AV-LAB CYBERSECURITY FOUNDATION

Metras XDR

Detailed EDR_XDR Solutions Overview

2026, 4th edition

Controlled attack simulation with full telemetry analysis

Environment: Windows 10, Windows 11, Windows Server + Active Directory

Evaluation period: March to June 2026

Last updated: June 10, 2026

2026

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Test Summary
Metras XDR

The solution provided a high level of visibility and detection effectiveness for most of the tested scenarios. PowerShell telemetry, AMSI, Script Block Logging, command-line visibility, behavioral detections, and visibility into activity related to LOLBins, WMI, SMB, WebDAV, remote execution, and exfiltration were rated particularly highly.

Key strengths included highly detailed RAW telemetry, extensive behavioral detections, broad visibility into local execution chains, and one of the most comprehensive AI-assisted remediation and investigation modules among the tested solutions. Metras XDR also provided detailed recommendations, risk scoring, and analytical context to facilitate SOC operations.

Visibility of activity between hosts was good, but more complex scenarios often required manual correlation of multiple incidents and telemetry rather than a single, coherent attack graph.

The solution meets the requirements for advanced visibility and correlation (Level 2), with moderate limitations primarily concerning the consistency of correlations between hosts and the automatic reconstruction of complex, multi-stage attack scenarios.

FULL

The function works in its full scope without significant limitations.

PARTIAL

The function works, but with noticeable limitations.

LIMITED

The function is present but provides minimal visibility or analytical value.

NONE

The function is unavailable or no relevant visibility was observed.

Attack Description	
Simulation of data retrieval via DNS TXT, reconstruction of the payload in %TEMP%, execution via LOLBin, and exfiltration.	***FULL***
Copying the payload between PCs before execution, then running the RAT as an EXE and quietly capturing keystrokes.	***FULL***
User downloads ISO, mounts it, and executes EXE, triggering payload and C2 communication (HTTP/mTLS).	***FULL***
Payload is delivered via WebDAV and executed by the user, establishing C2. The compromise is then extended to another endpoint through SMB file transfer and remote execution via WMI.	***FULL***
The attacker copies the payload to a remote host via SMB and executes it using PsExec as a SYSTEM service, thereby achieving remote code execution.	***FULL***
Using a local LLM model to dynamically select subsequent steps. After verifying SMB connectivity to the target host, remote code is executed via WMI, which creates, compiles, and runs the payload on the victim's system, generating multi-stage process telemetry.	***PARTIAL***
The attack uses an external AI model as a decision-making layer to control actions on the host. The script collects system information, saves it to a file, compresses it, and sends it externally via HTTP, while the AI issues subsequent decisions based on the system's state.	***FULL***
Clicking a phishing link launches mshta, which downloads and executes PowerShell. The script collects system data, establishes persistence via a Scheduled Task, runs rundll32 to hide its activity, and then exfiltrates data over HTTPS (curl). The entire chain uses LOLBIN.	***FULL***

02

The importance of telemetry detail in the context of incidents

Modern attacks, including long-term activities carried out by advanced threat groups (APTs), are rarely limited to a single incident. They often begin with a seemingly harmless phishing message, which is actually only the first stage of an extensive chain of activities involving maintaining access, escalating privileges, so-called lateral movement, and data exfiltration [1].

In such scenarios, it is not only the detection of a single alert that is crucial, but also the ability to record and correlate all relevant technical artifacts. Recording even partial information about potential incidents allows for the reconstruction of events that took place in the analyzed environment. EDR-XDR solutions that monitor systems and applications, thanks to data correlation and automation mechanisms, support security teams in identifying the relationships between the stages of an attack.

Based on the collected telemetry, it is possible to determine what actions the attacker took, in what order, using what processes, applications, and user accounts. In the case of attacks spread over time, it is particularly important to maintain a consistent chronology of events and visibility of changes in user context and permissions. This information can be presented in the form of a logical or graphical reconstruction of the incident (e.g., as a process tree or a map of connections between hosts), which will certainly facilitate understanding of the full course of the operation.

Another important element of a mature EDR-XDR platform is the ability to perform advanced queries, allowing analysts to manually search raw telemetry, build their own queries, and verify investigative hypotheses. In the case of multi-stage campaigns, a ready-made alert often does not reflect the full extent of the compromise. Only in-depth analysis allows for the identification of additional traces of the breach, connections between systems, and the attacker's actual goal.

The broader the range of monitored events and the greater the depth of telemetry, the greater the organization's ability to understand the attacker's intentions and techniques, and consequently to mitigate the impact of the incident and adapt security policies to real threats.

