SOPHOS

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 AInative 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.

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.

Туре

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.

Guides security professionals of

all skill levels through each stage

EXAMPLE:

Sophos AI Assistant

of an investigation.

Deployed In:

Sophos XDR

Massive AI Models

Assists users in performing a wide range of tasks.

Small AI Models

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

EXAMPL

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:

Size

Sophos Android DL model

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

Deployed In: Sophos Mobile

A Sophos Solution Guide. February 2025

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 SOPHOS ENDPOINT SOPHOS XDR Multiple deep learning models secure against Al Assistant guides security professionals Uses the Tenable Vulnerability Priority Rating (VPR) AI model known and never-before-seen attacks, including through each stage of an investigation threats in Microsoft Office solutions. PDFs and to predict the likelihood of CVE rich text format (RTF) files exploitation within 28 days SOPHOS XDR. SOPHOS MDR SOPHOS FIREWALL Al Case Summary provides a clear Al-powered zero-day threat intelligence is overview of detections and recommended delivered through SophosLabs Intelix next step **Automatically Stop Threats Mitigate Risk of Threats** Hunt, Investigate, and Respond Identify and neutralize threats Prevent attacks from executing Reduce exposure to attack **SOPHOS ENDPOINT & FIREWALL** SOPHOS MDR Web protection models detect Al-powered case triage malicious URLs, phishing accelerates investigation and websites, and other web-based eliminates duplicate cases threats SOPHOS EMAIL SOPHOS XDR, SOPHOS MDR Deep Learning-powered Natural AI Command Analysis provides insights Language Processing (NLP) identifies into attacker behavior by examining impersonation attempts commands that create detections SOPHOS MOBILE SOPHOS XDR. SOPHOS MDR Android DL model is trained on proprietary Android Al Search enables analysts to use natural language data to detect Android-specific malware to search for data, speeding up investigations

Delivered through Sophos' adaptive AI-native platform

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



Sophos Central

	 Protection is constantly updated based on threat intelligence from attacks in more than 600,000 diverse customer environments across the globe.
Dynamic	 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.
	and devices running windows, IUS, and Linux US.

Win-win: Human expertise plus Al technologies

Our people are at the heart of our AI-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 AI 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 AI 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 AI models

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Sophos Al use cases

Accelerate security operations with genAl

Extensive GenAI 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.

	Assistant w / Threat Analysis Center Dashboard / Cases / Case Details / Al Assistant	
#3-485 (vw-2-	roz High ✓ Investigating ✓ -dev99a8 on Windows) - WIN-DET-PERSIST-SCHEDULED-TASK-1 ∥	
Wha	at actions can I perform?	
+1	You can perform a variety of actions here, including:	
	Summarize this case. How was the activity first detected? List all impacted entities.	
	Check reputation of external system. Are impacted devices in a healthy state?	
	Write an executive summary about this case. Find all impacted users.	
	Oct 14, 2024 10:02	
	+ 🗅 🖒 🖓 :	
List	all impacted entities.	
+	Type 0 Name 0	
	Device desktopHAD7812LK ==	
	Device desktopJHG2453KJ ==	
	Device desktopM7Q32IH ==	

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.

Please make funds transfer
Mark Smith 4:06 PM (26 minutes ago)
to me 🔻
Please transfer the funds to this account: ACCT #123-4567-8901
Need the transfer by 11 am. Really appreciate your help here!
Once you're done, don't forget to post the details in this <u>Excel sheet</u> so we can keep track of it.
Thanks!
\leftarrow Reply Forward \rightarrow

Experience you can count on

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

Risk

Sophos Approach



The Sophos Al 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 AI 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.**

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.



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