



ROMSYS
new frontier group

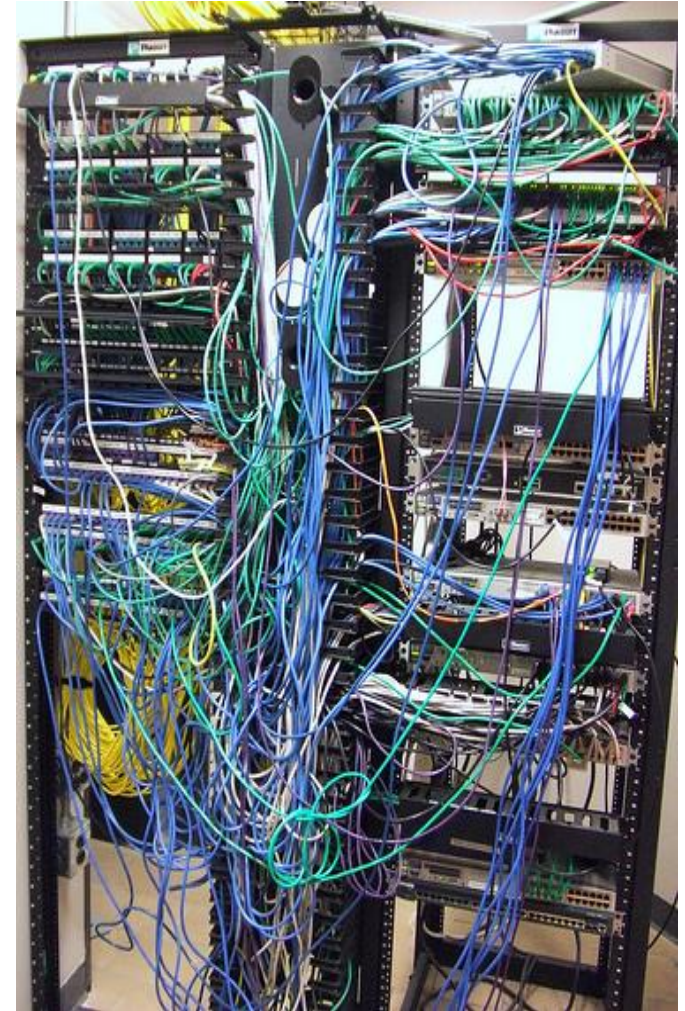
FORTINET.

Securizarea accesului la resursele interne si Internet

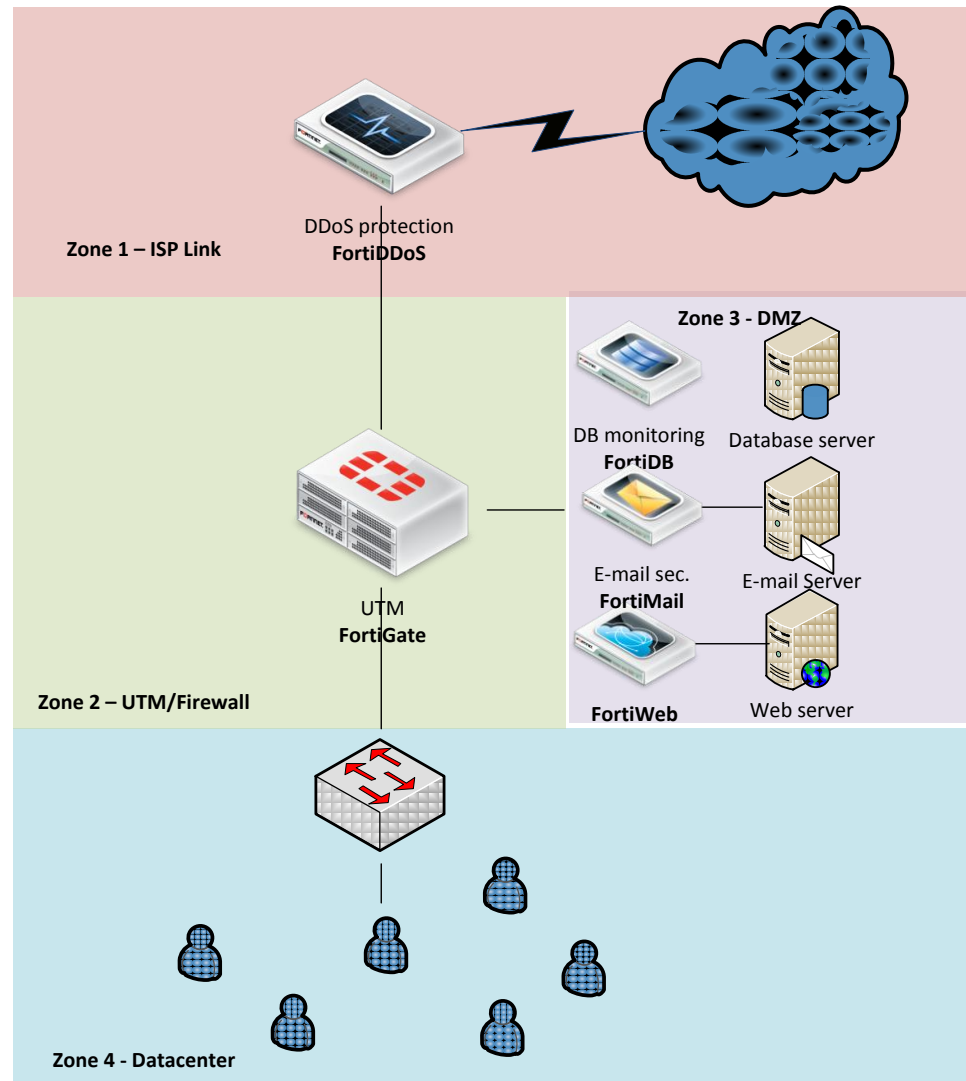
**Iulian Zamfir, Director Infrastructura Romsys
Cristian Amariei, consultant Fortinet**

