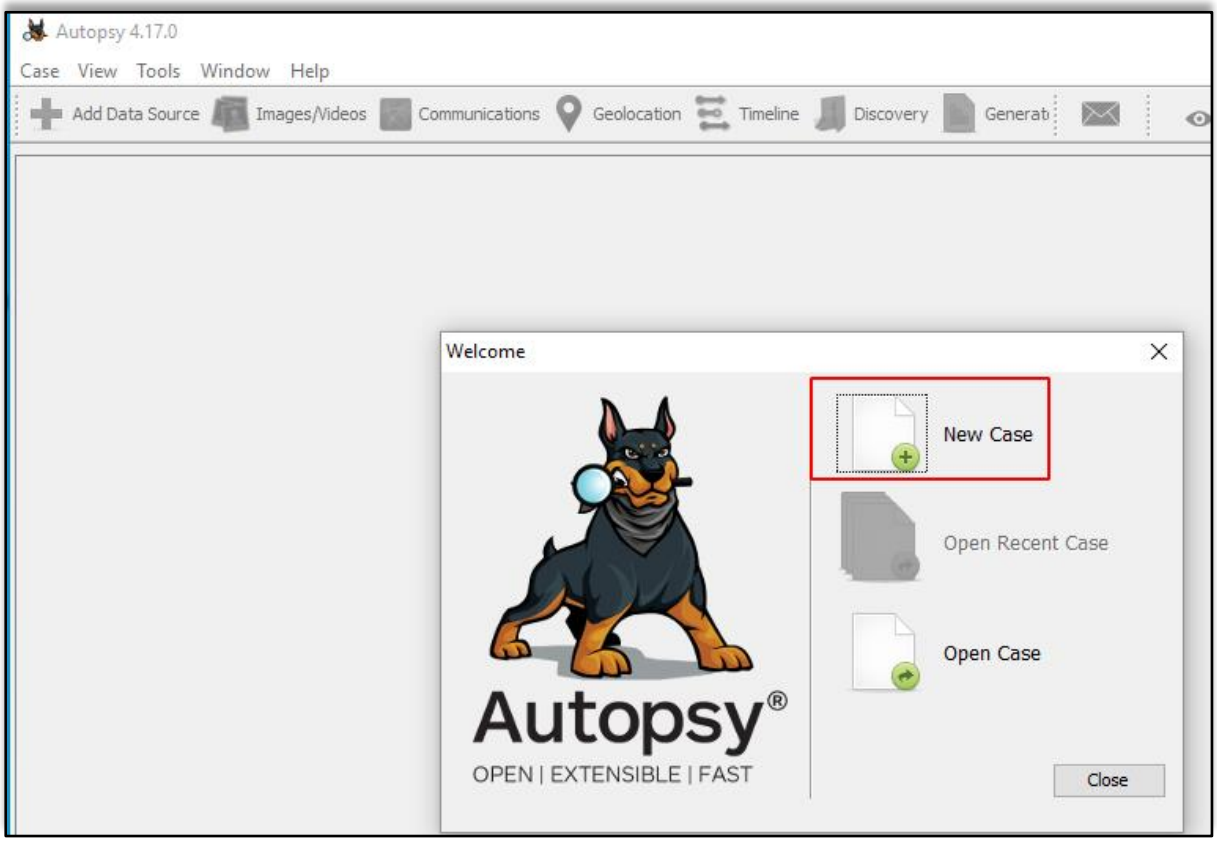
AUTOPSY WINDOWS

Autopsy for Windows

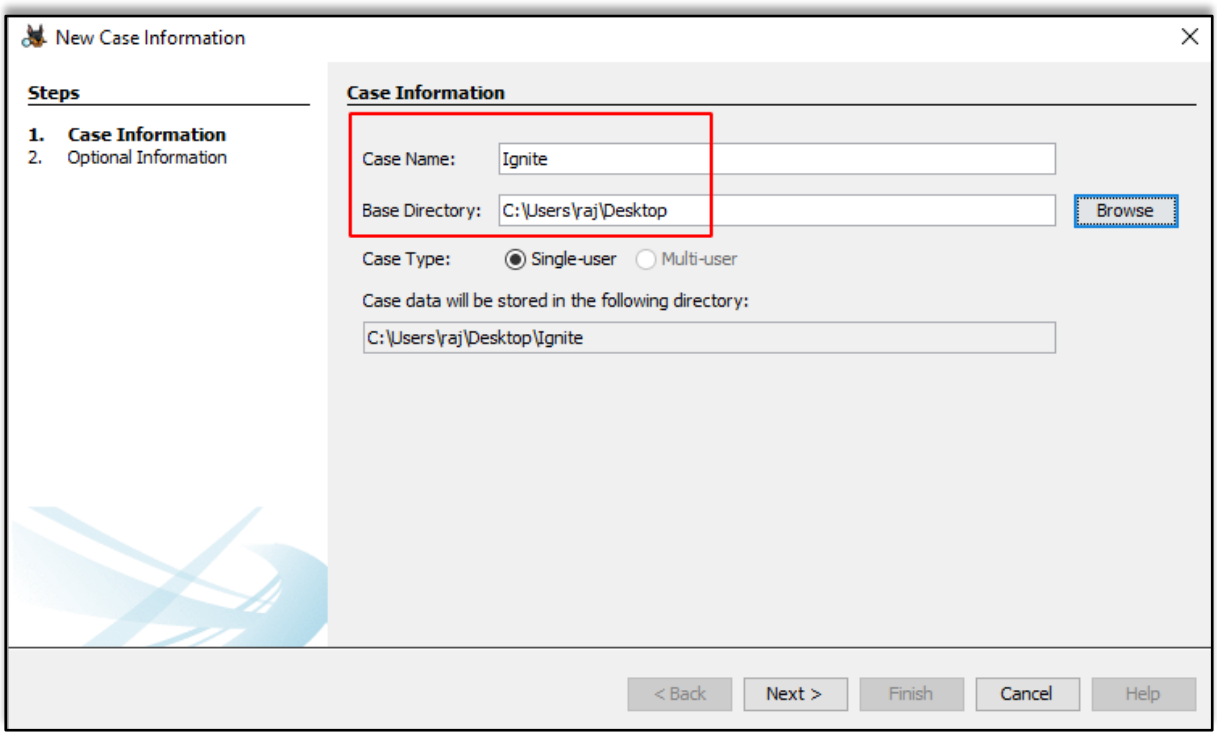
You can download the Autopsy Tool for Windows from here.

Creating a New Case

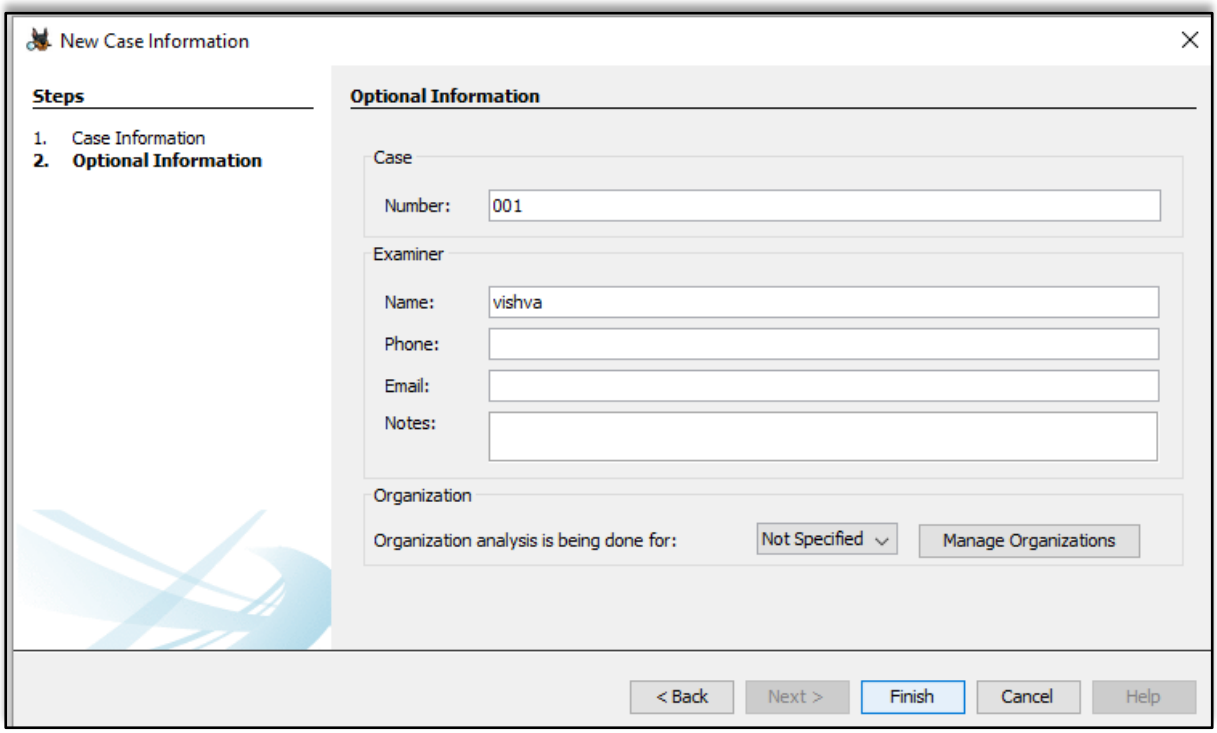
Run the Autopsy tool on your Windows Operating System and click on “New Case” to create a new case.



Then fill in all the necessary case information like the case name and choose a base directory to save all the case data in one place.

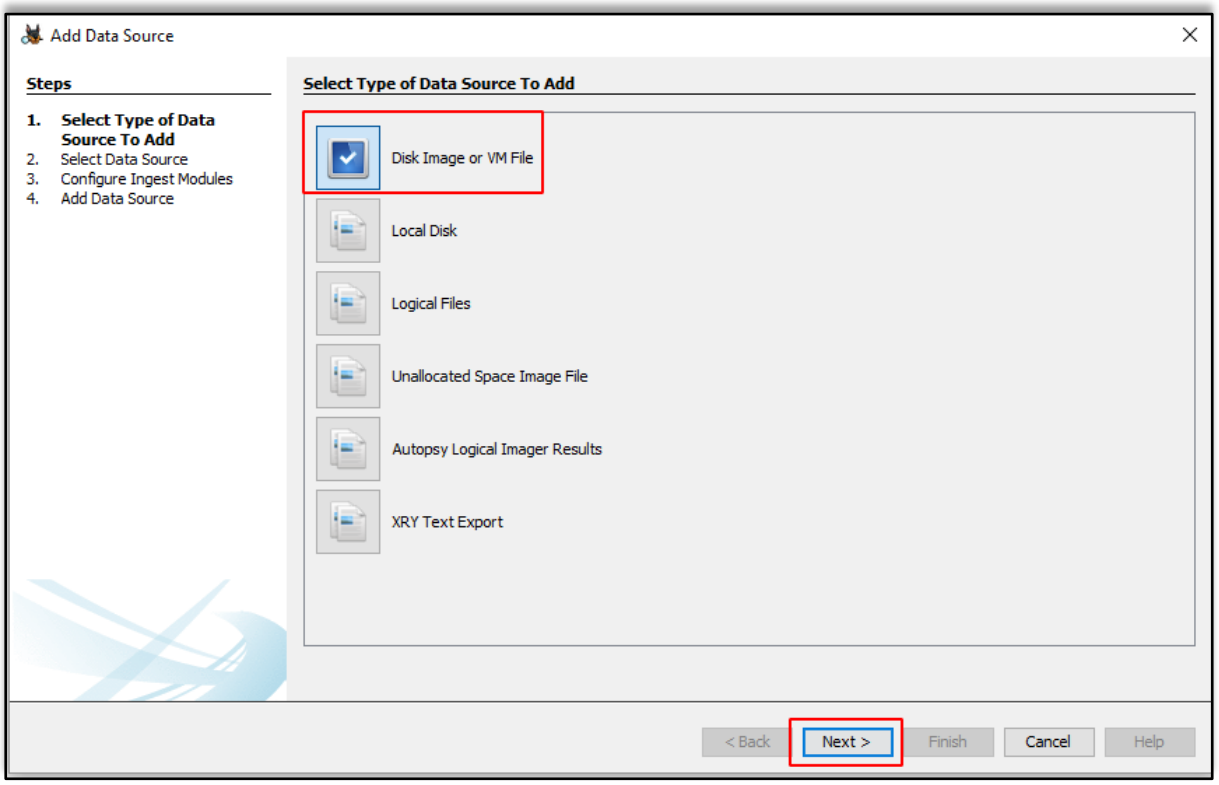


You can also add additional optional information about the case if required.

