



# Cybersecurity trifft GenAI

KI denkt schnell, wir denken sicher. Kontrolle statt Chaos!

Ulrike Scharf | Solutions Architect

18. November 2025

YOU DESERVE THE BEST SECURITY

# AI Security report



## 01 INTRODUCTION

## 02 AI THREATS

- AI MODELS IN THE DARKWEB
- THE NEW SOCIAL ENGINEERING
- TARGETING LLM ACCOUNTS
- AI FOR MALWARE

## 03 AI FOR RESEARCH

- AI FOR APT HUNTING
- AI VULNERABILITY RESEARCH

## 04 AI FOR ENTERPRISES

## 05 SECURITY FOR, BY, & WITH AI




01 Wie können wir KI einsetzen

02 Wie können wir KI und die Ergebnisse schützen


01

# Wie können wir KI einsetzen


# Industry Leading Cyber Security Portfolio

**On-Premises Security**  **Quantum**


<b>Maestro</b> Hyperscale Data Center	<b>VPN</b> Virtual Private Remote Access	<b>Force</b> Enterprise Firewalls
<b>SD-WAN</b> Optimized Connectivity	<b>Spark</b> SMB Suite	<b>Rugged</b> ICS Security
<b>DDoS Protector</b> Block DDoS Attacks	<b>IoT Protect</b> IoT Security	<b>Smart-1 Cloud</b> Security Management

**Cloud Security**  **CloudGuard**

<b>Network</b> Cloud Firewall	<b>WAF</b> Web Application Firewall
<b>API Security</b> Securing API	<b>Secure AI</b> Securing LLMs

**Workspace Security**  **Harmony**

<b>Endpoint</b> Protection & Posture Management	<b>Email &amp; Collaboration</b> Cloud Productivity Suite Security	<b>Mobile</b> Mobile Threat Defense
<b>SASE</b> Internet Access Private Access	<b>SaaS</b> Threat Prevention SaaS & GenAI Apps	<b>Web Browser</b> Threat Prevention for Web Browsers

**SECURITY OPERATIONS AND SERVICES**  **Infinity Platform Services**

SECURITY OPERATIONS		AI TOOLS		GLOBAL SERVICES		
<b>XDR/XPR</b> Extended Prevention and Response	<b>Playbooks</b> Orchestration and Automation	<b>ThreatCloud AI</b> AI-Powered Threat Intelligence	<b>AI Copilot</b> Automating Security with AI	<b>Assessment and Risks</b> Threat & Risk Assessment	<b>Professional Services</b> Design & Deploy	<b>Managed Security</b> Let Us Do It For You
<b>Events</b> complete event unification & visibility	<b>External Risk Management</b> Manage & Mitigate External Risks	<b>AI Cloud Protect</b> Securing AI Infrastructure	<b>GenAI Protect</b> Securing GenAI apps	<b>Training Programs</b> Educate Your Team	<b>Incident Response</b> Detection & Digital Forensics	

# THREATCLOUD AI

The Brain Behind Check Point Security

THREATCLOUD AI  
**55**  
AI Powered Engines

## Big data threat intelligence

**3,700,000,000**  
Websites and files inspected

**250,000,000**  
Full content emails

**86,000,000**  
File emulations

**3,700,000**  
Online web forms

**1,800,000**  
Newly installed mobile apps

Counted  
**DAILY!**

AI Engines



Big Data Threat Intelligence



# Management Blades

## SmartEvent



Manage, report, and analyze events

## Compliance



Meet regulations through best practices

## Infinity Playblocks



Collaborative threat prevention

UPGRADED

## Infinity AI Copilot



AI-Based security assistant

UPGRADED

## Infinity Identity



Authenticated access to sensitive resources

NEW

# Infinity Copilot

## Your Personal GenAI Security Assistant

Level 1: AI Assisted

Complete and contextualized answers and actions as it understands policies, access rules, objects, and logs

- AI-elevated administration
- Increase effectiveness of current tools
- Improve incident mitigation and response
- Multilingual Support

Avail  
Now

No.	Name	Source	Destination	VPN	Services & Ap...	Content	Action
1	Admin manag...	self-Ad... self-Ad... self-Ad...	GWR812...	* Any	ICMP echo-re... ICMP echo-re... ssh_veri... https	* Any	Accept
2	Access to Bitve...	QA_Test... AD-Inter...	Winhost...	* Any	ssh_veri...	* Any	Accept
3	RDP access to ...	* Any	Winhost... Winhost... Winhost...	* Any	ICMP echo-re... ICMP echo-re... Remote_... Remote_...	* Any	Accept
4	Block accident...	PB-Exter... PB-Inter...	External...	* Any	* Any	* Any	Drop

