

Firewall requirements to secure IPv6 networks – finished playing!

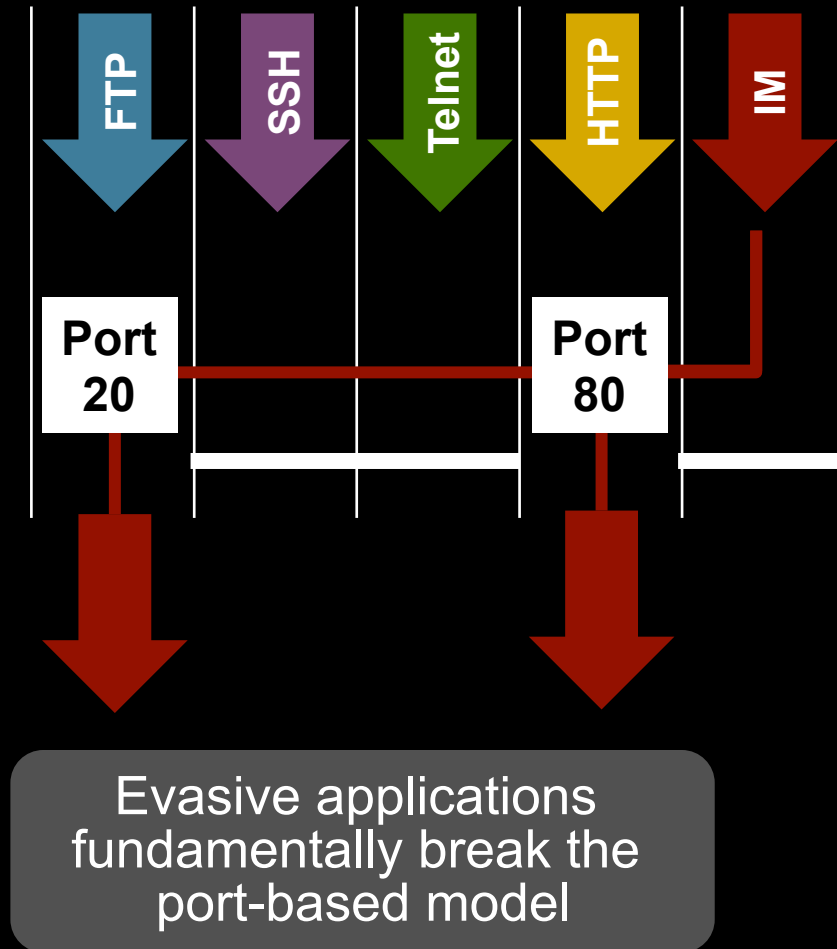
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Sr. Director Systems Engineering EMEA*