Securizarea accesului la Internet

- ✓ Accesul la resursele rețelei poate fi oricând limitat de atacuri DDoS
- ✓ Odata accesat, Internetul este plin de surprize: virusi, troieni, spyware...
- ✓ Utilizatorii navigheaza pe site-uri cu potential de malware
- ✓ Banda este sufocata de consum video, audio, jocuri, social media
- ✓ Utilizatorii gasesc cu dificultate un mail util intre atatea spam-uri
- ✓ Metodele de transmisie a informatiilor au devenit foarte diverse ducand la cresterea posibilitatii scurgerii datelor confidentiale
- ✓ Rezolvarea tuturor breselor de securitate poate aduce probleme de complexitate si costuri ridicate



Cum abordam si ce unelte avem la dispozitie?



Atacurile DDoS: Executie centralizata, Haos generalizat

Atacuri tip Spoofing

- Mai putine echipamente
- Putere limitata

Cienti Botnet

- Mai multe echipamente
- Putere mai mare

Servere C&C

- Mai multa putere
- Mai multa banda

FortiDDoS

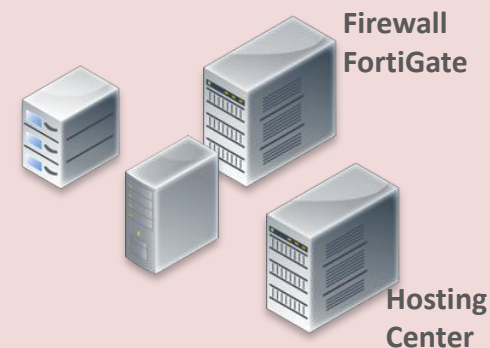
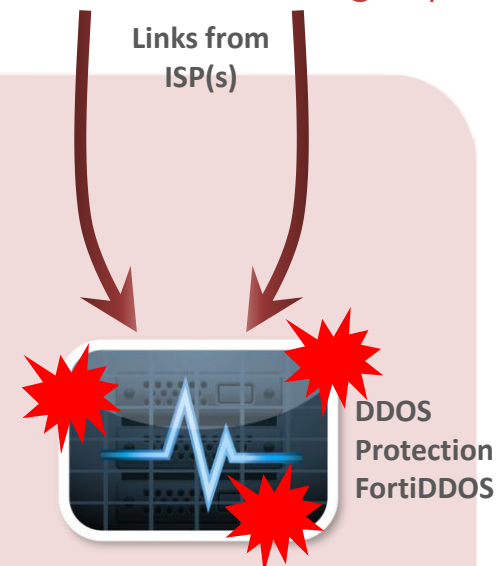
➤ FortiDDoS protejeaza legatura la Internet

- La perimetrul rețelei sau in datacenterul ISP
- Implementare in mod Transparent
- Posibilitate de bypass cu FortiBridge si integrata (roadmap)
- Traficul este scanat cu ajutorul unui modul specializat FortiASIC

➤ Construiește modelul traficului legitim

- Referinta este stabilita in functie de activitatea zilnica
- Estimarea pragului este adaptata la trafic
- Sunt suportate legaturi multiple la Internet

