Online Investigation and Evidence Collection

With criminals as connected as everyone else, it has never been more critical for law enforcement to conduct secure, anonymous, and compliant online investigations and evidence collection. For professionals that know how and where to look, there is a treasure trove of information that can accelerate and augment their investigations.

Compliance is Critical

Investigators and analysts must comply with chain of custody evidentiary policies or 28 CFR Part 23 criminal intelligence database regulations as they collect, process, and store social media and/or dark web information as evidence, or the evidence will be found inadmissible and thrown out of court.

Cyber Threats and Exposure Risks Are Everywhere

Evidentiary non-compliance isn’t the only risk. Online research using local browsers leaves digital footprints that expose and compromise missions. Cyber-savvy criminals sell the identities of researchers on the dark web, block access to websites, and use online resources to misinform and mislead investigations. Security professionals try to counter those risks and prevent exposure by cobbling together a patchwork of homegrown tools and dirty network lines, which puts a painful maintenance burden on IT.

Silo Research Toolbox Increases the Speed and Quality of Open Source Intelligence Production

Silo delivers the anonymity, security, and compliance that research teams must have through the initial stages of the intelligence lifecycle, from planning and direction to processing and collation.

- **Plan and direct with anonymity**: Customizable online fingerprint management capabilities change web server-facing characteristics of the browsing session to mislead web servers about the true intent of the research.
- **Collect evidence securely and quickly**: Built on the Silo web isolation platform, Research Toolbox wraps a suite of analytical instruments in an intuitive browser interface to drive investigative efficiency, while securely rendering all content off network.
- **Process and collate evidence in compliance**: Encrypted audit logs and a secure data storage preserve digital evidence with hash values to support chain of custody compliance.

![Figure 1: Increase speed and quality across essential stages](image)
Planning and Direction Stage

During planning and direction, Silo allows analysts to widen the scope of the investigation by letting analysts blend in with normal traffic and typical users. Researchers configure custom online fingerprints that align with essential properties of the research to obfuscate intent. The digital footprint left behind at the location of the research does not alert targets to the investigation.

Collection Stage

At the collection stage, Research Toolbox accelerates research with features that let analysts capture more evidence in less time. A covert translator discretely translates full web pages, paragraphs, and ad hoc text. Multiple evidence collection tools support the effortless capture of content, images, and URLs, while web annotation features and software integrations help comply with 28 CFR Part 23 policy.
Silo Research Toolbox completely isolates the local environment by delivering a secure, remote research browser running in the Silo Cloud. Researchers direct Silo to any site on the open, deep, or dark web with complete anonymity and immunity from malicious content. They receive only a benign, encrypted display of what’s rendered remotely, and a fresh browser is built for each research session.

**Figure 4: Robust suite of efficiency-driven evidence collection features**

**Process and Collation Stage**

At the process and collation stage, collaboration and compliance are critical. To ensure compliance with chain of custody and CFR 28 Part 23, Silo Research Toolbox logs and encrypts user activities and navigation details and provides secure cloud storage with unique hash values for web content collected as evidence. In addition, the secure data storage can be configured for team access to support inter-agency collaboration while maintaining data integrity.

**Figure 5: Meet chain of custody and CFR 28 Part 23 compliance**
Cost-efficient, Secure, and Easy to Adopt and Maintain

Silo Research Toolbox is a powerful, managed attribution SaaS solution that is easy to configure, adopt, and maintain.

Silo’s ease of use starts with the highly-intuitive browser interface, but carries through to system administrators, as well, with the friendly admin console that enables policy management at a granular level. Admin controls can be delegated partially or wholly to sub-admins or team leads, without having to give all administrators permissions over the instance.
Administrators also control what research teams are allowed to access (whitelist/blacklist) and can control egress locations of researchers. Audit logging provides full visibility into all web research activities to ensure compliance.

With its power and simplicity, Silo Research Toolbox is unlike VPN-based solutions, which need firewall ports opened when adding or changing egress locations and provide no protection from malware or weaponized content. No more reimaging compromised machines, managing dirty networks, or worrying about egress nodes and software patches.

Silo Research Toolbox lets you focus on what matters — the investigation.

ABOUT | Authentic8 is redefining how enterprises conduct business on the web with the Silo web isolation platform. Silo insulates and isolates all web data and code execution from user endpoints, providing powerful, proactive security while giving users full, interactive access to the web. Silo also embeds security, identity, and data policies directly into browser sessions, giving IT complete control over how the web is used. Commercial enterprises and public sector organizations use Silo solutions to provide secure web access, to control web data, apps, and workflows, and to conduct sensitive online research. Try Silo now at www.authentic8.com.