

Enterprise Security Perimeter Arch

Core Security Services

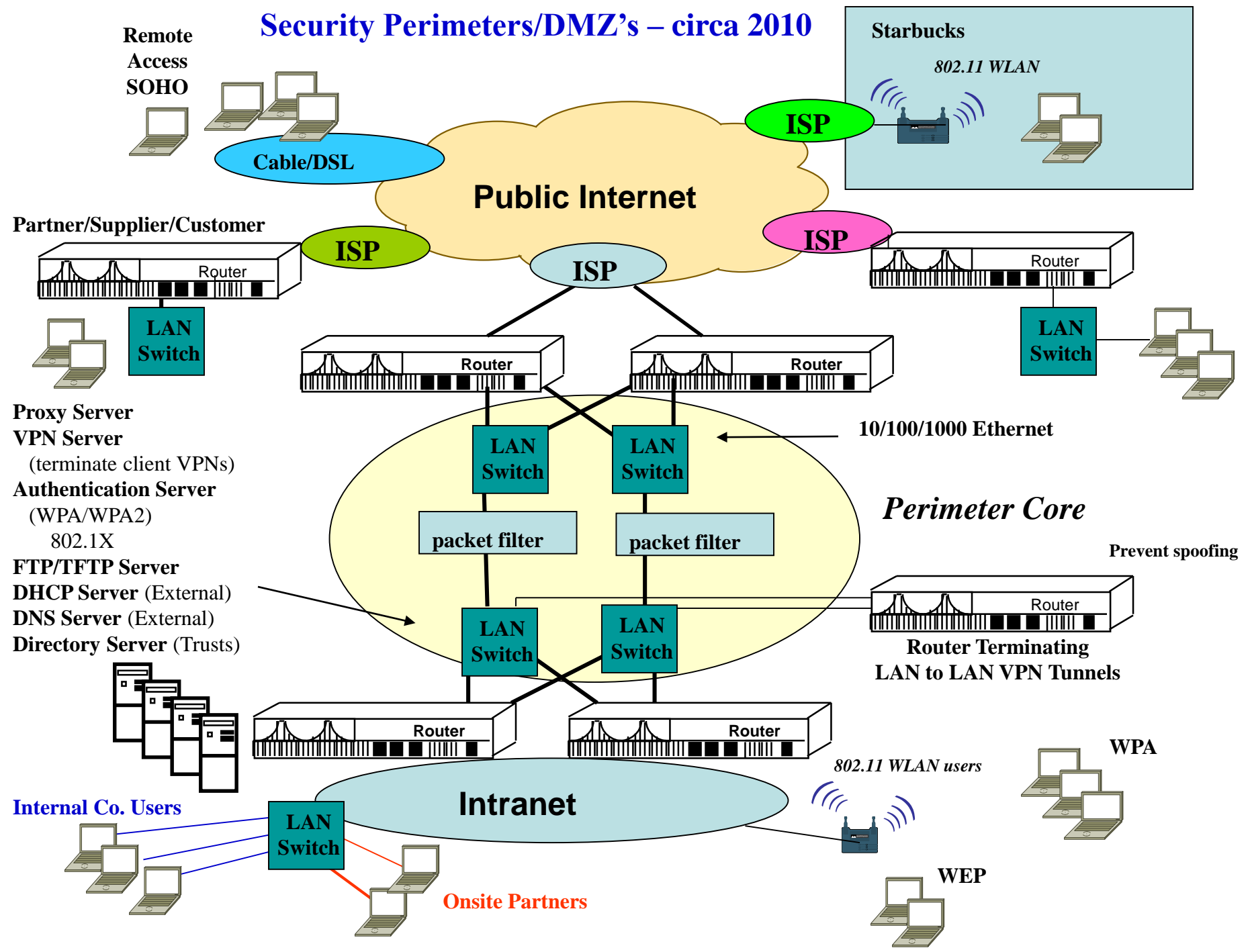
James Farricker

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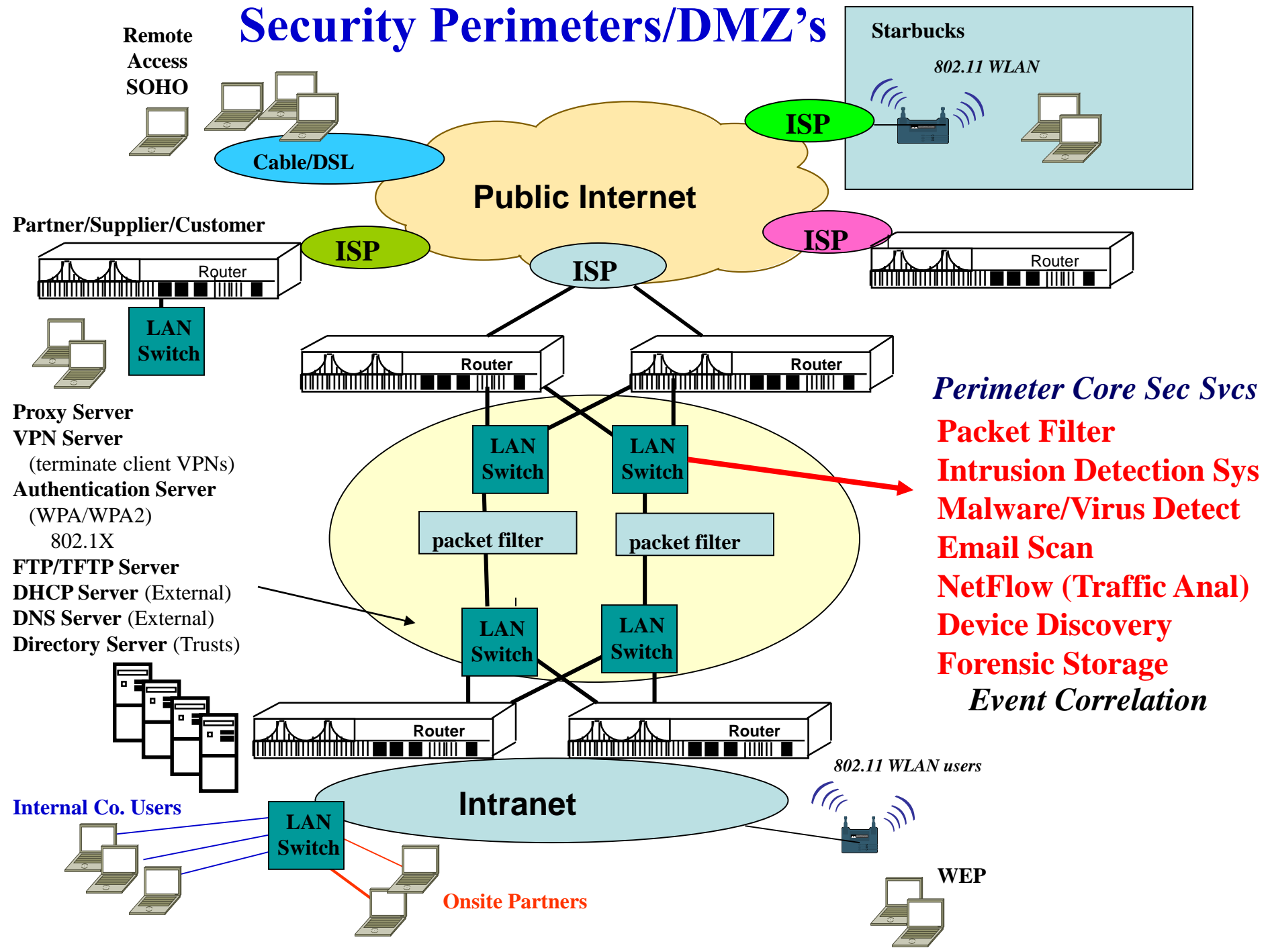
Network/Security Services

- **DNS** **Domain Name Service**
- **DHCP** **Dynamic Host Configuration Protocol**
- **Multicast** **SM, DM, SSM**
- **QoS** **Quality of Service**
- **GSLB/SLB** **Global/Server Load Balancing**
- **NTP** **Network Time Protocol**
- **WWW-Proxy** **World Wide Web Proxy Service**
- **WINS** **Windows Internet Name Service (MS)**
- **DDNS/AD** **Dynamic Domain Name Service (MS)**
- **AAA/Security** **Authentication, Authorization, Admittance**
- **IPSec** **Inbound/Outbound Access**
- **LDAP Directory** **Lightweight Directory Access Protocol**

Security Perimeters/DMZ's – circa 2010



Security Perimeters/DMZ's



Security Devices/Components on Perimeter

IDS

Intrusion Detection System

Virus/Malware Detect

Detect signatures of virus/malware in flows

Device Discovery

Detects new devices as they activate on net/LAN

Anomaly Detection

of traffic flows/patterns

Proxy Server

content filtering web proxy server provide admin control over content relayed both directions through the proxy. Ensures acceptable Internet usage.

Filter/Firewall

Block/permit IP addresses, TCP/UCP ports

Correlation Agent

*Fusion/correlation of different security “events”
Security Event Mgmt*

Why would NTP be a critical service ??