

Sophos Al-powered Cyber Defenses

Robust, battle-proven products and services that combine AI technologies and human expertise, delivered through Sophos' adaptive AI-native platform.



SOPHOS

Sophos has been pushing the boundaries of AI for cybersecurity since 2017, bringing together AI technologies and human cybersecurity expertise to stop the broadest range of threats, wherever they run. Security analysts are empowered to make smart decisions faster while organizations can operate with confidence knowing our robust, battle-proven AI solutions have their back.

Deep learning and generative AI capabilities that solve the most critical problems for our customers are embedded in our solutions and delivered through the largest AI-native platform in the industry. Training on data from attacks in more than 600,000 diverse customer environments, our adaptive AI-native platform delivers unrivalled defenses for our customers and enhances the power of defenders.

A Sophos Solution Guide, February 2025

Al level set

Al is a short acronym that covers a broad range of technologies of varying size and purpose. While generative Al models such as Microsoft Copilot and Google Gemini are often front of mind with Al, they are just a part of the story.

At Sophos, we use an extensive range of Al models to accelerate cybersecurity, matching the model to the security goal.

Type

Deep Learning AI (APPLY)

Uses artificial neural networks to recognize patterns and make decisions in a way that mimics the human brain. It applies learnings to perform tasks.

EXAMPLE:

Sophos URL Security Model

Detects malicious URLs, phishing websites, and other web-based threats.

Deployed In:

Sophos Endpoint, Sophos Firewall, Sophos Email, Sophos Mobile

Generative AI (CREATE)

Creates (generates) brand new content based on the structure and pattern of existing data.

EXAMPLE:

Sophos Al Assistant

Guides security professionals of all skill levels through each stage of an investigation.

Deployed In:

Sophos XDR

Size

Massive Al Models

Assists users in performing a wide range of tasks.

Small Al Models

Designed, trained and built for a specific, focused use case.

EXAMPLE

Microsoft Copilot, Google Gemini

These large language models (LLMs) can help users with a very broad range of tasks. They are trained on vast quantities of data that are publicly available.

EXAMPLE:

Sophos Android DL model

Trained on Sophos' proprietary Android data to detect Androidspecific malware.

Deployed In:

Sophos Mobile

Al at every point in your defenses

More than 50 (and growing) deep learning and GenAl models in Sophos solutions deliver fast, effective protection against cyberthreats, whenever and wherever they run. Our Al-powered cybersecurity reduces exposure, stops threats automatically, and empowers security analysts to make smart decisions faster.

Examples of AI use in Sophos products and services

SOPHOS MANAGED RISK

Uses the Tenable Vulnerability Priority Rating (VPR) AI model to predict the likelihood of CVE exploitation within 28 days

Mitigate Risk of Threats

Reduce exposure to attack

SOPHOS ENDPOINT

Multiple deep learning models secure against known and never-before-seen attacks, including threats in Microsoft Office solutions, PDFs and rich text format (RTF) files

SOPHOS FIREWALL

Al-powered zero-day threat intelligence is delivered through SophosLabs Intelix

Automatically Stop Threats

Prevent attacks from executing

SOPHOS ENDPOINT & FIREWALL

Web protection models detect malicious URLs, phishing websites, and other web-based threats

SOPHOS EMAIL

Deep Learning-powered Natural Language Processing (NLP) identifies impersonation attempts

SOPHOS MOBILE

Android DL model is trained on proprietary Android data to detect Android-specific malware

SOPHOS XDR

Al Assistant guides security professionals through each stage of an investigation

■ SOPHOS XDR. SOPHOS MDR

Al Case Summary provides a clear overview of detections and recommended next step

Hunt, Investigate, and Respond Identify and neutralize threats

SOPHOS MDR

Al-powered case triage accelerates investigation and eliminates duplicate cases

SOPHOS XDR, SOPHOS MDR

Al Command Analysis provides insights into attacker behavior by examining commands that create detections

SOPHOS XDR. SOPHOS MDR

Al Search enables analysts to use natural language to search for data, speeding up investigations

A Sophos Solution Guide, February 2025

Delivered through Sophos' adaptive Al-native platform

Sophos Central is the adaptive Al-native platform that delivers unrivalled protection and enhances the power of defenders. Dynamic defenses, battle-proven Al, and an open, integration-rich ecosystem come together in the largest Al-native platform in the industry.