[1] See an example of an APT attack on our editorial office in 2026:
https://avlab.pl/przypadek-falszywego-phishingu-to-element-dlugofalowego-ataku-grupy-storm-1679/

03

Protection model evolution

Product categories such as EPP, EDR, XDR, and SIEM are increasingly overlapping in terms of functionality. In practice, the differences between them no longer stem from commercial nomenclature, but from the scope of telemetry collected, the method of correlating it, the level of automation, and the ability to reconstruct multi-stage attack chains.

Many modern solutions referred to as EDR have expanded their capabilities to include integration with SaaS services, identity systems, and selected network sources, bringing them closer functionally to the XDR class. At the same time, some products positioned as XDR still rely primarily on endpoint telemetry, offering limited cross-domain correlation. This means that the product name does not always reflect its actual level of operational maturity.

The table below is for organizational and illustrative purposes only. It presents the typical characteristics of each class of solutions, assuming that specific implementations may go beyond this framework or combine elements of several categories.

EPP

Focuses primarily on prevention. Signature and reputation-based blocking with limited telemetry storage and minimal investigative context.

EDR

Endpoint-focused detection and investigation. Provides detailed telemetry (process trees, command lines, artifacts), retrospective analysis, and host-level response actions. Correlation is primarily limited to data generated by endpoints.

XDR

Enables cross-domain correlation based on endpoint telemetry. Aggregates and correlates signals from endpoints, identity providers, SaaS platforms, email, and network sources. Focuses on reconstructing attack chains across multiple systems.

SIEM

Log aggregation and correlation engine based on rules or behaviors. Data normalization, long-term storage, compliance-related use cases, and configurable detection logic. Detection quality depends largely on log quality, integration level, and rule maturity.

The models are simplified and do not fully reflect market dynamics. The historical evolution from EPP through EDR to XDR shows a shift in emphasis from signature-based prevention to deep telemetry, event correlation, and incident reconstruction. Of course, the protection of workstations and servers remains the unchanging core, but it is the range of data sources, the quality of correlation, and the possibility of multi-system analysis that today determine the real effectiveness of IT environment protection.

04

Scope, objectives and limitations of the 2026 edition

The purpose of the test is to evaluate the actual capabilities of EDR-XDR solutions in detecting, recording, and correlating multi-stage attacks under controlled laboratory conditions.

The analysis is not limited to the generation of alerts. The depth of telemetry, the quality of event correlation, the ability to reconstruct the attack chain, and the operational usefulness of data from the perspective of a SOC analyst are also evaluated.

Methodological assumptions

The test is carried out in a structured environment simulating a realistic attack scenario covering the stages from Initial Access to Exfiltration and Impact, in accordance with selected MITRE ATT&CK techniques.

Each stage is performed in a controlled and repeatable manner, with accurate time recording and predefined expected technical artifacts.

In the first phase, the test can be performed in “report-only” mode to assess visibility and correlation without interrupting the scenario. In subsequent stages, the effectiveness of response and automatic prevention mechanisms can be analyzed.

What exactly are we evaluating?

The test answers the following questions:

01

Does the solution generate a clear alert for the techniques used?

02

Does it provide complete and detailed event telemetry?

03

Does it enable correlation of events within a host and between systems?

04

Does it allow reconstruction of the attack chain in the logical context of the incident?

05

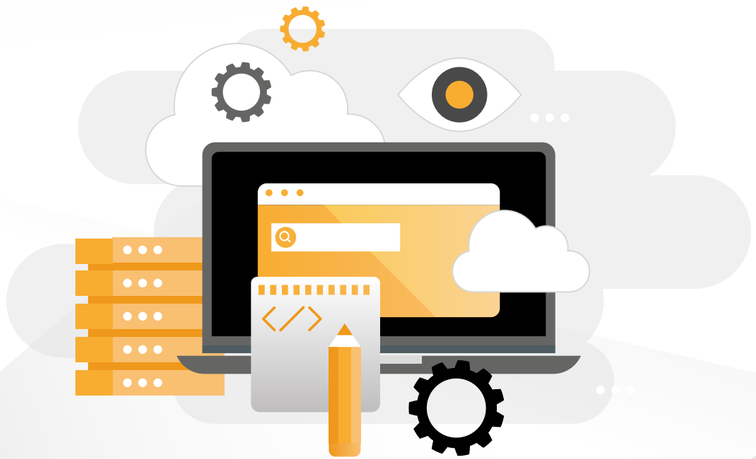
Is the data provided operationally useful from the SOC team's perspective?

Test limitations

The test is conducted in a controlled environment and does not reflect the full complexity of production environments involving hundreds or thousands of endpoints, non-standard configurations, integrations with external systems, and actual load.

The attack scenarios, while realistic, are selected examples and do not cover all possible threat variants.

