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# Bezpečnostný budíček

Tomáš Kelemen Fortinet



# Infraštruktúra je komplexnejšia a viac zraniteľná

84%

Companies are hybrid

Forbes: Remote Work Statistics and Trends

125+

Distributed applications used by enterprise

2022 Gartner: Market Guide for SaaS Management Platforms

42B

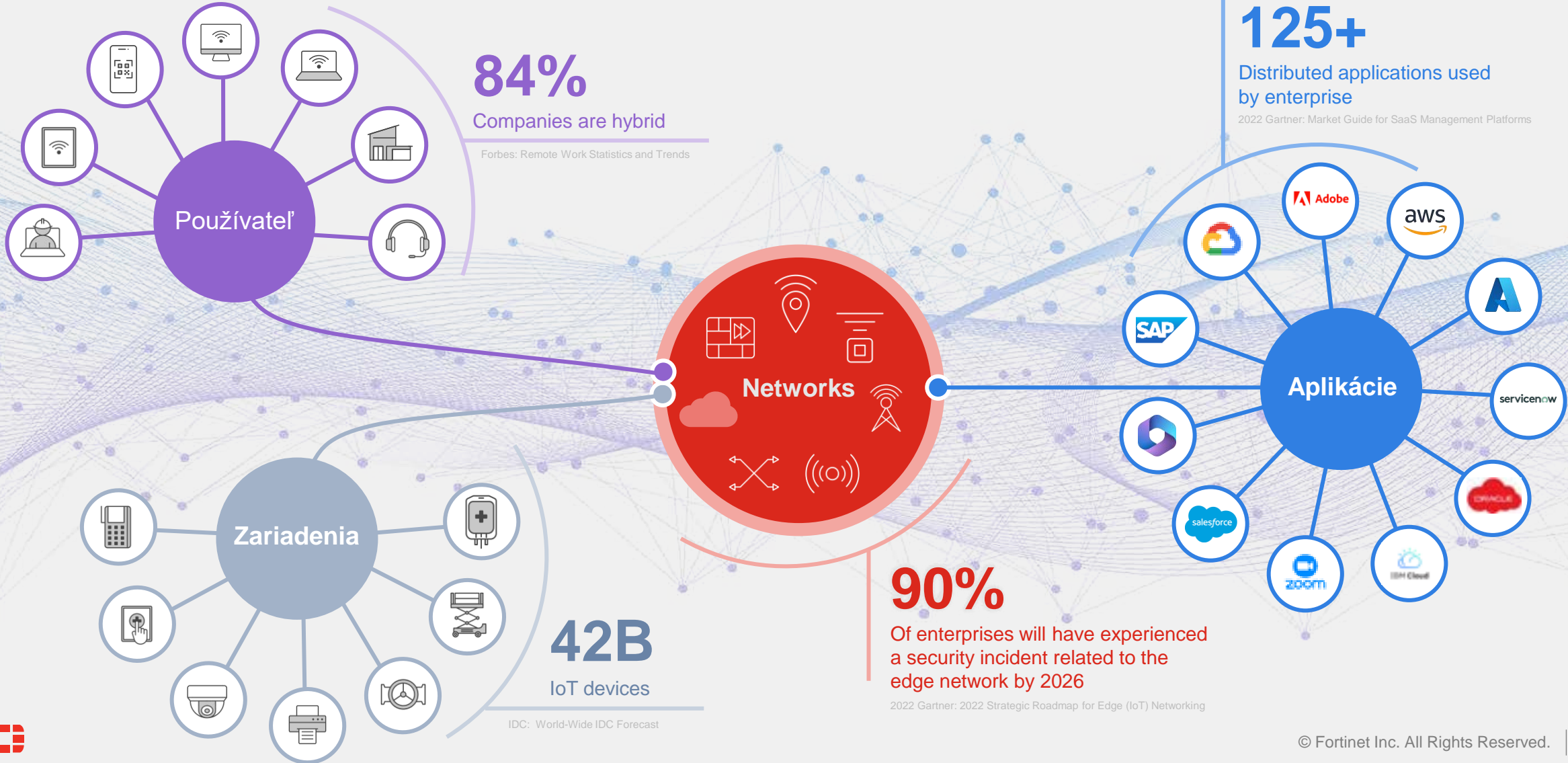
IoT devices

IDC: World-Wide IDC Forecast

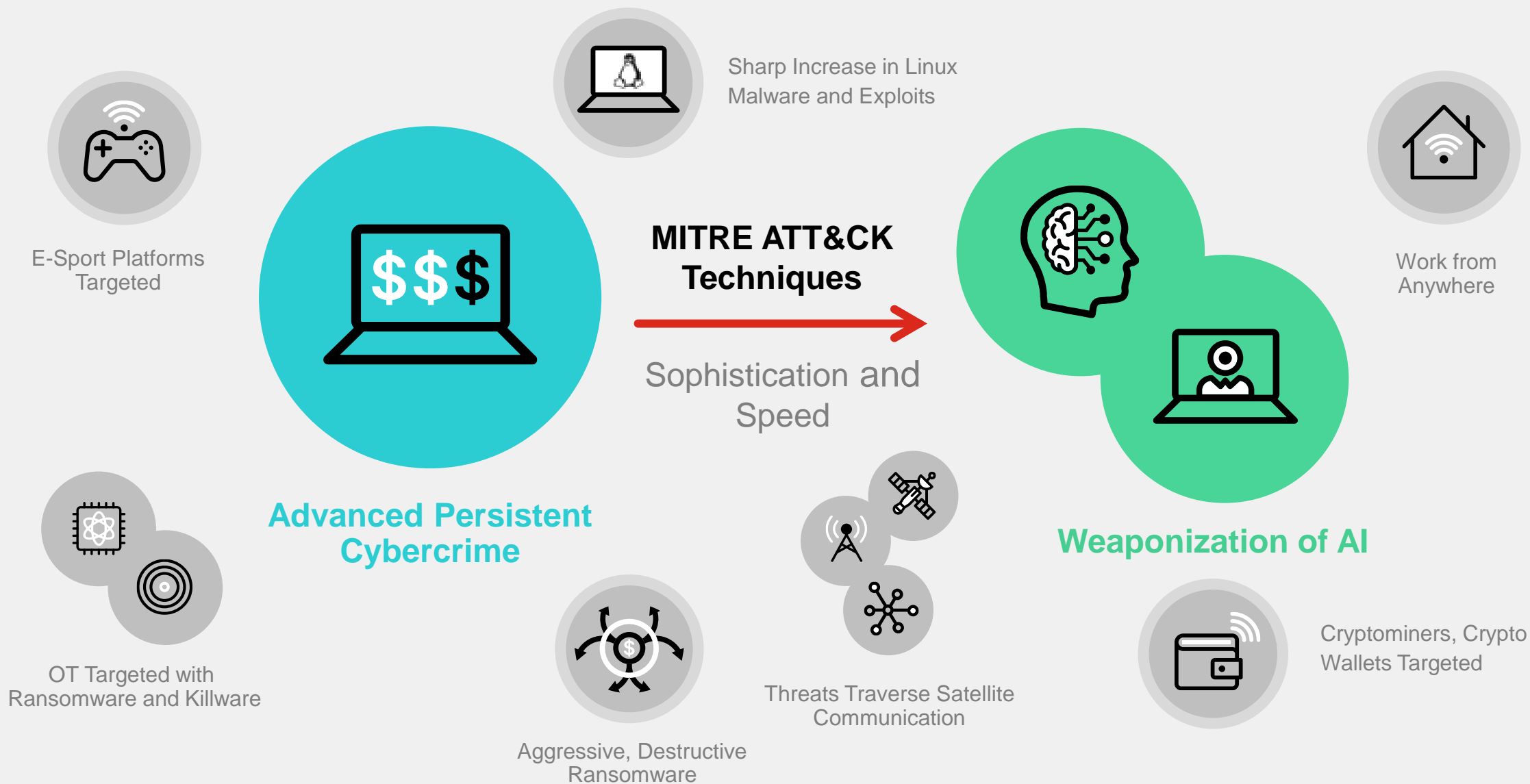
90%

Of enterprises will have experienced a security incident related to the edge network by 2026

