Vital Threat Management for Enterprise / Carrier

In a Digitally Integrated World

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Presentation Overview

Vital Threat Management For:

- Enterprise & APAC
  - Malware Trends
- Cost Effective, Next Generation Security
  - The Threatscape Today
  - Layered Security
- Mobile Threats
- Q&A

Enterprise & APAC

Targeted Attacks

- Documents Favored
  - Various Exploits Used
    - PDF, XLS, DOC
  - Common Malware Dropped

- Social Engineering 2.0
  - Location Based Services
  - Profiling
    - UPS / DHL Attacks

- Salesforce Snow-Ball Effect
    - **January 31, 2007:** 29,800 Customers
    - **September 2007:** Phishing attacks compromise sensitive data
    - **November 2007:** FTC spoofed attacks with compromised data

Enterprise & APAC

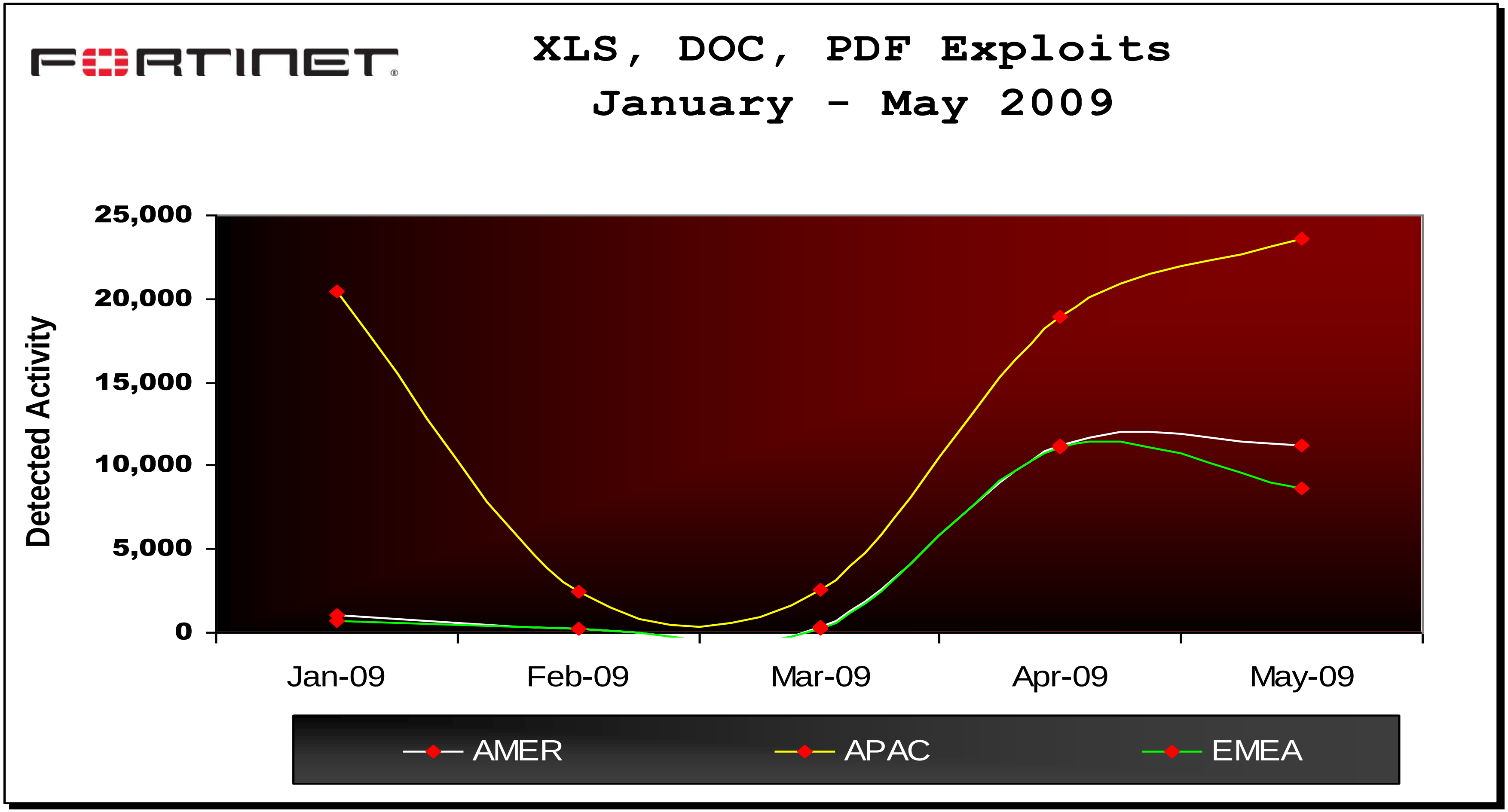
Targeted Attacks

- GhostNet[1]
  - 1,295 unique infections:103 countries
    - Ministry of Foreign Affairs, Embassies
    - Concentration in Asia
  - Spoofed Email (ie: campaigns@freetibet.org)
  - Malicious MS Word document – exploit
  - Drops trojan (Ghost RAT), and innocent document
  - HTTP Communication Used for C&C

GhostNet Source
1: Information Warfare: http://www.scribd.com/doc/13731776/Tracking-GhostNet-Investigating-a-Cyber-Espionage-Network

