

# Securing machine-written software. AppSec for AI-enabled SDLCs.

AI-generated code is now a material component of software delivery — a structural change in how software is produced, modified, and scaled. Traditional AppSec breaks under those conditions. What's required is a control plane: the Application Security Intelligence Layer.

## EXECUTIVE SUMMARY

# A structural change in how software is produced.

AI-assisted and AI-generated code is now a material component of modern software delivery — not a tooling shift, but a change in how software is produced, modified, and scaled.

This paper explains how AI changes the SDLC, why traditional AppSec breaks under those conditions, and what new control capabilities are required.

**CyberSagacity provides an intelligence and control layer** that enables secure, compliant, and economically rational operation of AI-enabled pipelines.



## STRUCTURAL SHIFTS

# From design-driven to synthesis-driven production.

Dimension	Traditional	AI-Enabled
Code creation	Human authored.	Machine generated / assisted.
Change rate	Episodic.	Continuous.
Provenance	Known.	Model + prompt + corpus.
Review	Human pull-request.	Often partial or bypassed.
Complexity	Bounded.	Emergent.

**Code now flows: AI assistants → SCM → CI/CD → cloud runtime — at machine speed.**

## WHY TRADITIONAL APPSEC FAILS AT AI SCALE

# More scanning produces more data — not more assurance.

01

**Volume & velocity**

SonarQube, Checkmarx, Veracode, Snyk, Dependency-Check, Semgrep generate orders of magnitude more findings — without improving prioritization.

02

**Signal collapse**

False positives, duplicates, and misclassification dominate outputs — obscuring true risk.

03

**Governance failure**

Organizations cannot answer: what matters, why it matters, and what is defensible.

**Treat tools as telemetry, not truth. Do not scale scanning — scale control.**

PROOF POINTS · FROM CYBERSAGACITY ANALYSIS

# The numbers expose how little scanner output can be trusted.

**~80%**

Of defects are misclassified; 5–25% are high-probability false positives by tool/language.

**<1%**

Of defects overlap across tools; 97% of duplicates occur within the same tool.

**3–5%**

Of defects have positive remediation ROI — the rest cost more to fix than they save.

**80–90%**

Of true high-risk issues missed by SAST/MAST/IAST; DAST, pentest, API & SCA miss >99.5%.

THE IMPLICATION

Without validation, organizations accumulate data — not assurance.

THE ASIL · A CONTROL PLANE ABOVE DETECTION

# It does not replace detection. It governs it.

IDE & AI assistants	Copilot · Cursor · CodeWhisperer
SCM & CI/CD	GitHub · GitLab · Jenkins · Argo
Detection tools	SAST · DAST · SCA · IaC · Secrets · API
<b>CyberSagacity ASIL</b>	<b>SATraits + SATriage</b>
Outputs	Jira · Slack · SIEM · GRC · Board

A control plane that sits above detection tools to provide **validated, correlated, quantified, and defensible** risk intelligence — closing the control loop continuously:



Findings + metadata + context are normalized, validated, correlated, modeled, quantified, and prioritized — into action.

OPERATIONAL FLOW EXAMPLE

# From 480 raw findings to the 7 that matter.

01  
AI generates a new **microservice**.

02  
GitLab pipeline runs Semgrep, Snyk, OWASP ZAP.

03  
**480 findings** produced.

04  
SATraits validates accuracy.

05  
SATriage models exploitability & financial impact.

06  
Top **7 prioritized** for remediation.

ENGINEERING

**Less noise, clear priorities**

Fewer interruptions; remediation focused on what actually matters.

SECURITY

**Defensible posture**

Audit evidence, compliance mapping, and a defensible risk position.

LEADERSHIP

**Quantified exposure**

ROI visibility and regulatory confidence tied to financial impact.

THE FUTURE OF APPSEC IS BETTER DECISION-MAKING

## Development velocity is accelerating. Assurance capacity is not.

Adding more tools — CNAPP, ASPM, posture management, AI-specific scanners — improves visibility but does not establish control. They don't validate signal, model exploitability, quantify impact, or support defensible decisions.

This asymmetry is not a tooling gap. **It is a control gap.** Organizations that scale AI-driven delivery without scaling control accumulate operational drag, latent risk, and regulatory exposure.

With an intelligence-driven control model, organizations can move faster without becoming reckless, automate without becoming opaque, and scale without losing governance.

CYBERSAGACITY

Not another security tool — the control plane required to safely operate in a world of machine-written software.

**The future of application security is not better detection. It is better decision-making.**

[Learn more at www.cybersagacity.com](https://www.cybersagacity.com) →