Dynamic

- Protection is constantly updated based on threat intelligence from attacks in more than 600,000 diverse customer environments across the globe.
- Adaptive defenses automatically respond to threats.
- Al models are continually enhanced using real-time inputs from 300 human security operations specialists.

Open

- Works with Sophos products, other vendors' products, or any combination of the two—across multiple OS environments.
- Centralized data and integrated workflows optimize security tasks and enhance human productivity to accelerate security outcomes.

Largest

- Breadth: Leverages telemetry from attacks on 600,000+ customers of diverse size and industries across the globe.
- Depth: Uses data from across the IT environment, from Sophos and non-Sophos technologies, and devices running Windows, iOS, and Linux OS.

Win-win: Human expertise plus Al technologies

Our people are at the heart of our Al-powered cybersecurity solutions, bringing their expertise to every aspect of the development process.

- Sophos X-Ops, our cross-functional cybersecurity task force, has deep knowledge of threats and adversary behaviors, helping identify how and when Al can have the greatest impact.
- The Sophos AI team applies extensive AI expertise to design, build, and maintain 50+ AI models specific to cybersecurity.
- 30+ years of cybersecurity engineering expertise ensure successful integration of AI models into Sophos products and services and safe feature rollouts.

Learnings from Al deployments advance our human expertise, enabling us to continually refine models, identify new applications, and advance our technology.

Human Expertise

- 1,500+ experts with deep knowledge of everything needed to successfully accelerate cybersecurity with AI:
- Threats and adversary behaviors
- Security operations pactices
- Al engineering
- Cybersecurity product engineering
- Secure capability deployment

AI Technologies

50+ industry-leading AI models built to maximize cybersecurity impact:

- Generative Al capabilities
- Deep learning Al capabilities
- Massive Al models
- Small Al models

A Sophos Solution Guide. February 2025

Sophos Al use cases

Accelerate security operations with genAl

Extensive GenAl capabilities in Sophos Extended Detection and Response (XDR) empower your security analysts to neutralize adversaries faster, increasing both analyst and business confidence.

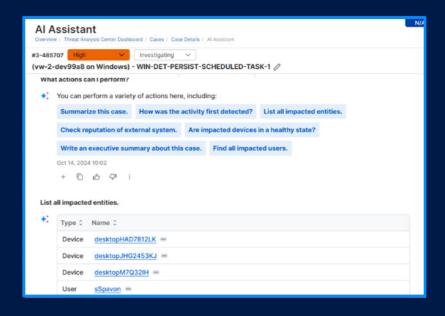
- Al Case Summary provides an easy-to-understand overview of detections and recommended next steps, helping analysts make smart decisions fast.
- Al Command Analysis delivers insights into attacker behavior by examining commands that create detections.
- Al Search uses natural language search to accelerate day-to-day tasks and lower the technology barrier to security operations.
- Al Assistant provides support and advice for analysts as they work a case, helping seasoned and less experienced analysts alike neutralize adversaries faster.

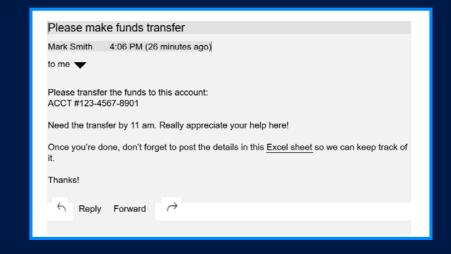
Sophos GenAl features are available on an opt-in basis, giving you full control.

Stopping Business Email Compromise with deep learning

Deep learning-powered Natural Language Processing (NLP) in Sophos Email identifies impersonation attempts trying to trick users into believing a scam or phishing email is legitimate.

Sophos Email uses AI to analyze subject lines and content for both tone and wording to identify suspicious conversations. Impersonation attempts are automatically blocked, preventing the attack, and the administrator is notified.