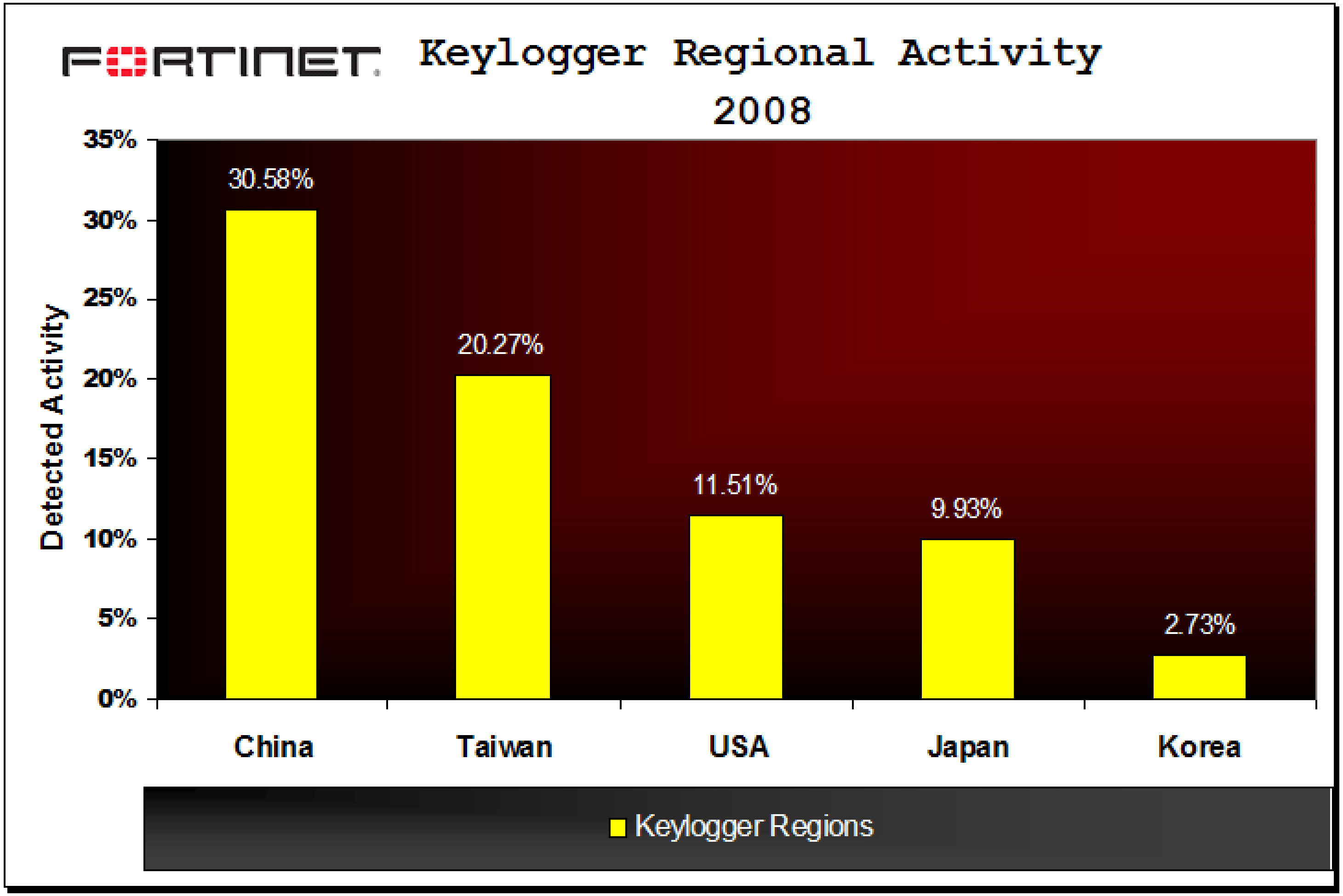
Enterprise & APAC

Targeted Attacks



Enterprise & APAC

Targeted Attacks



Enterprise & APAC

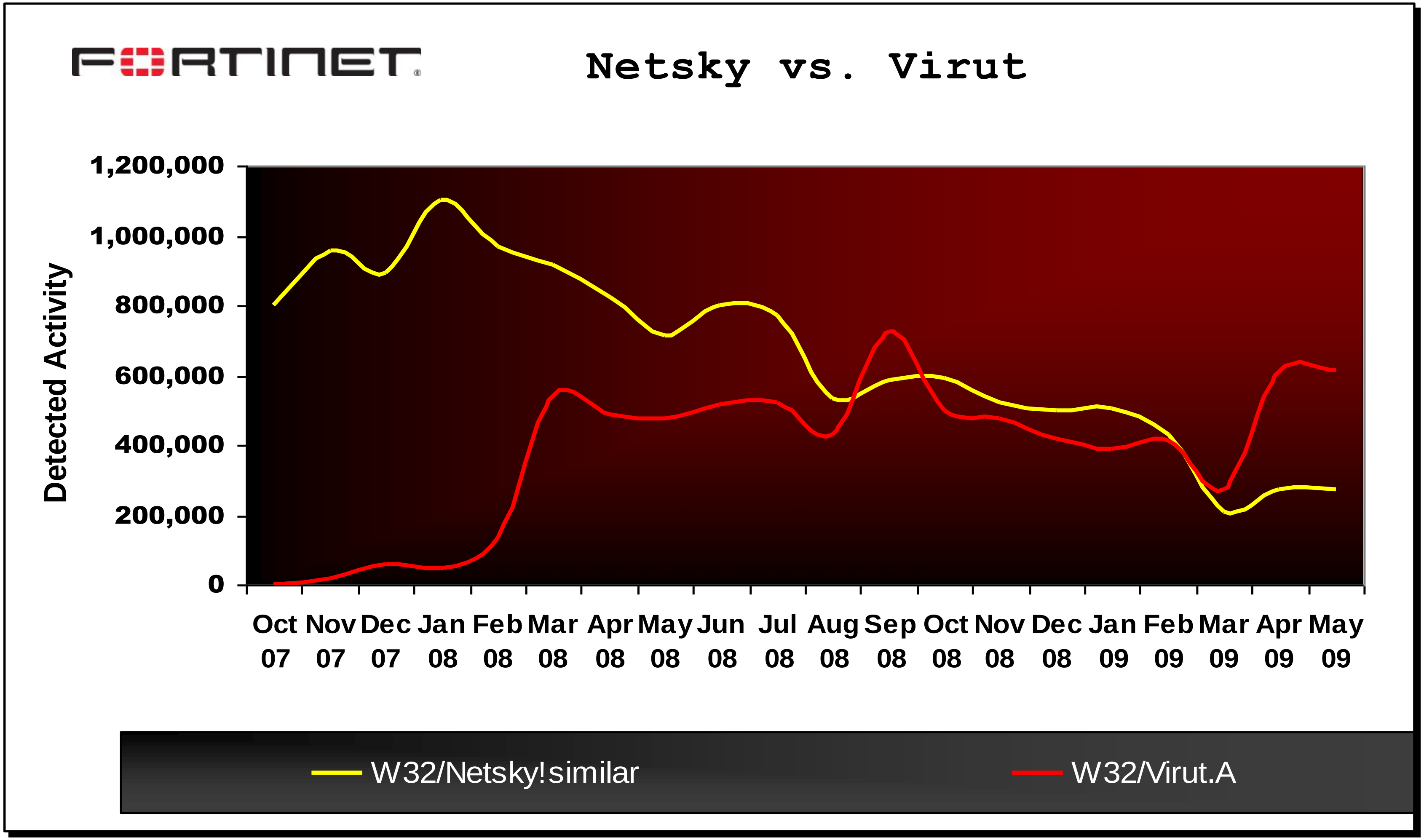
W32/Virut.A

- Dominant in Asia
  - Prevalent for 1+ Years in Korea
- Parasitic File Infector
  - Newly Discovered Hybrids
  - Especially Nasty to Clean

- Hybrid Effect
  - Blended Threats
    - MyDoom, Netsky, Scareware
  - Botnets & Control
  - Polymorphic