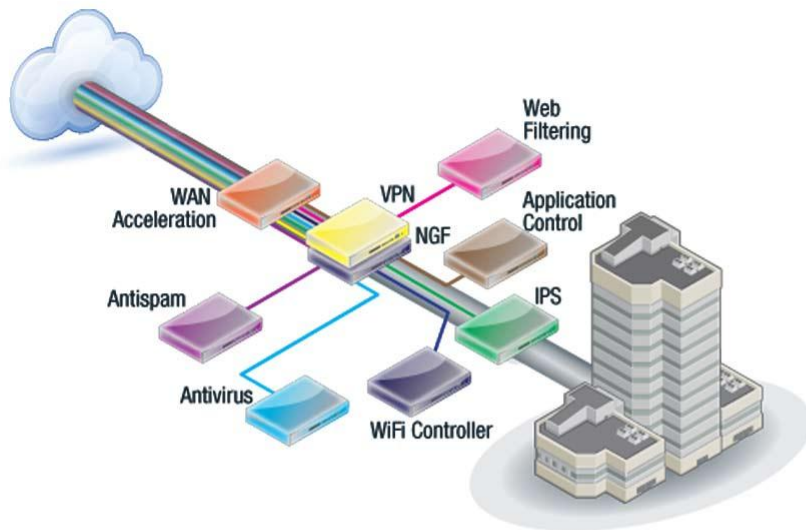
ROMSYS
new frontier group



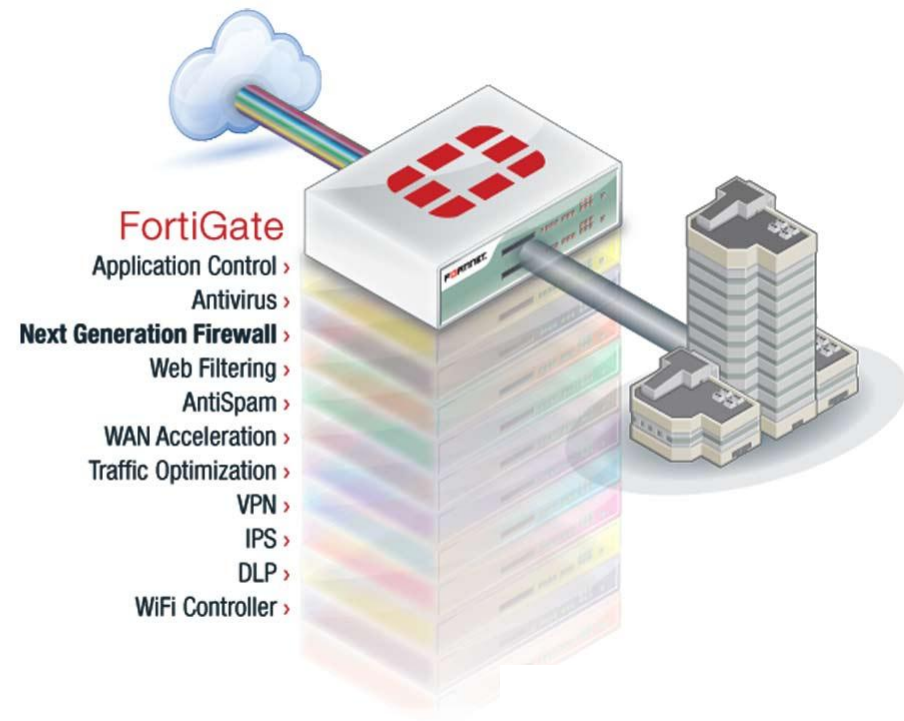
FORTINET

Securitatea Rețelei - O noua abordare

Soluțiile tradiționale Complex și costisitor



Soluția Fortinet Integrat și cost redus



Securitatea rețelei - Fortigate

Protecție în timp real

**Tehnologii de
Securitate și
Networking
Integrate**

Platforma proprie

Performanțe înalte

Suport și Update-uri

Servicii de securitate actualizate zilnic

AV

IPS

Web Filter

Antispam

App Ctrl

VM

Firewall

VPN

DLP

WAN Opt

Traffic Shaping

WLAN

VoIP

SSL Insp

HA

Load Balancing