Quick *firewall* refresher

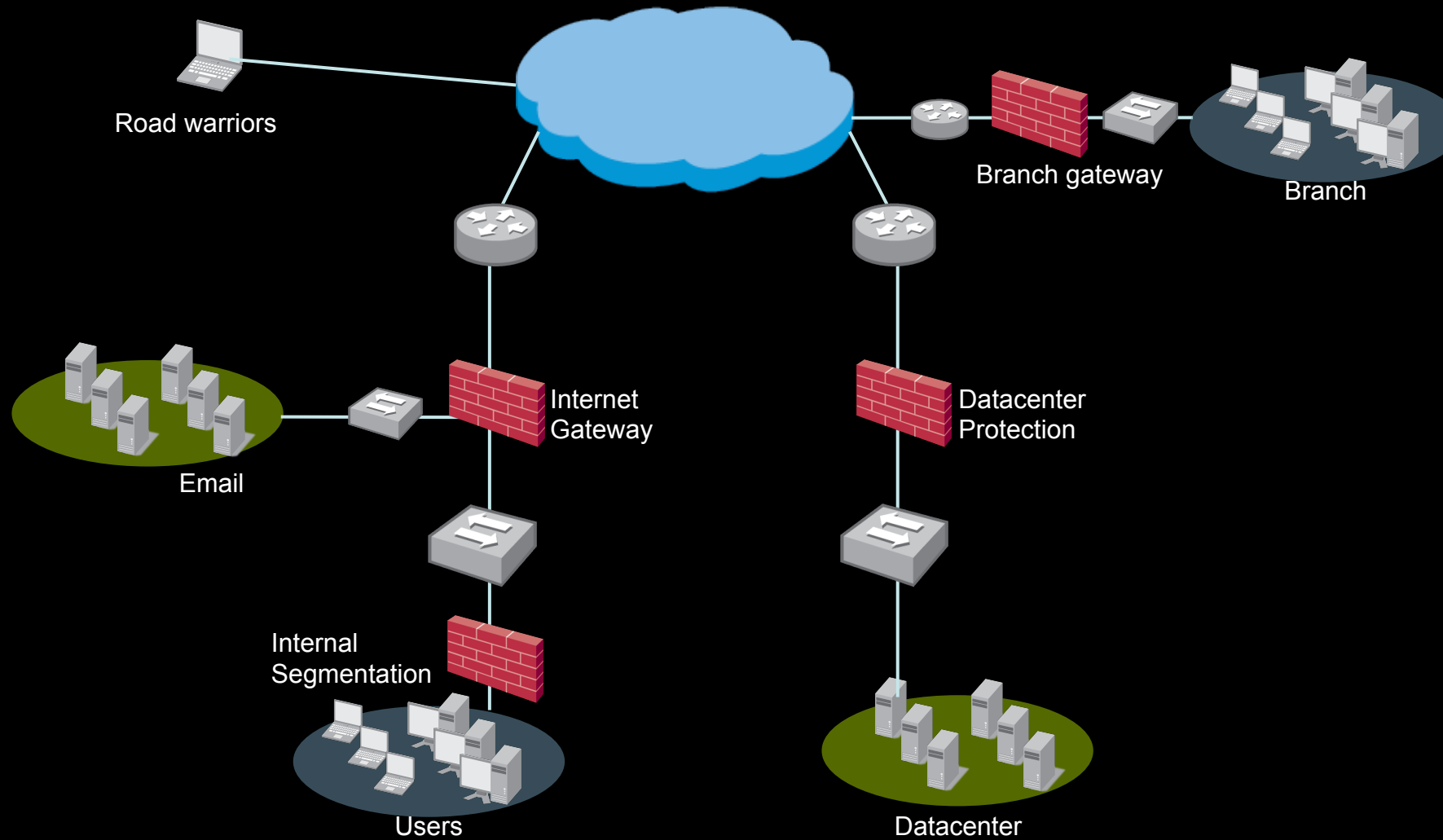
- Firewalls remained the same for +15 years while applications and application usage *(and malware)* changed in the last 10 years
 - From packet filtering to stateful-firewall to stateful-firewall with a nice GUI
 - From 10 Mbps to 100 Gbps but still the same stateful-firewall
 - ‘Next-generation’ meant going from a yellow to a black face-plate on the appliance

Recall the Genesis of the NGFW



- Applications Became Evasive
- An IP address is not a 'user'
- Applications can/will carry malware

IPv6 deployment options



IPv6 requirements for firewalls

- Focus on dual-stack functionality on the data processing part
 - **Transparent for IPv4 and IPv6**
- Focus on networking functionality
 - **Native IPv6**
 - **IPv4 to IPv6 to IPv4 gateway functionality**
- Focus on IPv6 services
 - **Native support for DNS, Syslog, NTP, RADIUS, LDAP, ...**

IP stack can change but ...
Malware is the same

The Strategic Role of Modern Malware



Malware provides the internal foothold to control and expand a sustained attack

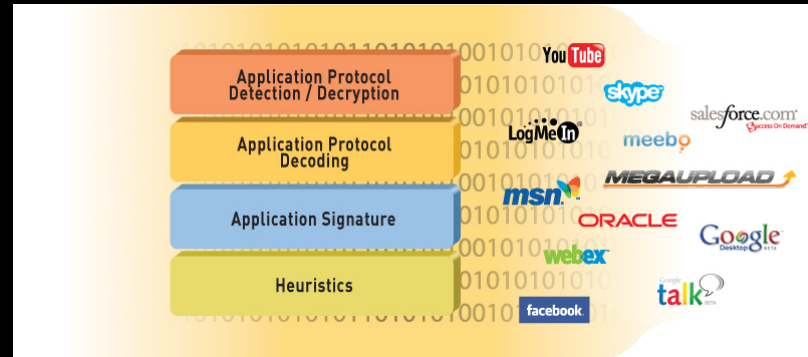
it's time to fix the traditional IPv6 firewall