Enterprise & APAC

- Volume & Infection Rate Increase Over 1.5 Years



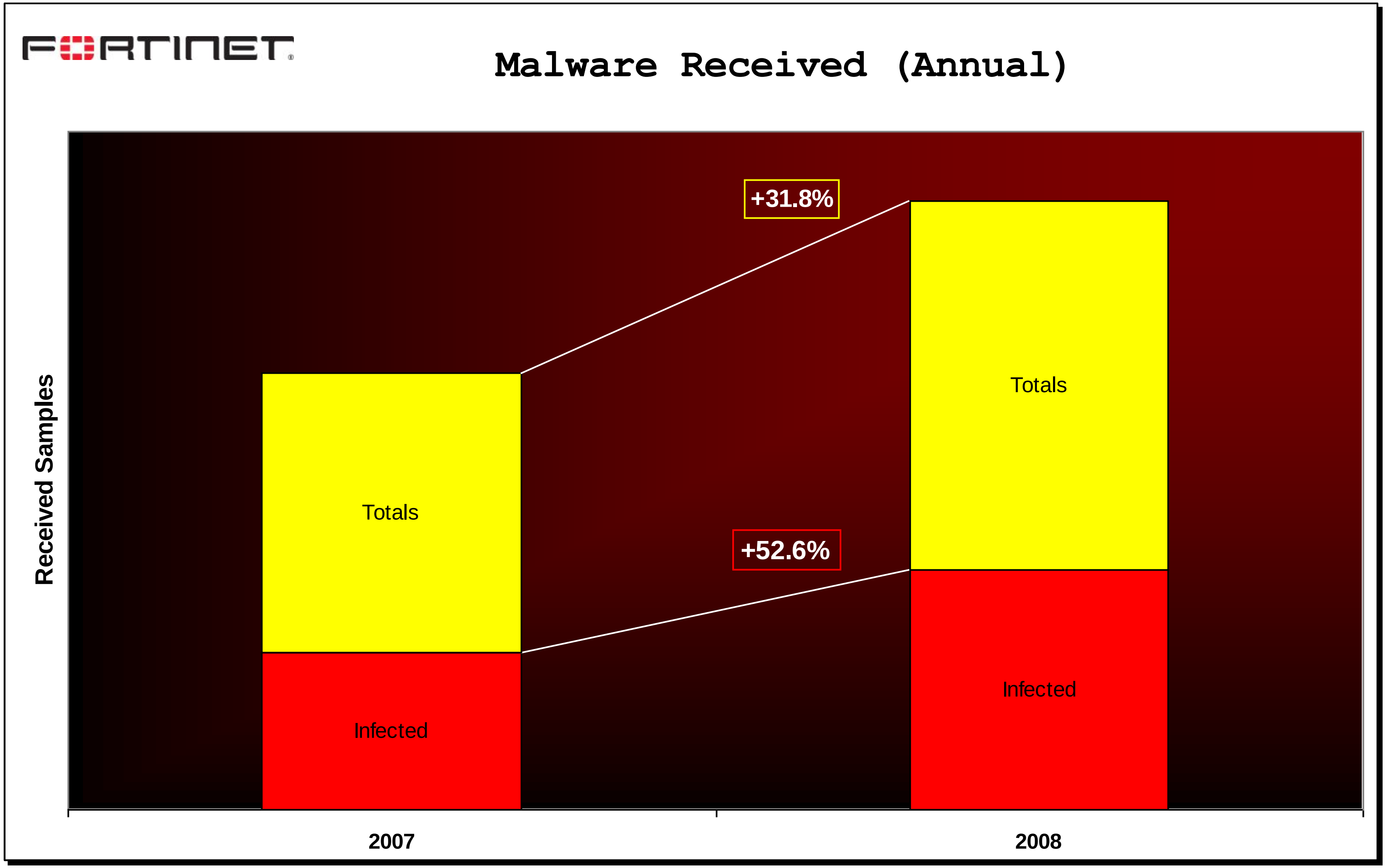
***Source**: Fortinet's FortiGate and Worldwide Intelligence Systems*

Cost Effective
Next Generation Security

Vital Threat Management

Cost Effective, Next Gen Security

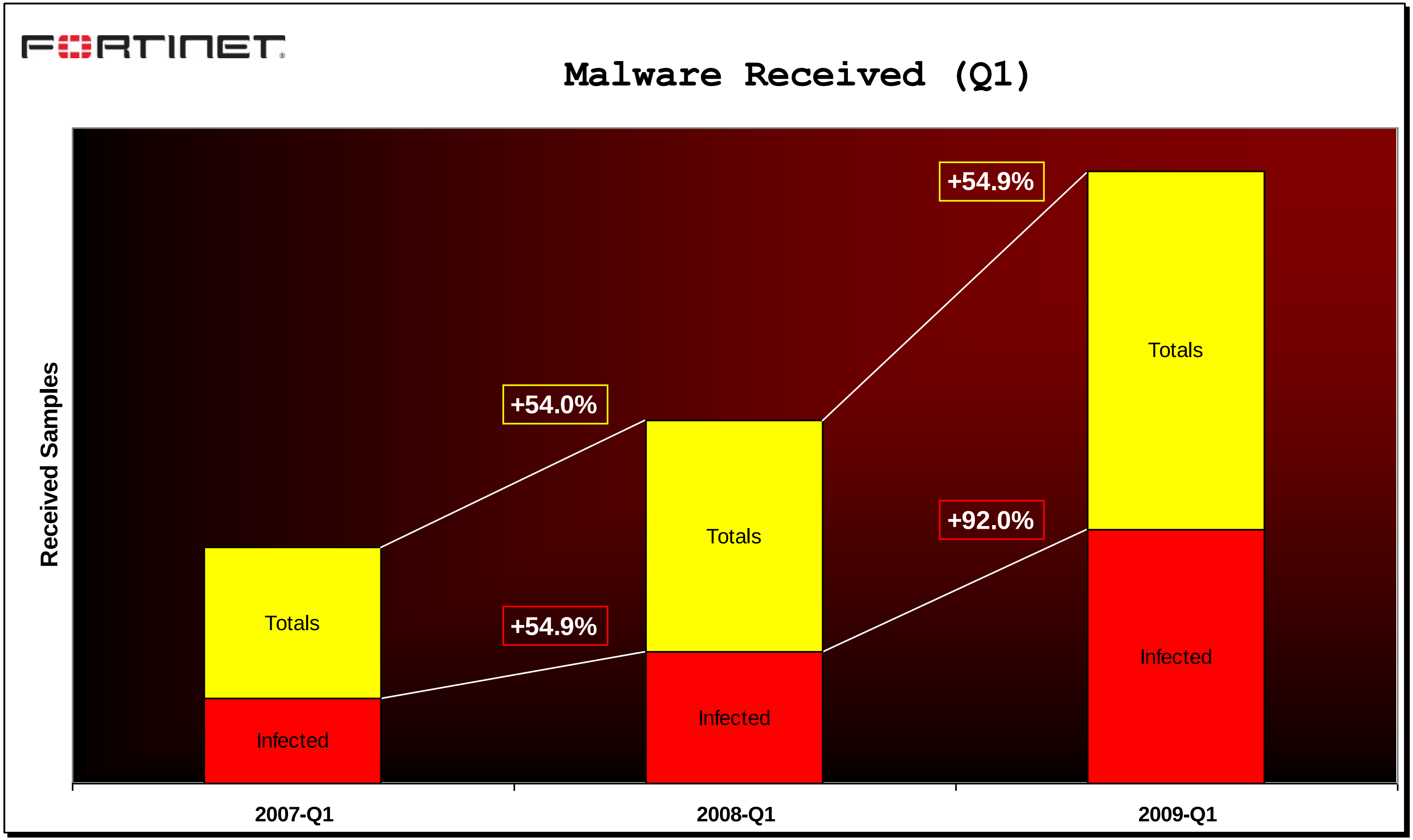
- Volume & Infection Rate Increase Over 2 Years