The results should be interpreted as an assessment of the technical capabilities of the solution under precisely defined test conditions. The test ensures repeatability and comparability of results but does not constitute a complete simulation of a large-scale production environment.



The 2026 edition introduces a clear distinction between:

- technology detection alone,
- full telemetry visibility,
- event correlation,
- attack chain reconstruction.

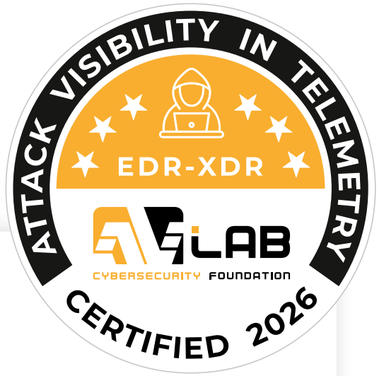
In the previous edition, these elements were evaluated together. The updated methodology separates detection effectiveness from the quality of the analytical context and the operational capabilities of the tested solution.

The comparison criteria have also been standardized, including:

- telemetry completeness,
- local and inter-host correlation,
- incident presentation consistency in the console,
- coverage of tested techniques.

The purpose of the changes is to increase the transparency of the methodology and reduce discretionary elements in the final assessment.

Certification model



Level 1 – Core Telemetry Visibility

CERTIFIED 2026

Awarded to solutions that provide full technical visibility of events within tested scenarios, including:

1. Generation of unambiguous security alerts,
2. Access to full telemetry (command-line, process relationships, file and registry changes, user context),
3. Consistent and accurate event chronology,
4. Automatic correlation of events within a single host.

Level 1 confirms that the solution provides sufficient technical visibility of security events at the host level, including clear alerts, key execution artifacts and contextual information required to analyze an incident within a single system.

Level 2 – Full Attack Chain Correlation

GOLD AWARD 2026

Level 2 is awarded to solutions that, in addition to meeting all Level 1 requirements, demonstrate the capability to automatically correlate events across multiple hosts and reconstruct a multi-stage attack chain within a single logical incident.

Solutions that do not provide basic attack visibility in the tested scenarios do not receive certification.

Certification is a summary of a technical assessment based on a defined methodology and uniform comparative criteria. The level awarded confirms that specific requirements for visibility, telemetry, and event correlation have been met.

Security features availability

1. Detection & Telemetry depth

Basic attack visibility	FULL
Full attack telemetry	FULL
Process tree visibility	FULL
Command-line visibility	FULL
Network - file - registry telemetry	FULL
MITRE technique mapping	FULL
Offline detection capability	FULL

2. Event Correlation & Attack Context

Single-host correlation	FULL
Cross-host correlation	FULL
Full attack-chain reconstruction	FULL
Graphical attack visualization	FULL

3. Threat Intelligence & Enrichment

Suspicious object intelligence (IP, URL, SHA)	FULL
External enrichment (reputation feeds, threat intelligence, VirusTotal-like services)	FULL
Approximate file reputation scoring	FULL

4. Incident Response Capabilities

Workstation isolation	FULL
File & process containment (quarantine, kill, blocking, isolation)	FULL
Sandbox or deep file analysis (manual or automated detonation; local or cloud)	FULL
Proposed remediation guidance	FULL
Data recovery capability (rollback or backup)	NONE
Automation or SOAR (native or external)	PARTIAL

5. Investigation & Hunting

Advanced query capability	FULL
Raw telemetry access	FULL
Timeline analysis	FULL

6. Security Posture & Exposure Visibility

Graphical security posture visualization (vulnerabilities, weak passwords, misconfiguration)	PARTIAL
Agent configuration validation	FULL

7. Platform & Administrative Controls

Updates management	NONE
Granular administrative access control	FULL
Admin console protection (MFA, SSO, audit log)	FULL
API availability	FULL
Multi-tenant console for MSSP (multi-company management)	FULL

8. AI-Assisted Operations

AI assistance in console (alert summarization, query generation, recommendations etc.)	FULL

07

Agent Configuration and Operating Mode

The test covered EDR-XDR solution operating in a Windows environment, in accordance with a predefined attack scenario and a uniform assessment methodology.

Most of the tested EDR-XDR platforms include an integrated antivirus module. This module remained active so that the environment configuration would reflect a real production deployment that an administrator might use in an organization.

In the first phase of testing, the solutions could be run in report-only mode, without automatic blocking and remediation. This was done to:

- enable full execution of the attack scenario,
- assess telemetry visibility,
- analyze the quality of correlation and incident reconstruction,
- avoid interrupting the attack chain at an early stage.

The configuration of agent policies was based on default settings, with a possible extension of the scope of telemetry collected. For solutions requiring manual policy configuration, settings were used to maximize event visibility and technical artifact logging, while maintaining compliance with the manufacturer's official documentation.

