

XRY Physical is a software package for the physical recovery of data from mobile devices. The memory dump from each individual device is a complex data structure, so MSAB has developed XRY Physical to make it easier to navigate this wealth of information.

With this tool, our software engineers have developed a forensic method to secure the handset's raw data from a mobile device (sometimes referred to as a hex-dump) and offer the ability to overcome security protocols on many devices and decode that raw information.

➤ Smartphone App Support

➤ Recover Deleted Data

➤ Bypass Mobile Passcodes

➤ Mobile Device Physical Examinations

Get More Data

MSAB's widely used XRY Logical software enables law enforcement agencies to perform 'Logical' data acquisition. This is a forensic process used to communicate with and read the contents of the device; which typically generates live information. XRY Physical has the advantage that it can reveal protected and deleted data, which may not be available through a logical analysis. Crucially, using XRY Physical, it is also possible to recover data from security locked phones.

Deleted Data Recovery

XRY Physical is different because it lets forensics specialists push investigation even further by performing a physical data acquisition – a process generating hex-dumps from the phone memory, typically bypassing the device operating system. This frequently leads to the recovery of deleted information.

XRY Physical supports acquisition of internal memory and removable media. Additionally, XRY Physical allows users to generate hash values of the memory image, as well as individually decoded files. With the expert knowledge from a team of dedicated developers, MSAB has a comprehensive understanding of each individual phone's unique memory structure.

Hex viewers

XRY Physical automatically shows users the data from the most relevant portions of phone memory. It allows examiners to explore even deeper with the use of XAMN. By activating source mode in XAMN, users will see the hex code for verification of the original raw data.

Through a process of dumping raw data followed by automated decoding to reconstruct the content – XRY Physical can secure a whole new layer of valuable data for investigators and forensic examiners.

Features

- Windows Based Software Solution
- Unique Help File for Every Device
- Easy Data Extraction
- HEX Analysis of Data
- Hash Algorithms

Tools

- CD/DVD Burning Wizard
- Clone SIM Cards
- Clean Registry
- Convert Old XRY Files
- License Updates
- Download Updates

Minimum Requirements

For the full list of recommended specifications, see MSAB.com/XRY

- Intel 6th Generation (Core i3 or above) processor, 16GB RAM, 1 USB-port
- 4 GB space for installation
- 500 GB space for data storage
- Windows 10
- 1600 x 900 resolution
- Microsoft .NET Framework 4.7.2

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➤ Discover evidence and intelligence

➤ Analyze and visualize data

➤ Create reports and share findings

The amount of data stored on mobile phones and other mobile devices is dramatically greater today than ever before. That makes the challenges of searching, filtering and analyzing that data more daunting as well. You need to quickly find what you are looking for, even in huge data sets.

Whether your mission is to gather and report intelligence, prevent crime or quickly produce solid evidence - the powerful and intuitive tools in XAMN enable the fastest possible route from having raw data to finding and reporting vital insights.

The right tools in the right hands

XAMN is designed with one goal in mind: to increase analytical efficiency - so that you can find what you are looking for quickly and easily.

A key element to successfully analyzing large volumes of data in digital forensics investigations is to understand how to process and contextualize the data, find the evidence it contains and then produce a comprehensive report. To do that, you need smart analytics – to search, filter, analyze and find the data quickly and at scale. To cross-examine data from multiple devices and individuals. Then to share with those who need to know.

No digital forensic analysis tool does that better today than XAMN.

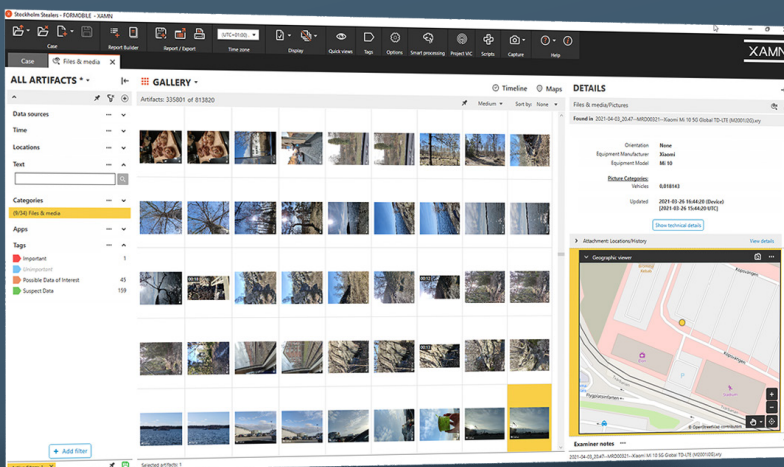
There are two versions of MSAB Analyze - XAMN:

XAMN Pro

An intuitive yet extremely powerful review and analysis tool that provides unprecedented search, linking, and filtering options that enables investigators, analysts and digital examiners to quickly discover evidence in mobile data. XAMN Pro simplifies and speeds up your work and is the tool of choice for anything from review of pictures and messages to advanced hex carving. XAMN Pro also includes extensive options for reporting and exports.

