ORDINE DEGLI
AVVOCATI DI MILANO

Procura della Repubblica
presso il Tribunale Ordinario di Milano
~ Squadra Reati Informatici ~

**Il Fascicolo delle Indagini Preliminari Digitali:
nuove sfide della Riforma Cartabia**

Luogotenente GDF Davide D'Agostino
Coordinatore Squadra Reati Informatici Procura della Repubblica Milano

Milano 12 gennaio 2023

Copie forensi e software

- **AccessData FTK Imager**
- **Magnet Axiom**
- **Cellebrite Ufed**
- **Cellebrite Pysical Analyzer**
- **Cellebrite Ufed Reader**

Copie forensi

- **Cosa sono**
- **Come si realizzano**
- **Come posso consultarle**

Copie forensi

- **Cosa sono**

DEMO.E01	07/01/2023 17:13	File E01	26.938.643...
DEMO.E01.txt	07/01/2023 17:16	Documento di testo	2 KB

Copie forensi

- Cosa sono

📄 DEMO.E01	07/01/2023 17:13	File E01	26.938.643...

Copie forensi

- **Cosa sono**

📄 DEMO.E01.txt   07/01/2023 17:16   Documento di testo   2 KB

```
Created By AccessData® FTK® Imager 4.2.0.13

Case Information:
Acquired using: ADI4.2.0.13
Case Number: DEMO
Evidence Number: DEMO SPEF
Unique Description:
Examiner:
Notes:

--------------------------------------------------------------

Information for E:\Demo\SPEF\10.01.2023\Axiom\DEMO:

Physical Evidentiary Item (Source) Information:
[Device Info]
 Source Type: Physical
[Drive Geometry]
 Cylinders: 7.480
 Tracks per Cylinder: 255
 Sectors per Track: 63
 Bytes per Sector: 512
 Sector Count: 120.176.640
[Physical Drive Information]
 Drive Model:   USB   SanDisk 3.2Gen1 USB Device
 Drive Serial Number: 0501947993e31e4587b5
 Drive Interface Type: USB
 Removable drive: True
 Source data size: 58680 MB
 Sector count:     120176640
[Computed Hashes]
 MD5 checksum:      0bcd96a4979390a23091ce2891fdbfbf
 SHA1 checksum:     33d7e20cffa669cd053e8f7ac199ad8501f6dc10

Image Information:
 Acquisition started:   Sat Jan  7 16:54:28 2023
 Acquisition finished:  Sat Jan  7 17:13:23 2023
 Segment list:
  E:\Demo\SPEF\10.01.2023\Axiom\DEMO.E01

Image Verification Results:
 Verification started:  Sat Jan  7 17:13:23 2023
 Verification finished: Sat Jan  7 17:16:39 2023
 MD5 checksum:      0bcd96a4979390a23091ce2891fdbfbf : verified
 SHA1 checksum:     33d7e20cffa669cd053e8f7ac199ad8501f6dc10 : verified
```

Copie forensi

- ## Come si realizzano

  (strumenti hardware)