The aim of the study was not to test non-standard experimental configurations, but to evaluate the real capabilities of the platform in a production scenario.

Environment configuration

The tests were conducted in a controlled virtual environment, including a separate attack infrastructure and victim systems with EDR-XDR agents installed.

The environment included:

01 a separate server simulating the attack infrastructure (Command-and-Control)

02 virtual machines running Windows 10 and Windows 11 with the tested agents installed

03 optionally, a domain controller (Active Directory) to simulate lateral movement and identity abuse scenarios

The victim systems had a standard operating system configuration with up-to-date security patches and full network access in accordance with the test scenario.

The attack scenarios were carried out using controlled simulation techniques that mirrored selected MITRE ATT&CK techniques. Depending on the test phase, adversary emulation tools and native system mechanisms were used to replicate the attacker's behavior as realistically as possible.

The test did not include social engineering elements (e.g., a real phishing campaign) because the goal was to technically replicate behavior at the host and infrastructure level, not to test user susceptibility to manipulation.

The attacks were carried out in a controlled and repeatable manner, without conducting full campaigns from start to finish. Each stage was performed according to a predefined scenario and documented in terms of expected technical artifacts.

Attacker Infrastructure
(Isolated Zone)

C2 Server - Kali Linux
(Command & Control)

Attack Tools & Frameworks
- Atomic Read Team
- Custom Scripts
- Other Simulations

Payload Delivery
(HTTP, SMB, RDP, etc.)

Internal Network
(Lab Environment)

Active Directory

DC - Windows Server
EDR/XDR Agent

Host A - Windows 10
EDR/XDR Agent

Host B - Windows 11
EDR/XDR Agent

Internet Acces
(Allowed)

EDR/XDR Console & Evaluation

Central Console
(Alerting, Investigation, Hunting)

MITRE ATTACK Mapping

Attack Chain Reconstruction

Attack Stages

Initial Access → Executions → Presistance → Defense Evasion → Credential Access → Lateral Movement → Exfiltration

Operational Assessment – Phase 1

Settings applied: Telemetry Only (Detect Mode)
Attack Scenario – Adversary Emulation (MITRE ATT&CK via Caldera Framework)

FULL

The function works in its full scope without significant limitations.

PARTIAL

The function works, but with noticeable limitations.

LIMITED

The function is present but provides minimal visibility or analytical value.

Initial Access	T1566.001	Download Macro-Enabled Phishing Attachment	***FULL***	Single host	✓ Alert generated ✓ Graphical process tree visible ✓ Attack-chain reconstruction possible ✓ PowerShell execution visible ✓ Full command line available ✓ User and endpoint context available ✓ Parent process references present ✓ RAW telemetry accessible
Execution	T1106	Execute process via Win32 API (Process.Start)	***FULL***	Single host	✓ Alert generated ✓ Graphical process tree visible ✓ Attack-chain reconstruction possible ✓ PowerShell execution visible ✓ Full command line available ✓ User and endpoint context available ✓ Parent process references present ✓ RAW telemetry accessible

Persistence	T1566.001	Creating persistent access by Scheduled Task after reboot	**FULL**	Single host	✓ Alert generated ✓ Persistence activity detected ✓ Full command line available ✓ Parent-child relationship process visible ✓ User and endpoint context available ✓ RAW telemetry accessible ◐ MITRE technique mapping partially
Defense Evasion	T1036.004	Masquerading via scheduled task name (win32times)	**FULL**	Single host	✓ Security alert generated ✓ Persistence activity visible ✓ Full command line available ✓ Parent-child relationship process visible ✓ PowerShell execution parameters visible ✓ User and endpoint context available ✓ RAW telemetry accessible ✓ Suspicious task naming detected ◐ Primary MITRE technique partially
Credential Access	T1555.004	Enumerate stored credentials (Windows Credential Manager)	**FULL**	Single host	✓ Credential-access activity visible ✓ VaultCmd execution visible ✓ Full command lines available ✓ Parent-child process relationships visible ✓ User and endpoint context available ✓ RAW telemetry accessible ✓ Process lifecycle telemetry visible ✓ Alert generated ✓ Graphical process tree visibility ✓ Attack-chain reconstruction possible ✓ ATT&CK mapping

Lateral Movement	T1021.002	SMB mount, file transfer, and remote execution via PowerShell	***FULL***	Full cross-host	✓ Multiple behavioral alerts generated ✓ WMI execution activity detected ✓ SMB administrative share activity visible ✓ Lateral Movement visible ✓ Full PowerShell command line available ✓ Parent-child process relationships visible ✓ AMSI telemetry available ✓ RAW telemetry accessible ✓ Behavioral correlation present ✓ ATT&CK mapping generated
Exfiltration	T1048.002	Upload file via HTTPS using curl to external service (file.io)	***FULL***	Single host	✓ Multiple behavioral alerts generated ✓ HTTP(S)-based communication detected ✓ Full command line available ✓ Parent-child relationship process visible ✓ User and endpoint context available ✓ RAW telemetry accessible ✓ ATT&CK mapping generated ✓ Exfiltration over C2 channel identified

Operational Assessment – Phase 2

Settings applied: Default Protection + “Live Search” mode

Methodological assumptions

The results of each attack scenario are interpreted from two operational perspectives: the attacker and the Security Operation Center. This approach helps to determine not only whether the attack was technically successful, but also how clearly it was visible and understandable from the defender's point of view.