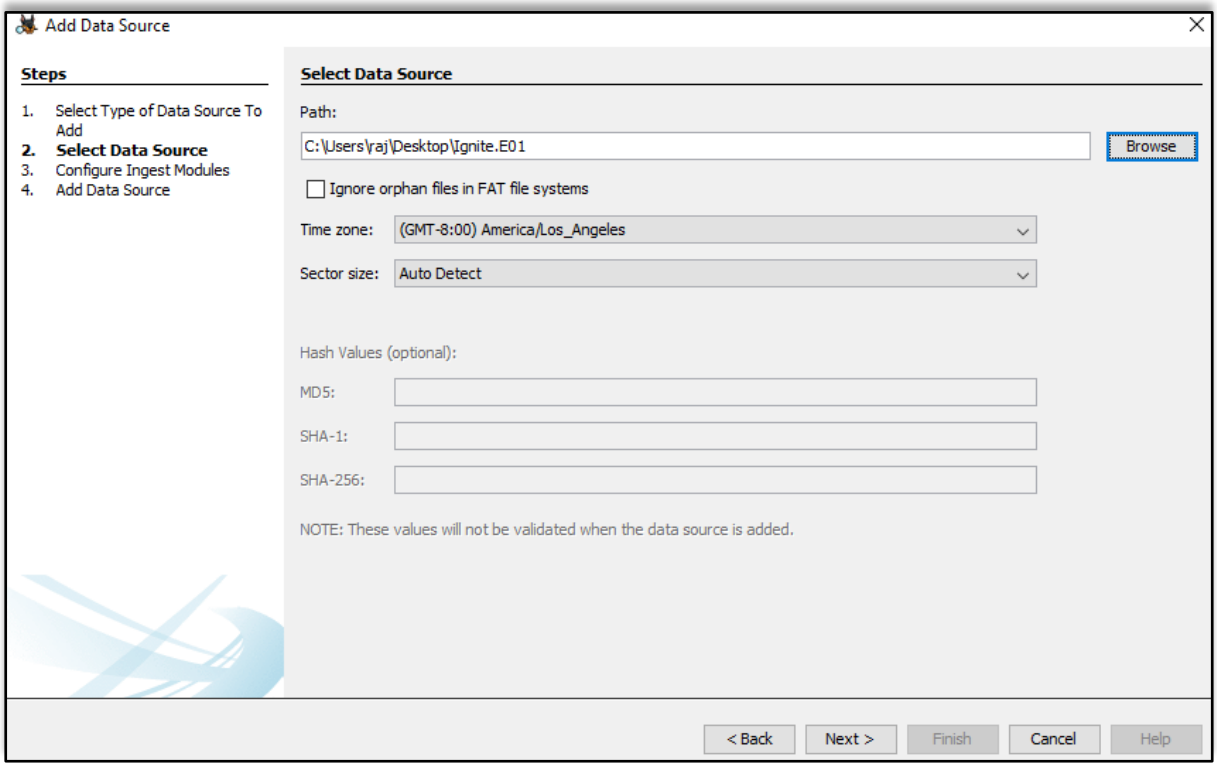


Now let us add the type of data source. There are various types to choose from.

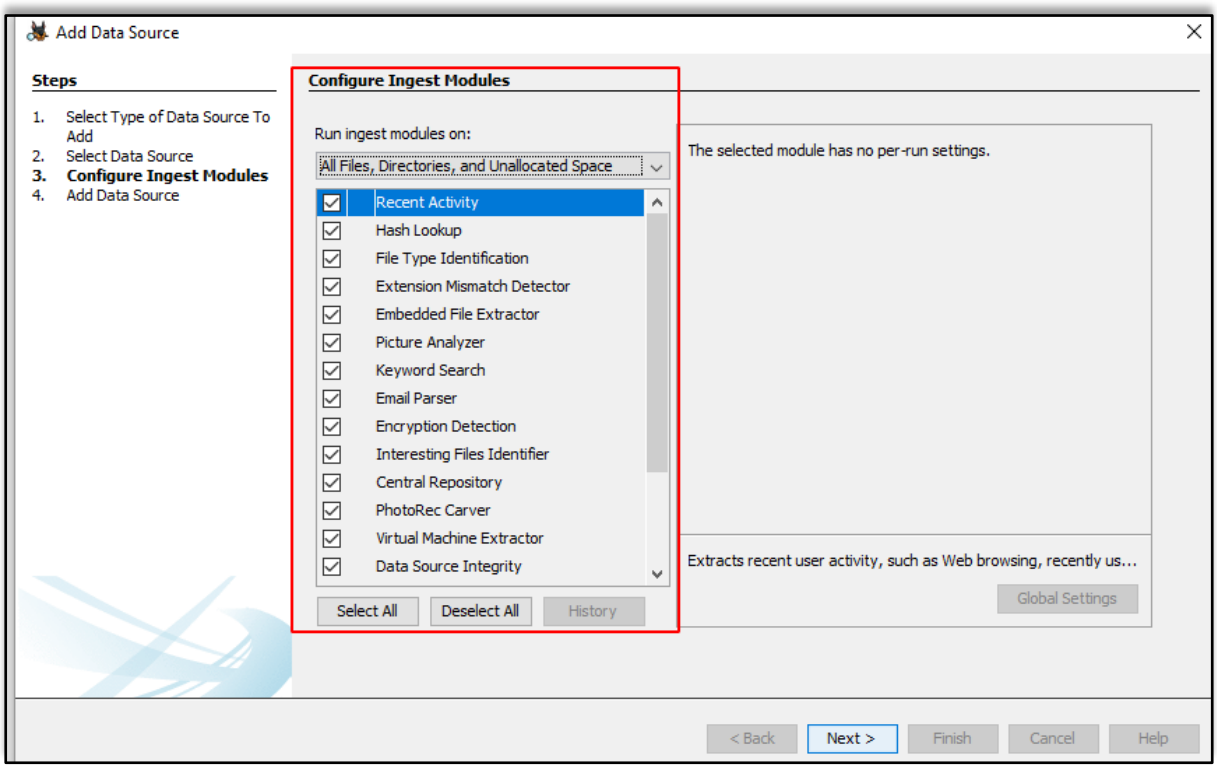
- **Disk Image or VM file:** This includes the image file which can be an exact copy of a hard drive, media card, or even a virtual machine.
- **Local Disk:** This option includes devices like Hard disk, Pen drives, memory cards, etc.
- **Logical Files**: It includes the image of any local folders or files.
- **Unallocated Space Image File**: They include files that do not contain any file system and run with the help of the ingest module.
- **Autopsy Logical Imager Results:** They include the data source from running the logical imager.
- **XRY Text Export:** This includes the data source from exporting text files from XRY.



Now let us add the data source. Here we have a previously created image file, so we will add the location of that file.



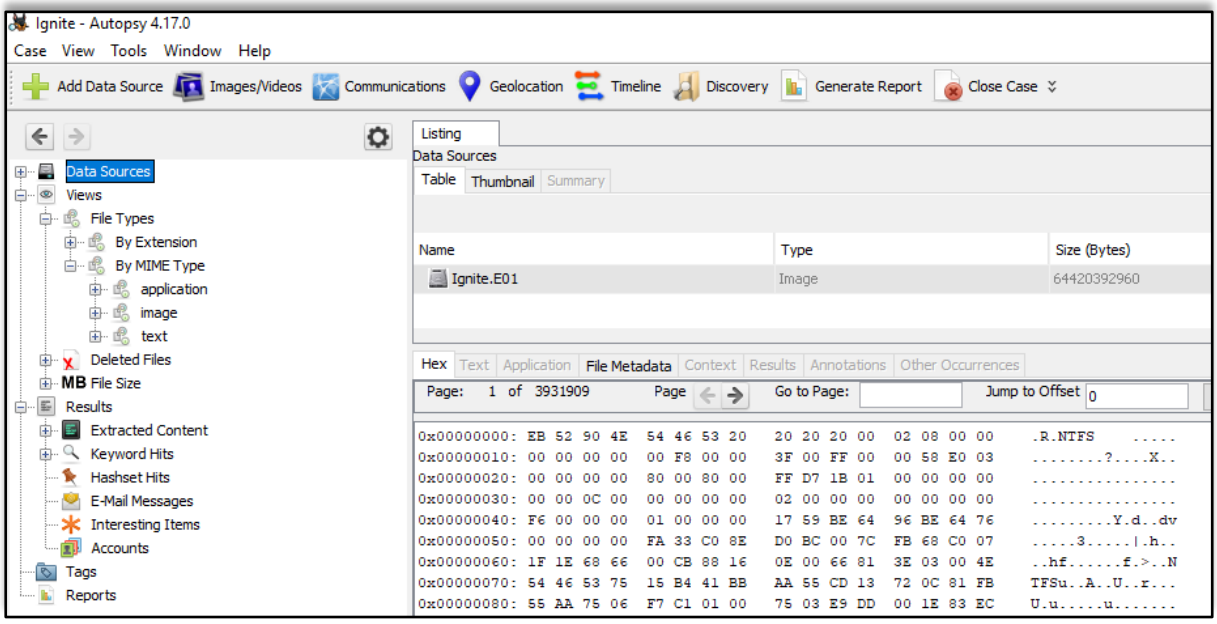
Next, you will be prompted to **Configure the Ingest Module.**



The contents of the Ingest module are listed below:

INGEST MODULE	
Recent Activity	It is used to discover the recent operations that were performed on the disk, like the files that were viewed recently.
Extension Mismatch Detector	It is used to identify files whose extensions were tampered with or had been changed to hide the evidence.
Hash Lookup	It is used to identify a particular file using its hash value.
File Type Identification	This is used to identify files based on their internal file signatures than just the file extensions.
Embedded File Extractor	It is used to extract embedded files like .zip, .rar, etc. and use those files for analysis.
Keyword Search	This is used to search for any particular keyword or a pattern in the image file.
Email Parser	This is used to extract information from email files if the disk holds any email database information.
Encryption Detection	This helps to detect and identifies encrypted password-protected files.
Interesting File Identifier	Using this feature the examiner is notified when results pertaining to the set of rules that are defined to identify a particular type of file.
PhotoRec Carver	This helps the examiner to recover files, photos, etc. from the unallocated space on the image disk.
Virtual Machine Extractor	It helps to extract and analyze if any Virtual machine is found on the disk image.
Data Source Integrity	It helps to calculate the hash value and store them in the database.

Data Source information displays basic metadata. Its detailed analysis is displayed at the bottom. It can be extracted one after the other.