Sistem de operare FortiOS



Hardware dedicat

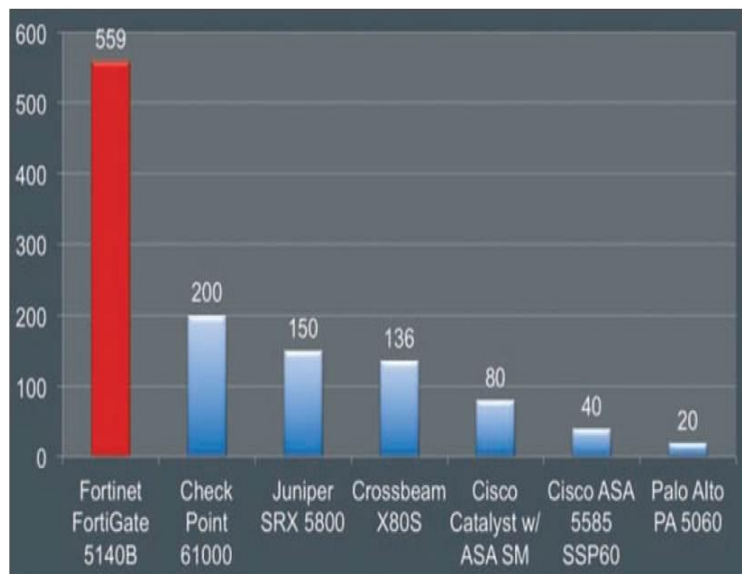
FortiCare™

FortiGuard Labs

Fortinet lider mondial

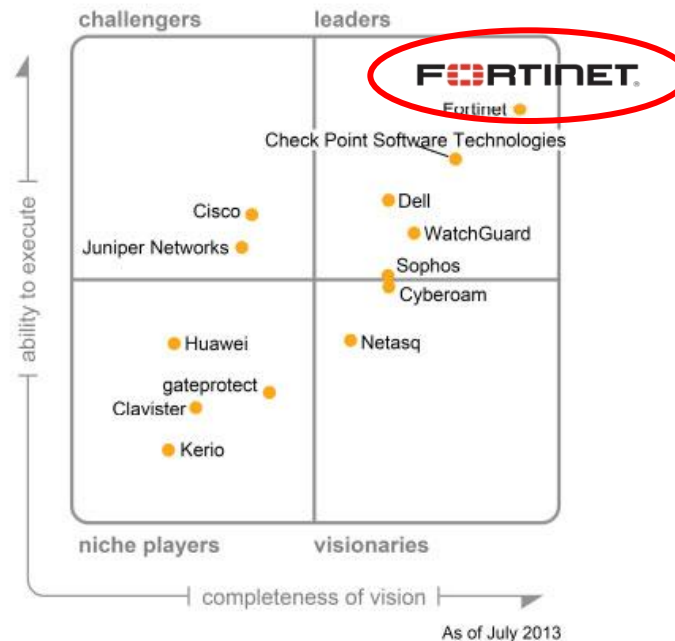
Cel mai rapid Firewall din
lume conform Breaking Point¹

BreakingPoint™ Firewall Gbps



Cadrantul magic pentru
Unified Threat Management²
Gartner

Figure 1. Magic Quadrant for Unified Threat Management



Source: Gartner (July 2013)

(1) Masuratorile au fost efectuate de catre BreakingPoint pe trafic UDP, 2012
(2) Gartner, Inc., "Magic Quadrant for Unified Threat Management", Iulie 2013

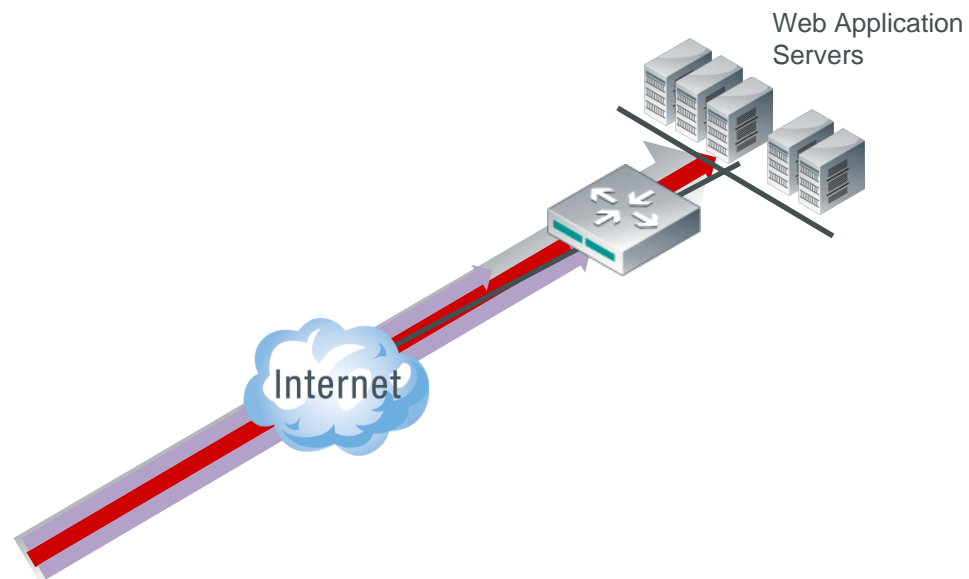


FORTINET.

