ForeScout

Comply to Connect Strengthening the Weakest Link

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IT Security Challenges

KrebsonSecurity

620 GB DDOS Attack

Attackers used unsecure routers, DVRs and cameras

YAHOO!

Half a Billion U

Disabled the ar
machines

Eddie Bauer

350 Stores

US and Canada stores breached. Used internal computer systems that are connected to PoS systems

Top 10

vulnerabilities exploited are more than a year old

Source: HP Security Research. Cyber Security 2016; page 32

Reference acronym glossary at end of presentation.

Impact of Inadequate Visibility and Automation

Industry Stats:

- **80%** of successful attacks leverage well-known vulnerabilities – *Gartner Security and Risk Management Summit*
- **99%** of exploits will continue to be from known vulnerabilities up to one year through 2020 - *Gartner*
- **Top 10** exploited vulnerabilities are more than a year old - *HP Security Research.*
- **66%** of networks will experience an Internet of Things based breach by 2018 – *IDC*
- **80%** of all endpoints connected endpoints to the network will not support agent based technologies by 2020 Gartner

Business / Mission impact:

- Reputational damage which could impact funding.
- Breach remediation averages $4 Million per incident – *Ponemon Institute, June 2016*
- Critical citizen services become unavailable, unreliable
- Loss of grant funding or punitive damages due to non-compliance with Federal & State requirements

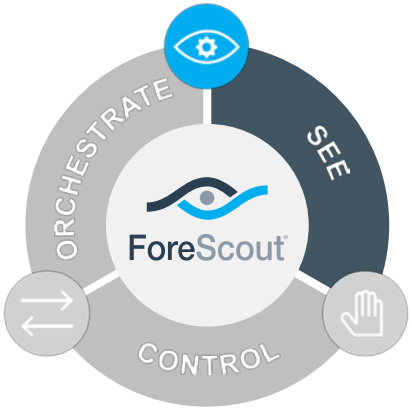
C2C Background

- US-DOD's formal continuous monitoring strategy evolving from NIST 800-53 and SANS 20 critical security controls
- Comply-to-Connect (C2C) is a comprehensive cybersecurity framework of tools and technologies designed to increase cybersecurity efficiency
- 4M+ DOD endpoints under management to date
- Primary objective to enable real-time cyber hygiene situational awareness and enforcement
- Automation of manual processes through third-party toolset integration leveraging an open architecture

Capability Gaps

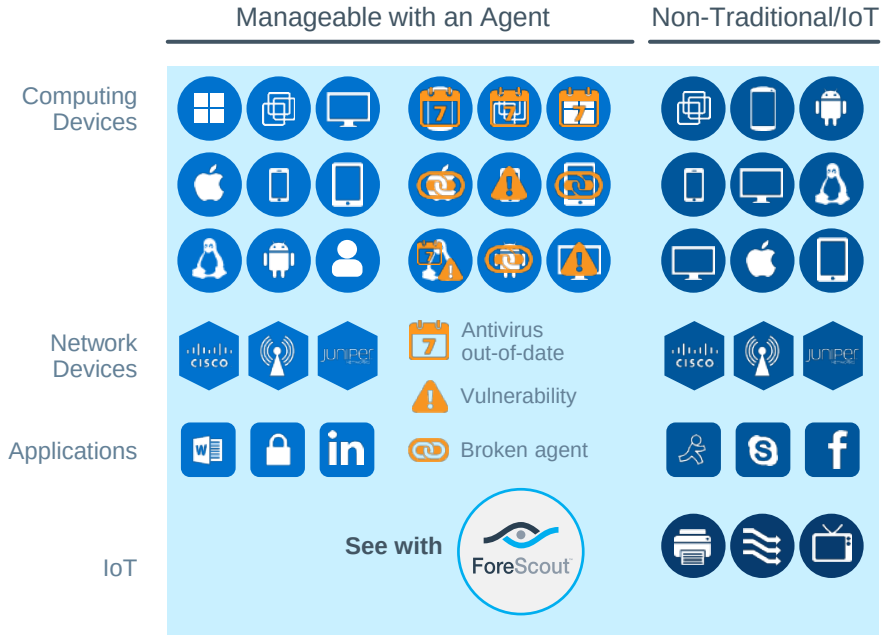
- Agent based security tools and point in time vulnerability scanning tools have inherent visibility gaps
- Lack of compliance enforcement and network access control for pre/post connect
- Need for continuous monitoring and control of ALL IP enabled endpoints in agentless manor
- Existing endpoint security tools relying on manual process to deploy agent or scan

Visibility is Essential



AGENTLESS

CONTINUOUS



Who are you?

Who owns the device?

What type of device?

Where/how are you connecting?