Identification Technologies Transform the Firewall

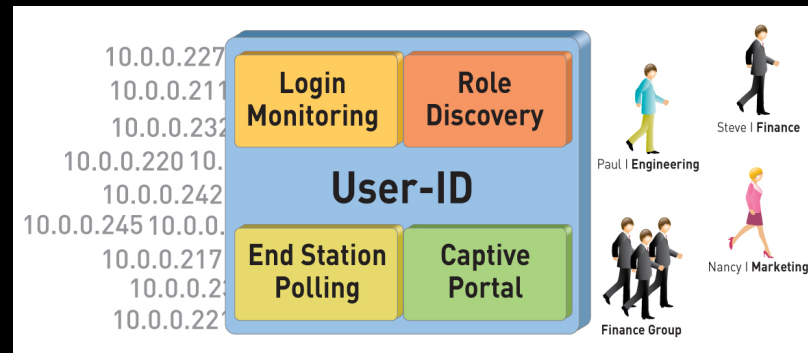
App-ID™

Identify the application



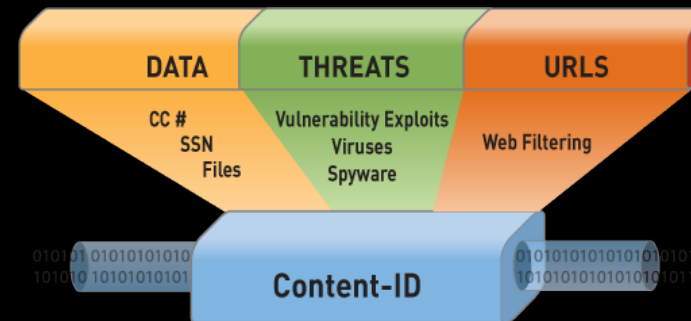
User-ID™

Identify the user



Content-ID™

Scan the content



Why App, User and Content-ID?