Securizarea aplicatiilor

Tendinte

- Automatizarea atacurilor
- Utilizarea pe scara larga a bot-ilor
- Tool-uri specializate pentru atacuri
- Dezvoltarea atacurilor DDoS
- Surse infectate cu Malware
- Injectii SQL si XSS



Securitatea aplicatiilor web - Fortiweb



Web Application Firewall - WAF

Securizeaza aplicatiile web si asigura conformitate cu PCI



Web Vulnerability Scanner

Scaneaza, analizeaza si detecteaza vulnerabilitati



Application Delivery

Asigura disponibilitatea si accelereaza performanta aplicatiilor web



Protectie DDoS

Protectie DDoS la nivel de retea si aplicatie



Securitatea Bazelor de date - FortiDB



Securitate DB si Complianta

Este o solutie de Monitorizare si Audit a bazelor de date si Management vulnerabilitati . Implementarea si gestionarea solutiei este facila , iar monitorizarea bazelor de date, auditul si complianta cu standardele de securitate sunt asigurate in timp util.

Monitorizarea Bazei de Date(DAM)

- Monitorizare in timp real a utilizatorilor si tranzactiilor critice
- Monitorizarea structurii tabelor(metadata)

Identificarea Vulnerabilitatilor

- Descoperirea automata a bazelor de date si a informatiilor sensibile din acestea
- Scanare si raportare vulnerabilitati impreuna cu sfaturi expert de remediere a acestora.

Control pe baza de politici

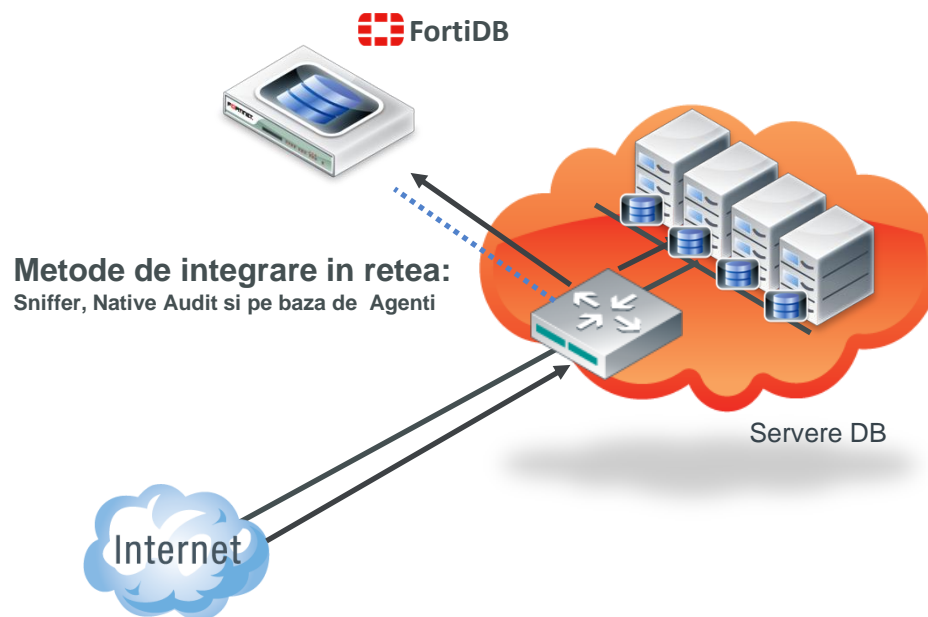
- Oferă automatizarea proceselor de monitorizare a bazelor de date pe baza de politici

Managementul riscului / complianta

- Diminuarea riscului, Politici si rapoarte predefinite utile pentru demonstrarea si mentinerea compliantei(PCI)

Bucuresti 10 Octombrie 2013 - Protecția infrastructurilor critice din sectorul energetic.

Dependțe intersectoriale energie-comunicații.