Copie forensi

- **Come si realizzano**

  (strumenti software)
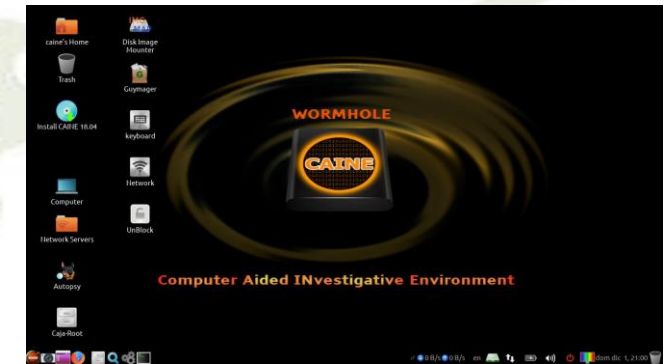
Copie forensi

- **Come posso consultarle**

FTK Imager

Copie forensi

- **Indicizzazione dei dati**

PROCESS

permette di indicizzare i
dati contenuti all'interno
di CF, file o cartelle
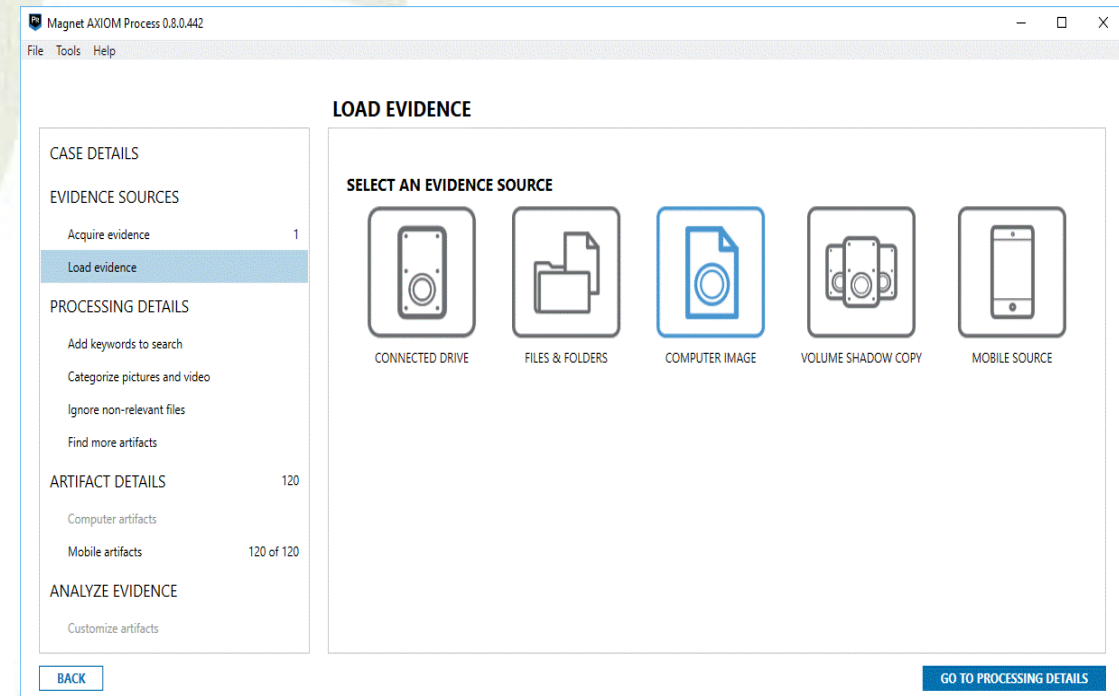
EXAMINE

permette di analizzare i file indicizzati con Axiom Process

ACQUISIZIONE DEVICE MOBILI

- **CELLEBRITE UFED**
- **MSAB XRY**
- **OXYGEN FORENSICS SUITE**
- **GRAYSHIFT GRAYKEY**

- **Ufed4PC/Touch**

permette di acquisire i device «mobile» (smartphone, tablet, GPS, droni)
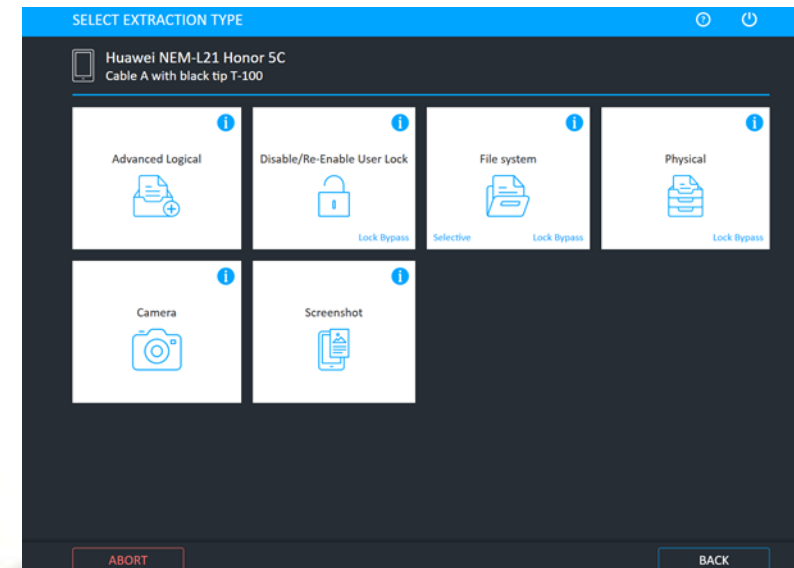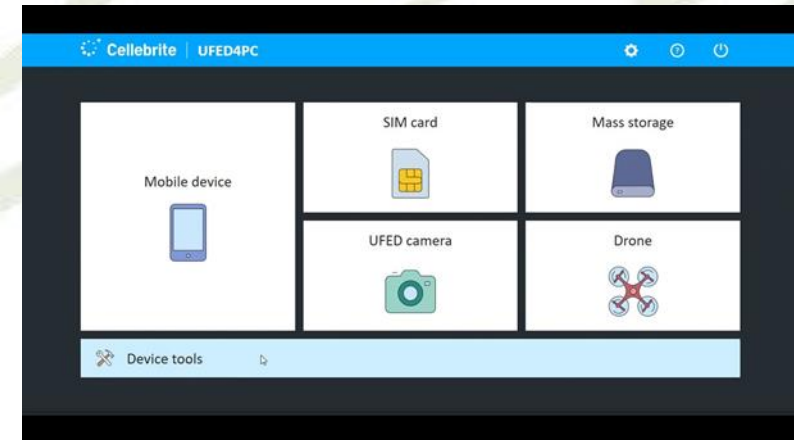
- **Pysical Analyzer**

