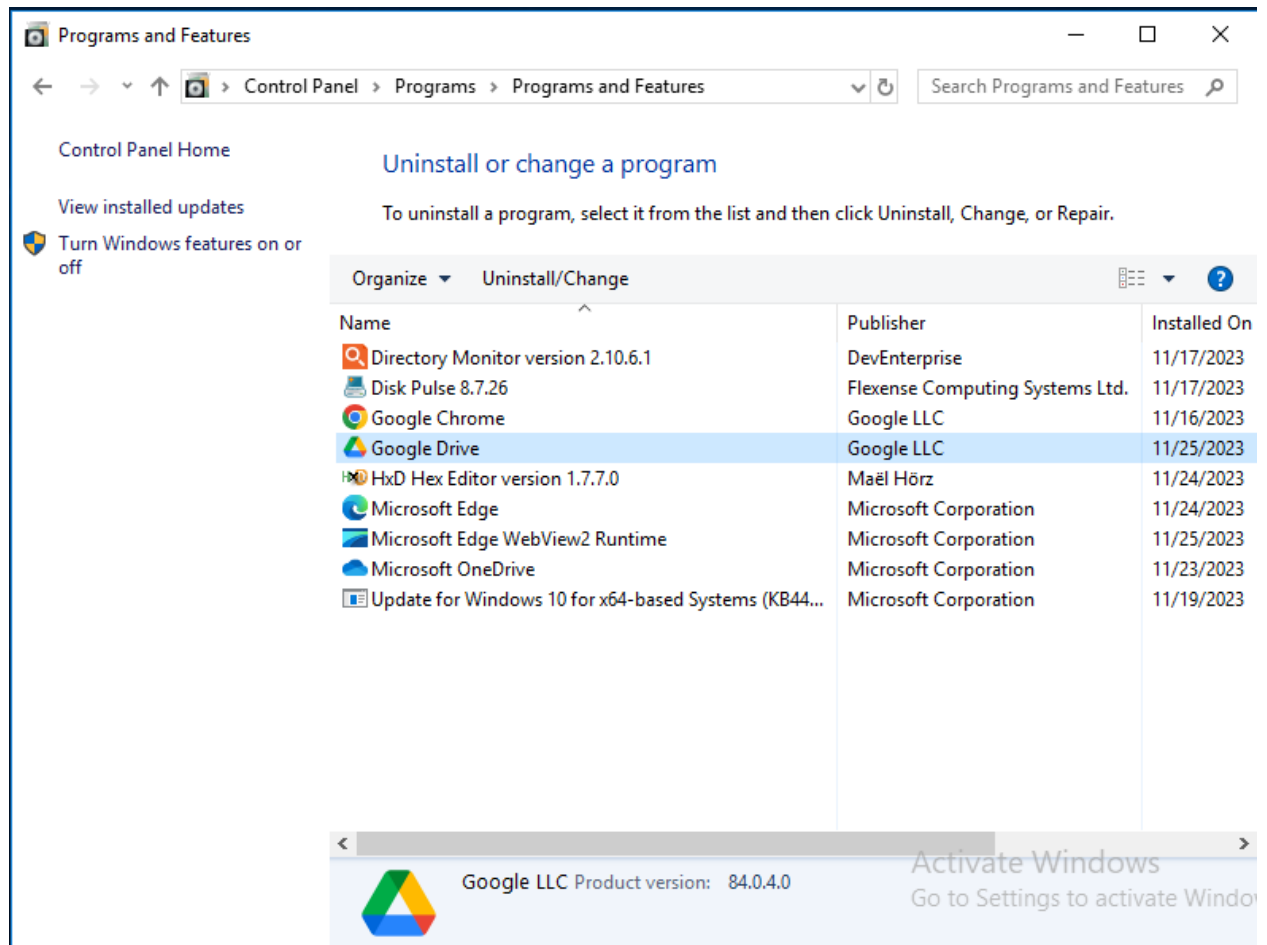
File Categories	Count	Percentage
NOEXT Files	31	43.66 %
TMP Files	13	18.31 %
LEVELDB Files	13	18.31 %
LOG Files	3	4.23 %
DBTMP Files	3	4.23 %
PF Files	3	4.23 %

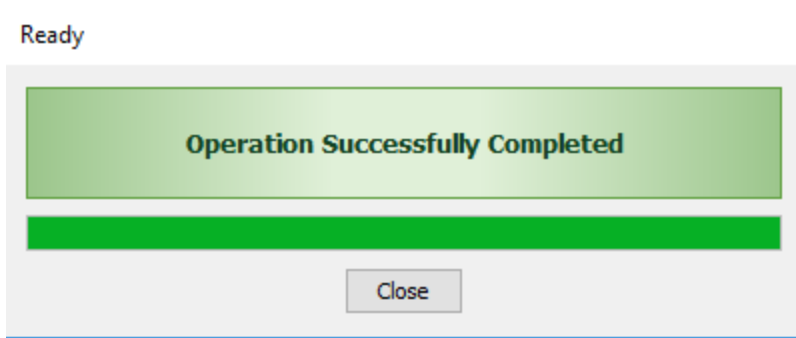
The bottom status bar shows: Active, Total: 67 Changes, Current: 67 Changes, Filtered: NA, Change Rate: 484 CH/Min.

- Launch WhatChanged and click on 'Get Baseline state'.