2022 Gartner: 2022 Strategic Roadmap for Edge (IoT) Networking



# Organizácie sú pod útokmi viac ako kedykoľvek predtým



# Známe útoky na Slovensku a v Čechách

## Podvodníci si trúfli na známou slovenskú firmu: V deepfake videohovore sa vydávali za šéfa

Vanessa Mássayová, TASR | 12. augusta 2023 o 17:59

- Deepfake videá napodobňujúce reálnych ľudí čoraz viac zahlcujú internet
- Obeťou takéhoto podvodu sa takmer stala aj známa slovenská značka GymBeam



Dalidor C



Deepfake Taylor Swift poh  
celý internet: EÚ chce prot  
umelej inteligencii rázne...



Na scénu sa vracia obľúbe  
slovenský projekt, ktorý  
„zarezal“ príchod novej vlá



Dôležitá príprava pre slovi  
voľby: Experti vysvetľujú, i  
odhalit dezinformáciu, pre



Na Slovensku „úraduje“ fa  
inšpektorka. SOI pred ňou  
varuje podnikateľov

## Košice

## GymBeam



# Známe útoky na Slovensku a v Čechách



Hledat...

IT SECURITY NETWORK NEWS je B2B komunitní web zaměřený na IT bezpečnost a související témata. #security #bezpečnost #ITSECNN

## Ransomwarový útok v benešovské nemocnici poukázal na rizika IoT zařízení



Výkupné v kryptoměnách kyberútokům loni přesáhlo jednu miliardu dolarů

# Známe útoky na Slovensku a v Čechách

Vrbové  
Semikron

**Forbes** PREDPLATNÉ Q ☰

BIZNIS EKONOMIKA PENIAZE LIFE ŠPECIÁLY A REBRÍČKY PODCASTY BRANDLAB 30 POD 30 NAŠE PODUJATIA KNIHY FORBES

**Útok hackerov spôsobil vrbovskej fabrike miliónové škody. Ako sa môžu firmy chrániť?**





Foto: archív Semikron Danfoss

 **Tomáš Nejedlý**  
3. 5. 2023 · 5 min. čítania Facebook Twitter LinkedIn Share

Výrobca polovodičov Semikron vo Vrbovom vlani doplatil na útok hackerov. Fabrika s pravidelnými ročnými tržbami cez sto miliónov eur a ziskami v miliónoch eur po ňom ohlásila výraznú stratu 4,2 milióna eur.



# O2 Místo Kyberčinu

<https://o2cybernews.cz/podcasty#porad2>

**Místo Kyberčinu**

Moderátor Pavel Matějček

Moderátor Jan Dolejš

←

→

**MÍSTO KYBERČINU**

Místo Kyberčinu # 7

30 MIN

Hacknuté vibrátory na dálkové ovládání a kyberútoky na jaderná zařízení v Íránu

**MÍSTO KYBERČINU**

Místo Kyberčinu #6

31 MIN

Když vás robotický vysavač vyfotí na záchodě a sociální síť jako nástroj pro ovlivnění voleb

