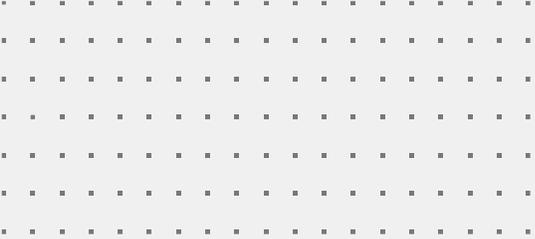




FORTINET®

Technology itself is reshaping the cyber risk landscape

Artificial Intelligence, reshaping technology for attackers, defenders
and protectors



Collaborative Cohesion: Achieving More as a Team

Today's Team



Ricardo Ferreira
Field CISO, EMEA

Ricardo is a strategic and results-driven leader with extensive experience in risk management in large-scale environments. He has a global perspective and is passionate about democratising technology to help businesses succeed.

Recently, Ricardo published a groundbreaking book, "Policy Design in the Age of Digital Adoption" which presents a framework for creating innovative policy programs that enable organisations to embrace the digital age fully.



Chris Roberts
Business Development Manager

Chris leads the Security Operations side of Fortinet's portfolio, helping customers and partners understand their risk and improve their visibility and counter measures.

Chris has worked in the IT industry for over 25yrs across a variety of disciplines and has been working for key vendors such as Cisco, HPE and Fortinet along with specialised VAR's that has given him a variety of relevant experience and insight into security challenges, potential solutions and mitigation strategies.



The Cybersecurity Partner You Can Count On

Securing people, devices, and data everywhere.

For over 20 years, Fortinet has been a driving force in the evolution of cybersecurity and the convergence of networking and security. Our security solutions are among the most deployed, most patented, and most validated in the industry.

Global Customer Base
680,000+
Customers

2022 Billings
\$5.59B+
(as of Dec 31, 2022)

Market Capitalization
\$59.4B
(as of June 30, 2023)

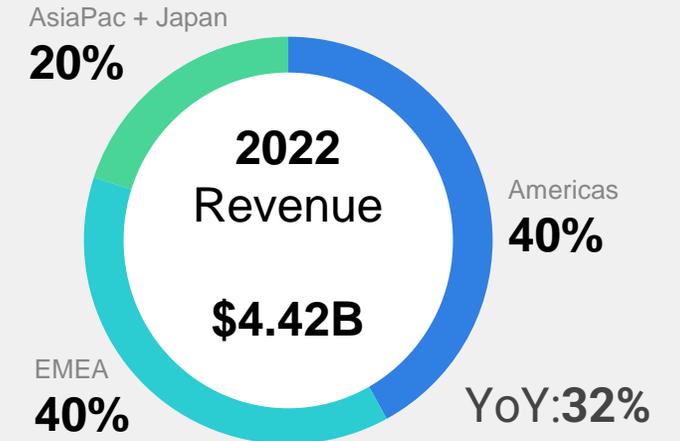
Organic R&D investment
1,285
Global Industry *Patents*

Broad, Integrated
Portfolio of
50+
Enterprise
Cybersecurity
Products

Strong Analyst
Validation
41
Enterprise Analyst
Report Inclusions

Vertical Integration
\$1B+
Investment in ASIC
Design & Development

Investment in scale of threat
intelligence and AI/ML
100Bn+
Threat Events Neutralized
Daily