XAMN Viewer

A free and easy-to-use tool that enables users of all levels in your organization to access, perform basic review, and create reports for mobile device data.



XAMN enables you to display and sort through your data fast and efficiently.

Discover critical evidence and intelligence faster

Leverage XAMN's unprecedented ease-of-use and review capabilities for quick results

Investigators, analysts, and forensic specialists are often tasked with sifting through thousands – even hundreds of thousands – of messages and pictures as well as gigabytes of other data.

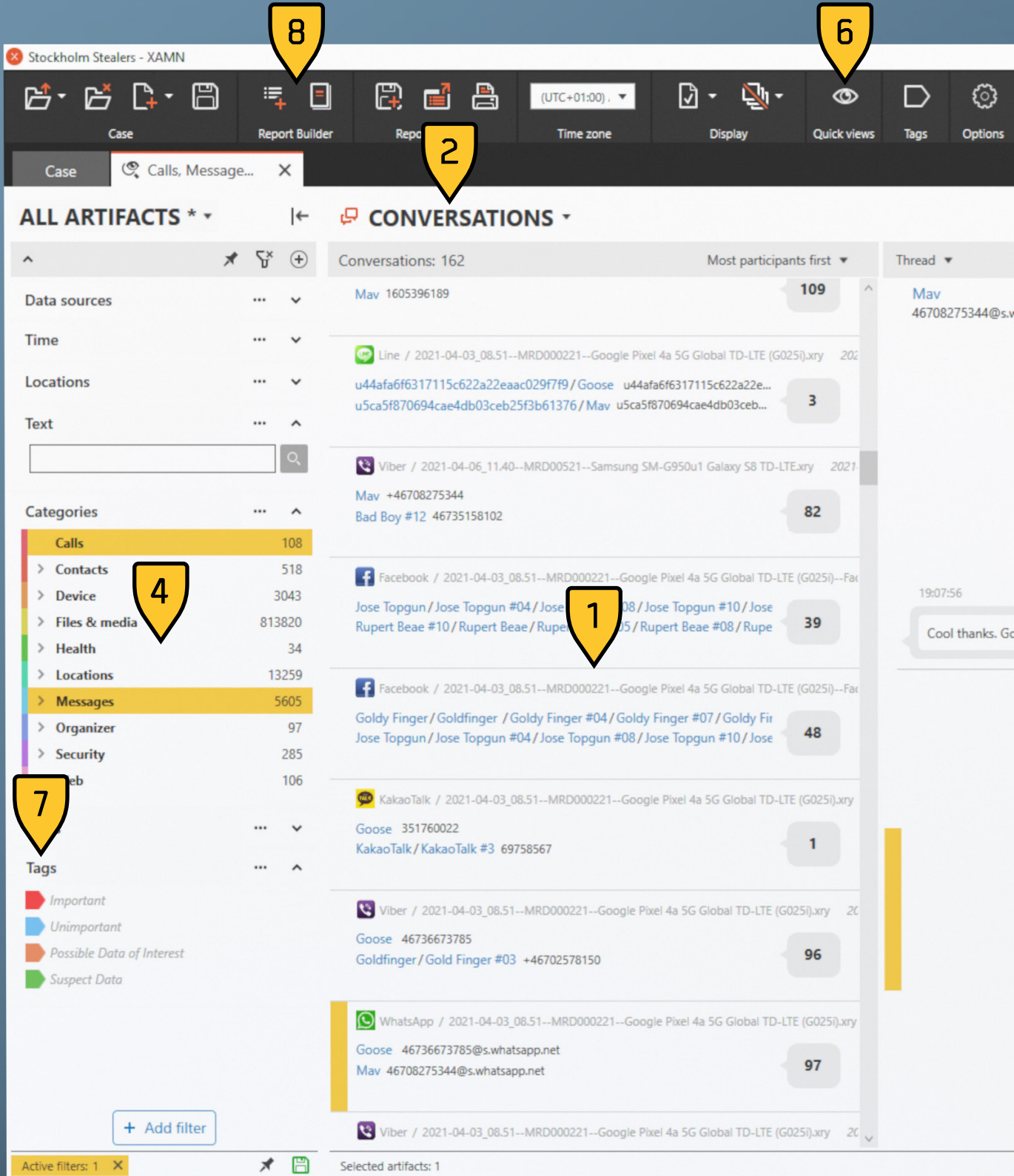
XAMN Pro is designed with one goal in mind: To increase analytical efficiency – so that you can find what you are looking for quickly and easily.