needs to work across all applications



Dropbox



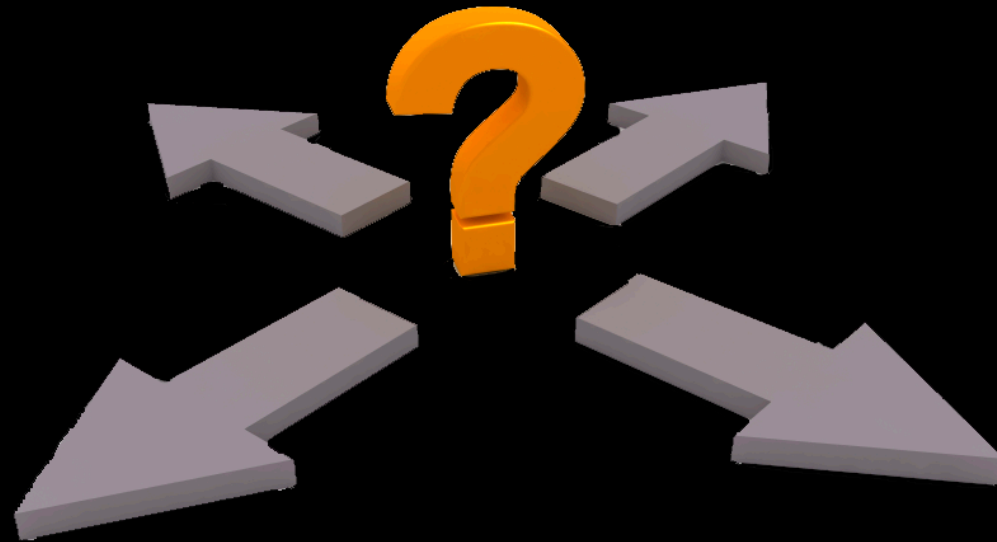
Salesforce



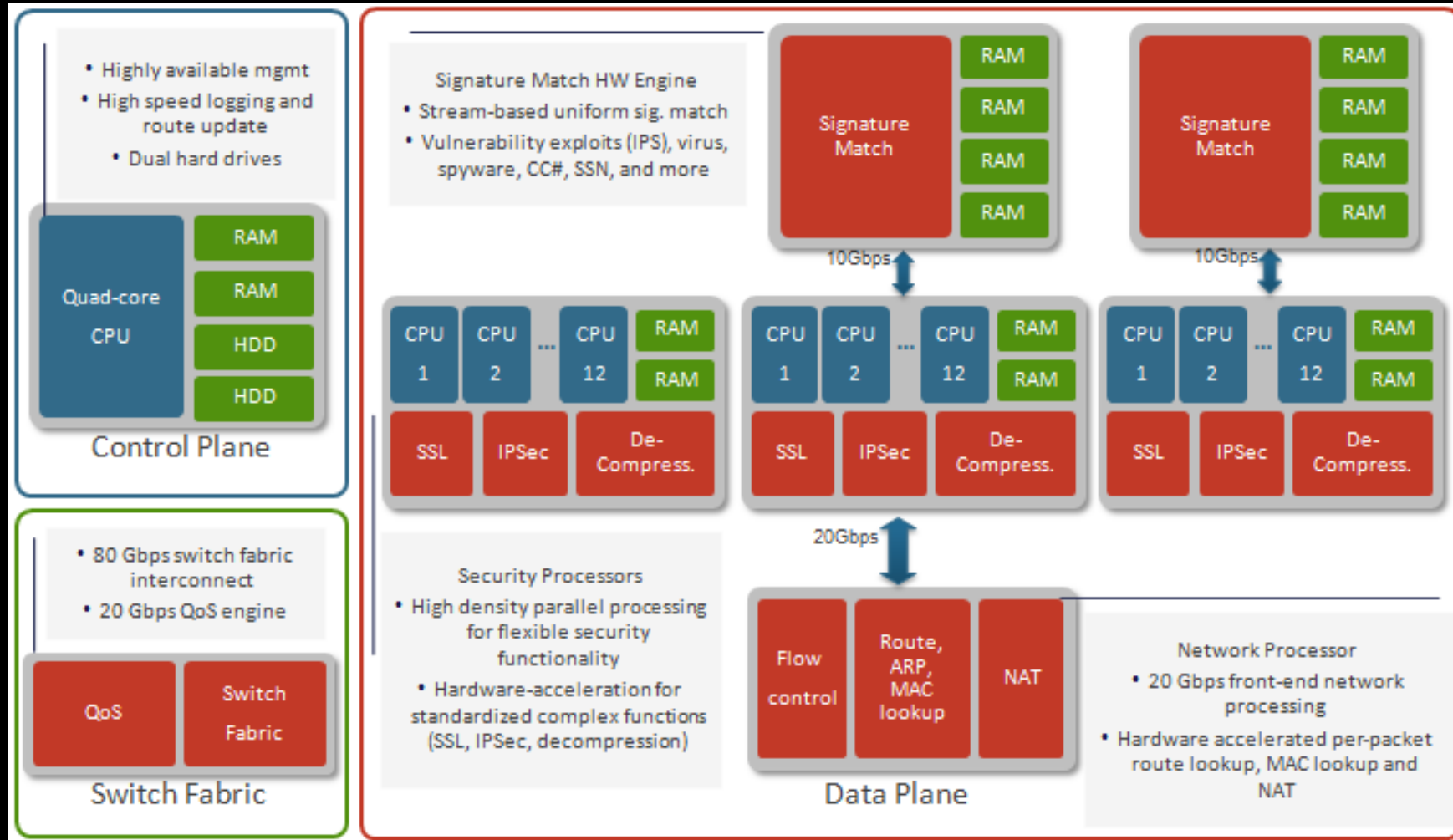
Microsoft®
SharePoint®

webex™

Control known applications and **block** the unknown



needs **high-speed** IPS and AV



solution has to be enterprise-wide



IPv6 firewall needs...continued

- **Seamless Next-Generation firewall operations across IPv6 and IPv4**
 - **Application detection**
 - **Interface with user-directories and user-identification methods (e.g. captive portal, API, etc...)**
 - **Content-scanning and (SSL/SSH) decryption is seamless on both stacks**
 - **Focus on IPv6 security specifics (e.g. IPv6 headers, DoS detection & prevention)**

IPv6 firewall needs...continued

- Secure connectivity
 - **SSL-VPN and IPsec for roaming users and branch offices**
 - **Mix & match IPv6 and IPv4**
- Integrated security policy management for both IPv6 and IPv4
- Integrated reporting and visualization of 'events'

Summary

- Need to 'secure' IPv6 networks and services
 - IPv6 becomes more widespread...
- Next-Generation firewall plays a very important role in 'transitioning' networks and managing both worlds
- Go6!!.....Go Palo Alto Networks NGFW!!

Palo Alto Networks next generation firewall