FORTINET®

Founded: **October 2000**

Founded by: **Ken Xie and Michael Xie**

Headquarters: **Sunnyvale, CA**

Fortinet IPO (FTNT): **November 2009**

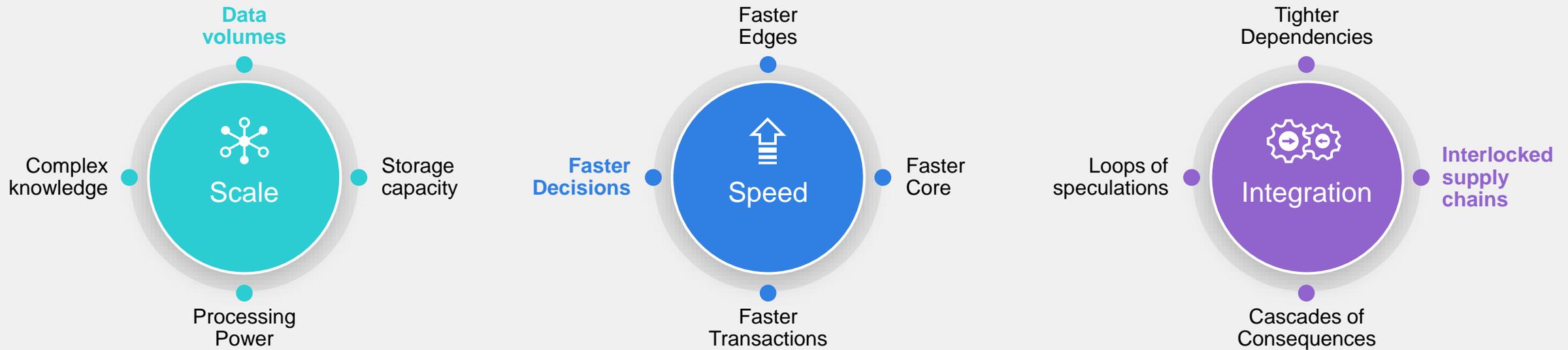
Listed in both: **NASDAQ 100 and S&P 500**

Member of: **2022 Dow Jones Sustainability
World and North America Indices**

Security Investment Grade Rating: **BBB+ Baa1**

Mapping the World of Cyber

The interplay between risks and regulation



Pressure from the Threat Landscape

2022 threat landscape summary

A Study on Robustness and Reliability of Large Language Model Code Generation

Li Zhong, Zilong Wang

University of California, San Diego

would ask LLM for real-world coding help. To fill the missing piece, in this work, we propose a dataset `REACTAPI` for evaluating the reliability and robustness of code generated by LLMs. We collect 120K coding questions from Stack Overflow on 24 representative Java APIs. We summarize the common misuse patterns of these APIs and evaluate them on common misuse patterns. **The evaluation results show that even for GPT-4, 62% of the generated code contains API misuses, which would cause unexpected consequences if the code is introduced into real-world software.**

in a few lines of code. Large language models are able to retrieve more suitable and customized answer for the question compared with searching in the online programming forums, such as Stack Overflow¹.

Such fast pace conceals potential risks in the code generation of large language models. From the perspective of software engineering, the robustness and reliability of generated code have not yet been thoroughly studied even if numerous works have been made to avoid syntax errors and improve semantic understanding in the generated code [27] [28] [29].

Crypto Wallets Targeted



The Need for a Unified Approach

Overcoming Language and Standard Barriers in EU Cybersecurity

NIS2 Directive (2022)

2022
Digital Operational Resilience Act (DORA)



COMPLEMENTARY

2022
Critical Entities Resilience (CER) Directive



INTERCONNECTED

WIP
Cyber Resilience Act (CRA)



FULFILMENT

2019
Cyber Security Act (CSA)
New addition recently proposed April 2023
"enable the future adoption of European certification schemes for 'managed security services' covering areas such as incident response, penetration testing, security audits and consultancy"



Supporting Policies



Regulatory Challenges and Opportunities in FSI

Enhancing FSI resilience with DORA

ICT Risk Management (Articles 5-16)

- ✓ Set of Principles and requirements on ICT risk management framework

ICT Related Incident Response (Articles 17-23)

- ✓ Harmonise reporting and obligations to FSI

Digital Operational Resilience Testing (Articles 24-27)

- ✓ Require financial entities to do Basic or Advanced Testing (TLPT)

Third Party Risk (Articles 28-44)

- ✓ Rules to monitor third party risk, contractual provisions, oversight framework for TPPs