XAMN Pro is an extremely powerful tool for analysis and reporting. Load your mobile device extractions and use a wide and intuitive range of filter, search, and viewing options to get past any redundant data and quickly find what you are looking for. After that, use one of many different options to visualize and report your findings.

You can load many different extractions into XAMN at the same time. This enables you to simultaneously search through and compare data from logical and physical extractions of mobile devices, memory cards, SIM Cards as well as XRY Camera and XRY Cloud files.

XAMN Pro supports analysis of extractions from mobile phones, drones, wearable tech, GPS devices, vehicle information systems, warrant returns, and more.

- Ingest and analyze data from MSAB's XRY, third-party extraction tools, call data records (CDR), warrant returns from online service providers, and more
- Link phone numbers, chat aliases, and other key identifiers to Persons
- Narrow down your search by filtering on content category, text, time, phone number, file size, geography, deleted data, text patterns, Project VIC, and more
- Use XAMN's AI-based content recognition filter to automatically classify images as weapons, drugs, people and other key categories – a tremendous time-saver in many cases
- Optimize your workspace with custom quick views and multi-monitor support
- Review artifacts using built-in viewers for PList, XML, SQLite files, and more



1. Artifacts pane

The artifacts pane displays your filtered results and updates in real-time as you add or remove active filters.

2. Analytical views

Investigate your filtered results using analytical views optimized for different types of artifacts.

Gallery: Pictures and media file

Conversations: Chats, messages and calls

Connection: Relationships between persons

Geographic: Artifacts with geolocation attributes

List, Column and File Tree: All types

3. Timeline & Maps

You can combine any analytical view with an intuitive timeline that shows activity based on time and a Maps view that shows artifacts having geolocation attributes.

4. Filters pane

XAMN provides a wide range of useful filters allowing you to narrow down your search based on criteria relevant to your investigation. In addition to the default filters, many more are easily accessed from the Filters menu. Artifacts are color-coded throughout XAMN, to make it easy for you to distinguish between content types such as pictures, messages and calls.

The screenshot displays the XAMN user interface. At the top, there is a navigation bar with icons for Smart processing, Project VIC, Scripts, and Help. The main window is divided into a left pane showing a WhatsApp chat history and a right pane showing details for a selected message. The chat history shows messages from 'Goose' (46736673785@s.whatsapp.net) on 2021-03-26, including a photo, a text message 'He's watching from bus stop', a voice note, a text message 'Meet me here soon' with a photo, and a location pin. The details pane on the right shows the following information:

Client	Phone
To: Ma	
WhatsApp ID	46736673785@s.whatsapp.net
Time	2021-03-26 18:59:36 (Network) [2021-03-26 17:59:36 UTC]
Direction	Outgoing
Status	Delivered (Read)
Related URL	https://mmg.whatsapp.net/d/f/AkIVMn80RJsx0lhJx9oGIPsSyy_J9Vj9EsYwiJbkgFPH.enc

Below the details pane, an attachment 'IMG-20210326-WA0007.jpg' is shown in a picture viewer. The image shows a wooden bench with 'GOOSE' written on it. The file name and path are displayed below the image.

5. Details pane

The details pane shows you detailed information about a selected artifact, like the selected message above. Depending on the type of artifact, XAMN can offer you ways to pivot your search to find related artifacts. For example, you can easily create a new filter to look for artifacts created in the same timeframe or in the same geographic area.

6. Quick views

Quick views are sets of saved filters. XAMN provides a number of useful Quick Views out-of-the-box that allows you to instantly look at e.g. only calls, messages, deleted data or artifacts created in the last 30 days. Additionally, you can easily create your own custom Quick Views that can help you greatly speed up your investigations.