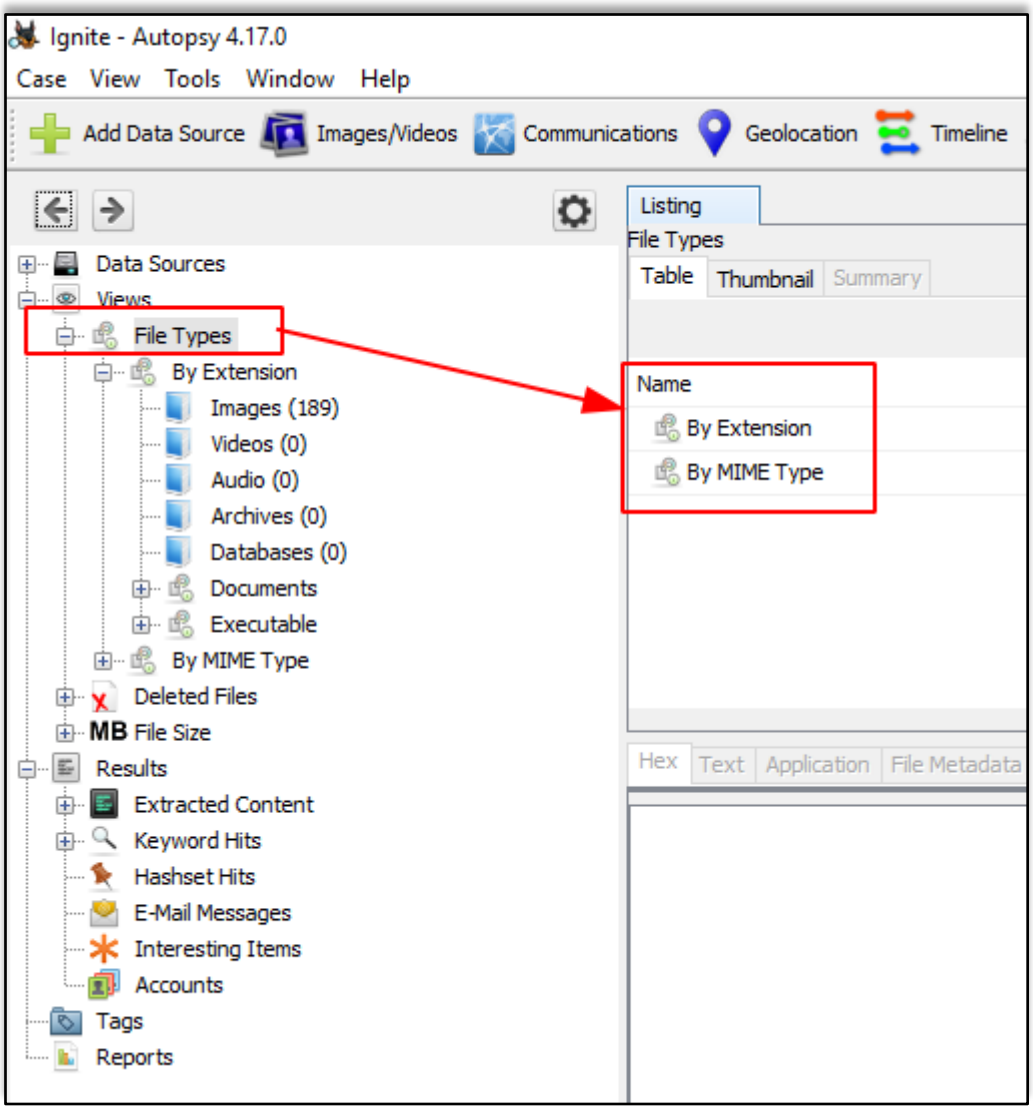


Views

File Type

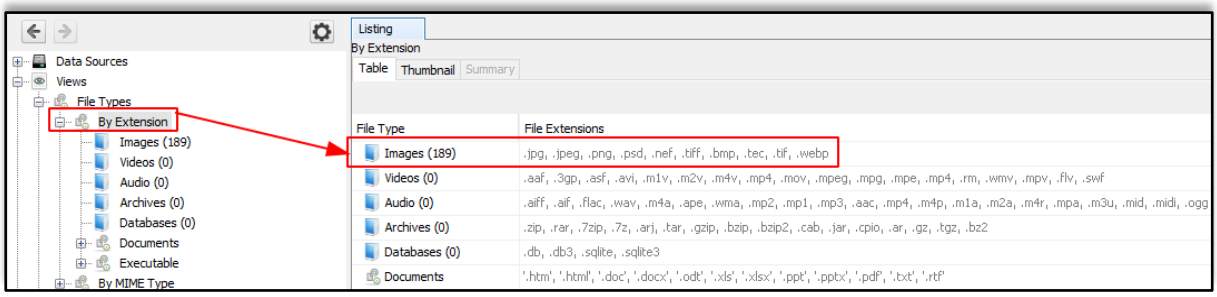
It can be classified in the form of File extension or MIME type.
It provides information on file extensions that are commonly used by the OS whereas MIME types are used by the browser to decide what data to represent. It also displays deleted files.

Note: These file types can be categorized depending on Extension, Documents, Executables.

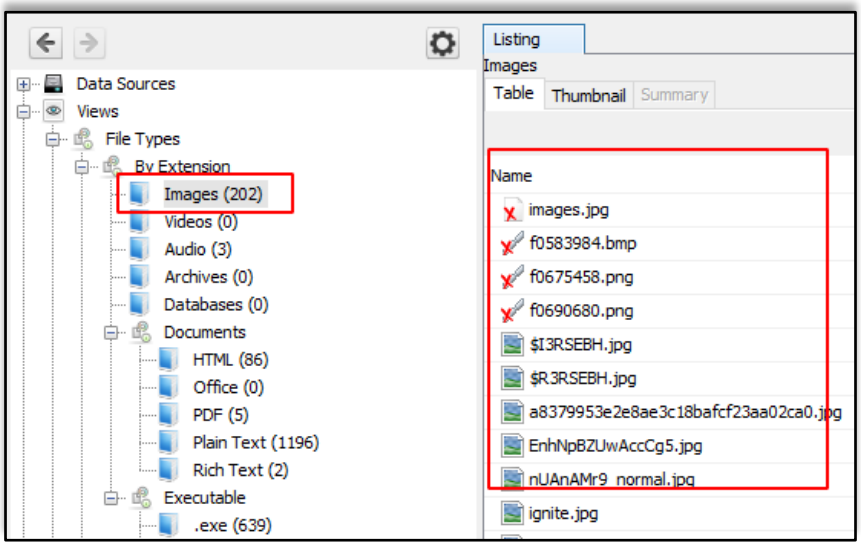


By Extension

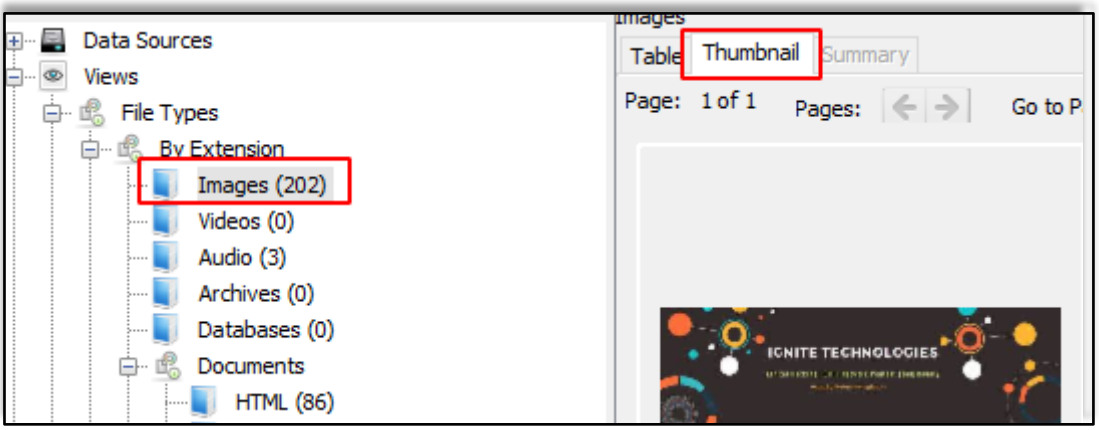
In the category Filetypes by extension and you can see that this has been sub-divided into file types like images, video, audio, archives, databases, etc.



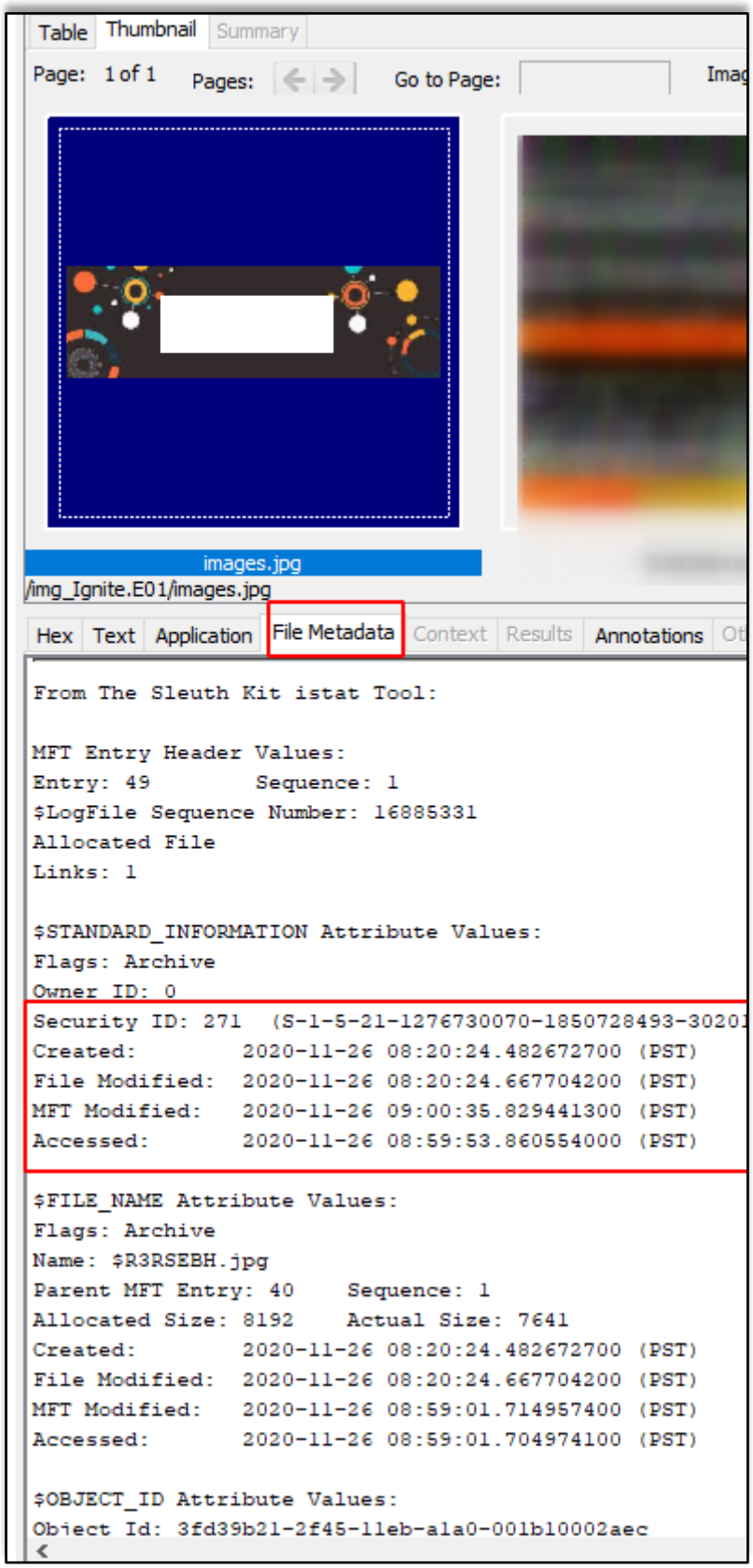
Let us click on images and explore the images that have been recovered.



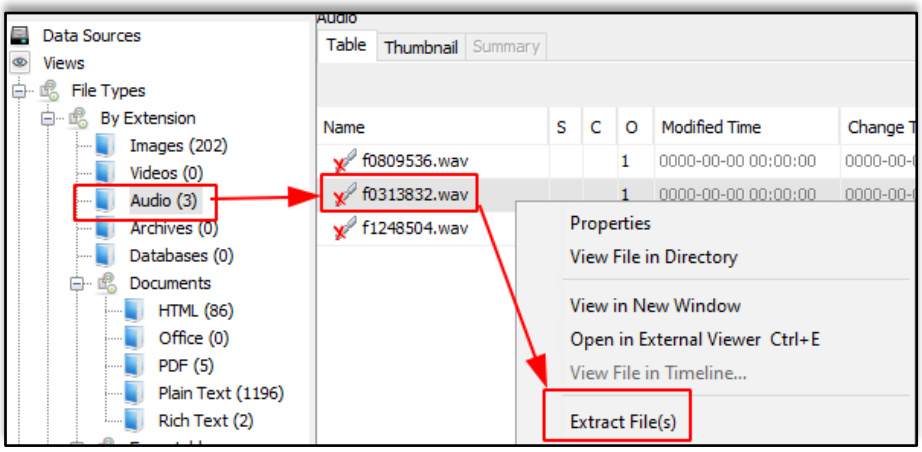
We can also view the thumbnail of the images.



On viewing the thumbnail, you can view the file metadata and details about the image.

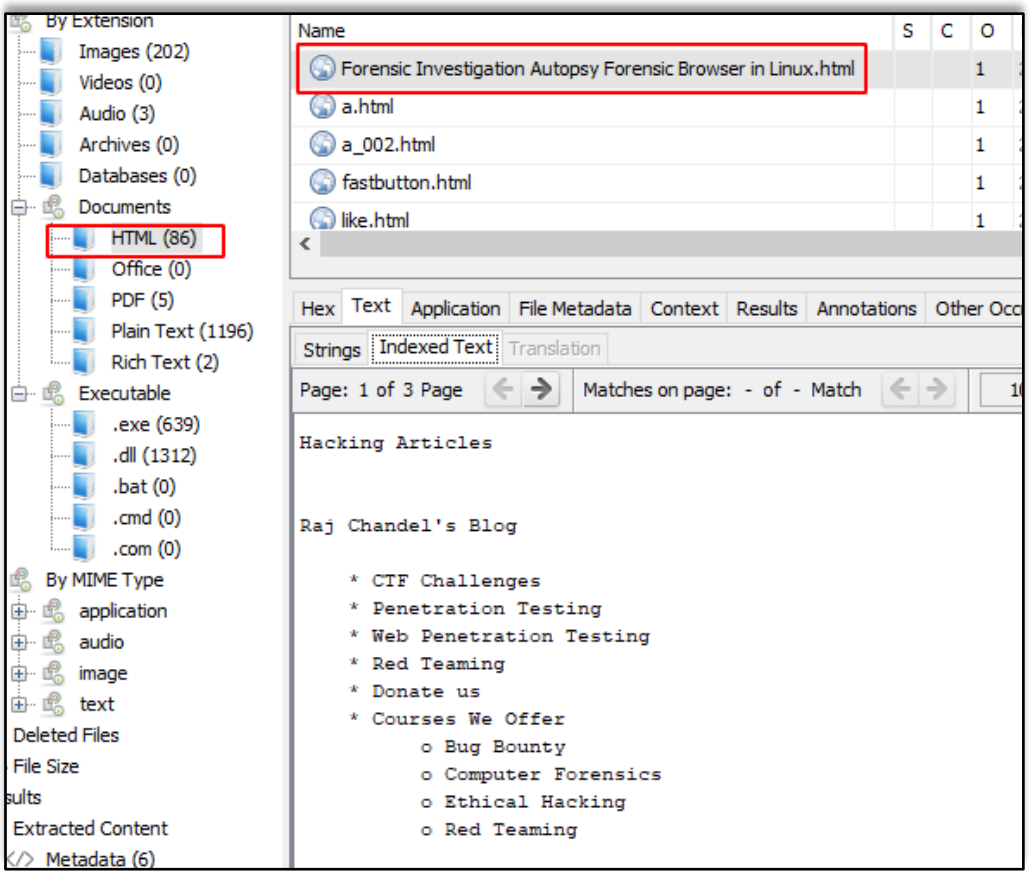


Here we can also view a few audio files that have been recovered. We can extract these files from the system and hear to them using various software.

