



From Mobile Workers to IPv6 - How to Secure Today's Networks

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The Network is No Longer Between Four Walls

The network has evolved to include:

- Wireless mobile devices
 - Phones
 - iPads
 - Scanners
 - Remote workers with laptops
 - SOHO deployments
 - Business partners
-
- The network must securely protect all points of access to the network and no longer just the headquarters' network

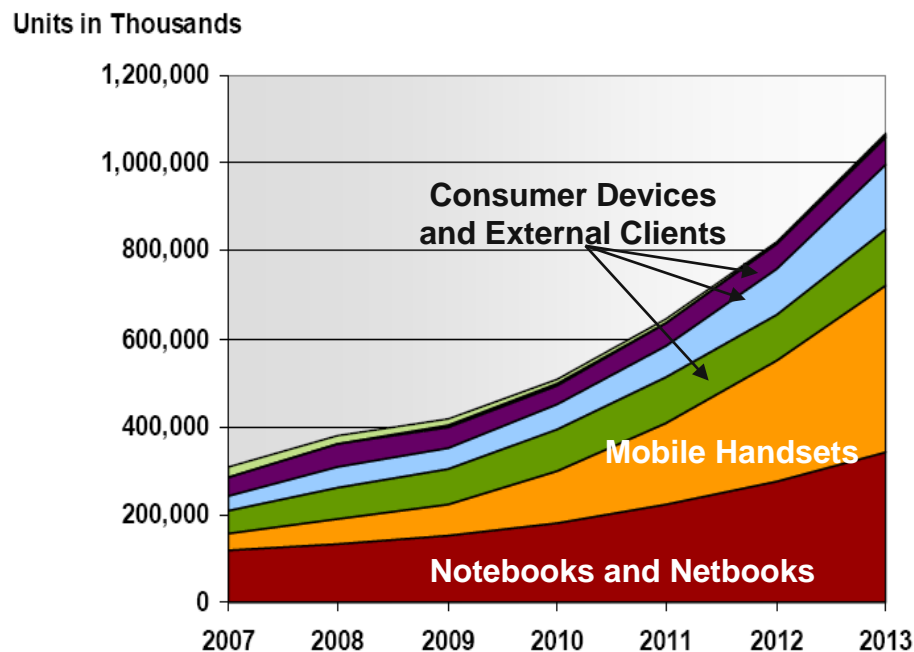




Wireless Network Adoption and Drivers

Wi-Fi enabled devices, cost and PCI compliance are driving WLAN adoption

- Mobile handsets & netbooks necessitate wireless connectivity
- Key industries are already moving to a wireless edge design
 - Examples: education and healthcare
 - Wireless is less costly to deploy vs. an edge switch and wiring
- PCI Compliance requires Rogue Access Point detection and Wireless IPS at retail locations



Source: In-Stat, 4/09

CAGR of >50% for Mobile Handsets with Wi-Fi 2009-2013

Network Requirements are Changing

- IPv4 is no longer
- Now in a world of IPv6
- Threats are being proliferated throughout networks in more advanced ways than ever
- Fortinet is ready!
 - Tested and verified by third-party test labs appointed by the U.S. government
 - Achieved the U.S. Department of Defense IPv6 product certification conducted by the Joint Interoperability Test Command (JITC).
 - FortiGate appliances have been listed on the DoD's Unified Capabilities Approved Products List for IPv6 since 2008
 - FortiGuard Labs provides regular updates delivering real-time protection for any corporation or government agency migrating to an IPv6 network
 - FortiGate platforms have supported IPv6 since 2007



IPv6 Deployment Landscape

- Historical Drivers of IPv6
 - U.S. Federal government
 - Japan
 - Specific carrier or education projects
- Recent Activities
 - IPv4 address space exhaustion
 - Carriers are motivated
 - More & more requests from large carriers