permette di indicizzare/ analizzare i device acquisiti con UFED4PC

- **Reader** permette di indicizzare/ analizzare i device acquisiti con UFED4PC

Cellebrite Reader 7.50.0.27

File · View · Tools · Report · Help

Search · Advanced

EvidenceCollection_202... · Welcome · Extraction Summary (2)

All Content · Advanced Logical · File System

Extraction Summary

+ Add extraction · Add external file · Project settings · Generate report

⌄ Extractions: 2

Advanced Logical ✎
Samsung GSM SM-G988B_DS Galaxy S...
Advanced Logical [Android Backup] 📁

Extraction start date/time
05/01/2022 20:04:36 +01:00
Extraction end date/time
05/01/2022 21:13:55 +01:00

Image Hashes
⚠ Hash data is available for this extraction.

Verify image hash

File System ✎
Samsung GSM SM-G988B_DS Galaxy S...
File system [Android Backup] 📁

Extraction start date/time
05/01/2022 19:51:15(UTC+1)
Extraction end date/time
05/01/2022 20:01:52(UTC+1)

Image Hashes
⚠ Hash data is available for this extraction.

Verify image hash

Device Info

📄 Generate preliminary device report ⋯

File System
Android ID · 43304a8c19980dec
ID pubblicità #1 · 47ef2f8d-8806-4a10-891a-af60b2569aab

Advanced Logical
Client Used for Extraction · Yes
Advertising ID · 47ef2f8d-8806-4a10-891a-af60b2569aab
Android ID · 43304a8c19980dec
Detected manufacturer · samsung
Detected model · SM-G988B
Phone date/time · 05/01/2022 20:20:23 +01:00
Phone revision · 11 RP1A.200720.012 G988BXXSCDUK1
ID pubblicità #1 · 47ef2f8d-8806-4a10-891a-af60b2569aab
Extraction Notes
Generic · +ZZ – Il fuso orario del contrassegno di data e ora del telefono es...
L'ultimo numero IMEI potrebbe essere errato. Verificare manualm...

Malware scanner
Malware scan performed · No

Content

Data

| Calendar | 637 | Contacts | 2301 | Cookies | 3 |
| Device Locations | 9 | Installed Applications | 150 | Instant Messages | 13781 |

Data Files

Applications	3	Archives	85	Audio	6316
Configurations	3	Databases	36	Documents	2263
Images	55721	Text	489	Uncategorized	11
Videos	780				

Cellebrite Reader 7.50.0.27

File   View   Tools   Report   Help

Search   Advanced

EvidenceCollection_2022-01...

Welcome   Extraction Summary (2)   Images (55721)

Table View   **Thumbnail View**   Folder View   Gallery View

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

2010 - 2019   2020 - 2029

Analyzed Data

> Application (150)
> Calendar (637)
> Contacts (2301)
> Location Related (9)
∨ Media (62817)
   Audio (6316)
   Images (55721)
   > Videos (780)
> Messages (13781)
> Search & Web (3)