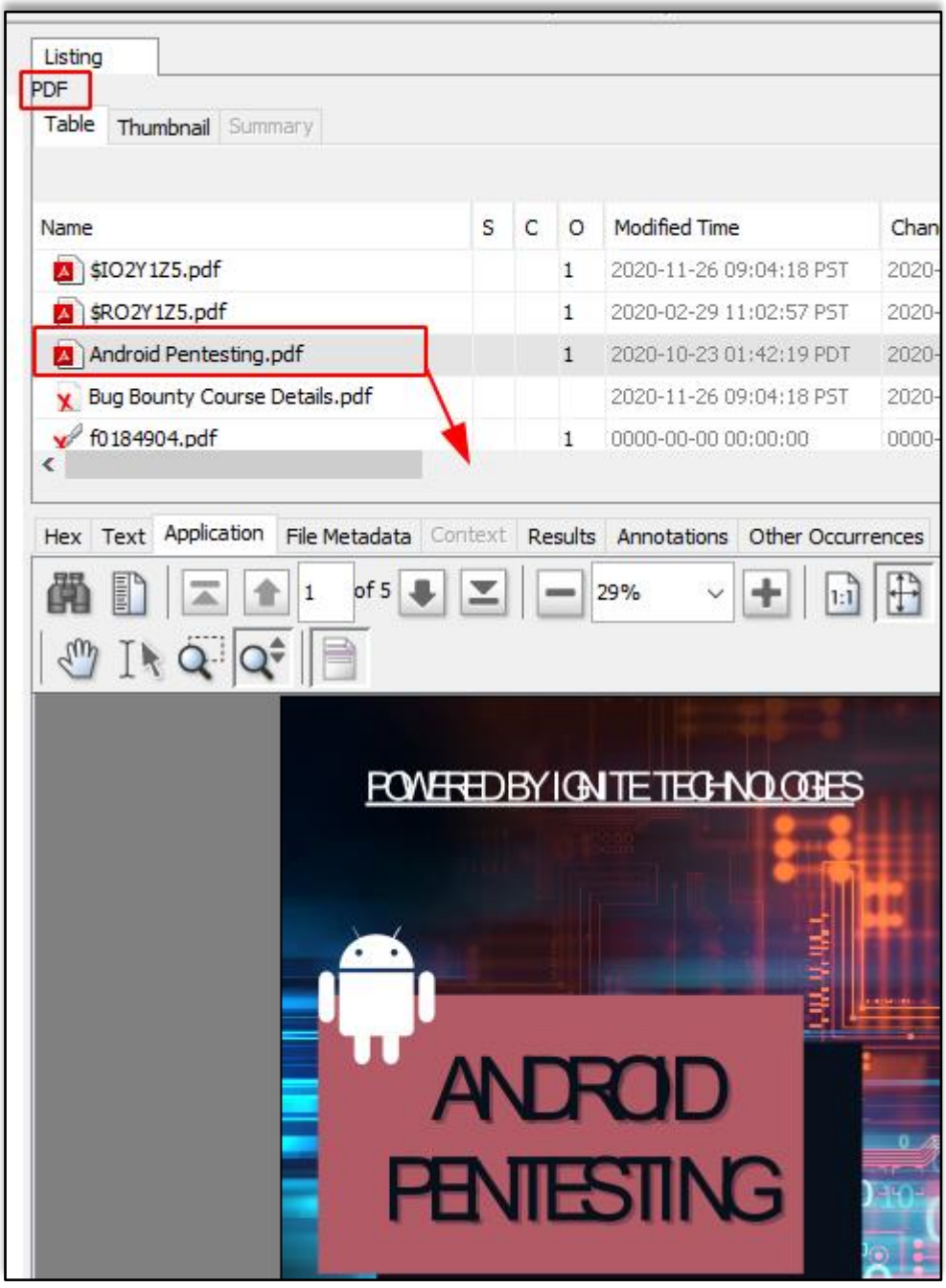


Documents

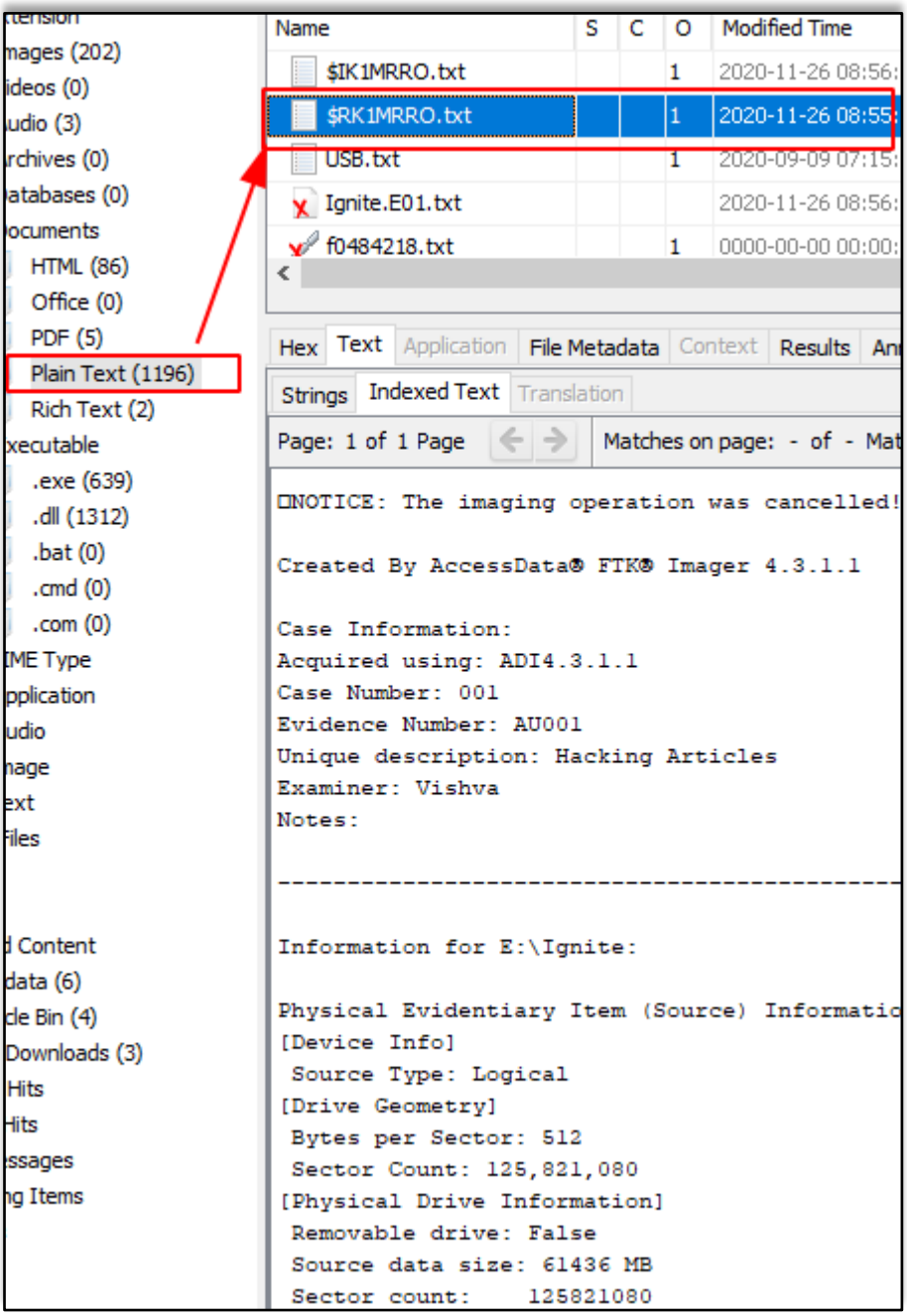
The documents are categorized into 5 types: HTML, office, PDF, Plain Text, Rich Text.
On exploring the documents option, you can see all the HTML documents present, you can click on the important ones to view them.



On exploring the PDF option, you can also find the important PDF in the disk image.

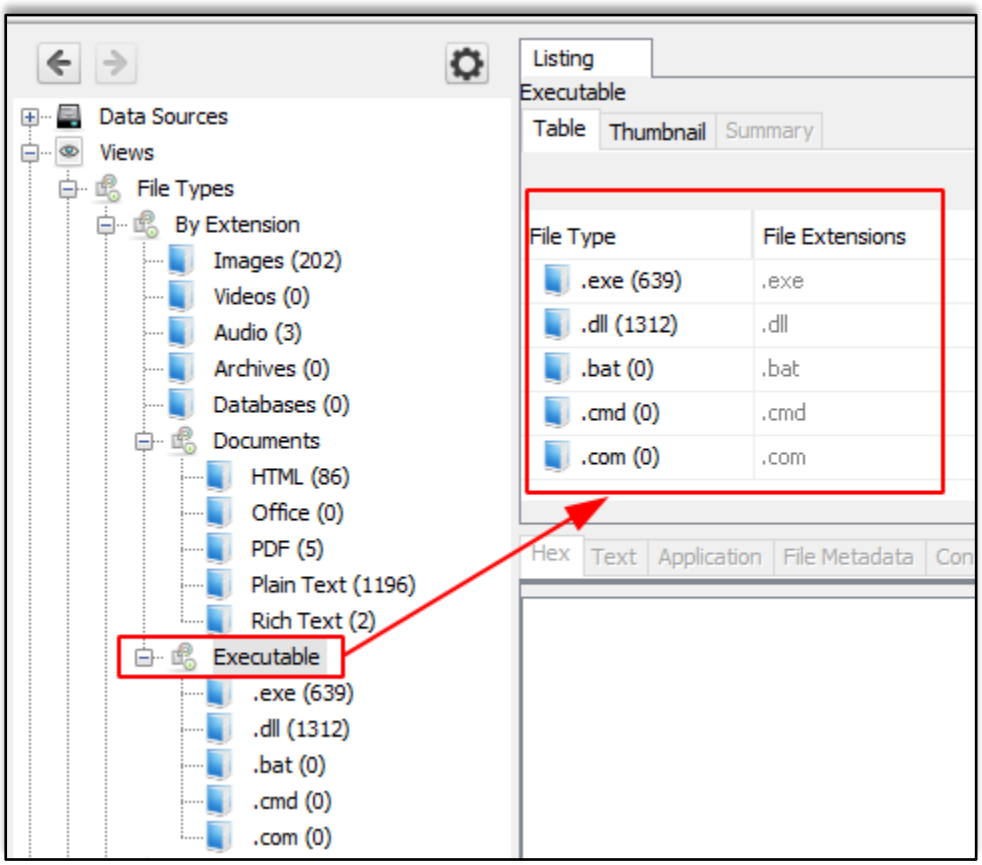


Similarly, the various Plain text files can also be viewed. You can also recover deleted plain text files.