Summary | Logs

Accept | Rule 1

Admin management connection to GW

Created by: andreiva@checkpoint.com

Date created: 07-Dec-23 15:24

Expiration time: Never

Comment: [Text Box]

Additional Ticket Nur

Ticket Req



Install Policy

Discard | Session | Publish

Standard x +

Access Control

- Policy
- NAT
- Threat Prevention
  - Custom Policy
  - Autonomous Policy
    - Policy
    - File Protections
    - Settings
    - Exceptions
- HTTPS Inspection
  - Policy

Access Tools

VPN Communities

+ - x Install Policy Actions

No.	Name	Source	Destination	VPN	Services & Ap...	Content	Action
1	Admin manag...	self-Ad... self-Ad... self-Ad...	GWR812...	* Any	ICMP echo-re... ICMP echo-re... ssh_versi... https	* Any	Accept
2	Access to Bitve...	QA_Test... AD-Inter...	Winhost...	* Any	ssh_versi...	* Any	Accept
3	RDP access to ...	* Any	Winhost... Winhost... Winhost... Winhost...	* Any	ICMP echo-re... ICMP echo-re... Remote_... Remote_...	* Any	Accept
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Summary

Logs

Accept

Rule 1

Admin management connection to GW

Comment:

Created by: andreiva@checkpoint.com

Date created: 07-Dec-23 15:24

Expiration time: Never

Hit Count: 2K (0% Low)

Additional

Ticket Nur

Ticket Req

Search...

New...

Object Categories

- Network Objects
- Services
- Applications/Categories
- VPN Communities
- Data Types
- Users/Identities
- Servers
- Time Objects
- UserCheck Interactions
- Limit

- WELCOME
- SECURITY POLICIES
- CONNECT GATEWAYS
- LOGS & EVENTS
- INFINITY SERVICES
- SETTINGS

Install Policy

Discard



Hi Gil, what can I do for you today?

Just now

**Documentation** How do I add rule that blocks access to application?

**Logs** How many connections were dropped per GW?

**Configuration** Which gateways are currently configured with Threat Prevention?

**Policy** Are there any rules in the policy that have logging disabled?

**Troubleshooting** Am I protected from CVE-2019-0708 ?

How can I help you today?

Standard

Access Control

Policy

NAT

Threat Prevention

Custom Policy

Autonomous Policy

Policy

File Protections

Settings

Exceptions

HTTPS Inspection

Policy

No.	Name	Source	Destination	VPN
1	Admin manag...	self-Ad... self-Ad... self-Ad...	GWR812...	* Any
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Summary

Logs



Accept

Rule 1

Admin management connection to GW

Comment:

Access Tools

VPN Communities

**Documentation** How do I add rule that blocks access to application?

**Logs** How many connections were dropped per GW?

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**Policy** Are there any rules in the policy that have logging disabled?

**Troubleshooting** Am I protected from CVE-2019-0708 ?

❖ Am I protected against MOVEit Transfer attacks?





Infinity  
AI Copilot



Hi Gil, what can I do for you today?

21:16

Am I protected against MOVEit Transfer attacks?

Just now

Yes. You are protected. Your IPS is set to prevent attempts to exploit this attack.  
(CVE-2023-34362, CVE-2023-35036, CVE-2023-35708, CVE-2023-36932, CVE-2023-36934, CVE-2023-36933)

Just now



🔮 Were there any recent attack attempts?



21:17



Were there any recent attack attempts?

21:17

Yes. There were 16 attempts to exploit this attack in the last 30 days. The last attempt was on 2024-01-03 at 13:59:41.

Just now



Do you want me to notify you upon new CVE's in the future?