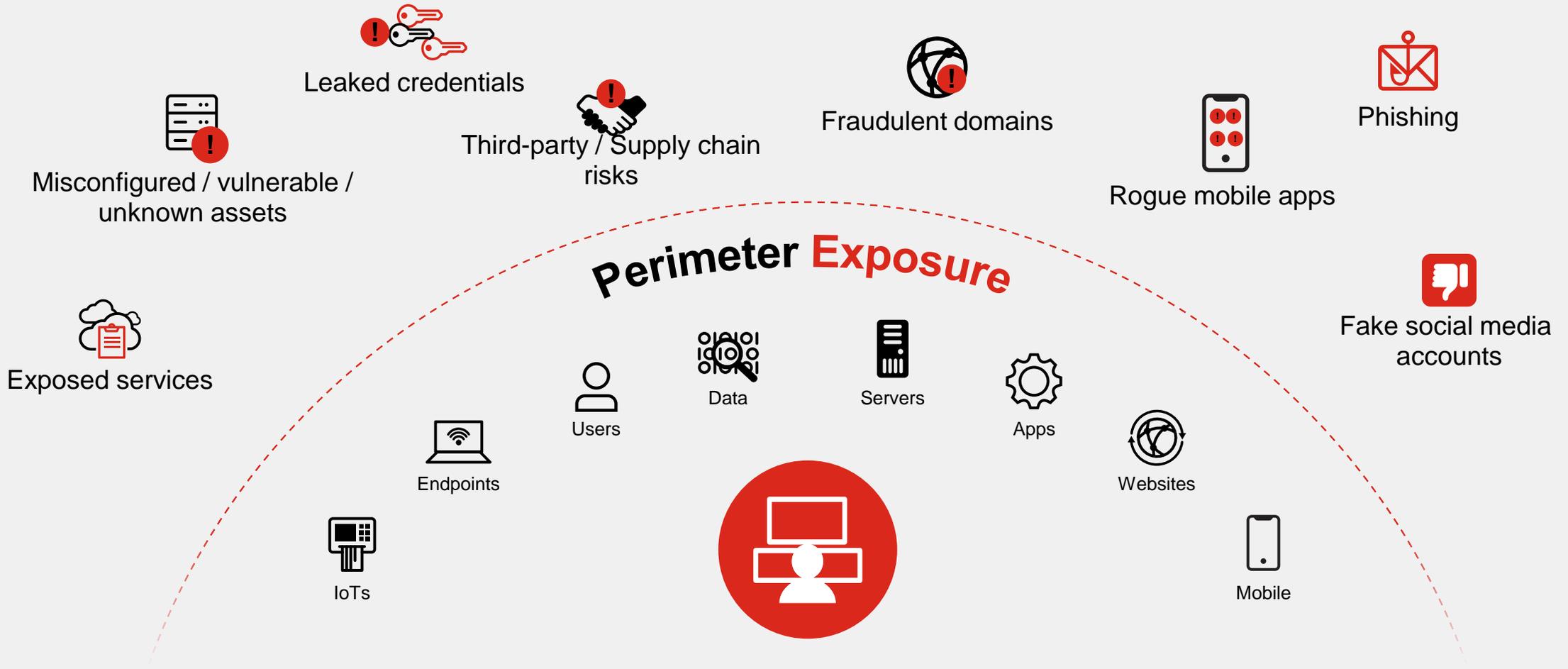
Information Sharing (Article 45)

- ✓ Voluntary exchange of information and intelligence on IOCs (Indicators of compromise), TTPs (Tactics, techniques and procedures)



The Ever-Expanding External Threat Landscape

External Exposure



State of the Nation

- **Ponemon Institute's 2022 Cost of Insider Threats report**

- Insider threat incidents up 44% over the past 2 years
- Costs per incident up more than 33%, to \$15.38

- **Conti group ransomware leaks in 2022**

- HR lead and recruitment director on the payroll

- **Russian-linked group behind Doppelpaymer**

- Recruitment a key part of strategy
- Paid vacation and reference requests

- **Shared Library Risks**

- FortiGuard Labs team discovered over 30 new zero-day attacks in PyPI packages (Python Package Index)

- **Regulatory Pressure**

- GDPR, DORA, CDA, etc

And on the Dark Web, cybercrime syndicates are ramping up their efforts, offering competitive salaries and benefits. Some jobs paid \$20,000 per month, and some groups offer PTO, paid sick leave, bonuses and employee referral programs. Roles vary from full-time and part-time jobs to traineeships and partnerships.

Embrace your fate, weakling,
and cower before my malevolence.

with glee and malice,

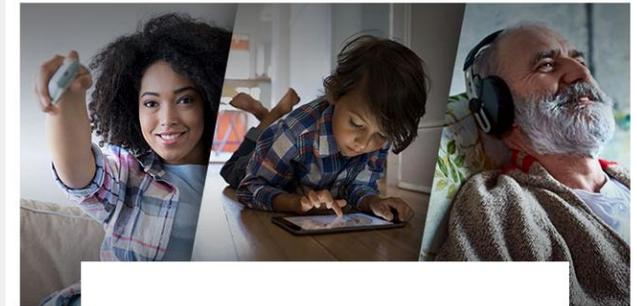
You see, I derive great pleasure from inflicting pain upon my victims. If you dare to take action, whether it be sticking or plugging anything or attempting to download any so-called remedy, your computer shall meet its doom.