Securitate email - FortiMail



Securitate email

Metode avansate de filtrare antispam si antivirus, cu posibilitate de carantina si arhivare a mailurilor atat legitime cat si spam

Sistem specializat de securizare email

- Filtrare bi-directionala care previne raspandirea in retea a: virusi, spam, phishing, viermi, spyware

Trei metode de implementare

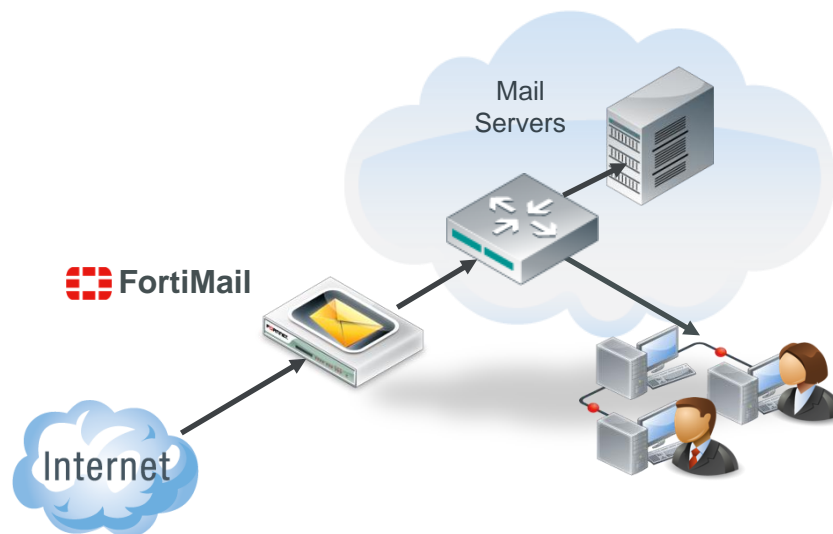
- Functioneaza in mod Transparent, Gateway sau Server adaptabile in functie de necesitatile companiei

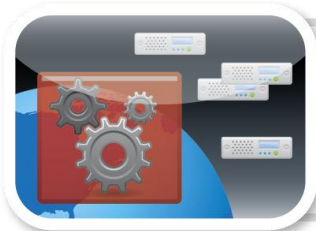
Criptare bazata pe identitate

- Comunicatie sigura criptata

Arhivare mesaje

- Posibilitate de stocare interna a mesajelor si logurilor , facilitand indeplinirea solicitarilor legate de politici si complianta





Application Delivery Controllers

Optimizeaza disponibilitatea, experienta utilizatorului, performanta si scalabilitatea functionarii aplicatiei.

Disponibilitatea aplicatiei

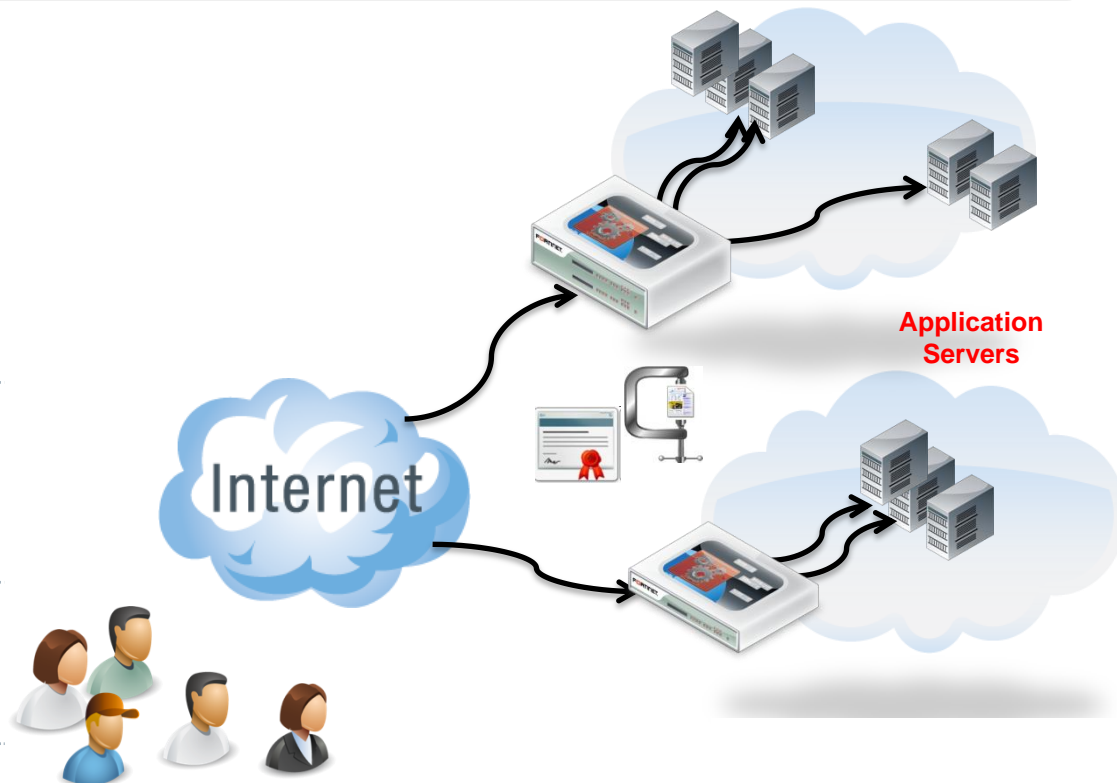
- Tehnici de balansare la Layer 4 si 7
- Persistenta aplicatiei
- Global Server Load Balancing (GSLB) pentru dispersare geografica
- Link Load Balancing
- Quality of Service (QoS)
- Suport IPv6