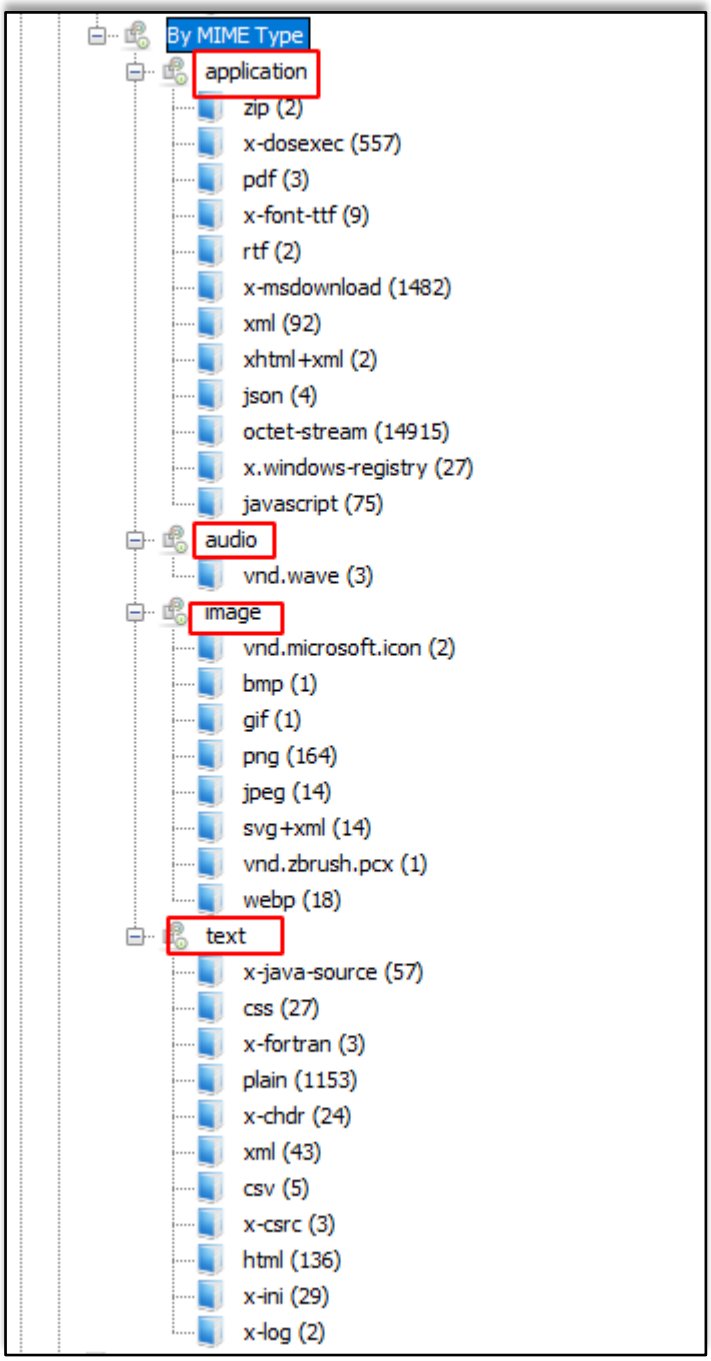
Executables

These file types are then sub-divided into .exe, .dll, .bat, .cmd and .com.



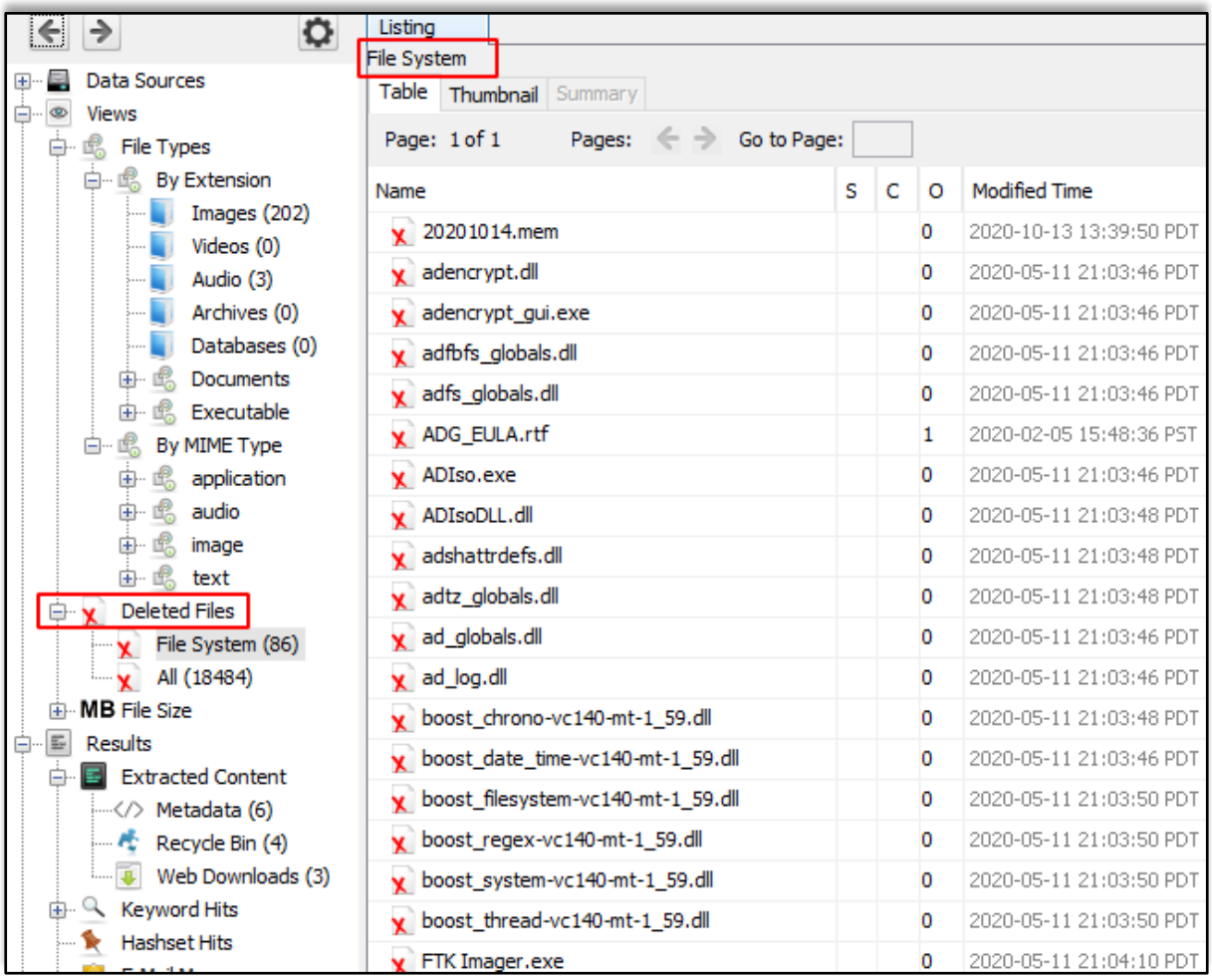
By Mime Type

In this type of category, there are four sub-categories like application, audio, image, and text. They are divided further into more sections and file types.



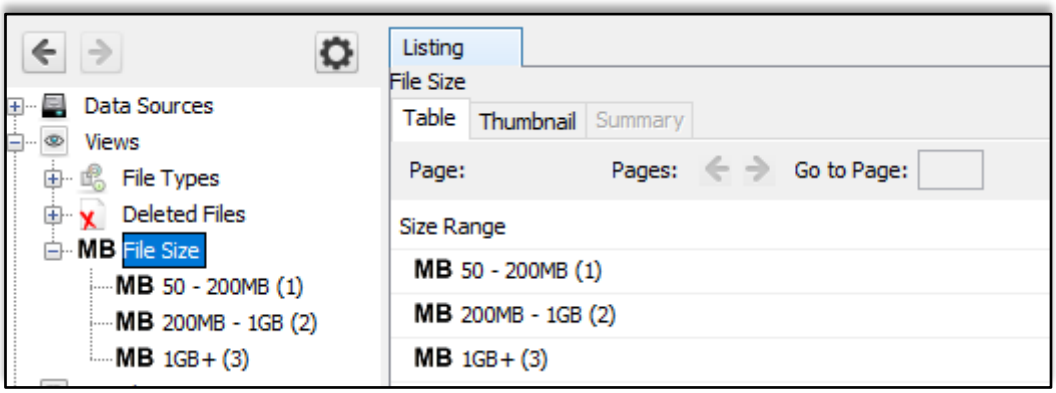
Deleted Files

It displays information about the deleted file which can be then recovered.



MB size Files

In this, the files are categorized based on their size starting from 50MB. This allows the examiner to look for large files.

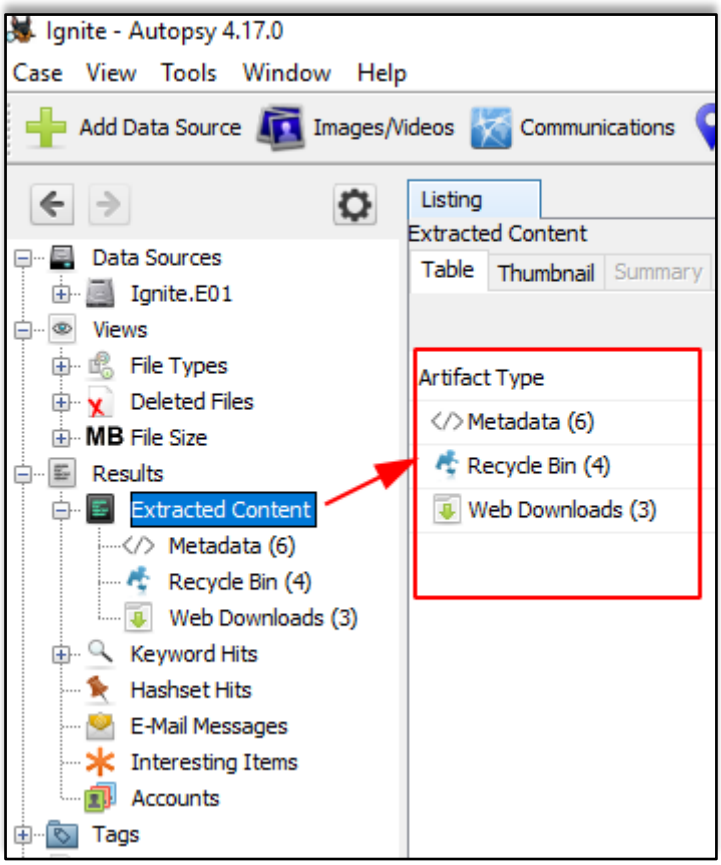


Results

In this section, we get information about the content that was extracted.

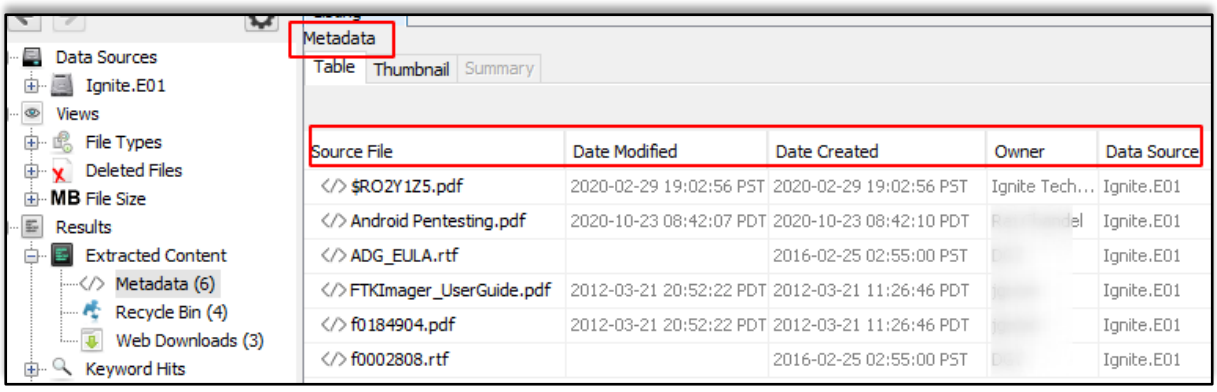
Extracted Content

All the content that was extracted, is segregated further in detail. Here we have found metadata, Recycle Bin, and web downloads. Let us further view each one of them.



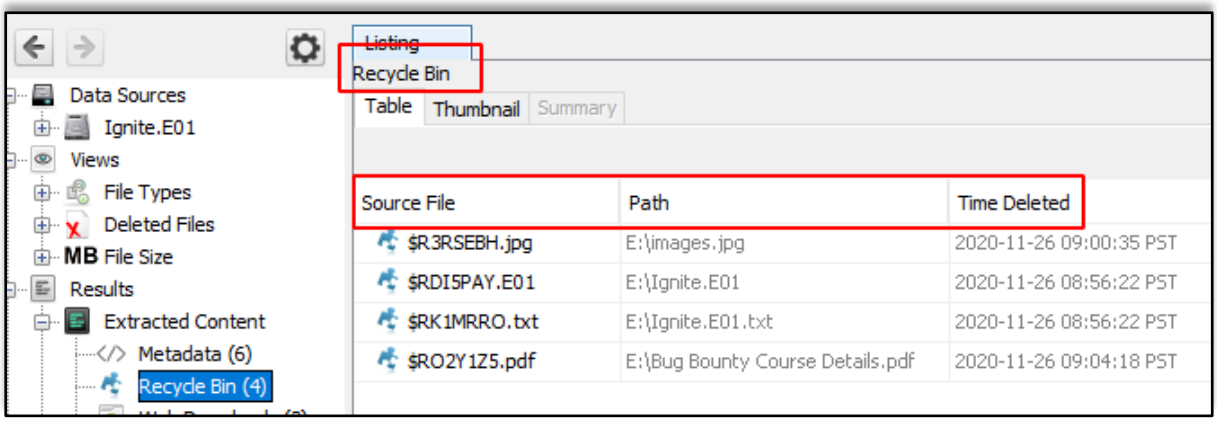
Metadata

Here we can view all the information about the files like the date it was created, to was modified, file's owner, etc.