RedLine Clipper, one of the malicious components, specializes in cryptocurrency theft by altering the user's system clipboard activities to replace cryptocurrency wallet addresses with those belonging to the attacker. This tactic preys on users who copy and paste wallet addresses during transactions, leading to the accidental transfer of funds to the attacker.

Cybercrooks are telling ChatGPT to create malicious code

Chatbot might let unskilled criminals launch attacks, if the code works

TV LICENSING



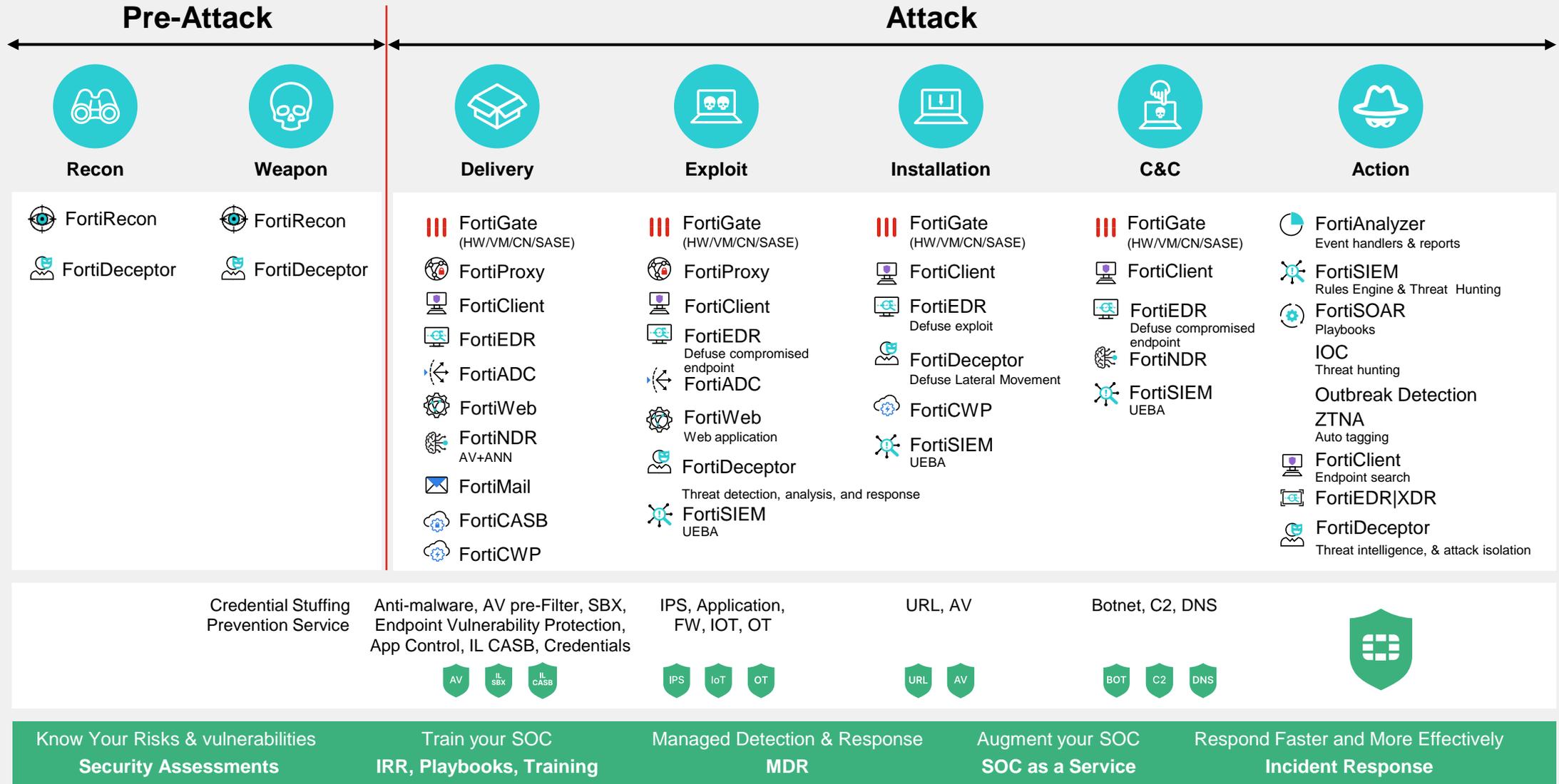
Dear Customer,

You've just 1 days left to renew your TV Licence.