Accelerarea aplicatiei

- Optimizare/Multiplexare TCP
- Offload si accelerare SSL
- Compresie

Securitate

- IPv4 and IPv6 firewall ACL rules
- Protectie SYN Flood





FORTINET.

Securizarea mediului wireless

Securitatea mediului wireless

- Foarte multe companii se confrunta cu fenomenul Bring Your Own Devices (BYOD)
- 50% dintre companiile care au adoptat BYOD au fost atacate
- Dispozitivele cu posibilitate de conectare Wi-Fi continua sa prolifereze
- Multe solutii firewall nu sunt capabile sa identifice aceste dispozitive si sa impuna politici per utilizator



FortiGate + FortiAP pentru securizare wireless

- FortiAP reprezinta gama de solutii access point ale Fortinet
- FortiGate include functionalitatea de wireless controller pentru orice FortiAP
- Functionalitati FortiAP:
 - » Sistem pentru detectarea intruziunilor in mediul wireless
 - » Detectarea si suprimarea AP-urilor straine care incearca sa se conecteze la reseaua clientului
 - » Politici pentru oaspeti: cont guests, cote de timp, parole temporare
- Functionalitati FortiGate utile in mediul wireless:
 - » Filtrare site-uri web in functie de categorii
 - » Posibilitate de controlul al aplicatiilor utilizate
 - » Antivirus
 - » Management de banda pentru a prioritiza traficul important pentru business

Client UTM



Filtrare URL



Antivirus



Autentificare
2-Factor



Optimizare WAN



Remote VPN



Scanare
Vulnerabilitati



Control
Aplicatii



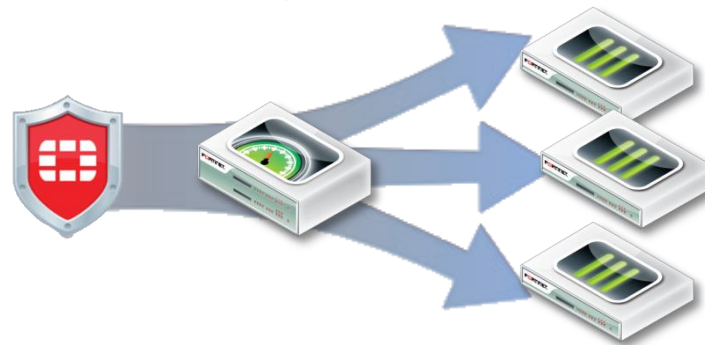
- ✓ Administrare centralizata cu FortiGate
- ✓ Disponibil pentru Windows, Mac OS X, Android si iOS



Suport pentru solutiile de securitate Fortinet

Automatizarea si optimizarea proceselor – Solutii Complementare

- **FortiAnalyzer** este o platforma dedicata pentru agregarea centralizata a logurilor, analiza, arhiva de continut si raportare ;
- **Fortimanager** este o solutie complementara cu rolul de a gestiona centralizat intreaga infrastructura de securitate Fortinet ;



- **Fortiswitch** – asigura interconectare Layer 2 pentru toate componentele retelei ; anumite modele pot fi gestionate centralizat din Fortigate sau au interfete POE ce pot fi utilizate pentru a alimenta FortiAP-uri sau alte echipamente de retea