**MÍSTO KYBERČINU**

Místo Kyberčinu #5

31 MIN

První smrt zaviněná ransomwarem a nemocnice v hledáčku hackerů

**MÍSTO KYBERČINU**

Místo Kyberčinu #4

52 MIN

**SPECIÁL:** Když vám zavolá digitální dvojník vašeho šéfa a jak firmy ovlivní směrnice NIS2



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inside

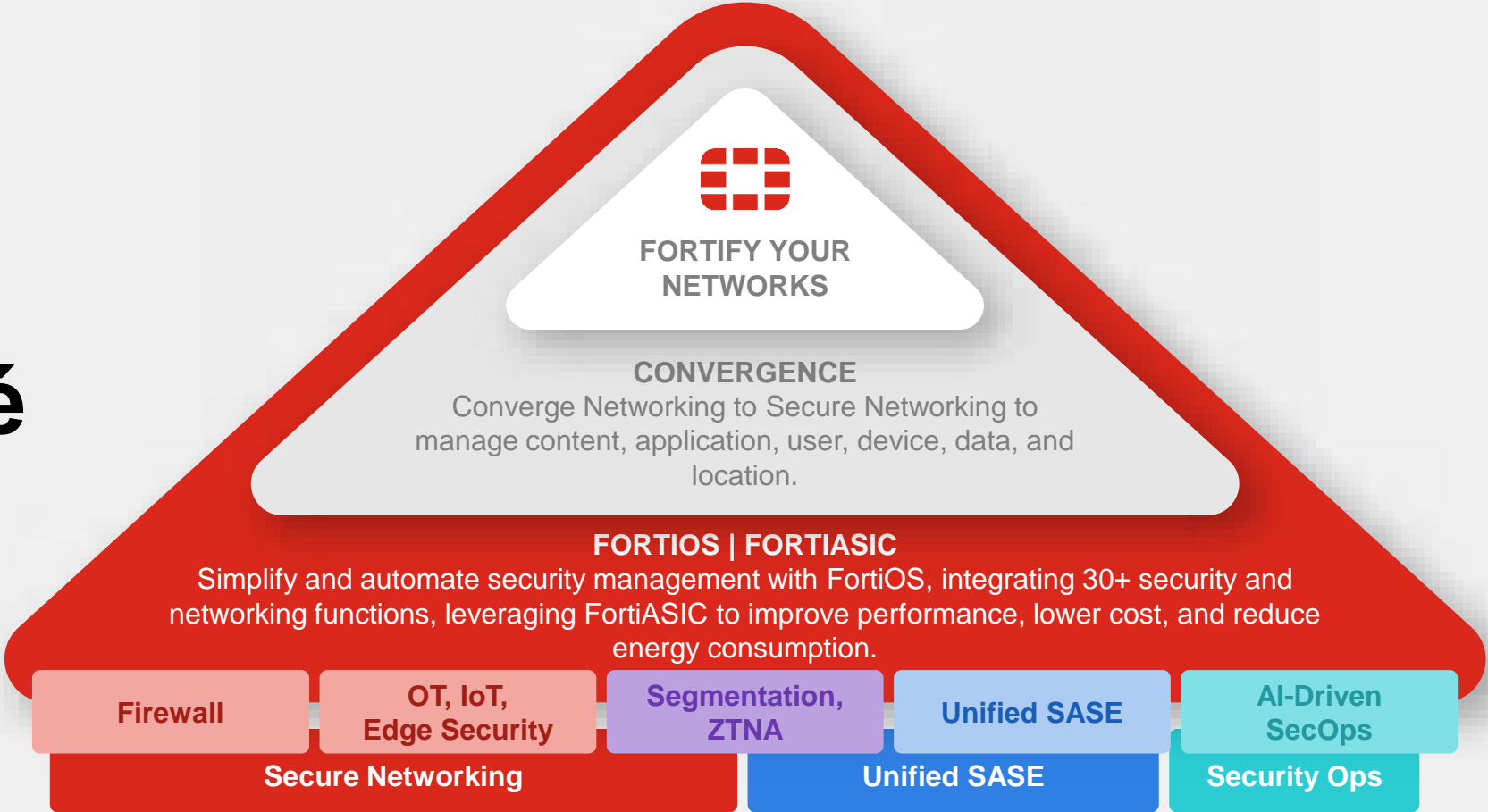




# Fortinet Platforma

Jeden OS

Špecializované ASICs



# The only company with the **same** Operating Systems across ALL Network Security Markets



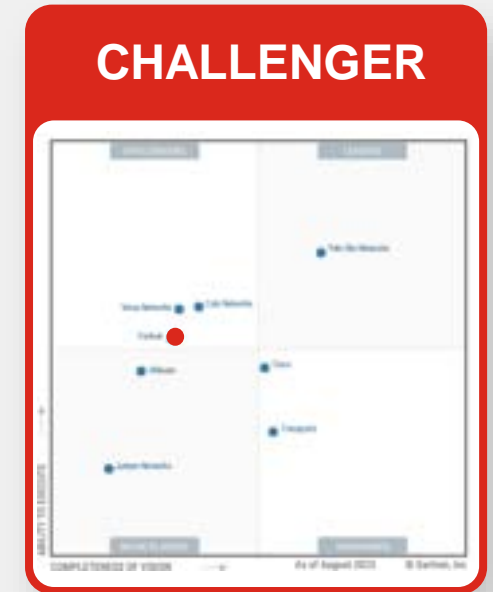
December 2022 Magic Quadrant for **Network Firewalls**



September 2022 Magic Quadrant for **SD-WAN**



March 2024 Magic Quadrant for **Wired & Wireless LAN**



August 2023 Magic Quadrant for **Single-Vendor SASE**



**FortiOS Operating System**



# World's Most Powerful Networking Security Operating System



# Securing People, Devices, and Data Everywhere

*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**

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

**705k+**

Customers

Broad, Integrated Portfolio of

**50+**

Enterprise Cybersecurity  
Products

2022 Billings

**\$5.59B+**

(as of Dec 31, 2022)

Strong Analyst Validation

**70+**

Enterprise Analyst Report  
Inclusions

Market Capitalization

**\$45.5B**

(as of March 31, 2023)