Your licence covers you to watch or record live TV programmes on any channel or device, and to download or watch BBC programmes on iPlayer until the end of 4/25/2023 4:46:38 AM. Just remember to keep your licence payments up to date, to make sure you stay licensed.



How to Break the Attack Sequence



Products and Solutions

FGD AI-Powered Security

SOC Augmentation by FortiGuard



Fortinet SecOps Portfolio

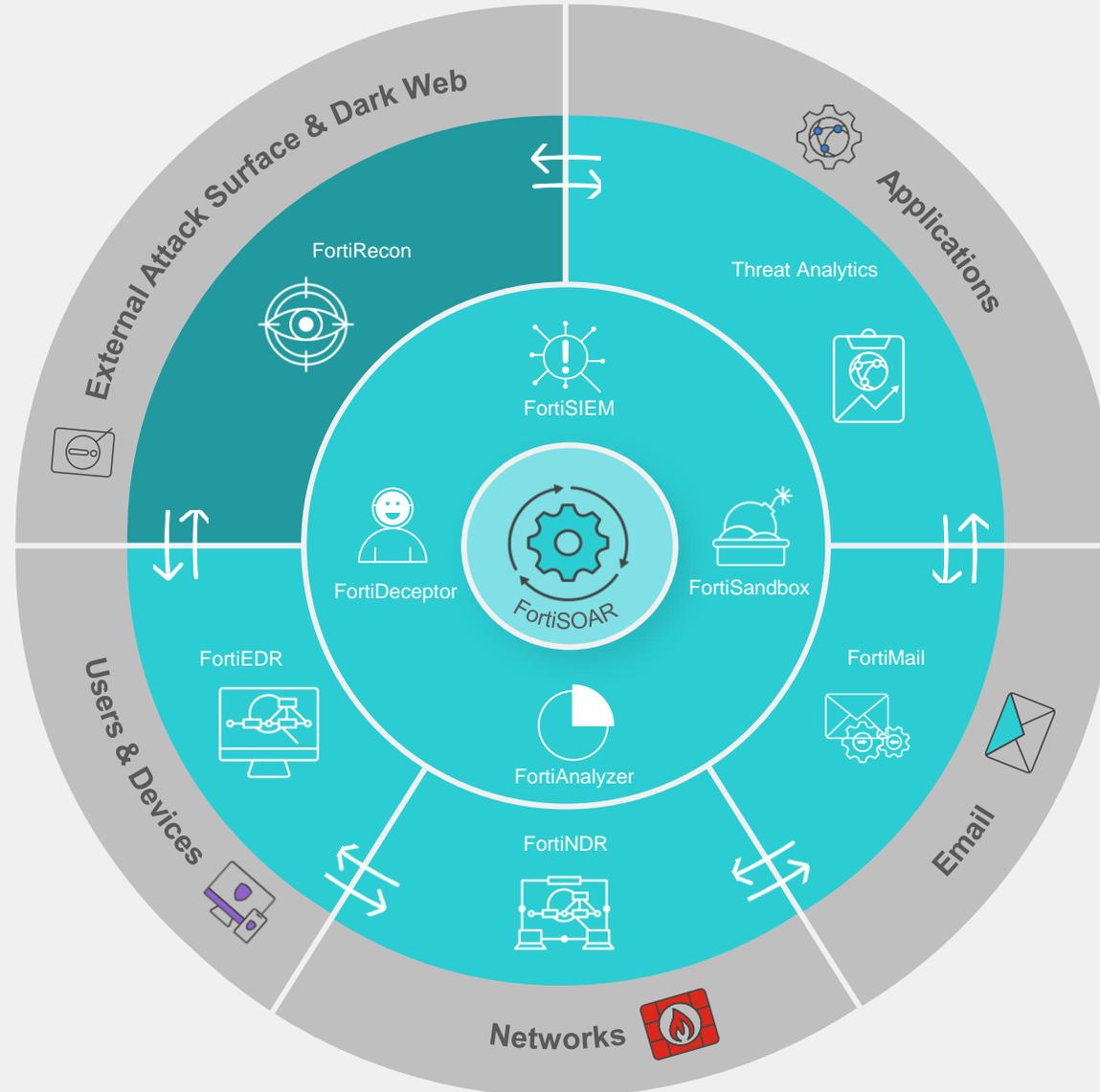
A cybersecurity platform- built on AI and Automation- to accelerate time to detect and respond to cyber intrusion