***Source**: Fortinet's FortiGate and Worldwide Intelligence Systems*

Cost Effective, Next Gen Security

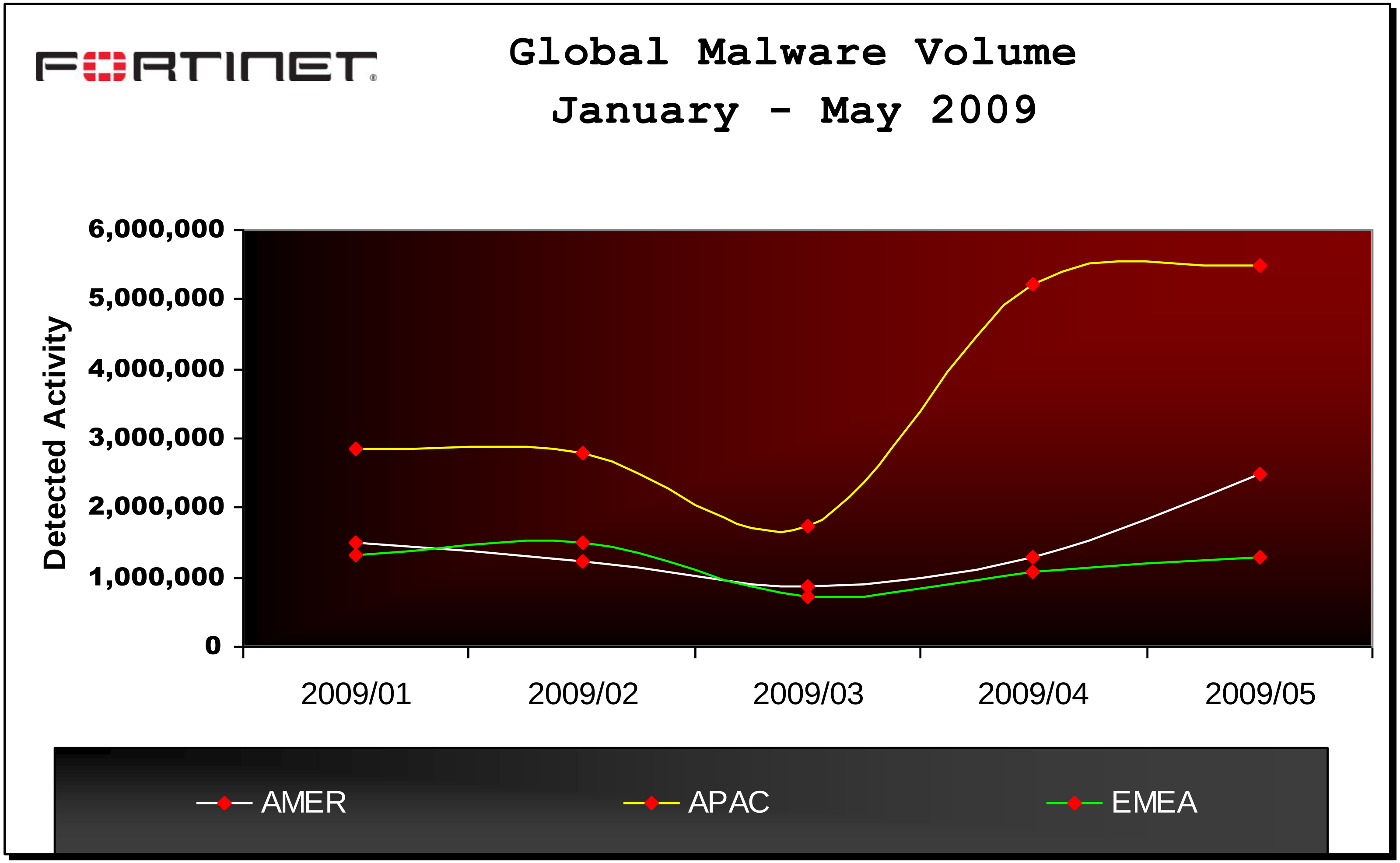
- Volume & Infection Rate Increase Over 3 Quarters