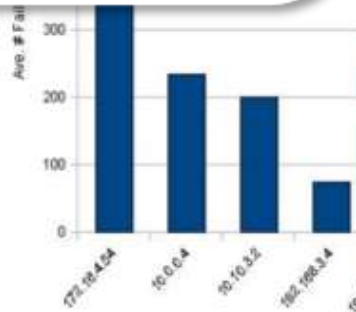


Threat Examples

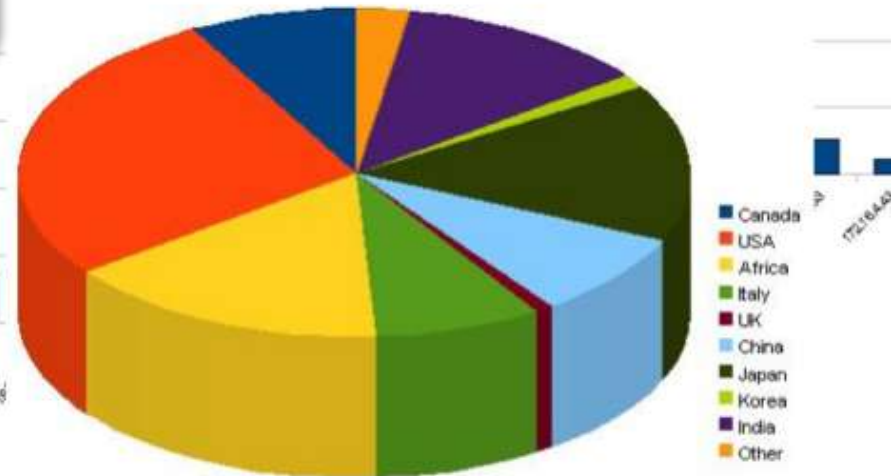
- Botnet
 - Main drivers for botnets are for recognition and financial gain
 - Conficker is one of the largest botnets out there that has infected an estimated 1 million to 10 million machines which attempts to sell fake antivirus to its victims
 - Newer botnets have even been capable of detecting and reacting to attempts to figure out how they work.
- Stuxnet
 - First discovered [malware](#) that spies on and subverts industrial systems,^[3] and the first to include a [programmable logic controller](#) (PLC) [rootkit](#).
 - Stuxnet contains, among other things, code for a [man-in-the-middle attack](#) that fakes industrial process control sensor signals so an infected system does not shut down due to abnormal behavior.^{[21][27]} Such complexity is very unusual for [malware](#).
- Evasion

Moving Beyond Signature-based Threat Detection

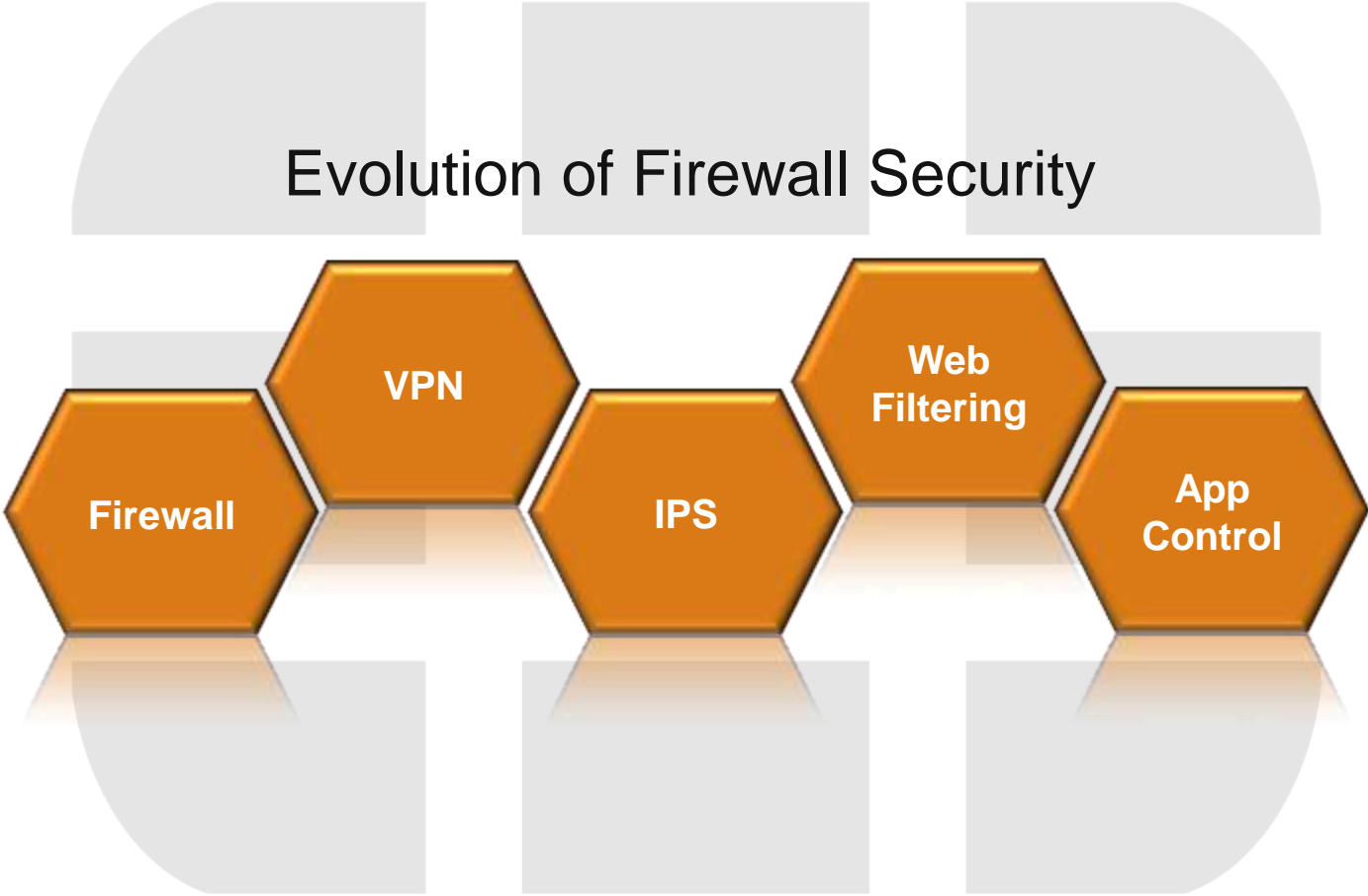
- Establish a Baseline:
 - Geography
 - Bandwidth
 - Applications
 - Failed connects
- Report Anomalies or Deviations (from baseline)