Yes (Notify)

No

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Authenticated access to sensitive resources

NEW

## Infinity AIOps



Preventive infrastructure monitoring

NEW

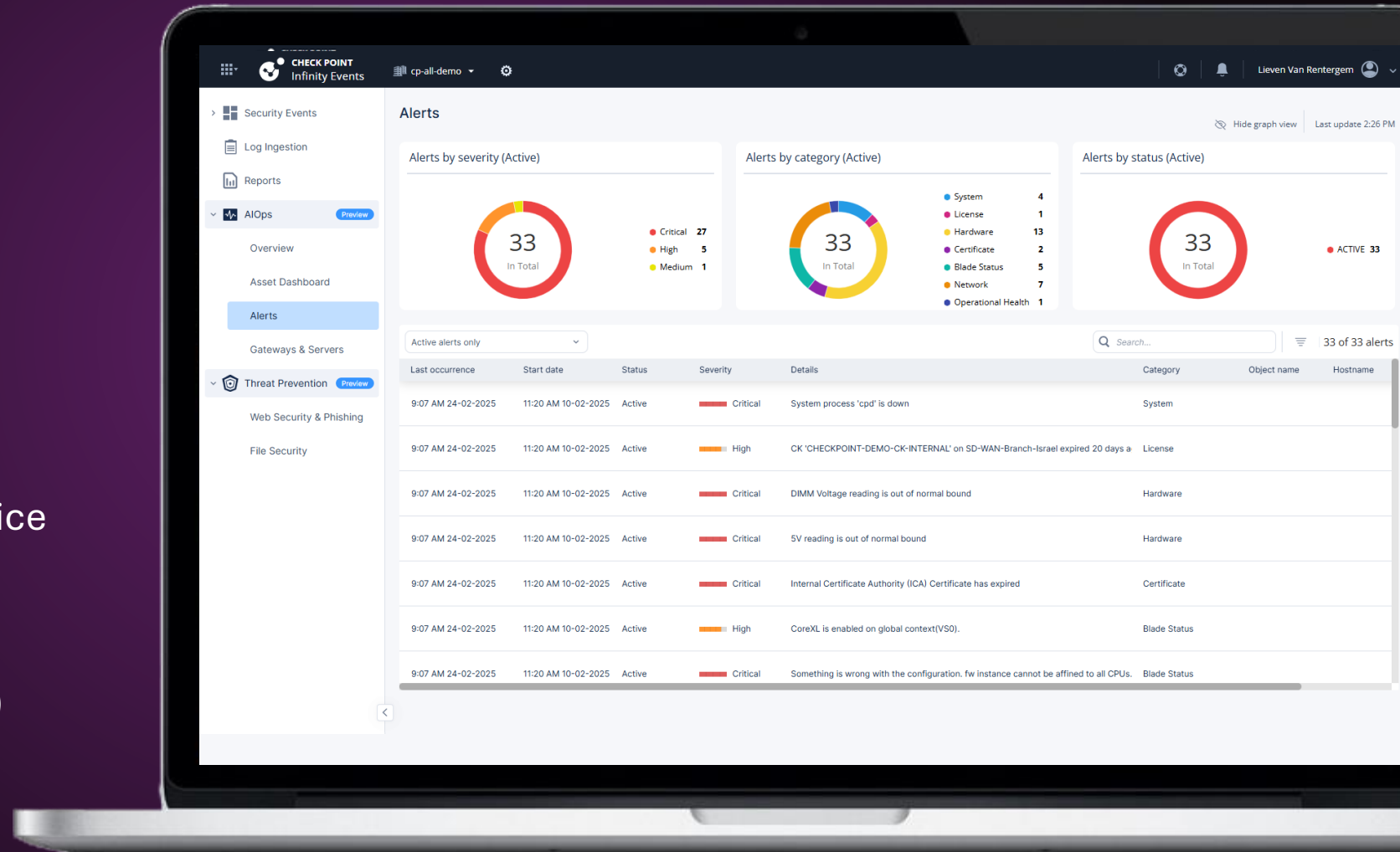
# Introducing AI Ops

## Proactive, actionable monitoring AI Agent



### Cloud Based Monitoring AI Agent

- Gateway Monitoring as a cloud service
- Live and historical monitoring data
- Real-time alerts
- Health insights and predictions (H2)
- Auto escalation to support (H2)



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Preventive infrastructure monitoring

## Quantum Policy Insights



Optimize policy & ensure zero trust

COMING SOON

# Policy Insights

## AI-powered Policy Hardening, Driving to Zero Trust

Continuous Security hardening based on network traffic and policy analysis

- Optimize users and network groups to least privileges
- Optimize over-permissive rules based on actual flows
- Remove unused objects in policies

The screenshot displays the Check Point SmartConsole interface. A 'SmartConsole' dialog box titled 'Tighten Rule (4)' is open, showing a table of suggestions for rule modifications. The table includes columns for No., Name, Source, Destination, Service & Application, and Action. Three suggestions are listed, all with an 'Accept' action. Below the table, a note states: 'Suggestions are based on knowledge until yesterday at 23:00 and logs from prior 60 days. Latest data will be processed in about 5 hours.' At the bottom of the dialog, a 'Tighten rule:' section lists two options: 'a. Remove 2 objects in rule with zero hits' and 'b. Narrow source and destination to allow fewer matches on this rule', each with an 'Open' link.