Attacker's perspective

From the attacker's point of view, the key issue is whether the individual techniques were executed according to the planned scenario and whether the chain of attacks could be carried out in whole or in part.

1. Was the payload successfully executed?
2. Was communication or control of the host established (if applicable)?
3. Was it possible to maintain or extend access (e.g., lateral movement or exfiltration)?
4. At what stage was the attack chain interrupted if it was stopped by defensive mechanisms?

This perspective helps determine whether the solution actively disrupts the attack or merely logs the activity.

SOC-Defender

From a security team perspective, the key factors are the quality and completeness of the information presented in the security console and whether the incident can be quickly understood and investigated. From this perspective, we assess:

1. Was a clear security alert generated?
2. Is there sufficient telemetry data available to analyze the event?
3. Were related events automatically correlated?
4. Can the attack chain be reconstructed in the context of a single incident?
5. Does the analysis require manual correlation of events?

The tables below summarize the operational results of each attack scenario using simplified visual indicators for both perspectives.

Responding to scenarios from Phase 2

Custom Attacks Scenarios

FULL

The function works in its full scope without significant limitations.

PARTIAL

The function works, but with noticeable limitations.

LIMITED

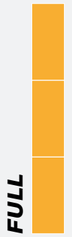
The function is present but provides minimal visibility or analytical value.

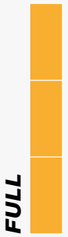
NONE

The function is unavailable or no relevant visibility was observed.

Attack Description	Used tools	Stages	Attack's MITRE ID	Attacker's Perspective	Security Operation Center Perspective	Assessment
Simulation of data retrieval via DNS TXT, reconstruction of the payload in %TEMP%, execution via LOLBin, and exfiltration.	Custom + PowerShell script	1. Initial Access 2. Execution 3. Defense Evasion 4. Command & Control 5. Exfiltration	T1059.001 T1071.004 T1105 T1218.009 T1036.005 T1564.001 T1041	Downloading DNS chunks, delivering the payload, execution, and successful HTTP communication (status code 200).	✓ Credential-access activity visible ✓ VaultCmd execution visible ✓ Full command lines available ✓ Parent-child process relationships visible ✓ User and endpoint context available ✓ RAW telemetry accessible ✓ Process lifecycle telemetry visible ✓ Alert generated ✓ Graphical process tree visibility ✓ Attack-chain reconstruction possible ✓ ATT&CK mapping	***FULL***

Attack Description	Used tools	Stages	Attack's MITRE ID	Attacker's Perspective	Security Operation Center Perspective	Assessment
Copying the payload between PCs before execution, then running the RAT as an EXE and quietly capturing keystrokes.	DuplexSpy	1. Initial Access 2. Lateral Movement 3. Execution 4. Persistence 5. Credential Access 6. Collection 7. Command and Control 8. Exfiltration	T1204.002 T1056.001 T1113 T1071.001 T1041 T1547.001 T1082	Execute the RAT as an EXE to quietly capture keystrokes. There are no exploits, it has a low profile and there is periodic exfiltration to C2.	✓ Lateral movement activity detected ✓ Remote WMI execution detected ✓ Remote payload execution identified ✓ Full command line available ✓ User and endpoint context available ✓ Behavioral correlation generated ✓ AI-driven attack summary available ✓ Risk scoring generated ✓ ATT&CK mapping generated ✓ Investigation recommendations generated ✓ RAW telemetry accessible	FULL
User downloads ISO, mounts it, and executes EXE, triggering payload and C2 communication (HTTP/mTLS).	Sliver Server	1. Initial Access 2. Execution 3. Defense Evasion 4. Command and Control 5. Lateral Movement 6. Discovery 7. Collection 8. Exfiltration	T1566.001 T1204.002 T1036.005 T1071.001 T1021.002 T1041	The attacker delivers ISO, victim mounts it and runs EXE, establishing payload execution and C2.	✓ Alert generated ✓ Execution from external drive identified ✓ User-initiated execution identified ✓ Explorer parent process correlation available ✓ TT&CK mapping generated ✓ AI-generated summary available ✓ Investigation recommendations generated ✓ User and endpoint context available ✓ RAW telemetry accessible	FULL