Source: *Fortinet's FortiGate and Worldwide Intelligence Systems*

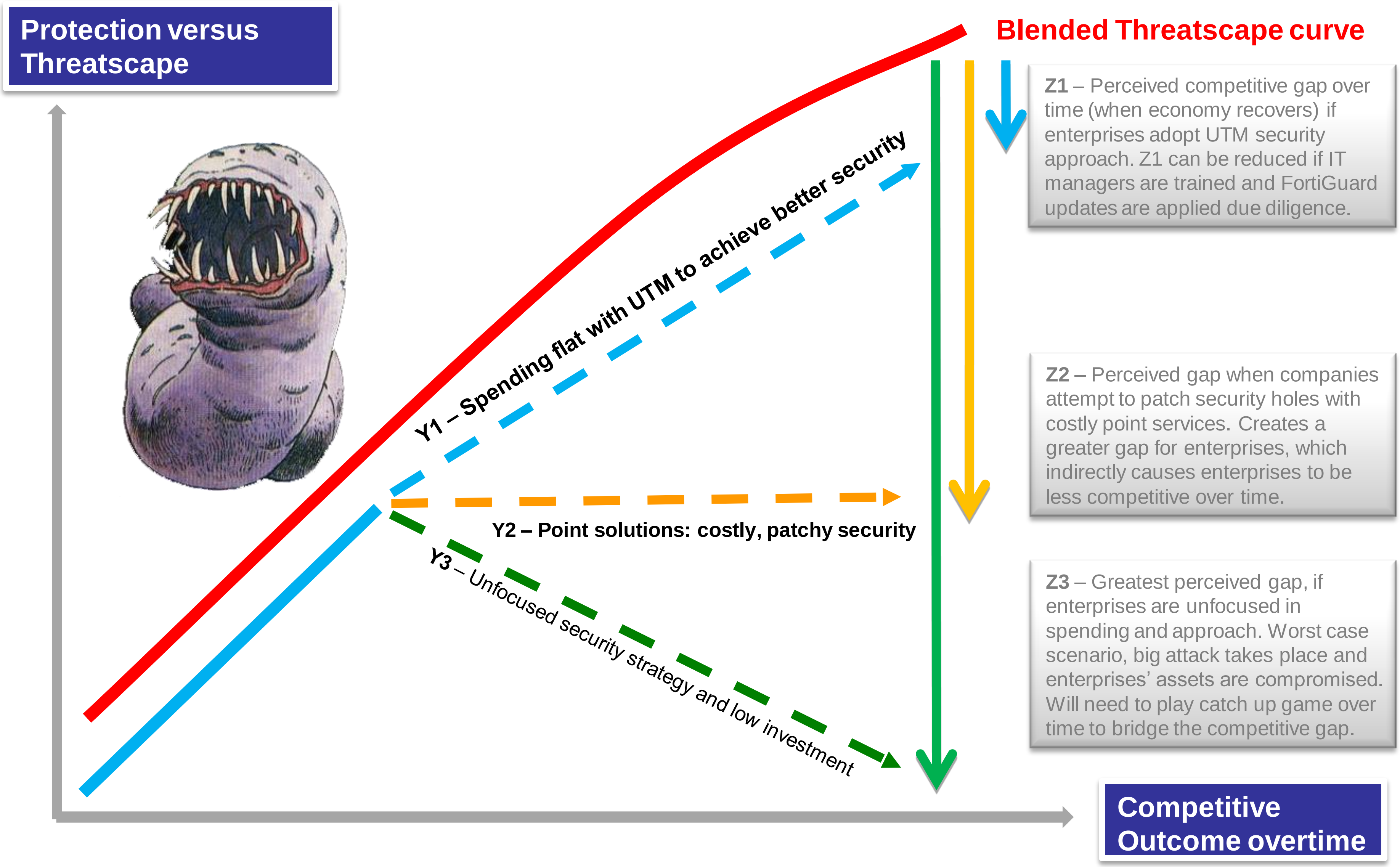
Cost Effective, Next Gen Security

- APAC Leading 2009 Malware Detections



Source: *Fortinet's FortiGate and Worldwide Intelligence Systems*

Ringfence corporate security networks

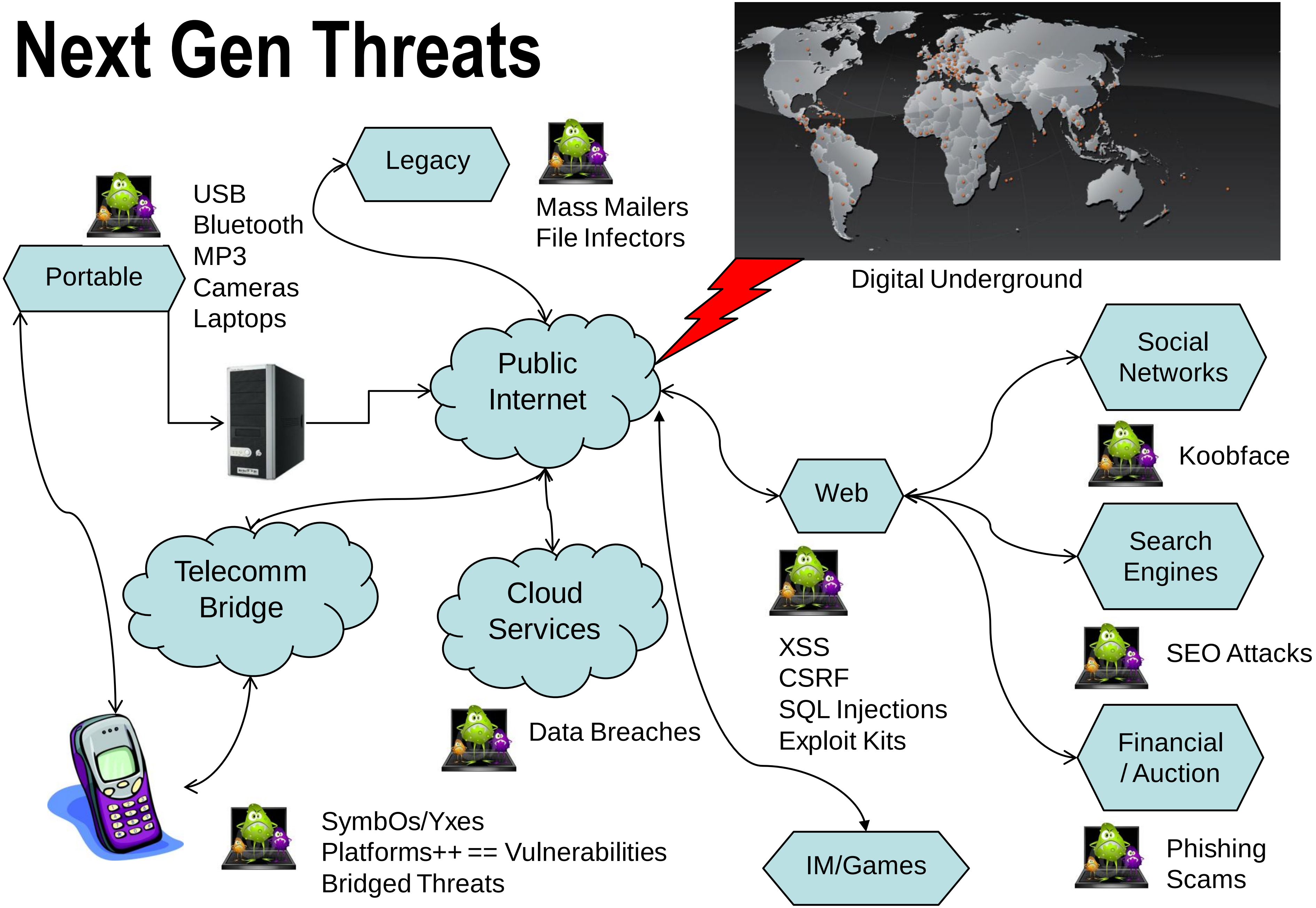

Protection versus Threatscape
Blended Threatscape curve
Y1 – Spending flat with UTM to achieve better security
Y2 – Point solutions: costly, patchy security
Y3 – Unfocused security strategy and low investment
Competitive Outcome overtime

Z1 – Perceived competitive gap over time (when economy recovers) if enterprises adopt UTM security approach. Z1 can be reduced if IT managers are trained and FortiGuard updates are applied due diligence.