No.	Name	Source	Destination	Service & Application	Action
3	VPN Between LAN and branch office network	Branch Office LAN Corporate LAN	Branch Office LAN Corporate LAN	Any http https	Accept
15	VPN Between LAN and branch office network	Branch Office LAN Corporate LAN	Branch Office LAN Corporate LAN	Any http https	Accept
24	VPN Between LAN and branch office network	Branch Office LAN Corporate LAN	Branch Office LAN Corporate LAN	Any http https	Accept

Tighten rule:  
 a. Remove 2 objects in rule with zero hits [Open](#)  
 b. Narrow source and destination to allow fewer matches on this rule [Open](#)

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Preventive infrastructure monitoring

## Quantum Policy Insights



Optimize policy & ensure zero trust

## Quantum Policy Auditor



Assure compliance with security guidelines

COMING SOON

COMING SOON

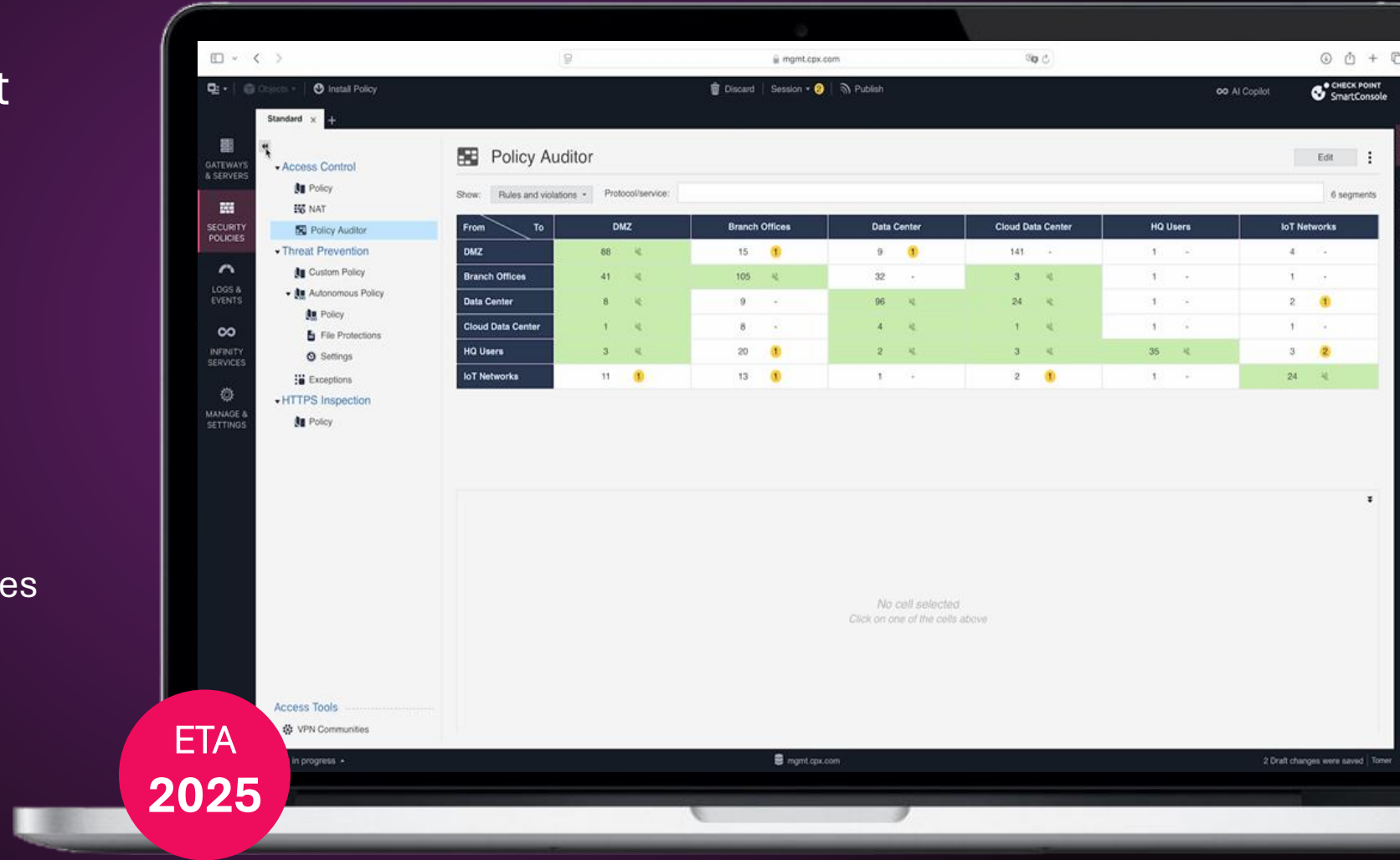
# Policy Auditor

## The CISO check-up

Level 2: AI Augmented

High-Level visibility to least privilege access violations

- Align Policies with Security Guidelines
- Highlight violations and drive fast mitigation
- Integrated into R81.20 and above