Attack Description	Used tools	Stages	Attack's MITRE ID	Attacker's Perspective	Security Operation Center Perspective	Assessment
Payload is delivered via WebDAV and executed by the user, establishing C2. The compromise is then extended to another endpoint through SMB file transfer and remote execution via WMI.	Sliver Server	1. Initial Access 2. Execution 3. Command and Control 4. Lateral Movement 5. Exfiltration	T1105 T1204.002 T1071.001 T1021.002 T1047 T1041	The attacker delivers payload via WebDAV, gains C2, then uses SMB and WMI to execute payload on another endpoint.	✓ WebDAV-based payload delivery visible ✓ Execution from remote WebDAV share detected ✓ Unsigned binary execution detected ✓ Outbound network communication detected ✓ SMB Admin Share lateral movement detected ✓ Lateral tool transfer detected ✓ PowerShell activity detected ✓ AMSI telemetry available ✓ Parent-child process relationships visible ✓ Masquerading activity detected ✓ Non-standard port communication detected ✓ User and endpoint context available ✓ RAW telemetry accessible ✓ Remediation guidance available ◐ Some ATT&CK mappings partially inaccurate	

Attack Description	Used tools	Stages	Attack's MITRE ID	Attacker's Perspective	Security Operation Center Perspective	Assessment
The attacker copies the payload to a remote host via SMB and executes it remotely using WMI (Win32_Process), thereby achieving remote code execution.	Custom + PsExec + Atomic Red Team	1. Lateral Movement 2. Execution	T1021.002 T1047 T1570	The attacker uses administrator credentials to access the administrative share, transfers the payload to a remote host, and executes it remotely via WMI (Win32_Process), achieving remote code execution.	✓ Extensive telemetry visibility ✓ Full command-line visibility ✓ Parent-child process relationships visible ✓ RAW telemetry accessible ✓ SMB Admin Share activity detected ✓ WMI-based remote execution detected ✓ Lateral tool transfer detected ✓ Investigation recommendations available ✓ Remediation guidance available ✓ ATT&CK mapping available ✓ Multi-stage attack visibility present	 FULL
Using a local LLM model to dynamically select subsequent steps. After verifying SMB connectivity to the target host, remote code is executed via WMI, which creates, compiles, and runs the payload on the victim's system, generating multi-stage process telemetry.	Ollama AI + Custom PowerShell	1. Discovery 2. Execution 3. Lateral movement	T1059.001 T1046 T1021.002 T1047	Collect the host's context and pass it to a local LLM, which selects the most effective lateral movement step. Then use SMB to gain access to the target system and remotely execute code via WMI.	✓ Multiple alerts generated ✓ Remote execution visible ✓ Target-side payload execution visible ✓ LOLBin-compiler activity visible ✓ Full command-line visibility available ✓ Cross-host telemetry present ✓ RAW telemetry accessible ✗ No automatic reconstruction of remote execution chain	 PARTIAL

Attack Description	Used tools	Stages	Attack's MITRE ID	Attacker's Perspective	Security Operation Center Perspective	Assessment
The attack uses an external AI model as a decision-making layer to control actions on the host. The script collects system information, saves it to a file, compresses it, and sends it externally via HTTP, while the AI issues subsequent decisions based on the system's state.	OpenAI (API) + PowerShell	1. Reconnaissance 2. Command & Control (AI) 3. Collection 4. Staging 5. Exfiltration	T1082 T1518 T1071.001 T1005 T1560 T1041 T1567	The attacker launches a simple loader that communicates with the AI model and executes its commands. It delegates the analysis of the environment and the selection of actions to LLM, which decides on the next steps based on the data it receives.	✓ Behavioral incidents generated ✓ AI recommendations available ✓ Full script content visible ✓ System discovery activity visible ✓ Software discovery activity visible ✓ Local data collection visible ✓ Archive creation activity visible ✓ Exfiltration activity visible ✓ Curl-based upload visible ✓ Parent-child process r elationships visible ✓ LOLBin activity visible ✓ Full command-line visibility available ✓ RAW telemetry accessible ✓ Multi-stage local attack chain visible	
Clicking a phishing link launches mshta, which downloads and executes PowerShell. The script collects system data, establishes persistence via a Scheduled Task, runs rundll32 to hide its activity, and then exfiltrates data over HTTPS (curl). The entire chain uses LOLBIN.	Kali Linux + browser + powershell + schtasks + rundll32 + curl	1. Initial Access 2. Execution (LOLBIN) Execution (PowerShell) 3. Collection 4. Persistence 5. Defense Evasion 6. Execution (LOLBIN) 7. Exfiltration	T1566.002 T1218 T1059.001 T1005 T1053.005 T1036.005 T1218 T1041	I use phishing to launch mshta and bypass standard detection mechanisms. The HTA loads PowerShell in the background, which collects data and maintains access via a Scheduled Task. I use only legitimate system tools (LOLBIN) to minimize detection, and I send the data externally via HTTPS.	✓ Incidents generated ✓ Parent-child process relationships visible ✓ Full command-line visibility available ✓ HTA execution detected ✓ Mshta LOLBin execution visible ✓ RAW telemetry accessible ✓ User and endpoint context available ✓ Local execution chain reconstruction visible ✓ Multi-stage process correlation available	