Vertical Integration

**\$1B+**

Investment in ASIC  
Design & Development

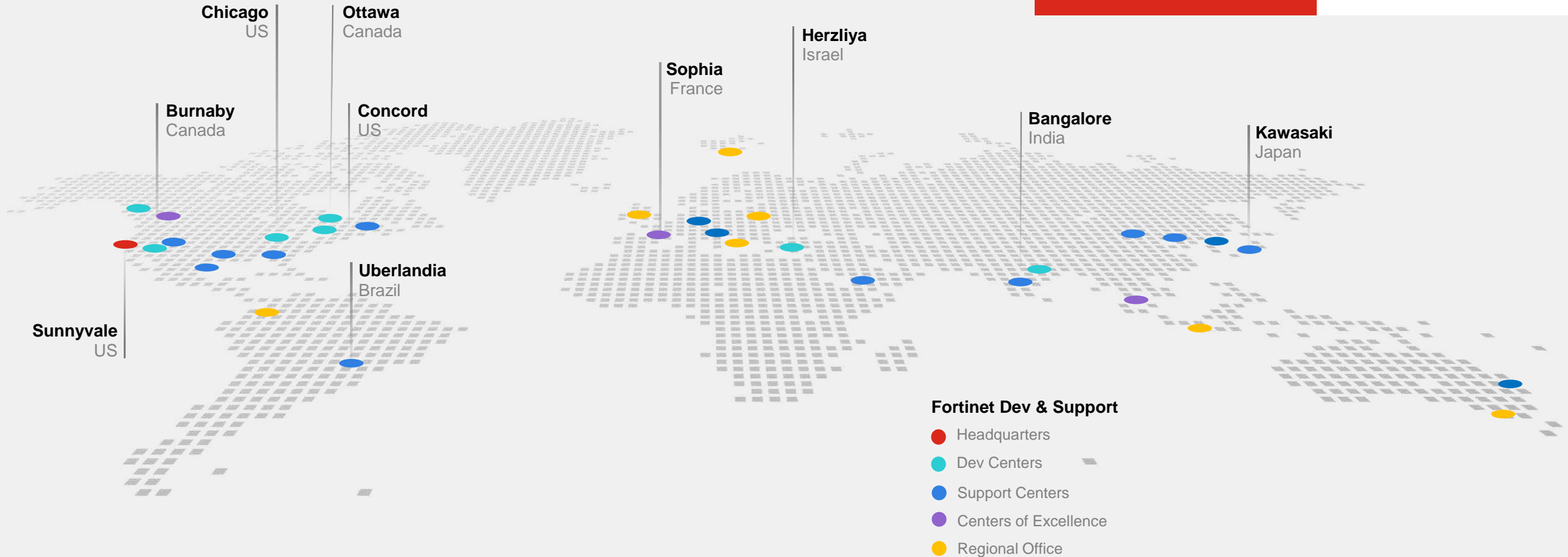


# Global Reach and Support

Majority of our R&D is based in North America

**13,600+**  
Employees  
Worldwide

**100+**  
Global Cloud  
Locations



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# Doporučenia v prípade útoku