7. Tags

To keep your findings organized as you review data, you use Tags. Tags are bookmarks that can be applied to a single or multiple artifacts in one go. XAMN provides two default tags - Important and Unimportant. In addition, you can freely create as many custom tags as you like.

8. Reports

After completing your analysis, a common step is to create a report with your findings. XAMN allows you to create reports in two ways - with intuitive drag-and-drop using the Report Builder or using the Report/Export option.

Analyze and visualize your findings in new, powerful ways

Quickly get an understanding of your data by examining it from different perspectives.

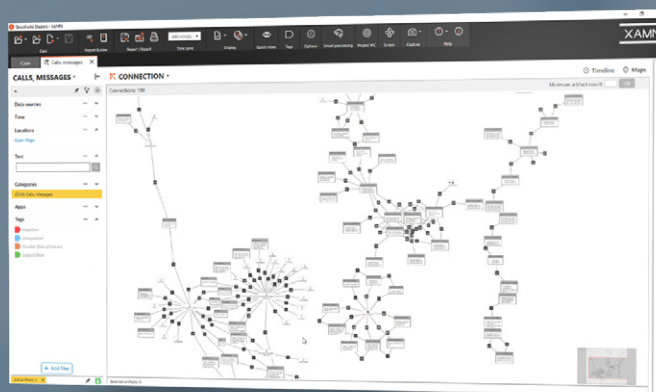
XAMN Pro provides an immediate overview of the connections between different persons of interest, and helps you discover additional individuals that may be relevant to your investigation.

XAMN Pro enables you to discover and investigate data from different perspectives:

- The **Geographic** and **Maps** views lets you navigate data by location to see where calls were made or received, pictures taken, and more.
- The **Conversations** view lets you track chat threads from popular chat apps.
- The incredibly powerful **Connection** view allows you to discover and investigate the interactions between different device owners and accounts.

XAMN Pro also provides a built-in advanced hex carving tool for experts, designed to help you dig deeply into undecoded or fragmented data in order to bookmark, reconstruct and validate crucial pieces of information that would otherwise be unavailable. Very importantly, XAMN Pro makes it easier to defend the validity of your findings.

- See entire chat threads like they are displayed in the apps in the Conversations view
- Explore messages and other interactions between persons in the Connection view
- Review findings with geo data in the Maps view and combine it with a Timeline
- View the source details of an artifact or deep-dive in the Hex view with carving support
- Explore contents of SQLite databases and map findings to reportable artifacts



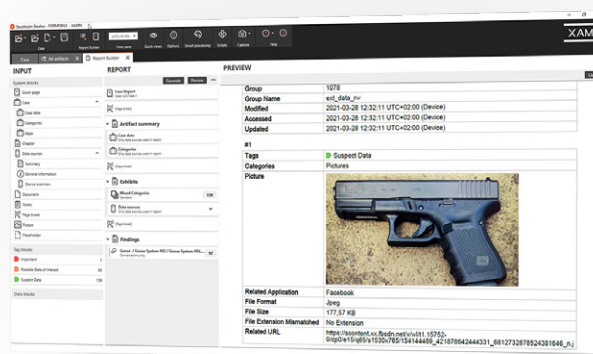
The Connection view is one of many comprehensive visualisation options that allow you to understand, organize and explore the data you're investigating.

Share your findings with streamlined reporting

Save time and share your findings with precision using XAMN Pro's Report Builder and extensive export options.

Clear and understandable reports are vital to success, and creating them is one of the most important steps of your digital investigation. XAMN's Report Builder allows you to, with simple drag-and-drop technology, quickly create reports for use in your department or for presentation in court. You can easily tailor the layout and structure to fit different stakeholders and have complete control over ordering and the layout used in different sections of the report.

In addition to Report Builder, XAMN Pro provides extensive functionality to export data in a wide range of formats, such as PDF, Word, Excel, XML, GPX, VICS, and more. You can also create a subset of an XRY file that can be shared with e.g. legal advisors and prosecutors and be interactively reviewed using XAMN Viewer.



XAMN's Report Builder lets you construct reports though an intuitive drag-and-drop interface, and save the resulting structure as a template for future use.

- Quickly include findings in your report by tagging artifacts of interest
- Easily arrange your findings using drag-and-drop
- Include external material in your report, such as SOP descriptions, photos, and protocols
- Create and make use of templates for an even more efficient process

Contact sales@msab.com to get started!