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Next-Generation Endpoint Security Overview

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Agenda



- Endpoint Security Defined
- What about antivirus?
- The next-generation endpoint security triggers
- Next-generation endpoint security market dichotomy
 - Prevention vs. Detection/Response crowd
- Recommendations and lessons learned



What Is An Endpoint?





Primary:

Windows PCs

Secondary









Windows Server







What is Endpoint Security?

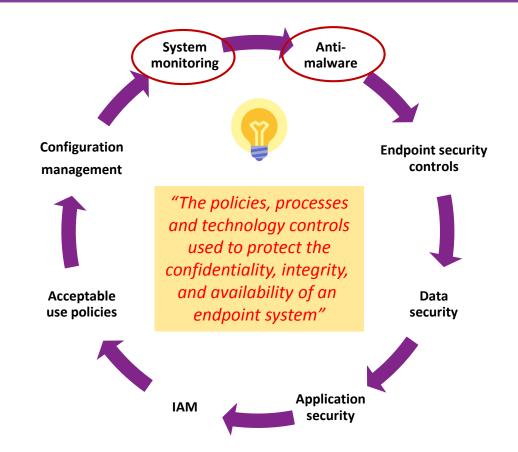






What is Endpoint Security?







What About AV?



- \$5 billion to \$7 billion WW market
- 95%+ penetration rate
- Historically dominated by 5 vendors
- History of usurping functionality
 - Application controls, anti-spyware/adware, full-disk encryption



Antivirus Myth and Reality



- AV is NOT a commodity product (nor is it "dead")
- AV management is often delegated to IT operations groups
- AV is not always well maintained
- Advanced features:
 - Not well known or always used
 - Can have a substantial impact on system performance
 - Mixed results in terms of efficacy



Endpoint Security Market





























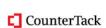






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NG Endpoint Security Triggers



- Network compromise, cyber-attack, or data breach
- Time and resources necessary for system reimaging
- Cybersecurity quantum leap

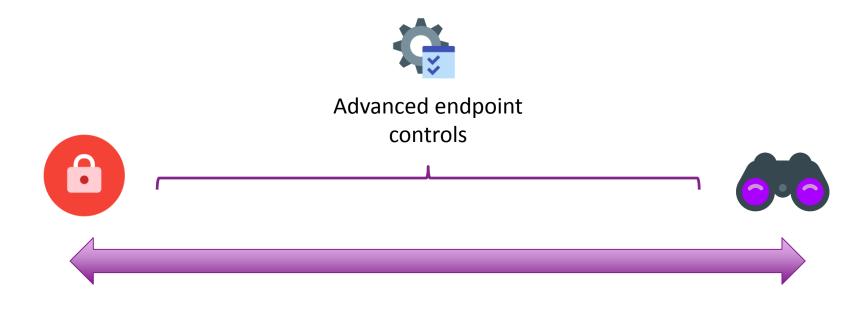
- Cybersecurity cavalry to the rescue!
 - Needs and resource assessment





Endpoint Security Continuum





Advanced malware prevention

Advanced detection and response (EDR)



Endpoint Security Advanced Prevention



"Hair-on-fire" problem

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- Resource constraints
 - Staff size, skills, time
- Endpoint malware prevention may be one of several cybersecurity initiatives

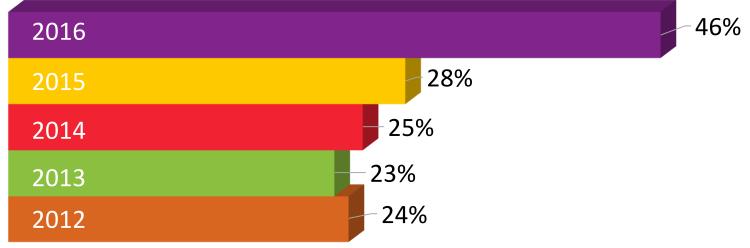


Endpoint Security Advanced Prevention





Problematic shortage of IT security skills





Advanced Prevention Products



- New types of algorithms
- Process isolation or sandboxing
- Behavioral heuristics
- Tight integration with threat intelligence





Procurement and Deployment



Extensive background research

RFI/RFP

Product testing

POC

Pilot project

Enterprise deployment



Observations



- Early stage products have obvious flaws
 - Extensive customer input into product roadmaps



- Scale and manageability are high priority requirements
- AV replacement is often part of strategy
- Enhancements may be required
 - Windows firewall, application controls, etc.



Advanced Detection and Response



- Progressive skills and resources
- Strong relationships with existing AV vendor



- Not hung up on endpoint agents
- Broad approach to anti-malware based upon data analytics
 - Network sandbox, threat intelligence, open source tools, custom rules, etc.
- Focus on IR automation and orchestration



Advanced Detection and Response Products



- Data collection- and analytics-centric
 - Windows logs, system activities, forensic capture, etc.



- Various requirements for endpoint data collection
 - Polling, trigger-based, local collection, central collection, etc.
 - Trend toward real-time continuous collection and visibility
- Product GUI and analytics may or may not be important



Procurement and Deployment



Basic background research Exploration of open source and commercial offerings

Simple and concise RFI/RFPs

POC including product and process integration

Pilot project to test scale and data management

Enterprise deployment



Observations



- Very demanding user base
- Best-of-breed mentality



- Customers will likely
 - Demand product customization and enhancements from vendors from the start
 - Want to use products to create (and even distribute) custom remediation rule sets
- "Big brother" issues



Further Analysis



- Continuum will continue
- Rip-and-replace mindset
- Possible extensions for data security and insider threat
- Cloud-based control plane?
- Endpoint security and patching





Action Items



- Assessment
 - Existing AV, malware, malicious network traffic, skill sets...
- Requirements definition
 - Comprehensive security requirements
 - IT and business requirements
 - Technical requirements
- Research and evaluation
 - Cast a wide net but maintain a focused search
- Plan for the long-term