Tomáš Kelemen Fortinet



# Naše skúsenosti

**Žiadna segmentácia**

**Zastaralý HW  
Nulová vizibilita**

**Slabá  
bezpečnosť**

**Legislatívne nedostatky  
Zákon o IT vo verejnej správe  
Naplnenie kyberzákona NIS**

**Nedostatok ľudí  
Nekompatibilita mgmt.  
softvérov**



# Šírenie útokov bez prekážok

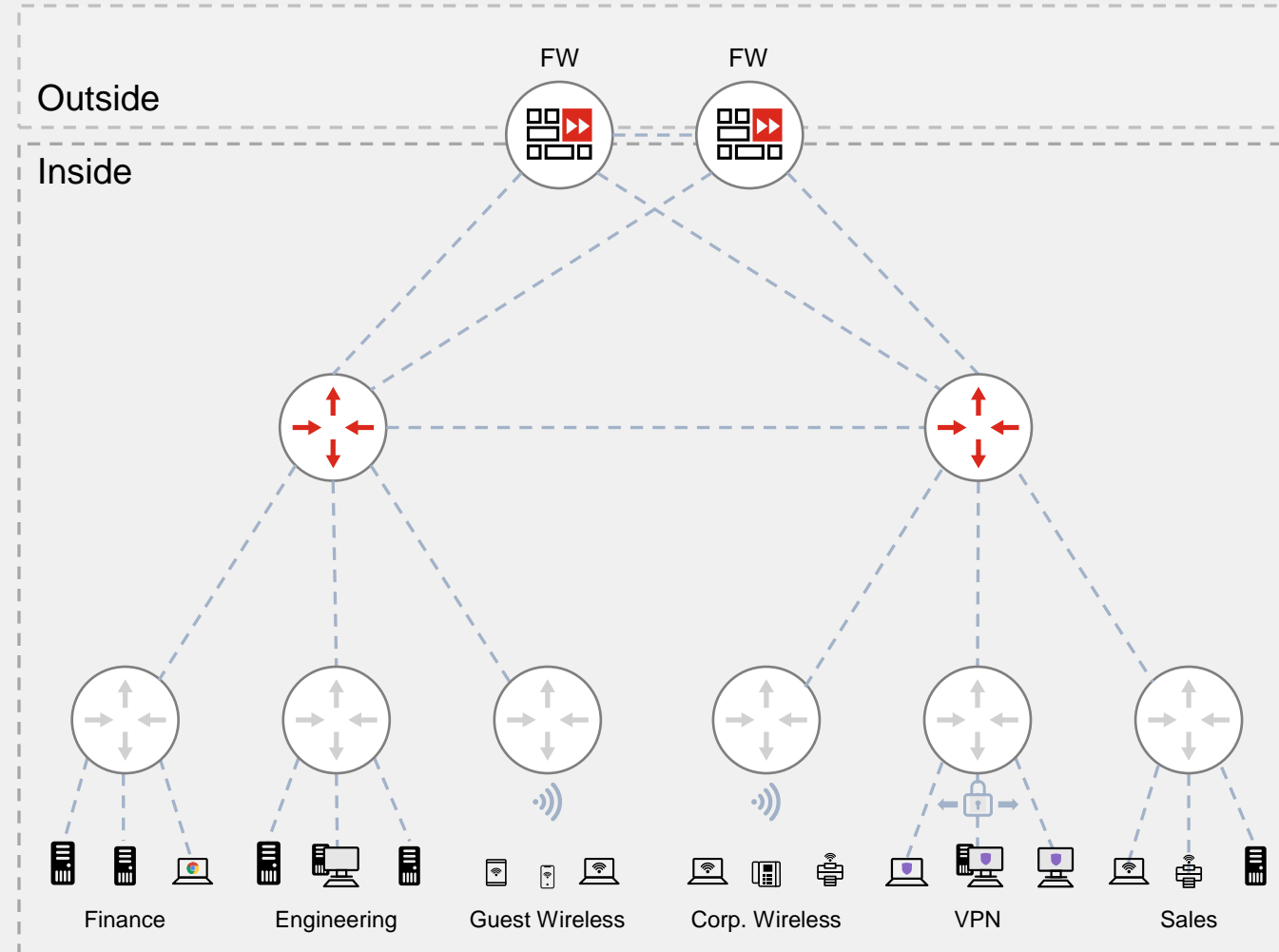
Dnes

## Problem

- Protect business from outside threats
- Protect users from the internet
- Keep users productive

## Solution

- Apply all security at the internet edge
- Flat network provides no internal security
- Visibility into the network severely limited
- Risk of compromise is very high



## Establishing Trust

- Network Address
- User Identity
- Business Logic
- Fabric Connectors
- Applications
- Device Identity

## Advanced Security

- SSL Inspection
- IPS
- Antivirus
- Application Control
- Web Content Filter
- Data Loss Prevention
- Secure Email Gateway
- Denial of Service Protection
- Web Application Firewall
- Cloud Access Security Broker
- Advanced Threat Protection
- Endpoint Protection