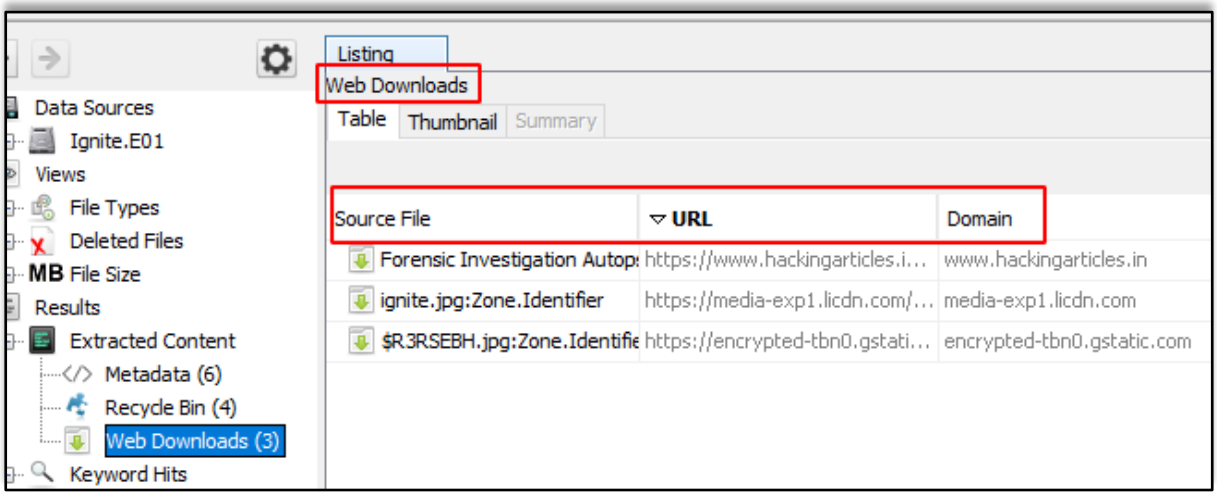
Recycle Bin

The files that were put in the recycle bin are found in this category.



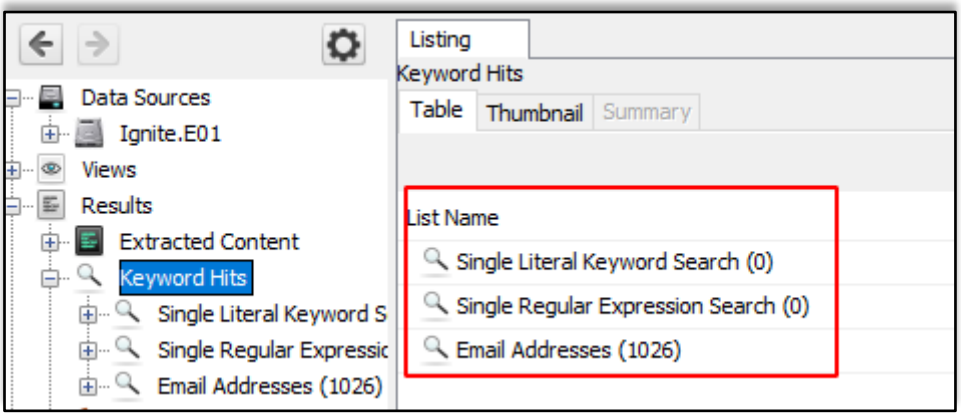
Web Downloads

Here you can see the files that were downloaded from the internet.

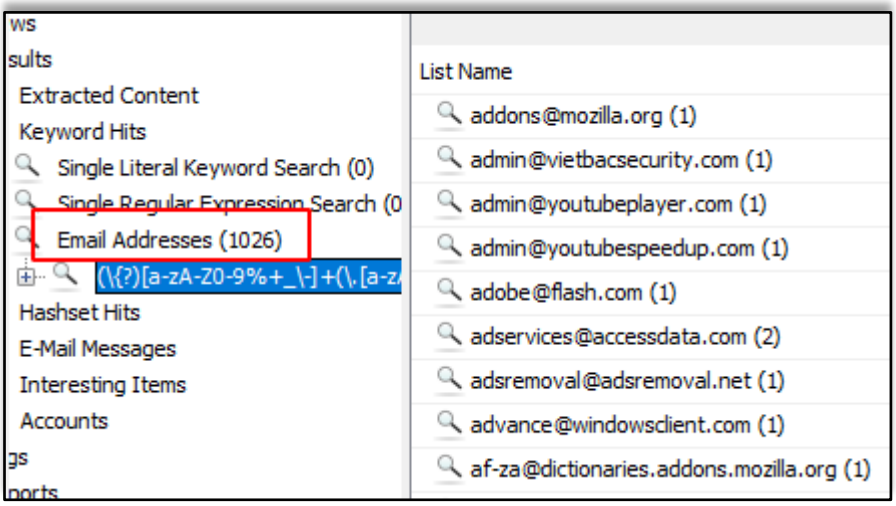


Keyword Hits

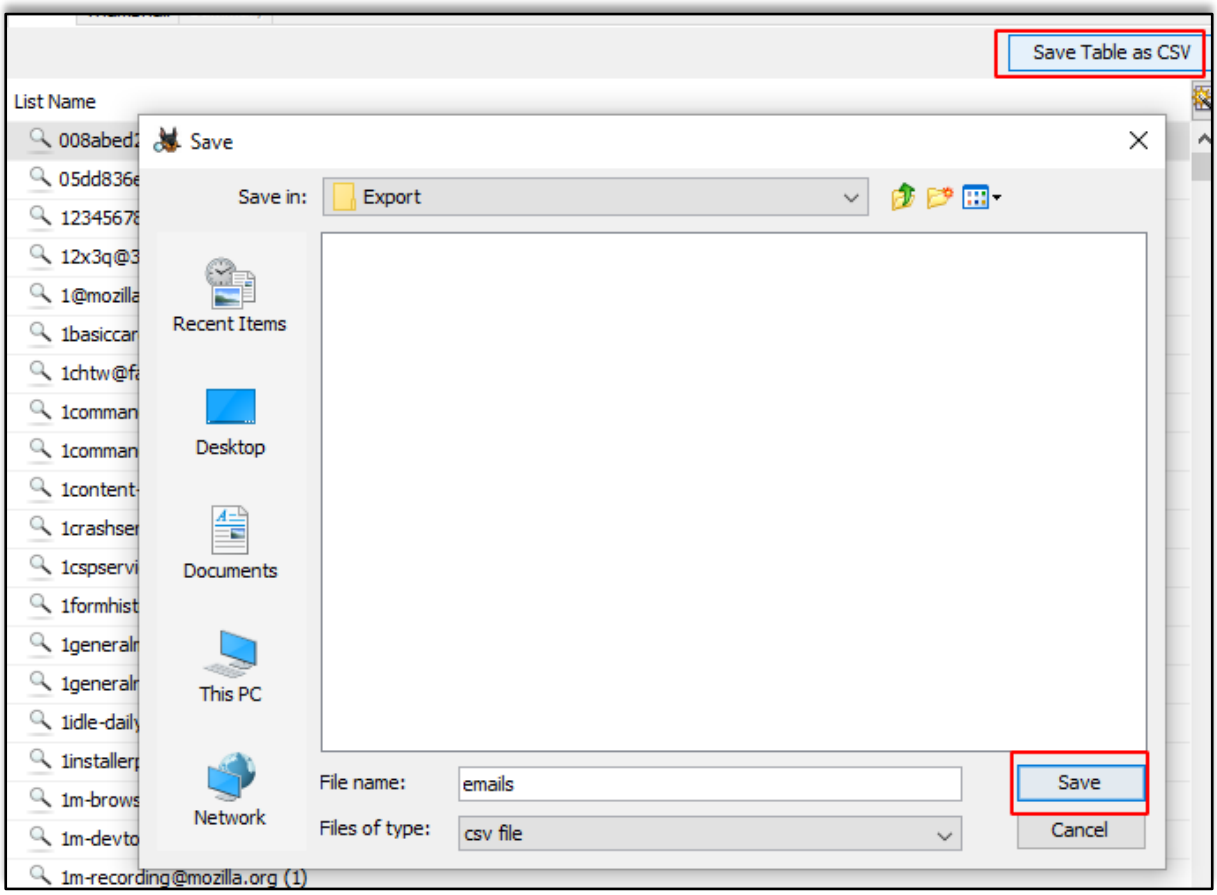
In this, any specific keywords can be looked up for in the disk image. The search can be conducted concerning the Exact match, Substring matches, Emails, Literal words, Regular expressions, etc.



You can view the available email addresses.

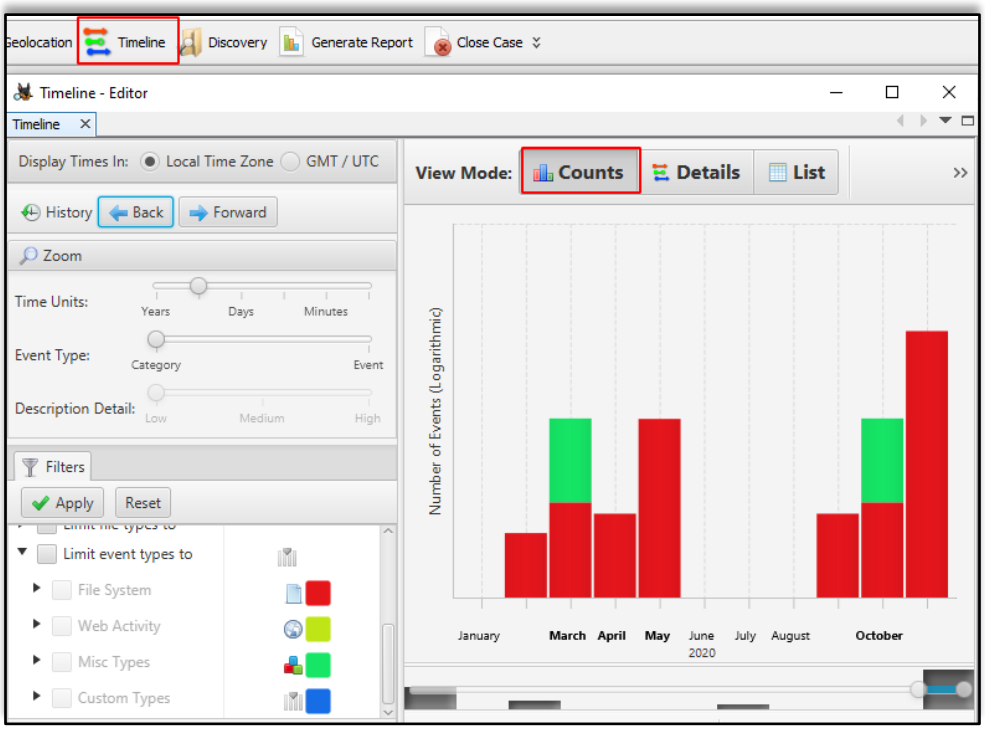


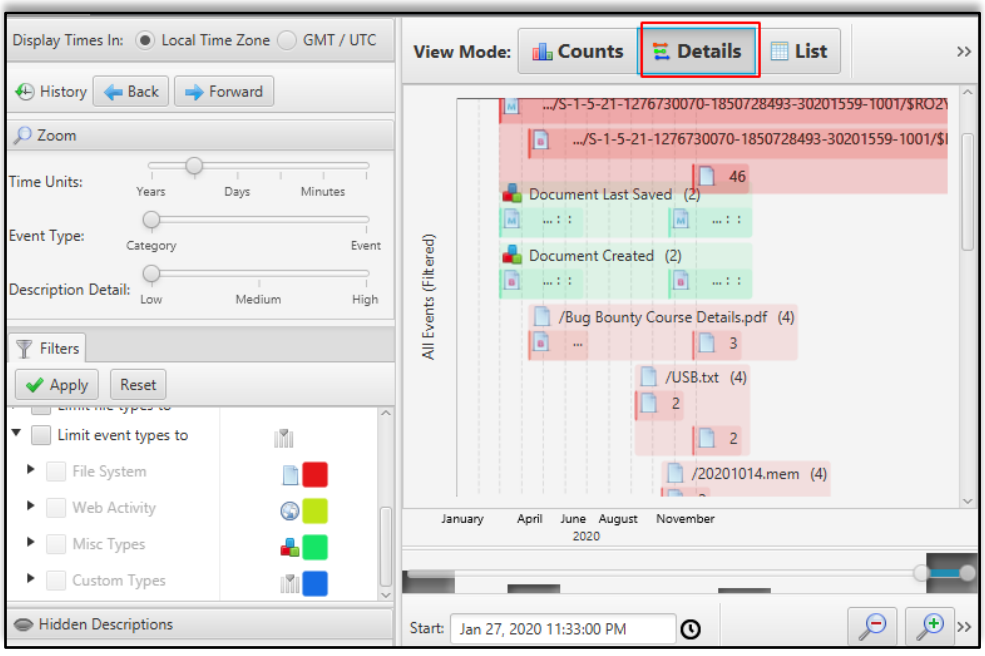
You can choose to export into a CSV format.