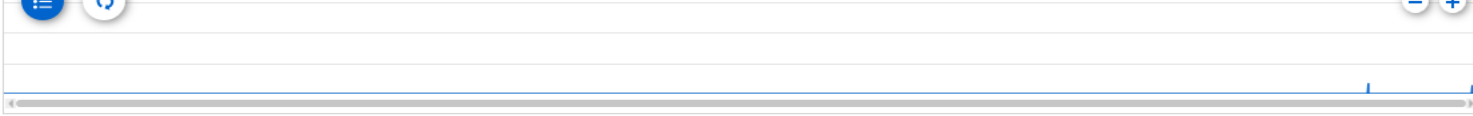**Data files**

Applications (3)
Archives (85)
Configurations (3)
Databases (36)
Documents (2263)
Text (489)
Uncategorized (11)
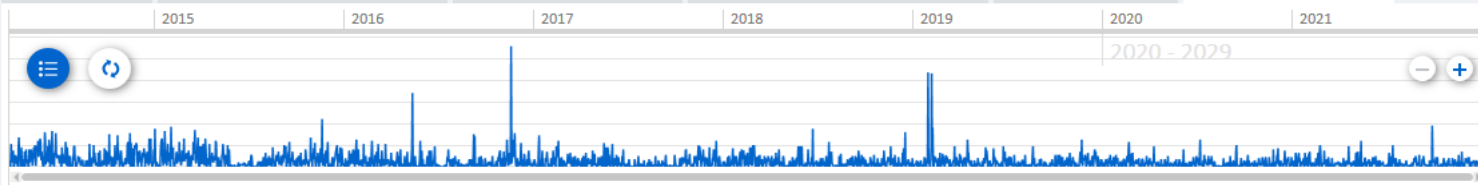
1 Filters applied Clear filters

Export Filters Actions Table Search

Search tags...

Clear All   Manage tags

∧ Case tags
   ☐ Evidence (F6)
   ☑ Important (F7)
   ☐ Pending (F8)
   ☐ Completed (F9)
   ☐ Verified (F10)

∨ Project VIC categories

Description (optional)

OK   Cancel

Images

Details   Events (0)

Save

Name: 0130475_2019-1-1.pdf_embedded_24.jpg
Type: Images
Size (bytes): 314888
Path: Documents/0130475_2019-1-1.pdf/0130475_2019-1-1.pdf_embedded_24.jpg
Created:
Accessed:
Modified:
Changed:
Deleted:
Extraction: Advanced Logical
MD5:   0535f5203ba0f19b8dad2b3601d3230b
Source file: 0130475_2019-1-1.pdf : 0x799DF0

Map
Position:
Address:
Map Address:

Total: 55721   Deduplication: 0   Items: 55721/55721   Selected: 55721   Known files: 0   Path: Documents/0130475_2019-1-1.pdf/0130475_2019-1-1.pdf_embedded_24.jpg

Extraction Report - Cellebrite Reports

Data Files (5)

Images (5)

#	File Info		Additional file info		Thumbnail	Deleted	*
1	Name:	Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_3.jpg	Size (bytes):	501516			
			Source Extraction	File System			
	Path:	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp Documents/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_3.jpg	Source file	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp Documents/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx : 0x1B545F (Size: 2425520 bytes)			
	MD5:	141e1a001332a906c08a9d3c7b8cf7e1					
2	Name:	Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_5.jpg	Size (bytes):	43629			
			Source Extraction	File System			
	Path:	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp	Source file	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp Documents/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di			

Images (5)

#	File System	Name	Size (bytes)	Path	Meta Data	Tags	MD5	TextualMetadata	Classifications	Hash sets	Category	SHA25
1	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip	Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_3.jpg	501516	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp Documents/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_3.jpg	File size:501516 Bytes Chunks:1 Date & Time Creation time: Modify time: Last access time: Deleted time: Change time: Offsets Data offset:0xC4D6B128	Image	141e1a001332a906c08a9d3c7b8cf7e1					
2	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip	Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_5.jpg	43629	Samsung GSM_SM-G988B_DS Galaxy S20 Ultra.zip/sdcard/WhatsApp/Media/WhatsApp Documents/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx/ Certificazione e Accreditamento nell'ottica del GDPR.A cura di Massimiliano Parla.pptx_embedded_5.jpg	File size:43629 Bytes Chunks:1 Date & Time Creation time: Modify time: Last access time: Deleted time: Change time: Offsets Data offset:0xC4DF9E13	Image	d36b46777b0630bbe58a54737214aae1					
3	Documents	01081229.pdf_embedded_1.jpg	264449	Documents/01081229.pdf/01081229.pdf_embedded_1.jpg	File size:264449 Bytes Chunks:1 Date & Time Creation time: Modify time: Last access time: Deleted time: Change time: Offsets Data offset:0x216B	Image	ce0c503437b30928574b790338510412					

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