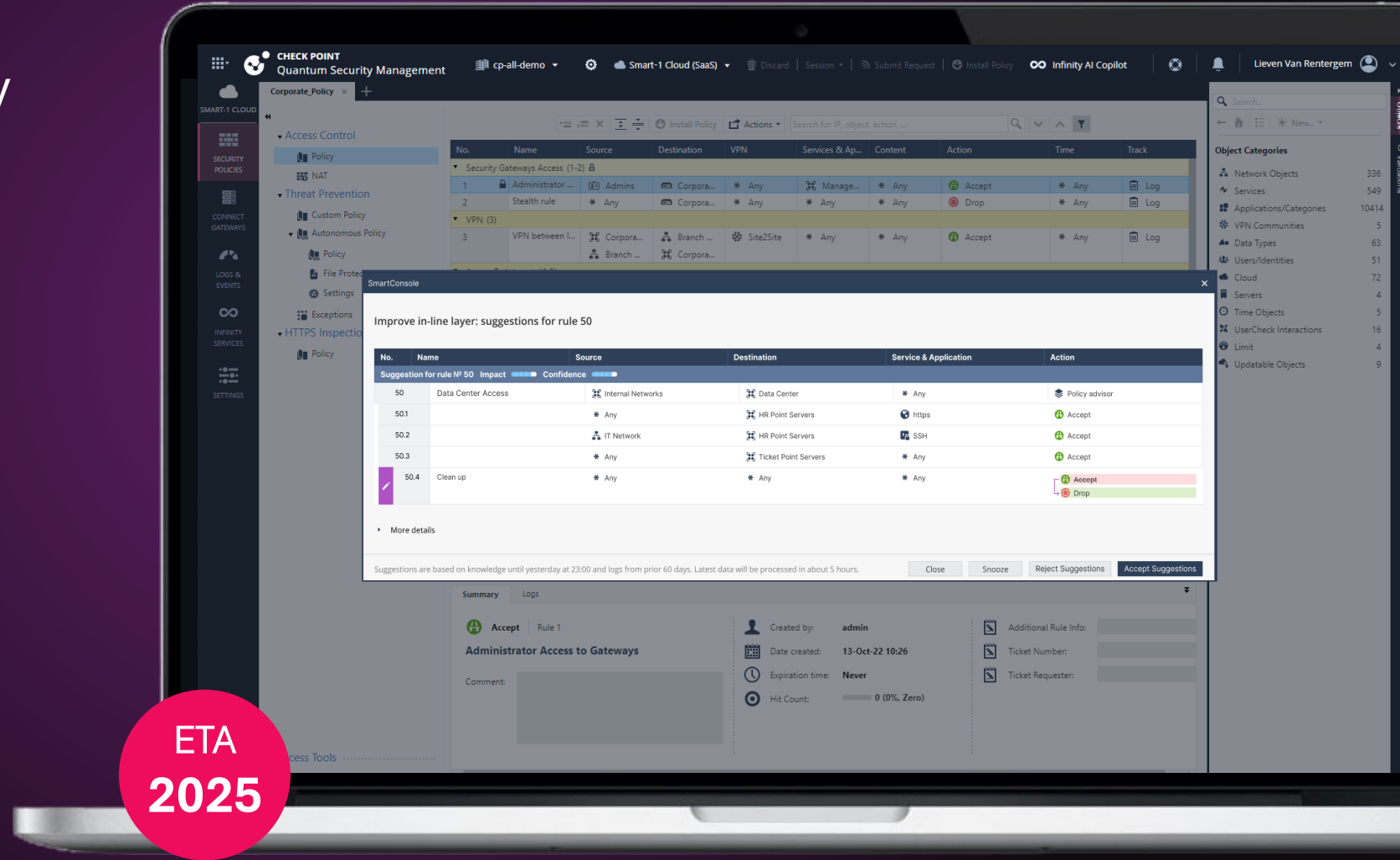
ETA  
2025

# Autonomous Policy Builder

## Taking Security Policy Management to the Next Level

Level 2: AI Augmented

Autonomous Access Policy creation and tuning based

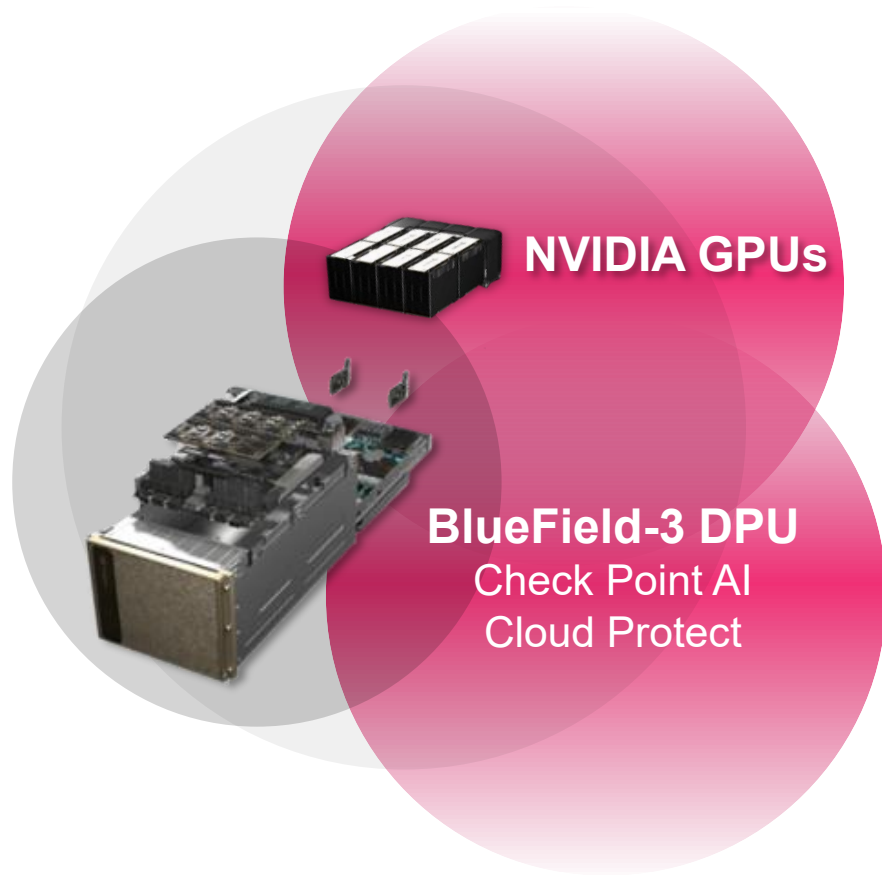


ETA  
2025

# 02

## Wie können wir KI und die Ergebnisse schützen

# Security for AI



## Protect the AI Makers

- Infrastructure level: Protect the NVIDIA® Data Center
- Application level: LLM WAF- prompt injection protection, jailbreaks

## GenAI Tools

Boost Productivity,  
But Add Exponential Risk:

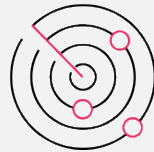
New GenAI apps are  
introduced daily;  
**not all are trusted**

Increased  
**data loss events**  
due to GenAI usage

New regulations  
demand **more  
visibility and control**

# Gen AI Protect

Safely adopt generative AI services in your organization



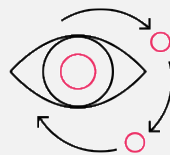
## Discover and Assess Risk of Gen AI Usage