# Potreba zníženia útočnej plochy – segmentácia



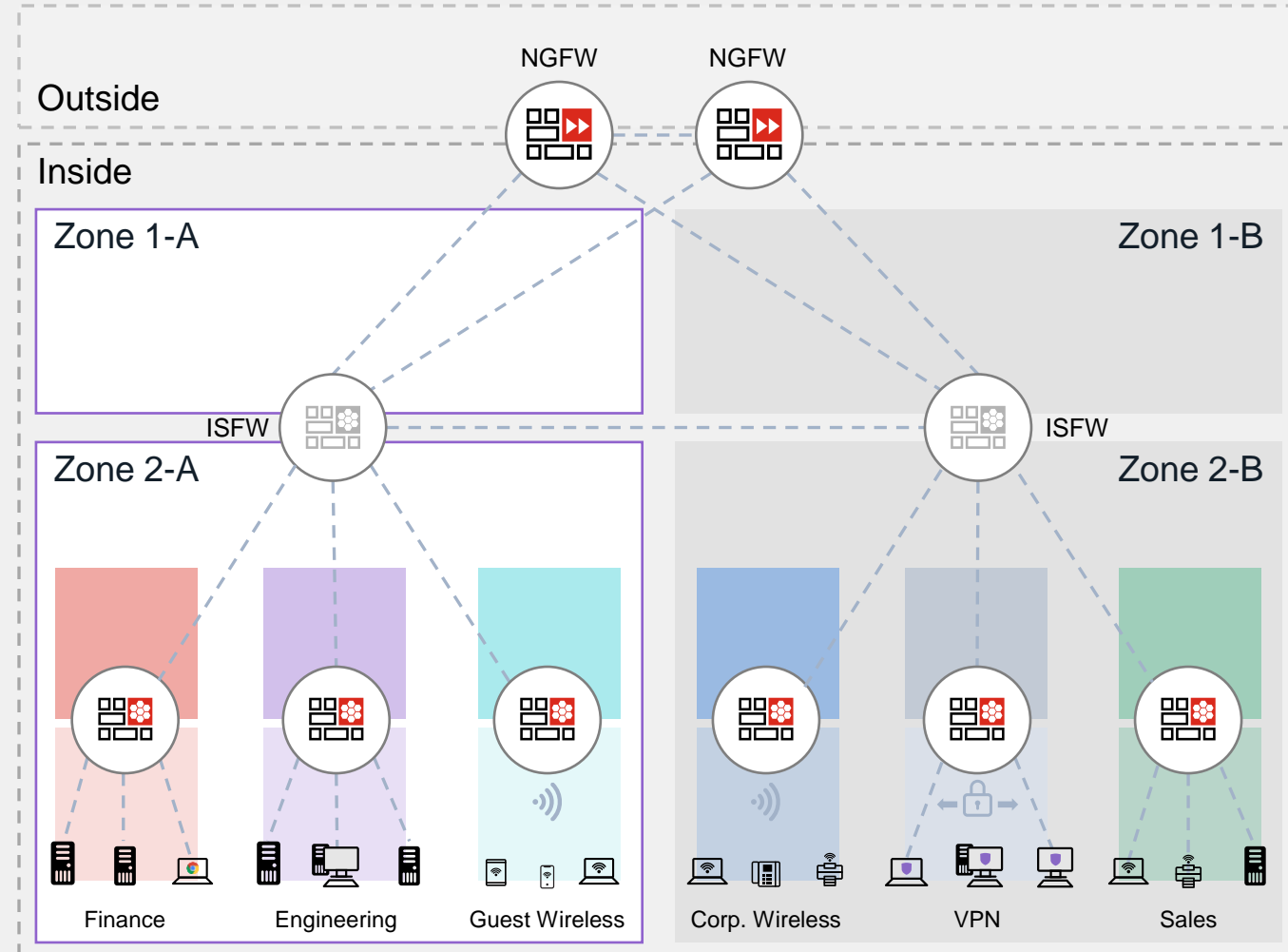
## Problem

- Flat internal network
- No internal visibility
- No internal security



## Solution

- Many enforcement points
- Create containment zones
- Inspect SSL
- Inspect Applications
- Check for zero-day malware
- Protect critical assets



## Establishing Trust

- **Network Address**
- **User Identity**
- Business Logic
- Fabric Connectors
- Applications
- Device Identity



## Advanced Security

- **SSL Inspection**
- **IPS**
- **Antivirus**
- **Application Control**
- Web Content Filter
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- Endpoint Protection



# Evolution of NGFW to Hybrid Mesh Firewall Solution

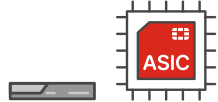


Single, Unified Management Console



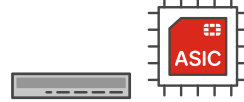
FortiManager

## Branch



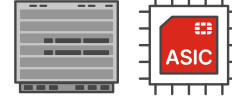
FortiGate  
40-90 Series

## Campus



FortiGate  
100-900 Series

## Data Center



FortiGate  
1000-7000 Series

## VM / Cloud / FWaaS



FortiGate VM



FortiCNF



FortiSASE

## Networking Operating System Everywhere



Firewall



VPN



NGFW



Segmentation



Distributed  
NGFW



DDoS



Low  
Latency



Integrated  
W/LAN



5G/LTE



HW SSL  
Inspection



Secure  
SD-WAN



Hyperscale



ZTNA



FortiGuard Labs  
AI-Powered Threat  
Intelligence

### Device Security



North/South Inspection  
East/West Inspection  
SSL Inspection

### Content Security



Anti-malware  
Detect Malicious Files

### Web Security



Stop DNS-based Attacks  
Block Malicious URLs

### Content Security



Prevent Data  
Exfiltration

**By 2026, more than 60% of organizations will have more than one type of firewall deployment, which will prompt adoption of hybrid mesh firewalls.**



Gartner, Magic Quadrant for Network Firewalls, Rajpreet Kaur, Adam Hills, Tom Lintemuth, December 2022.

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inside