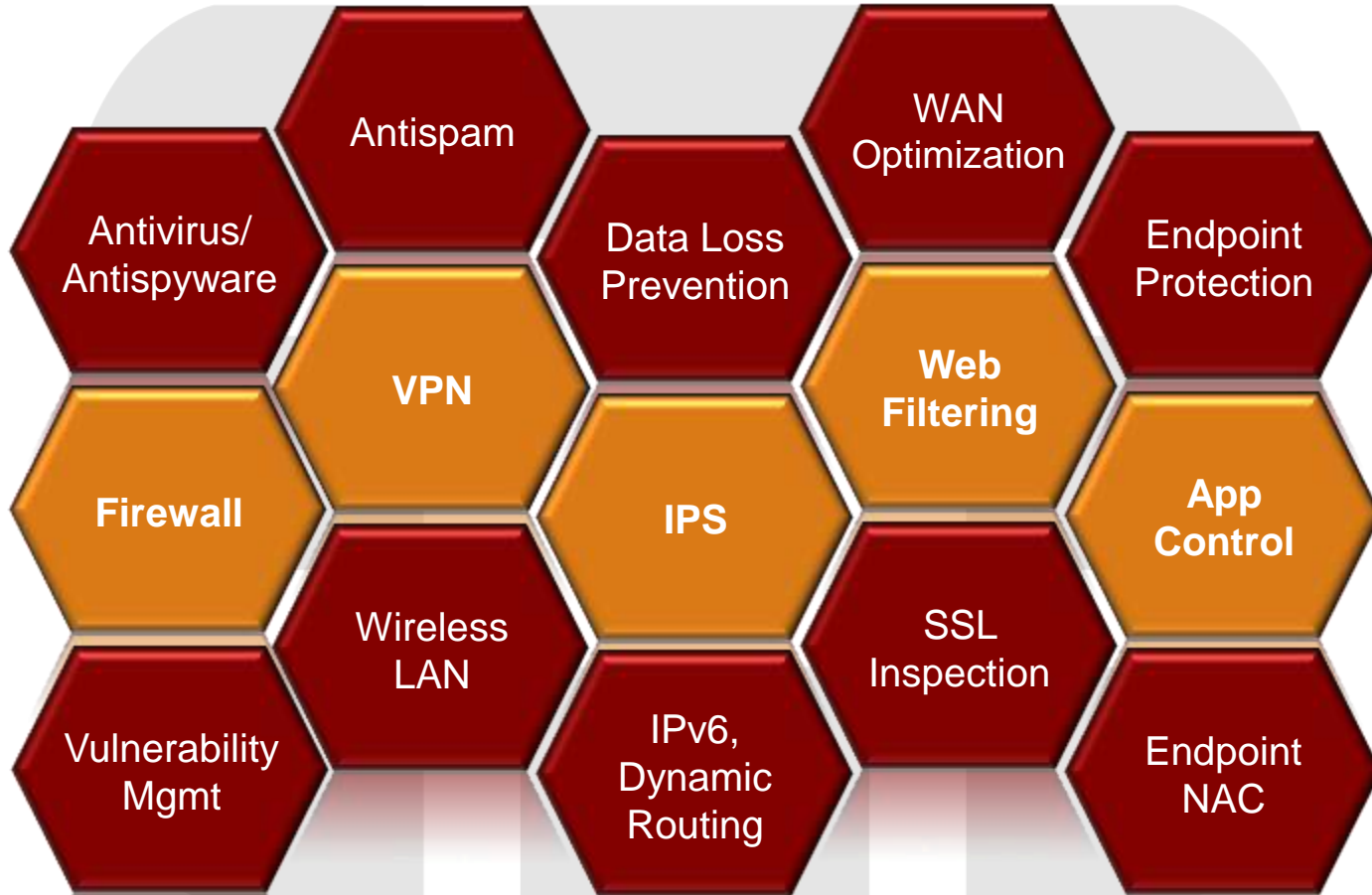
Country Request Distribution



Evolution of Firewall Security

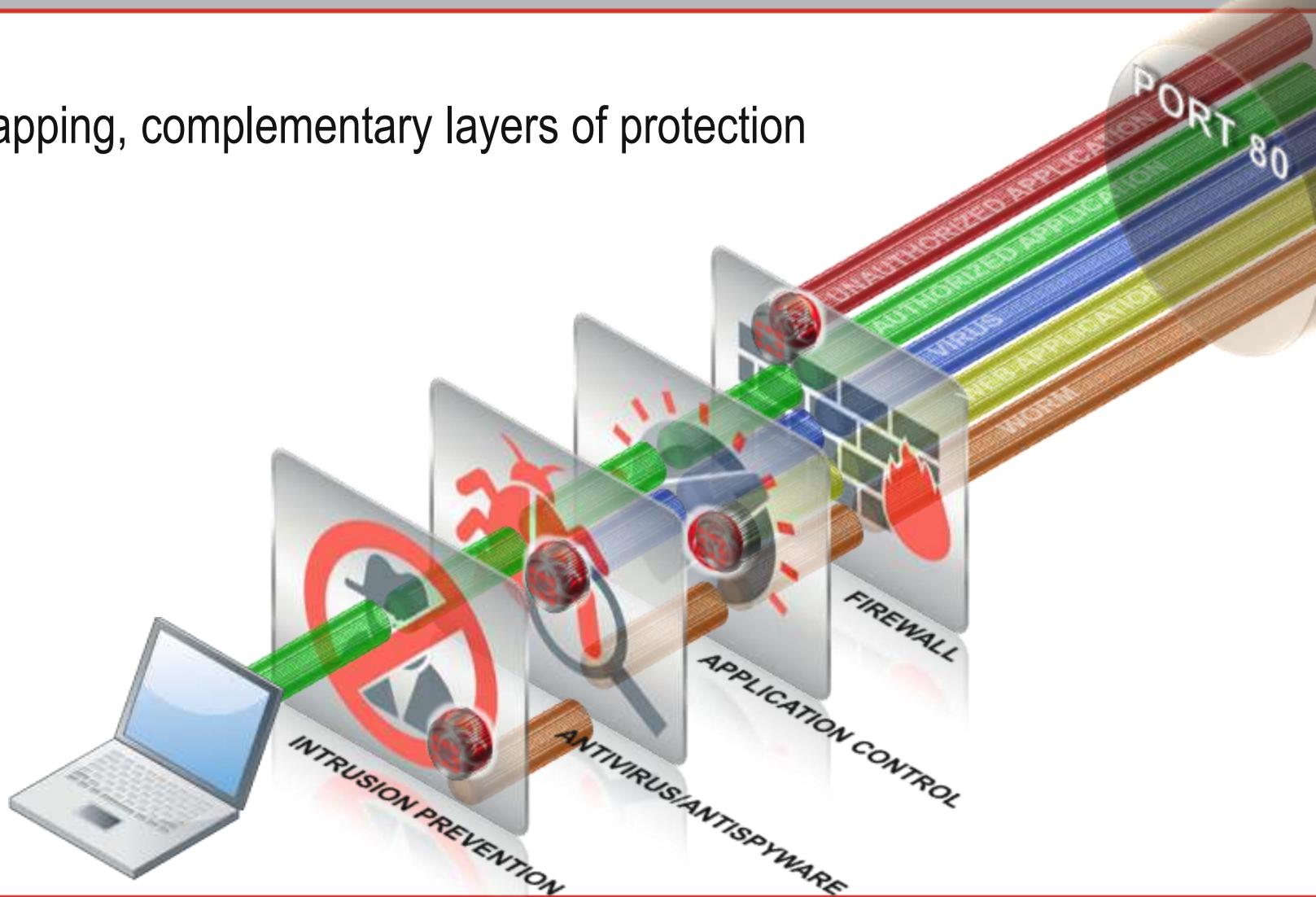


Complete Protection



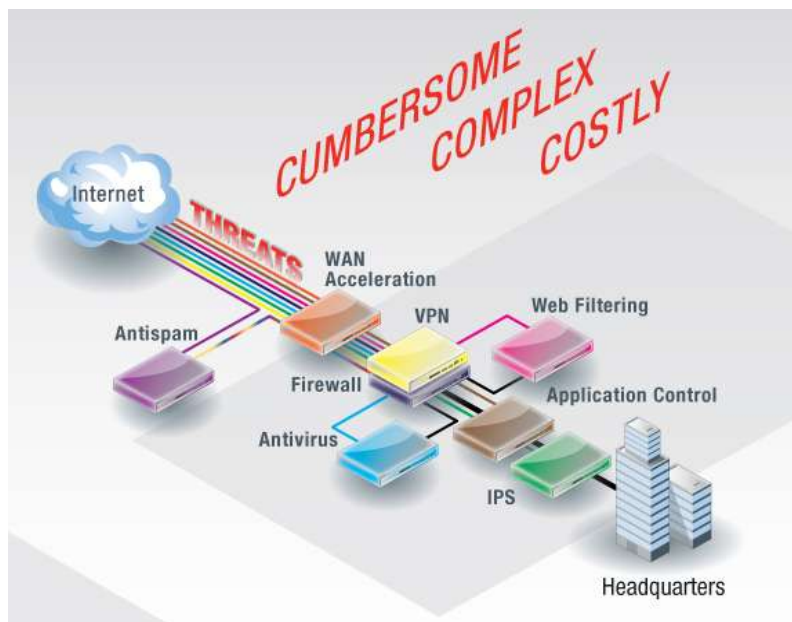
Layers of Protection Against Today's Threats

Overlapping, complementary layers of protection