Z2 – Perceived gap when companies attempt to patch security holes with costly point services. Creates a greater gap for enterprises, which indirectly causes enterprises to be less competitive over time.

Z3 – Greatest perceived gap, if enterprises are unfocused in spending and approach. Worst case scenario, big attack takes place and enterprises' assets are compromised. Will need to play catch up game over time to bridge the competitive gap.

Next Gen Threats



Legacy

Mass Mailers
File Infectors

Digital Underground

USB
Bluetooth
MP3
Cameras
Laptops

Portable

Public Internet

Social Networks

Koobface

Web

Search Engines

SEO Attacks

Telecomm Bridge

Cloud Services

XSS
CSRF
SQL Injections
Exploit Kits

Data Breaches

Financial / Auction

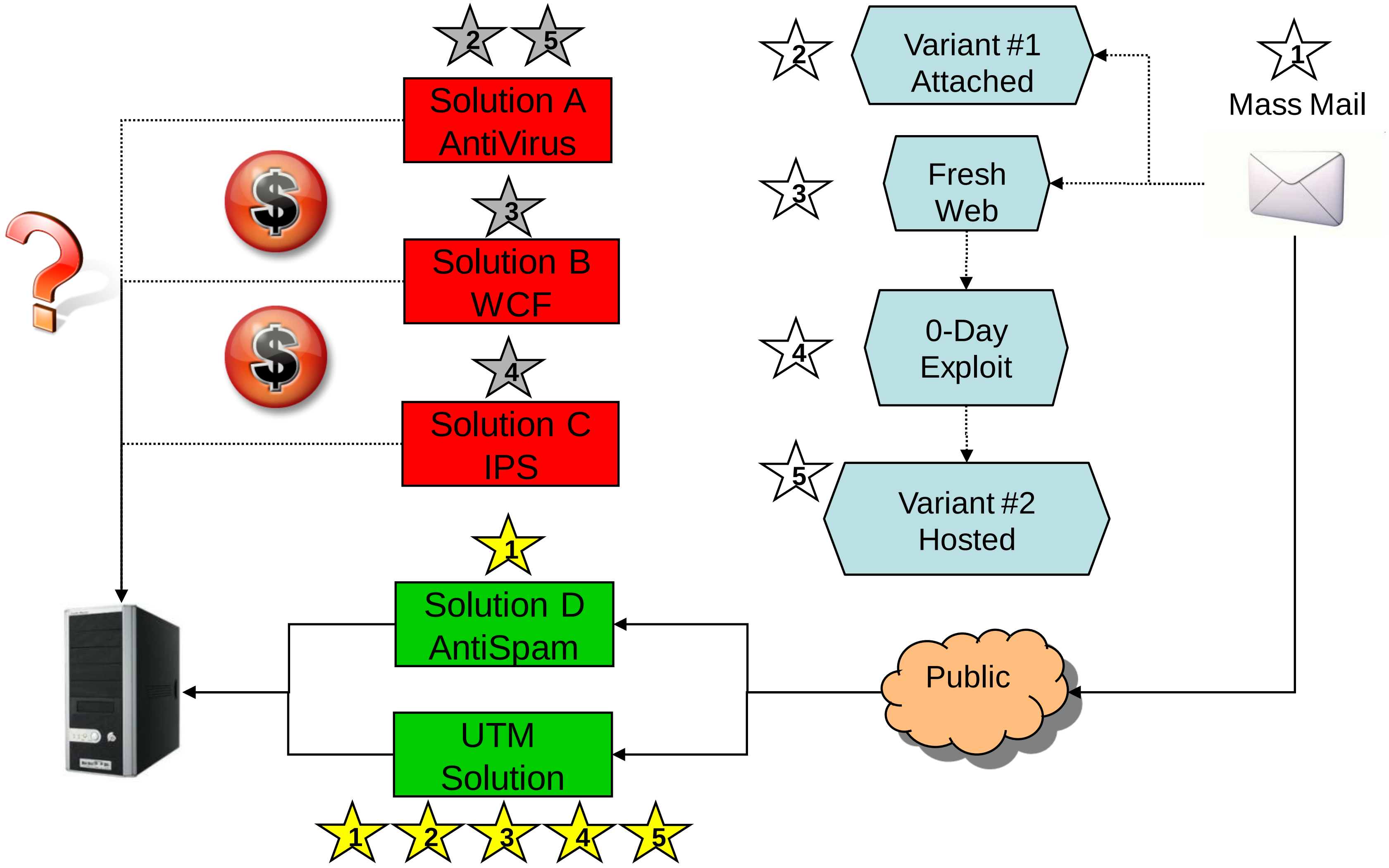
SymbOs/Yxes
Platforms++ == Vulnerabilities
Bridged Threats