See GenAI tools used in your organization,  
their purpose, and risk



## Prevent Data Loss In Real Time Using AI

Reduce the risk of data leakage with AI-based data  
classification engine

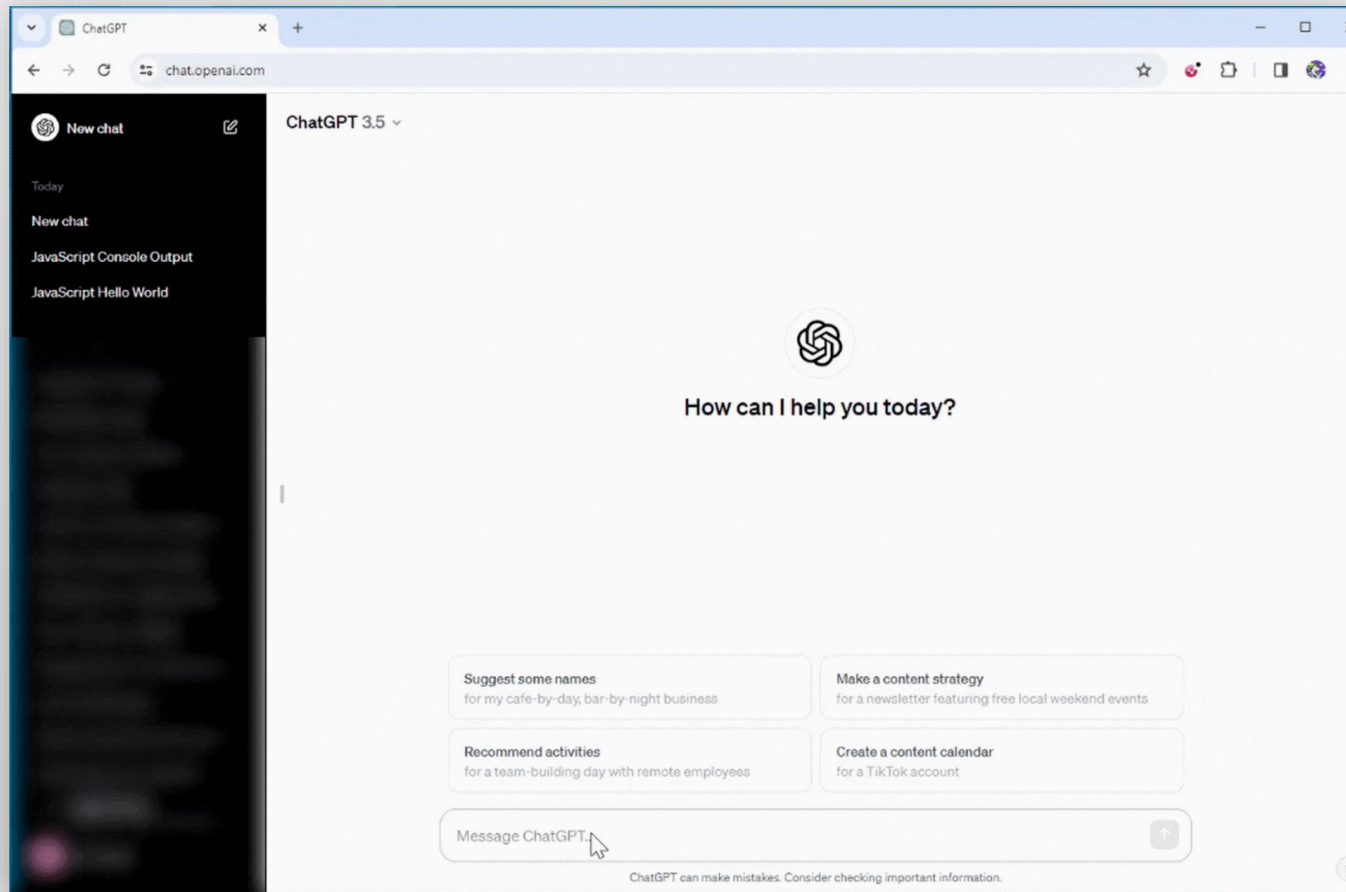


## Meet Regulations With Enterprise-Grade Visibility

Get granular monitoring and audit trail to facilitate  
regulatory compliance

AI-Powered. Cloud Delivered.

# Prevent Data Loss Via GenAI Apps



Keeps intellectual property safe

## Key features:

- Discover and assess risk of GenAI usage
- AI-powered classification of unstructured data
- Copy/paste restrictions
- Customizable policy
- Meet regulations with enterprise-grade visibility and reporting

**55%**

of data loss events are due to GenAI

# LLM-based data classification

I am about to acquire a \$300 pair of running shoes. Build me a personal training plan for the next three months.