Romsys at a Glance

ROMSYS
new frontier group

3.000+

Successful projects
implemented in Romania and
abroad

19+

Years of Experience

70+

Clients in **TOP 100** companies
in Romania

157.000+

Man-days consultancy

120+

Active projects in 2011
PMP, ASAP, CAPM Methodologies

30+

Traditional partnership with
technology leaders

340+

Employees in Romania

17

Local Offices, 24/7 support,
over 70 specialists

Austria

Headquarters. Since 2007, member of
New Frontier Group

Network Capabilities

Turnkey Networking Solutions

Requirements Analyze,
Equipment Procurement
Value added Services Deployment,
Installation & Integration
Testing & Certification
System Documentation
End User Training

Networking Integrated Systems

Physical Infrastructure
Structured cabling, Campus and
Metropolitan backbones
Cat6, cat6a, cat7, Fiber Optic, Wireless
Intranet & Internet Access
LAN & WAN structures Integration of
Value Added Services
Infrastructure management Nexans
Lansense

Advanced Technologies

Passive Equipment
NEXANS
CORNING, AMP, Molex...
Active Equipment
Cisco, Juniper, HP, Fortinet, Rukus, F5,
Radware, PaloAlto Networks, Riverbed,
F5, PacketLight ...

Technical Support

Audit & Consultancy Remote
Network Mgmt. Remote
Monitoring & Testing

Maintenance

On site technical support
5X8, 6X10, 7X24
response / restore time Guaranteed
extension Warranty

- **Networking Strategy and Optimization Services**
 - networking strategy
 - application optimization
 - network infrastructure optimization
 - network management optimization

- **Converged Communications Services**
 - network convergence
 - IP telephony
 - unified messaging service
 - real-time collaboration services
 - IP contact center services

- **Mobility and Wireless Services**
 - enterprise mobility
 - digital communities

- **Network Security Services**
 - network security assessment, design and implementation

- **Network Integration Services**
 - network integration and deployment

- **Network Managed Services**
 - network operations and management

Country Wide Support

- **Own Country-wide Support Organization**
- **Comprehensive Support & Service**
Hardware / Software / Networking / Applications

- **System Maintenance: Total Casco**
Hardware: Preventive Maintenance
Repairs, incl. Spare Parts
Software: Help Desk
Bug fixes, Upgrades

- **Service Level Agreements:**
5 x 8; 6 x 10; 7 x 24
Guaranteed Response Time
In-Country Spare Parts Stock



Business Partners

ROMSYS
new frontier group



Certified Silver Partner

with the following specializations:

- Advanced Security
- Express Unified Communication
- Express Foundation
- Cisco TelePresence Video Express Authorized Technology Provider ATP

12 Certified Engineers :CCIE, CCNP (R&S, Voice, Security, Service Provider , Wireless), CCDP, CCDA, CSE



Gold Partner

RTSA-W, RTSA-EVSI,
RTSS-W, RTSS-EVSI



Gold Partner

FCNSP, FCNSA



Certified Platinum Partner

STS Veritas Cluster Serves



Certified Partner

7 people of networking team completed
Nexans Expert Training Program



Certified

Partner

Networks Certified Systems Engineer
WDM Solutions



Certified Partner

WiSEGuy & Ruckus
Certified Technical Instructor



Gold Partner RNS

AIS, ASE, Master ASE



Premier Partner

Certified Security
Administrator
Certified Security Expert



Certified Partner



Certified Partner

JCNIA, JCNIS, JNSS
JNSA



Platinum Partner



Certified Partner



Registered Partner



Certified Partner



Utilities

- **Electrica:** Smart Metering System – Automated Metering System
(Implement networking system for over 300 sites)
Networking optimization, remote monitoring and on-site support
 - **TransElectrica:** Large DWDM/CWDM WAN infrastructure and IP/MPLS
(Implement networking system for over 100 sites)
Unified communication system for over 100 sites
NAC & DLP solution
 - **Hidroelectrica:** First VoIP in Romania
(VPN, VoIP, Video Conferencing, remote monitoring and on-site support)
 - **E.ON Gaz Ro:** Large ip WAN infrastructure
(VPN for over 150 sites, VoIP, Video Conferencing)
 - **GDF Suez Energy:** Large ip WAN infrastructure
(VPN for over 150 sites, VoIP, Video Conferencing)
 - **ENEL** Call Center solution
Network security deployment
-

Defense

- **CIE1, CIE2:** NATO Compatible Networking Infrastructure of the RMoD HQ
- **DRMI Brasov:** NATO Compatible Networking Infrastructure of the RMoD Training
- **RONACS, SCAAN:** Communication solutions and technical support

VA MULTUMESC!