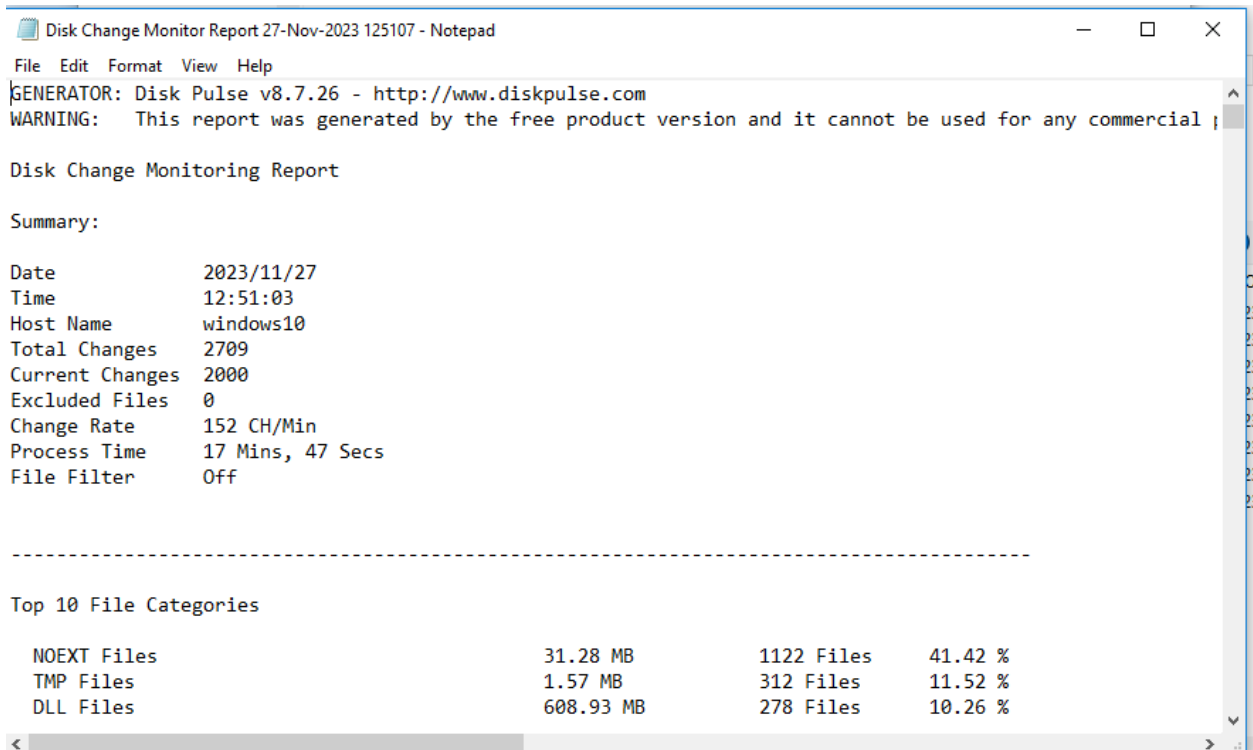


- Navigate to control panel, under the programs click on uninstall a program and double click on google drive to uninstall.





- **Output text by disk pulse, including all the modified files and folders.**



Disk Change Monitor Report 27-Nov-2023 125107 - Notepad

File	Edit	Format	View	Help
27-Nov-2023 12:49:09 Modified	2.54 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\Lo	
27-Nov-2023 12:49:09 Deleted	0 Bytes	---	C:\Users\mike\AppData\Local\Temp\5c51a05d-0d9:	
27-Nov-2023 12:49:13 Modified	2.54 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\Lo	
27-Nov-2023 12:49:13 Modified	20.00 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	8.00 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	264.00 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	4.01 MB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	512.36 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	44.00 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:13 Modified	36.00 KB	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:14 Modified	24.66 KB	SYSTEM	C:\Windows\Prefetch\GOOGLEDRIVEFS.EXE-DBAC9CE	
27-Nov-2023 12:49:15 Modified	392.00 KB	SYSTEM	C:\Users\mike\ntuser.dat.LOG1	
27-Nov-2023 12:49:15 Modified	1.58 MB	TrustedInstaller	C:\Windows\WinSxS\amd64_microsoft.windows.gdi	
27-Nov-2023 12:49:15 Modified	606.78 KB	Administrators	C:\Program Files\Google\Drive File Stream\84.6	
27-Nov-2023 12:49:15 Modified	290.60 KB	TrustedInstaller	C:\Windows\System32\wevtapi.dll	
27-Nov-2023 12:49:15 Modified	197.92 MB	Administrators	C:\Program Files\Google\Drive File Stream\84.6	
27-Nov-2023 12:49:15 Modified	1.45 MB	Administrators	C:\Program Files\Google\Drive File Stream\84.6	
27-Nov-2023 12:49:15 Modified	0 Bytes	TrustedInstaller	C:\Windows\WinSxS\amd64_microsoft.windows.gdi	
27-Nov-2023 12:49:16 Modified	62.50 KB	TrustedInstaller	C:\Windows\System32\nlaapi.dll	
27-Nov-2023 12:49:16 Created	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:16 Modified	0 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	
27-Nov-2023 12:49:16 Modified	2 Bytes	mike	C:\Users\mike\AppData\Local\Google\DriveFS\ce	

- Screenshot of Googles Program's files directory(Drive folder) disappears after uninstalling the client.