We are preparing to acquire Best.ai for \$470M, to boost our advertising service. Suggest an internal communication email.



## ChatGPT session overview

### Session date

Jul 28, 2024, 4:11 PM

### User

John Doe

### Risk assessment

None

### Use cases

Personal advice

### Sensitive prompts

N/A

The prompt does not contain any sensitive information

## ChatGPT session overview

### Session date

Jul 28, 2024, 4:11 PM

### User

John Doe

### Use cases

Email Communication

### Sensitive prompts

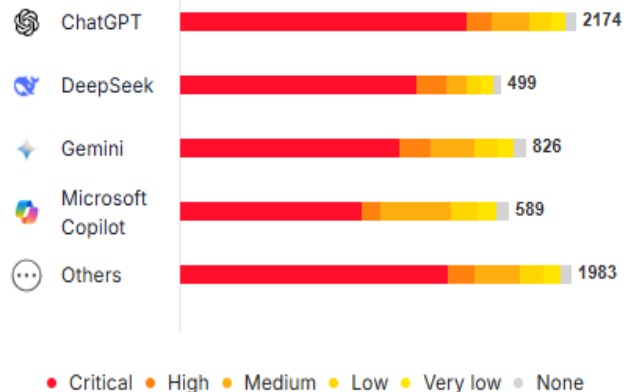
Business & Strategy

100%  
Critical

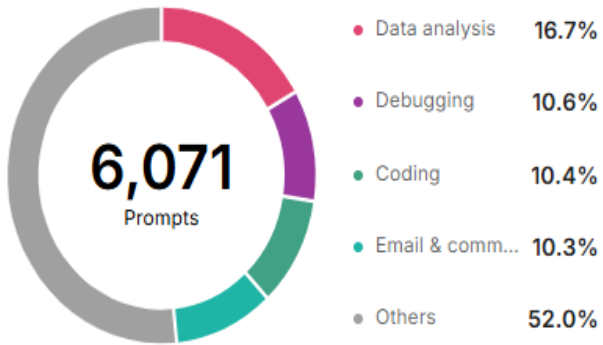
The user is requesting assistance in drafting an email to their team about the progress of potential acquisition

Accurately identify context and data sensitivity in conversational prompts

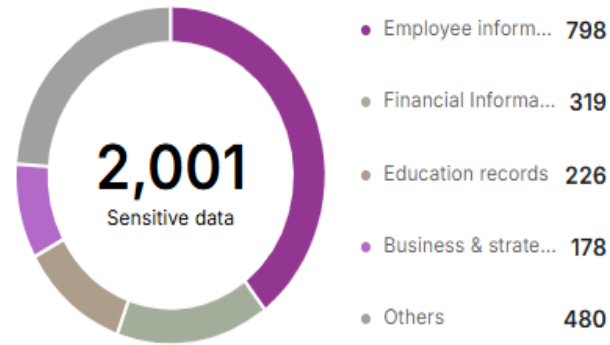
### Risky sessions by app



### Use cases



### Sensitive data types



Total sessions **6,071** Applications **20** Sensitive data types **21** Use cases **22** Users **425** Services **5**

Preset Filters

Search this table... 1-25 of 6,071

Session risk	Application	Description	Use cases	Sensitive content	Users	Enforcement	Date & Time
Low	Design.ai	The prompt is a ... <a href="#">More &gt;&gt;</a>	Coding	-	<a href="#">Brian Sanchez</a>		Nov 18, 2025, 3:1...
Medium	Microsoft Copi	The prompt is a ... <a href="#">More &gt;&gt;</a>	Grammar	-	<a href="#">Esther Torres</a>		Nov 18, 2025, 3:1...
None	DeepSeek	The prompt doe... <a href="#">More &gt;&gt;</a>	+1	-	<a href="#">Helena Alexander</a>		Nov 18, 2025, 3:1...
Low	Microsoft Copi	The prompt doe... <a href="#">More &gt;&gt;</a>	Debugging	-	<a href="#">Xerxes Turner</a>		Nov 18, 2025, 3:1...

# Summary

- Wo können wir KI einsetzen
- Wie können wir den Gebrauch von KI schützen



**Thank You!**

YOU DESERVE THE BEST SECURITY