Telemetry, correlation and incident visibility assessment based on Phase 2

The table summarizes the observations derived from all executed attack scenarios in phase 2 and presents the overall assessment of telemetry visibility, event correlation and incident reconstruction capabilities of the evaluated solution.

- requirement for obtaining Level 1 or Level 2 Certification
- no requirements

FULL

The function works in its full scope without significant limitations.

PARTIAL

The function works, but with noticeable limitations.

LIMITED

The function is present but provides minimal visibility or analytical value.

Attack Description	Required for at least Level 1 Certification	Required for Level 2 Certification	Assessment	Comment
Basic attack visibility	✓	✓	***FULL*** 	Visibility into the basic and advanced stages of the attack was high and included, among others, execution, LOLBins, PowerShell, lateral movement, WMI, WebDAV, SMB, and exfiltration.
Full attack telemetry	✗	✗	***FULL*** 	The telemetry coverage was very broad and included, among other things, the command line, process tree, AMSI, Script Block Logging, file operations, network telemetry, RAW logs, and inter-host activity.
Parent-Child Process Visibility	✓	✓	***PARTIAL*** 	Parent-child relationships were generally visible. However, in some scenarios, the absence of an incident prevented the automatic generation of complete process graphs and execution chains in the console.
Command-line visibility	✓	✓	***FULL*** 	The command-line interface was very detailed.
User context visibility	✓	✓	***FULL*** 	The visibility into the user's context was comprehensive and included the active user, the login context, and the association of actions with specific hosts and processes.

Attack Description	Required for at least Level 1 Certification	Required for Level 2 Certification	Assessment	Comment
Timestamp integrity	✓	✓	**FULL**	Telemetry maintained the temporal consistency of events, enabling analysis of the execution chain and activity between hosts.
Single-host correlation	✓	✓	**FULL**	Event correlation on a single host was consistently very good and covered the process tree, LOLBins, and the local execution chain.
Cross-host correlation	✗	✓	**PARTIAL**	Visibility into activity between hosts was good and included SMB, WMI, WebDAV, and remote execution, among others. However, correlation often required manual analysis of multiple incidents and raw telemetry rather than a single, cohesive attack graph.
Network telemetry	✗	✗	**FULL**	The network's telemetry visibility covered local and inter-host connections, as well as exfiltration traffic, including information on direction, IP addresses, and ports.
File & registry telemetry	✗	✗	**FULL**	The visibility of file operations was very good and included the creation, modification, archiving, transfer, and execution of payloads and artifacts.
Remediation guidance	✗	✗	**FULL**	Comprehensive analytical and remediation recommendations were generated, including host isolation, payload analysis, credential reset, and further investigative steps. The AI module was among the most detailed of the solutions tested.
Graphical attack visualization	✗	✗	**PARTIAL**	The process tree is now visible, and process and activity relationships are partially visualized. Multi-stage scenarios and cross-host activities often required manual correlation of multiple incidents and raw telemetry data instead of a single, coherent attack graph.
Advanced query capability	✗	✗	**FULL**	Extensive search and filtering capabilities for telemetry data, including command-line searches, searches by process, host, and user, as well as free-text searches.