A Sophos Solution Guide. February 2025

Feature focus: Sophos AI Assistant

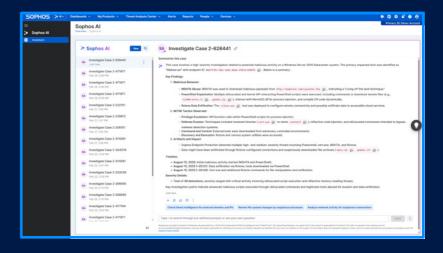
Accelerate threat investigations: The Al Assistant delivers immediate, context-rich insights by correlating real-time telemetry with Sophos Intelix threat intelligence. Analysts can ask natural-language questions and instantly receive investigation paths, detection context, and recommended next steps. This helps teams progress rapidly from detection to containment.

Boost analyst efficiency: By consolidating critical information from across your environment into a single, accessible view, the Al Assistant eliminates time wasted pivoting between tools. Analysts can fully triage, investigate, and hunt threats from one place, allowing seasoned analysts to focus on advanced hunting and complex case investigations.

Empower junior analysts: The AI Assistant transforms complex investigations into simple prompts, reducing reliance on complex query languages. Over time, it helps junior analysts build confidence and skill, effectively leveling up your SOC team without additional headcount.

Extend MDR expertise in-house: Built by the same team that powers the world's most widely used managed detection and response service, the Al Assistant brings frontline expertise directly to your analysts. Sophos MDR teams themselves use it to reduce mean time to respond (MTTR), ensuring your in-house team benefits from the same proven strategies.

Scale threat hunting and proactive defense: Beyond incident triage and investigation, the AI Assistant enables proactive threat hunting with plain-language prompts. Teams can explore historical data, identify attack patterns, and uncover stealthy adversary behaviors before they escalate. By automating correlation and surfacing hidden anomalies, it amplifies your threat hunting reach without needing an army of specialists.



Sophos Solution Guide. February 2025

Experience you can count on

We've been using Al successfully to accelerate cybersecurity since 2017. With Sophos, you can focus on your business, confident that Al is delivering reward, not risk, for your organization.

Risk

Sophos Approach

Organizations don't see the promised benefits from their Al investments.	Outcome-focused AI With years of AI expertise, we know how to deliver real-world impact.
Poorly developed, trained, and deployed Al solutions can cause real damage.	Security-first processes Our robust development processes allow customers to use Sophos Al with confidence.
Vendors focus on the AI, not the benefits it delivers.	Real-world benefits Our robust, battle-proven Al-powered solutions make a material difference by neutralizing threats faster and empowering analysts to make smart decisions.

The Sophos AI team

The Sophos AI team comprises experts who know how to use AI to accelerate positive cybersecurity outcomes. This dedicated global group focuses on two main areas:

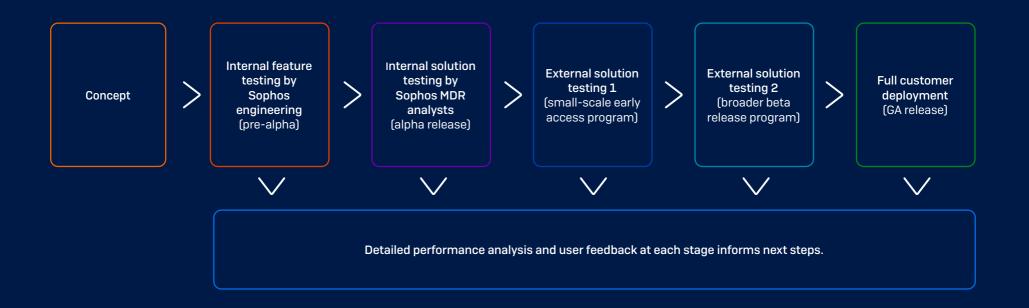
- Developing and applying AI in Sophos solutions
- Novel research that advances Al for cybersecurity

The Sophos AI team shares its research findings through public reports and events. Check out its latest publications on the **Sophos AI blog site.**

A Sophos Solution Guide. February 2025

Robust generative AI development process

The benefits of GenAl for cybersecurity are matched by their potential danger. Sophos deploys rigorous processes for all GenAl tools, from concept to full deployment. Detailed performance analysis and user feedback at each stage informs the next step in the development process.



Securely navigate the AI hype with Sophos

To find out more about Sophos' Al-powered cybersecurity solutions and how they can help you achieve your goals, visit **www.sophos.com** or speak with your Sophos Partner or representative.