IM/Games

Phishing Scams

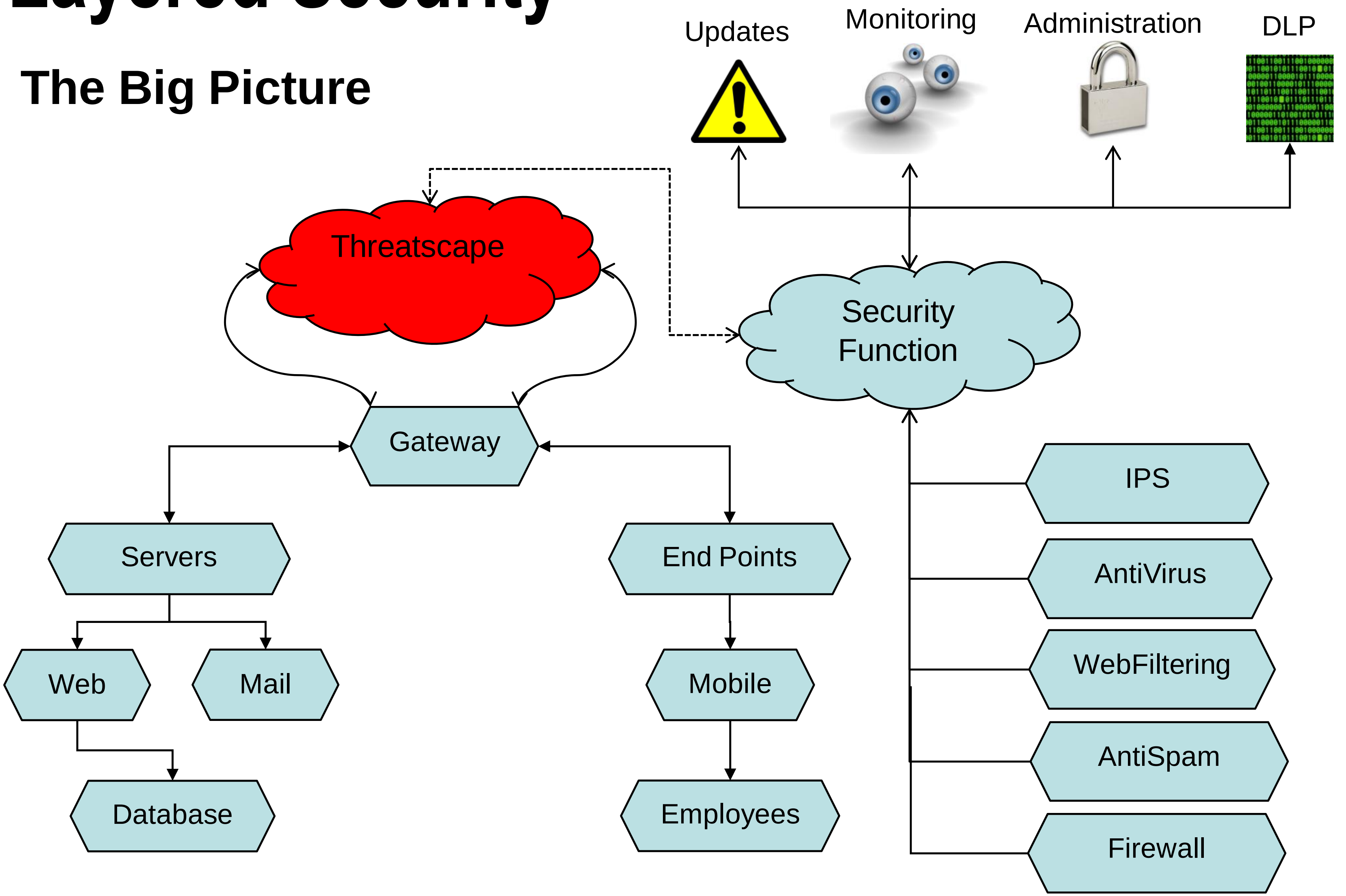
Layered Security

UTM vs. End Point Approach



Layered Security

The Big Picture



Layered Security

Consolidated Approach (UTM)

- Consolidates Management and Deployment
  - Operating Expenses Smoothed
  - Licenses--
- Smaller Footprint
  - Capital Expenditures Reduced
- Scalable to Address:
  - Threat Growth
  - Growing Operations
- Manageable
  - Monitored View of all Threat Vectors
  - Increased Incident Response

Layered Security

In Summary

- Modern Threats Require Layered Solution
  - Too Complex of a Challenge
- Defense in Depth
  - UTM
    - Cost Effective; Security != $$
    - Provides Enhanced Security
    - Both Client & Server Side
  - Policies & Education
- Scalable Solution Required for Threatscape
- Security is Essential
  - Huge Losses Possible
  - Breaches Damage Reputation

Mobile Threats

Vital Threat Management

Mobile Threats on the Rise

Past and Present

2004:

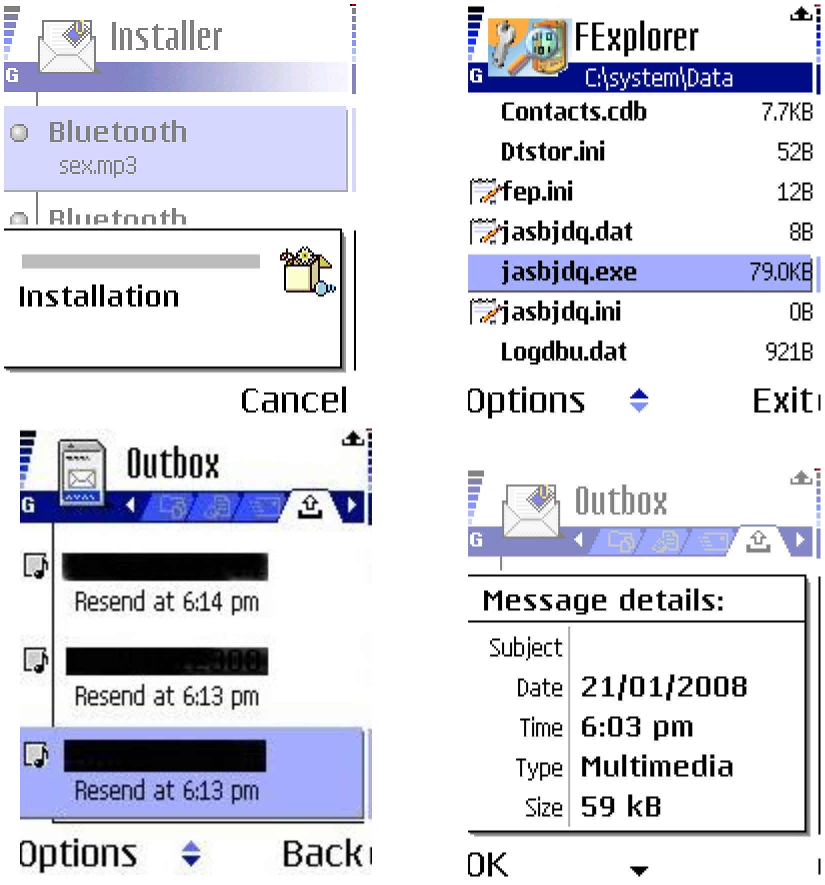
- **SymbOS/Cabir (PoC)**
  - ✓ **Bluetooth**
- **SymbOS/Skulls (DoS)**

2005:

- **SymbOS/CommWarrior**
  - ✓ **Bluetooth, MMS, MMC**

2008/2009:

- **SymbOS/Flocker**
- **SymbOS/BeSeLo**
  - ✓ **File Extension Tricks**
- **SymbOS/CurseSMS (DoS)**
- **SymbOS/Yxes**



FExplorer
C:\system\Data

Contacts.cdb	7.7KB
Dtstor.ini	52B
fep.ini	12B
jasbjdq.dat	8B
jasbjdq.exe	79.0KB
jasbjdq.ini	0B
Logdbu.dat	921B