Security Operations Platform



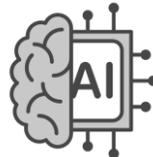
CONSOLIDATE

Consolidated security operations platform to accelerate time to detect and respond.



AI Across the Attack Surface

Monitor a specific domain, or across domains, to detect intrusion



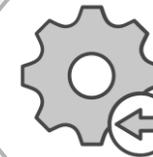
Fabric-native Integration

Interoperate beyond industry norm, to detect and disrupt



Centralized analytics and response

Orchestrate, automate and/or augment operations

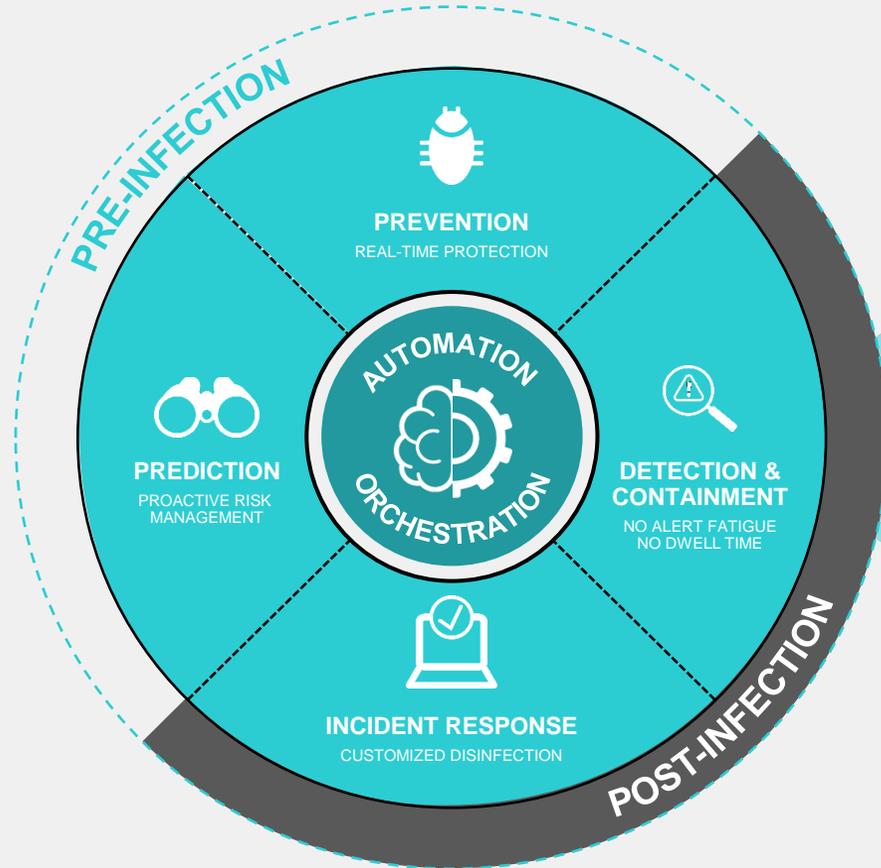


AI Thoughts – Attackers Perspective

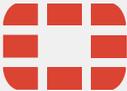


- Better, more convincing content
- Quicker route to market
- Wider spread of attacks with less effort
- More likely re-use of malicious code fragments
- Quicker Search Engine Optimisation
- Just another tool to use
- More pay days more regularly

AI Thoughts – Businesses Perspective



- Analyse greater amounts of data more quickly
- Endpoint behavioural understanding
- Improve zero day exploit detection
- Increase automation efficiencies
- Focus on integration/lower gaps in visibility
- The kill chain is still critical to disrupt
- Drive down TTD and TTR metrics
- Don't write off existing investments!
- Focus – MFA, training, email, endpoint, remote users
- Investigate Digital Risk Protection Services

F**RTINET**®