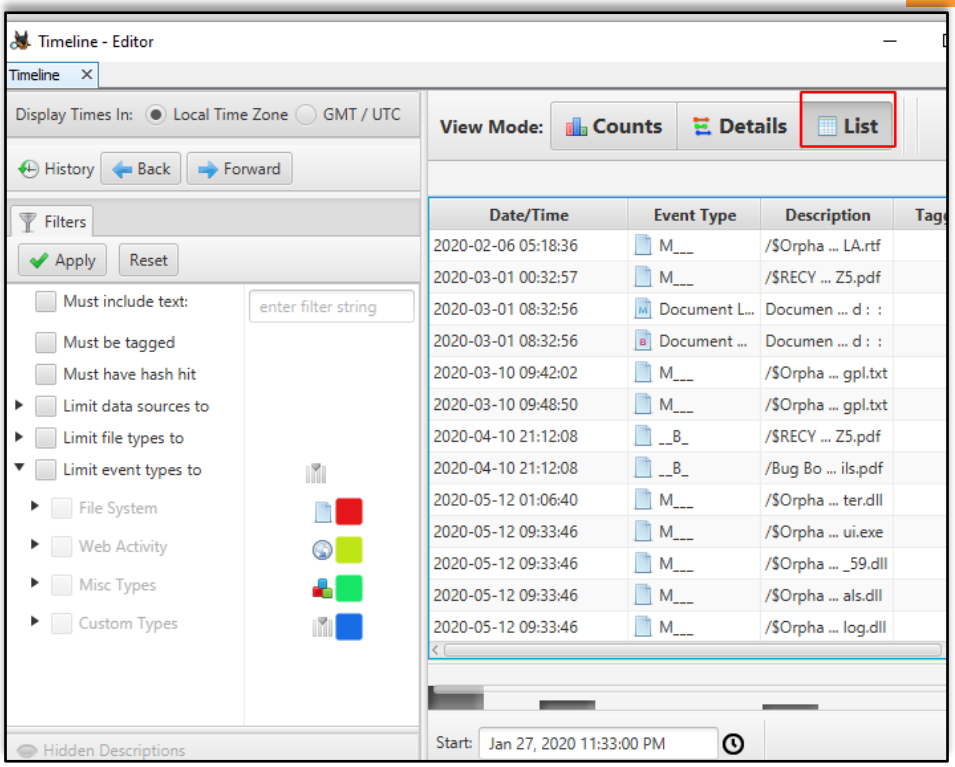


Timeline

By using this feature, you can get information on the usage of the system in a statistical, detailed, or list form.

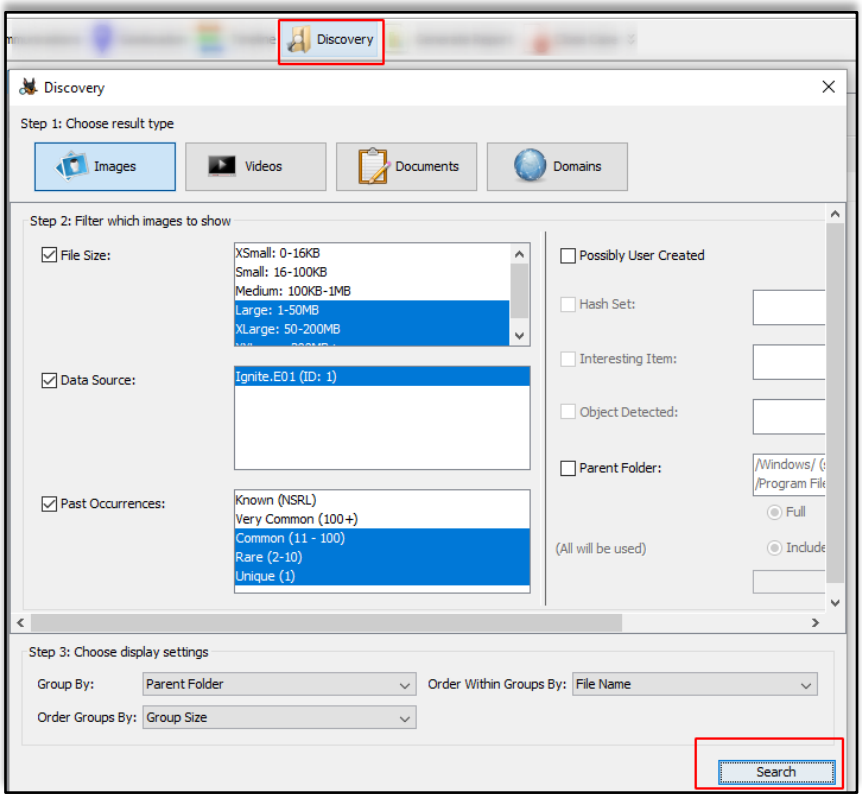




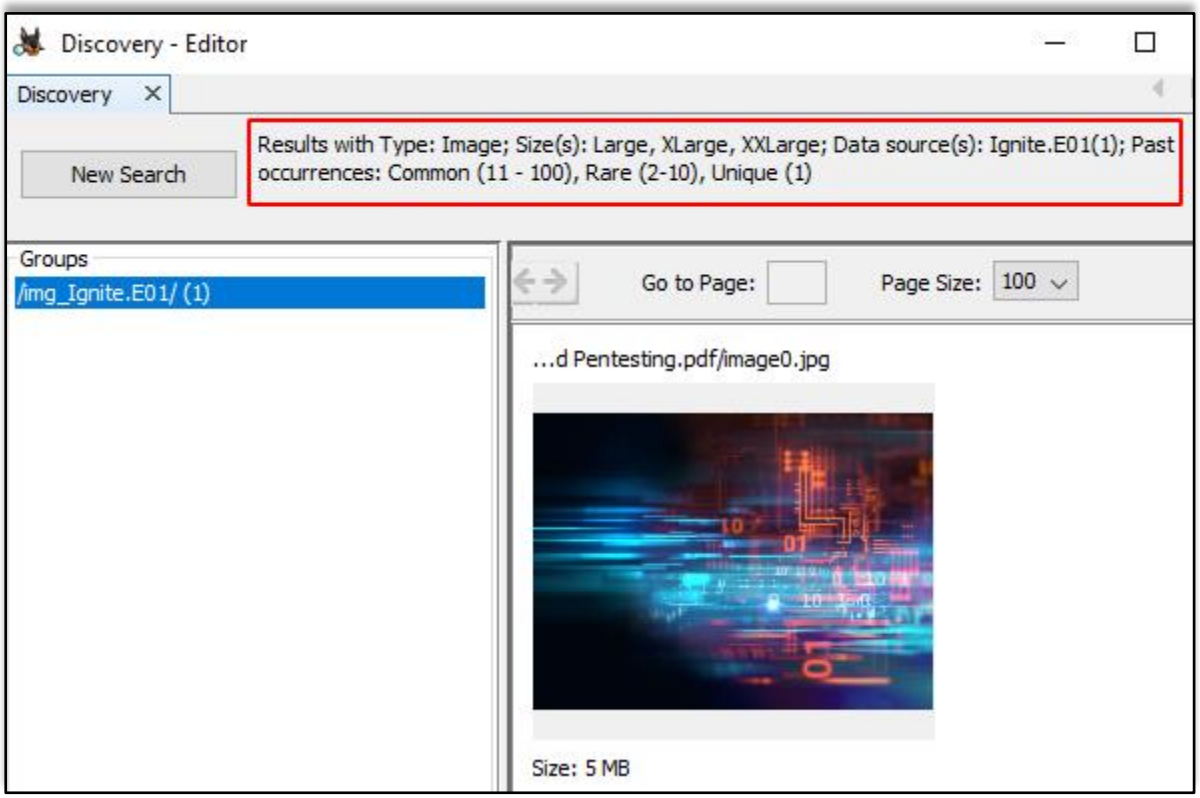


Discovery

This option allows finding media using different filters that are present on the disk image.

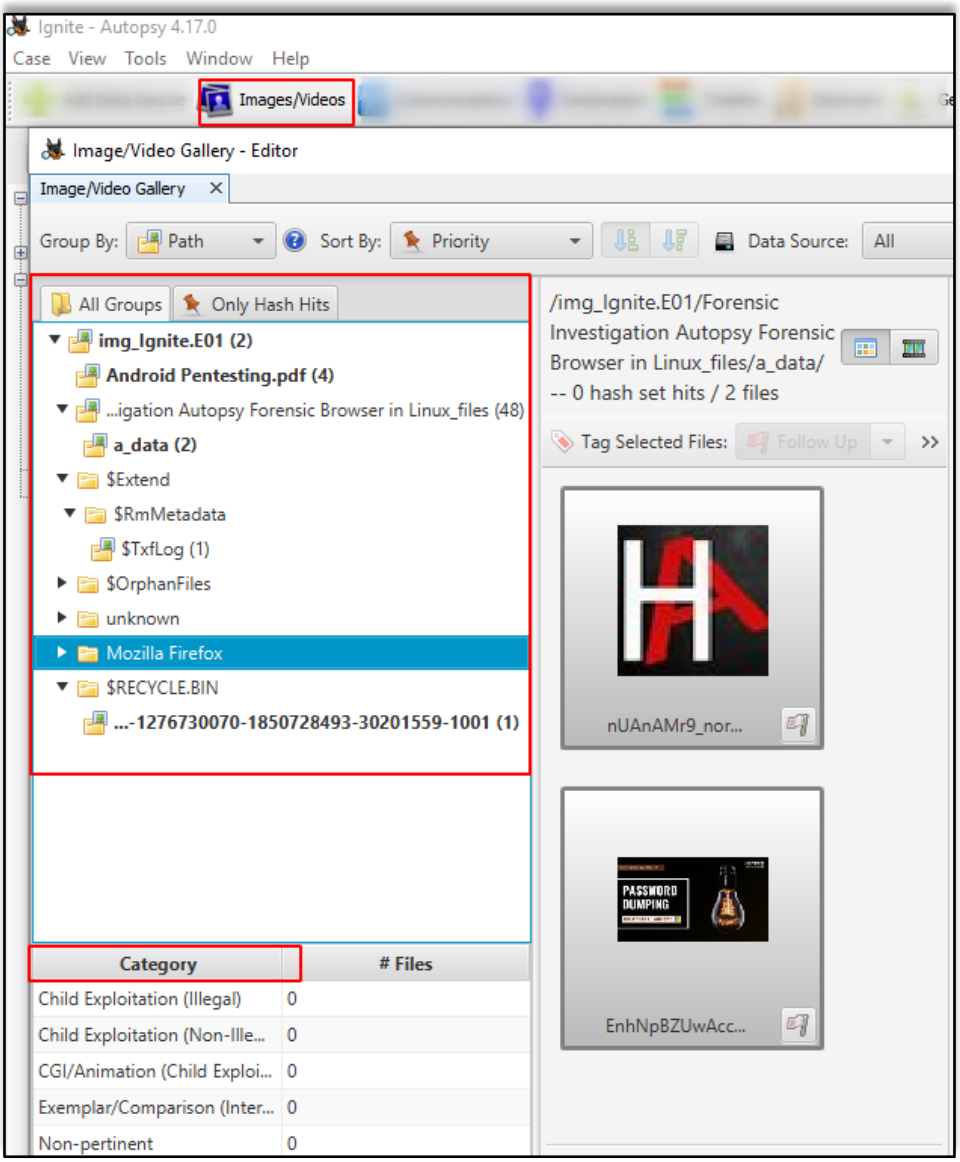


According to the selected options, you can get the desired results.