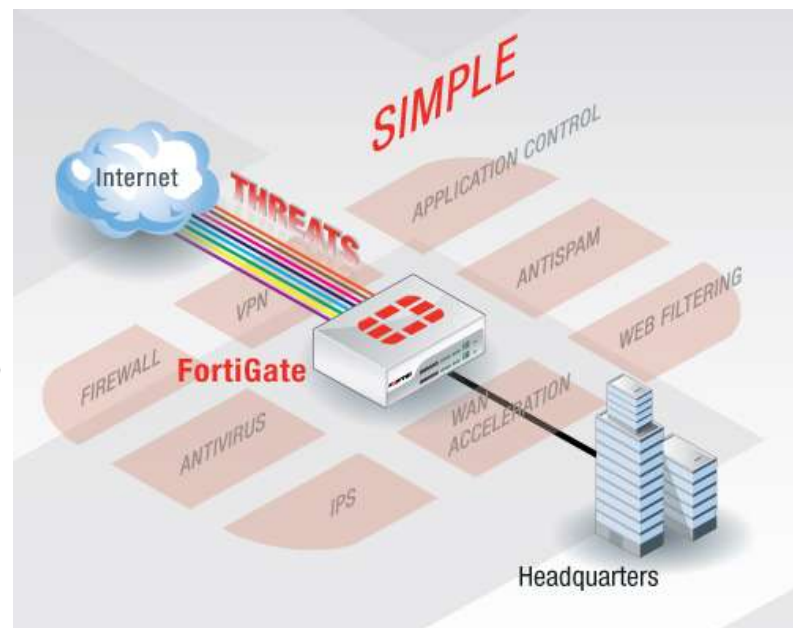
A New Approach

Traditional Network Security Solutions



- Stand-alone, non-integrated security
- Mix of off the shelf systems and applications
- Higher total cost of ownership – multiple vendors and licensing fees
- Difficult to deploy / manage / use

Integrated Solution



- Real-time, integrated security intelligence
- ASIC-accelerated performance
- Lower total cost of ownership – single vendor and no per user licensing fees
- Easy to deploy / manage / use



Thank you!

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