Outbox

[redacted]
Resend at 6:14 pm

[redacted]
Resend at 6:13 pm

[redacted]
Resend at 6:13 pm

Outbox

Message details:

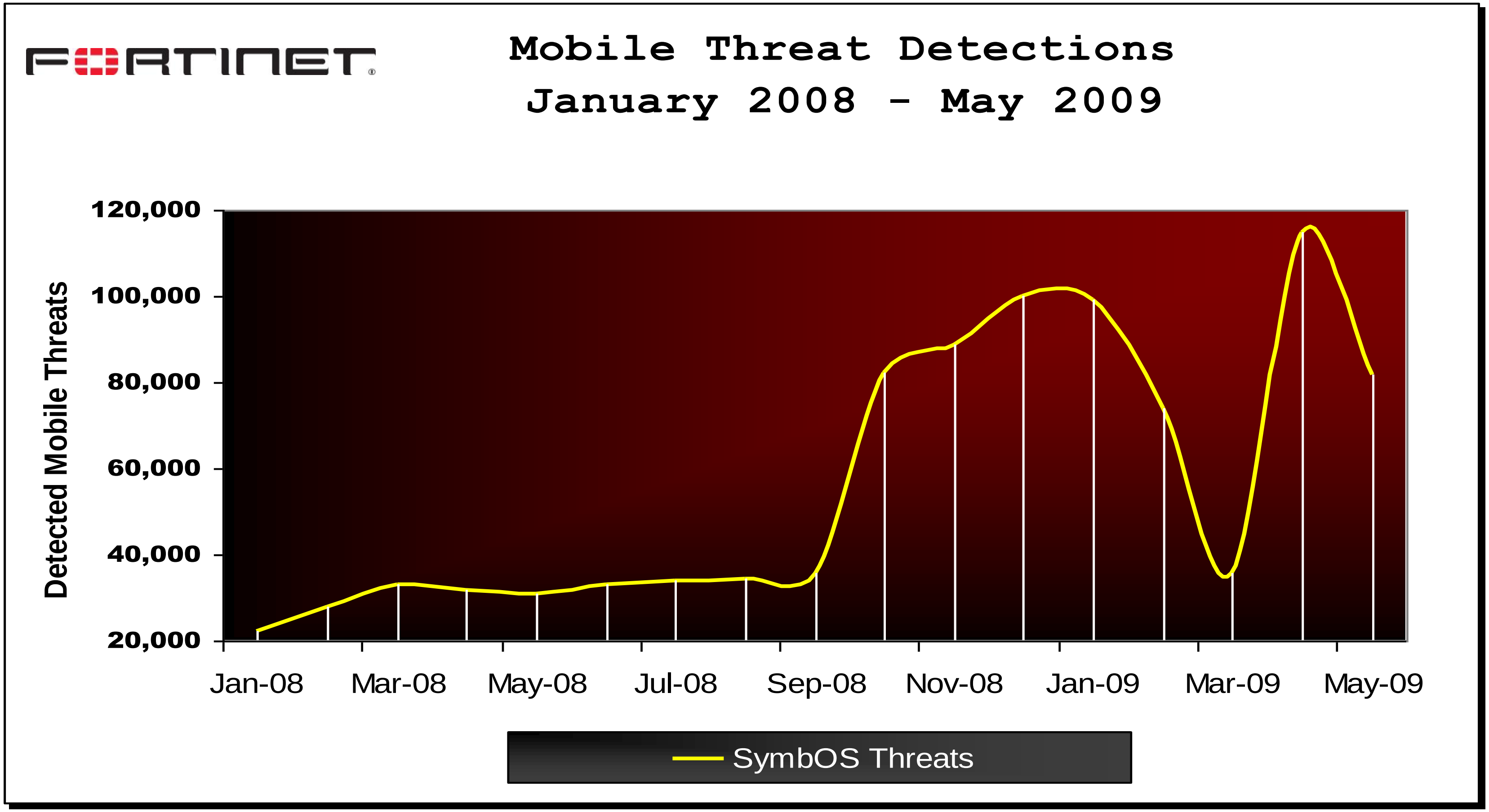
Subject	
Date	21/01/2008
Time	6:03 pm
Type	Multimedia
Size	59 kB

BeSeLo Propagation on S60 Phones

Destruction & Defacement → Monetization

Mobile Threats on the Rise

A Growing Trend

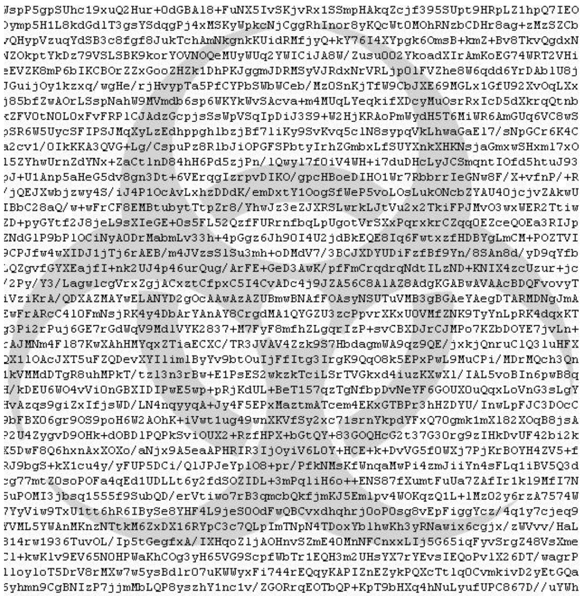


Statistics from Fortinet's network security appliances worldwide

Moving Forward: Securing The Future

Active Threat Ingredients

- Plethora of smart devices
- Increased complexity / functionality
  - ✓ Bridges created
  - ✓ Security holes introduced
- New platforms introduced
- Roaming insider threat
- Adoption of 3G → Roadmap to 4G
  - ✓ Traffic == Cold Hard Cash



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On The Horizon

- Increased integration
  - ✓ Smart devices & cloud services
- Digital underground invests
  - ✓ Custom malware / targeted attacks
  - ✓ Zero-days, roaming botnets

Moving Forward: Securing The Future

Protecting Against Attacks

- **Enterprise Security**
  - ✓ **Endpoint Solution (Roaming)**
  - ✓ **Gateway Solution (Bridged)**
  - ✓ **Policies & Education**

- **Carrier Security**
  - ✓ **Gateway Solution (MMS)**
  - ✓ **Monitoring & Alerts**

- **Vendor Security**
  - ✓ **Safe Coding / R&D Practices**
  - ✓ **Responsible Disclosure**

✓ ***FortiCarrier***
✓ ***FortiClient Mobile***
✓ ***FortiGuard Global Security Research Team***

Questions ?

Thank You!