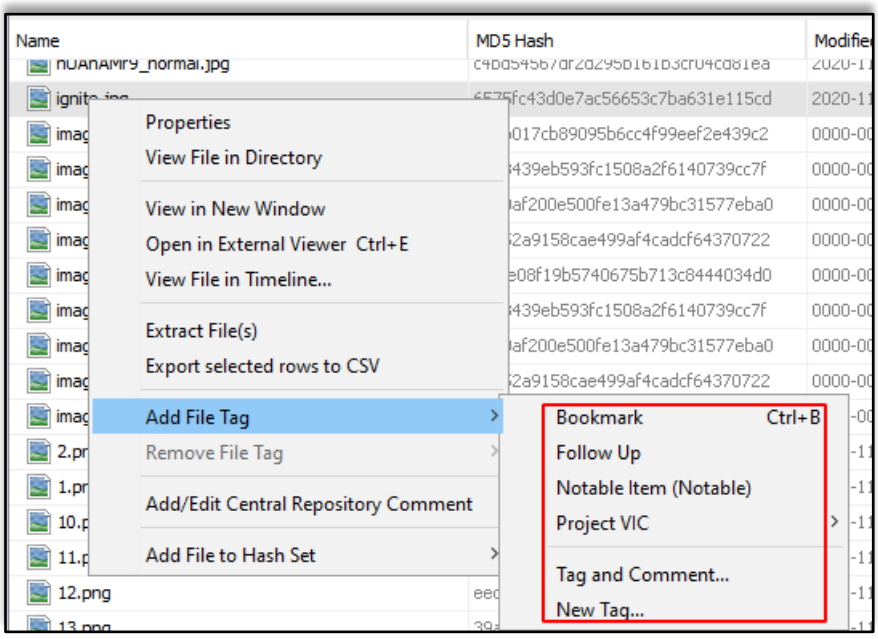
Images/Videos

This option is to find images and videos through various options and multiple categories

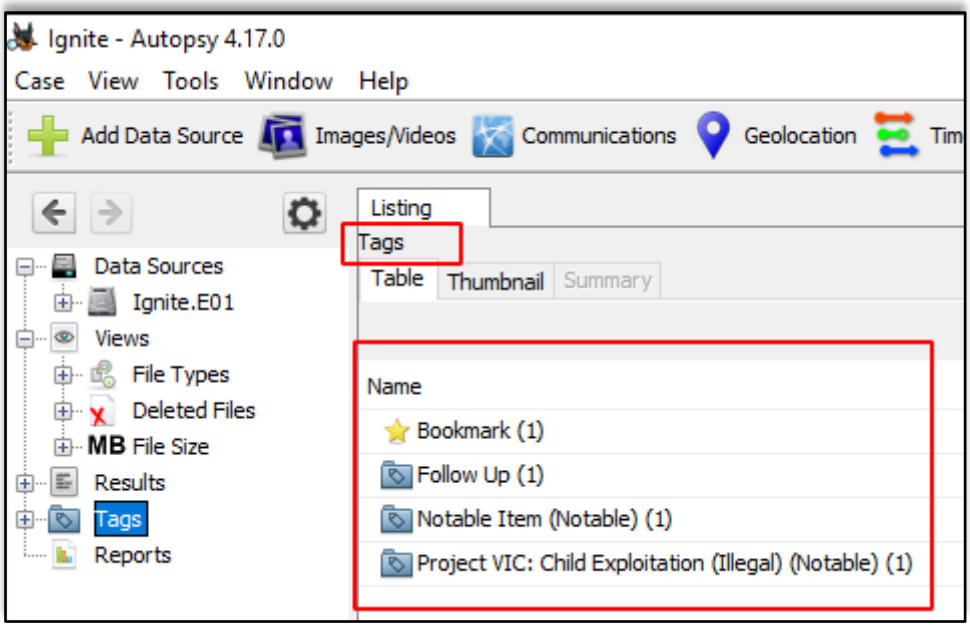


Add File Tag

Tagging can be used to create bookmarks, follow-up, mark as any notable item, etc.

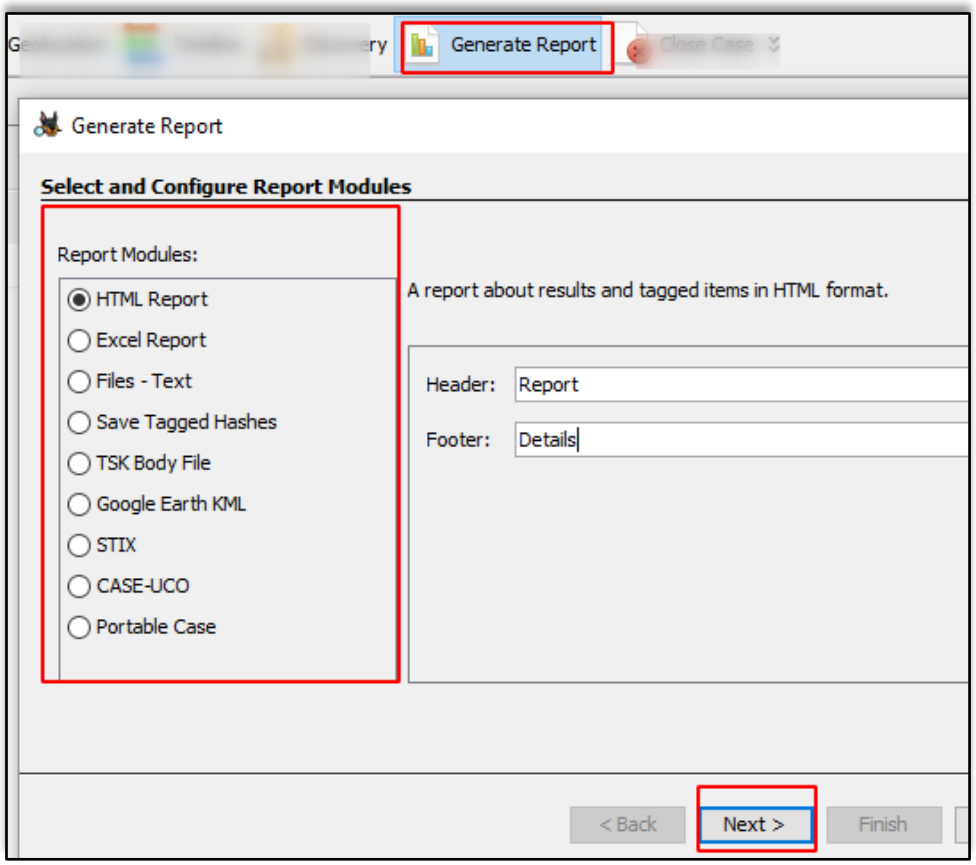


Now when you see the tags options, you will see that files were tagged according to various categories.

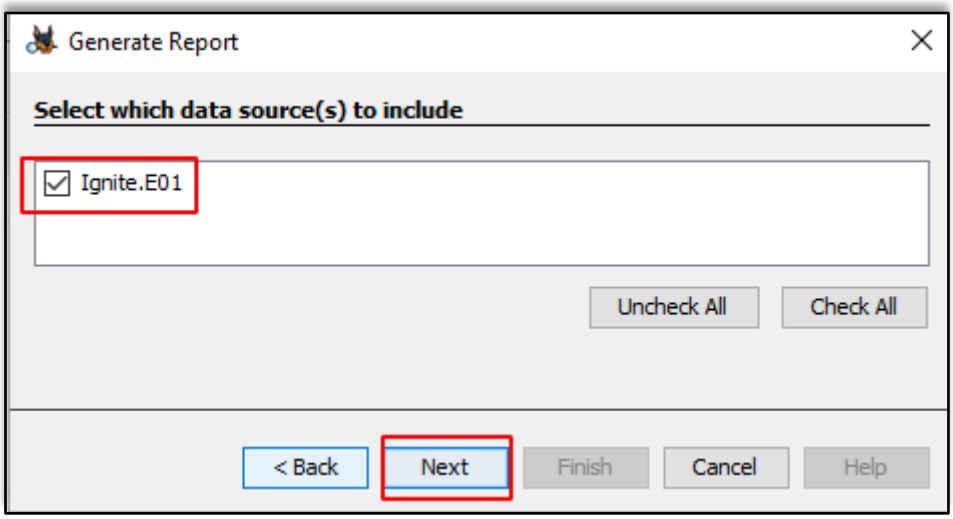


Generate Report

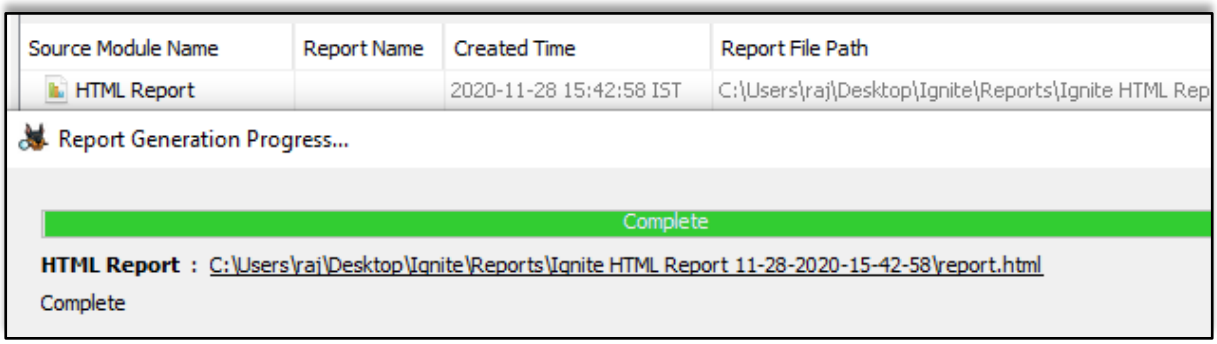
Once the investigation is done, the examiner can generate the report in various formats according to his preference.



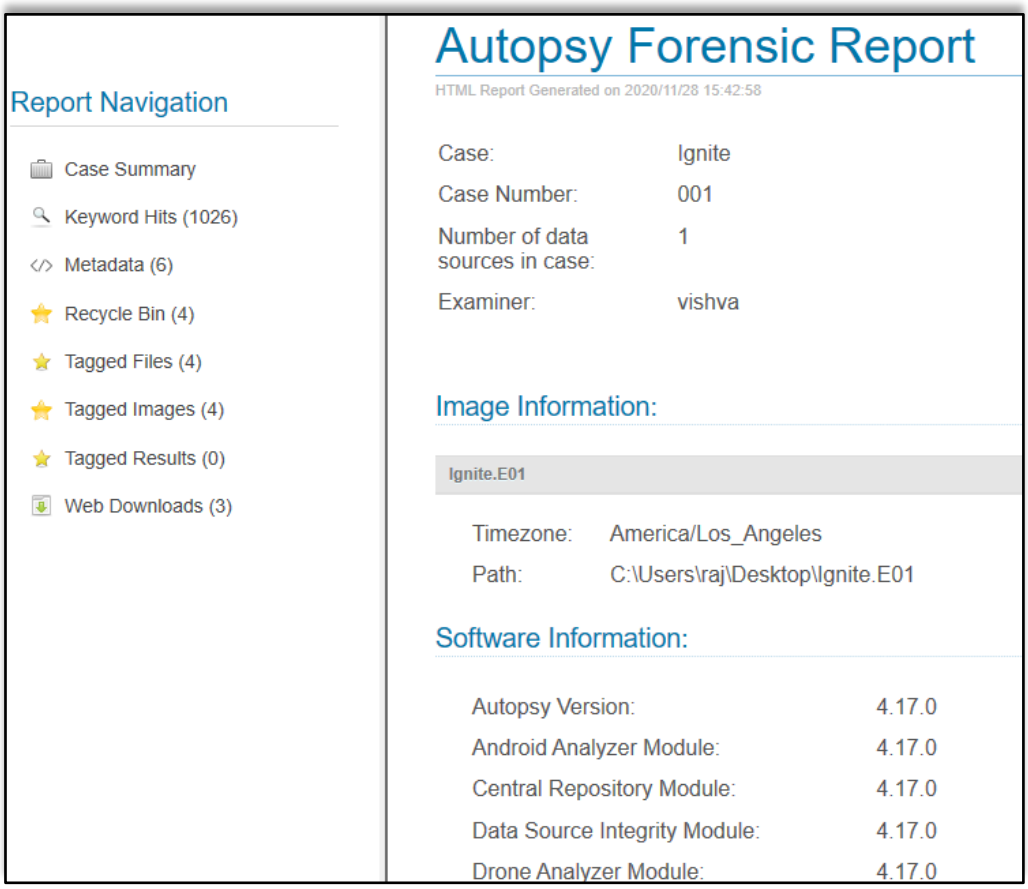
Check the data source whose report needs to be generated.



Here we chose to create the report in HTML format.



Kudos! Your Autopsy Forensic Report is ready!



References

- https://www.hackingarticles.in/comprehensive-guide-on-autopsy-tool-windows/
- https://www.hackingarticles.in/forensic-investigation-autopsy-forensic-browser-in-linux/