Test conclusions

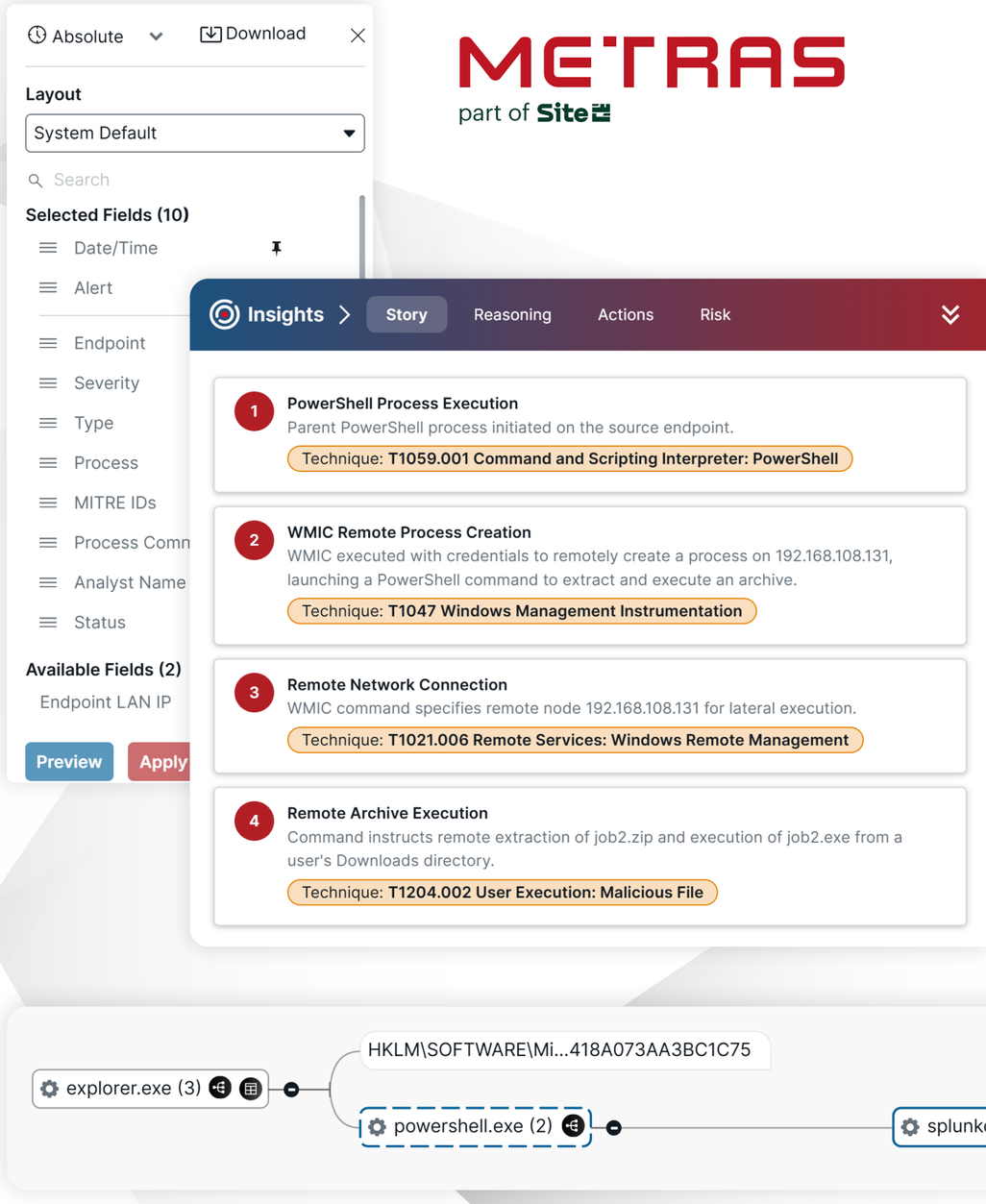
Metras XDR provided a high level of telemetry visibility and behavioral detection across a wide range of multi-stage attack scenarios. Overall, the admin console provided detailed visibility into activity related to PowerShell, AMSI, Script Block Logging, LOLBins, HTA execution, SMB Admin Shares, remote execution via WMI/DCOM, payloads delivered via WebDAV, archiving, and data exfiltration. During testing, full command-line access, RAW telemetry, and detailed process information were consistently available.

Visibility into local execution chains, behavioral detections, AI-generated remediation guidance, and comprehensive analytical summaries were particularly well-rated. In many scenarios, the platform correctly identified activities related to lateral movement, remote execution, payload delivery, and exfiltration, while also providing risk scoring and recommendations useful during SOC analysis.

Visibility into activity between hosts was good and allowed for the identification of lateral movement flows, SMB activity, and communication between systems. Limitations, however, mainly concerned the correlation of more complex multi-stage scenarios, where analysis often required manually combining multiple incidents and RAW telemetry instead of a single coherent attack graph. In some scenarios, a full reconstruction of the attack required manual analysis between the source and target hosts.

During testing, partial inaccuracies were also noted in MITRE ATT&CK mapping, where some detections appeared to rely more on heuristic behavior classification than on precise technique assignment. Despite this, the telemetry and behavioral detections themselves remained detailed and operationally useful.

Overall, Metras XDR provides very broad telemetric visibility, extensive behavioral analysis, and one of the most advanced AI-assisted remediation and investigation modules among the tested solutions, although the area of automatic correlation between hosts and full attack chain reconstruction still requires further development.



To learn more about the collaboration, please visit the Attack Visibility in EDR-XDR Telemetry page, where you can also track the results of recent editions.

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