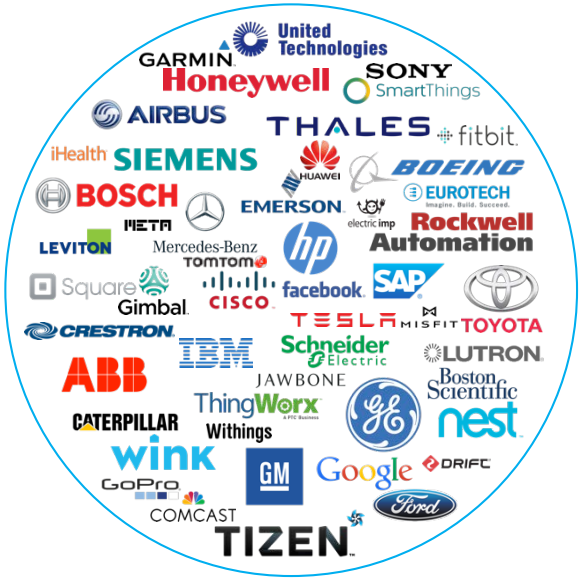
What is the device hygiene?

Reference Acronym Glossary at the end of presentation

Exponential IoT Growth

PC's & Mobile Devices

IoT Devices



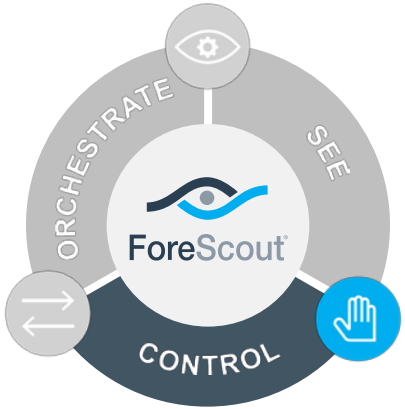
Took **25 years** *to get to* **10 Billion devices***

Will take only **5 years** *to get to* **30 Billion devices***

Source: Gartner IoT, PC and Mobile device forecast 2015

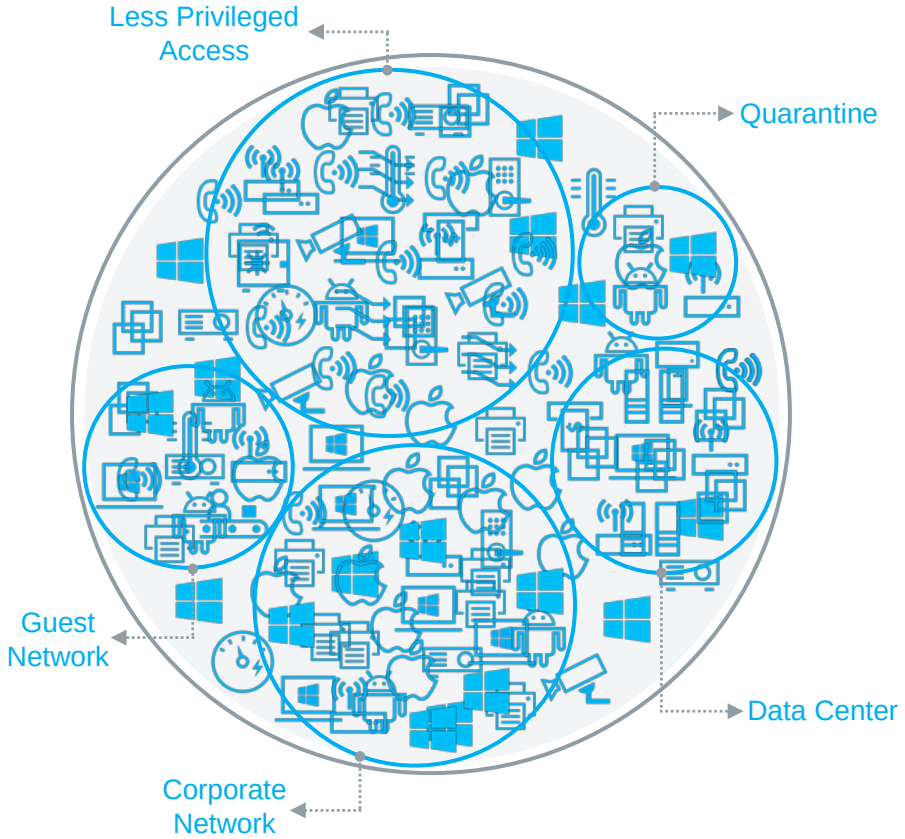
Reference acronym glossary at end of presentation

Automation requires Confidence



POLICY-DRIVEN

AUTOMATED



Notify

Comply

Restrict

Reference acronym glossary at end of presentation.

Critical Characteristics of a C2C Framework

- **Full Network-Based Visibility, Discovery and Classification of All Devices –** Full network visibility requires integration with the network to identify all connected devices in an agentless manor. All other approaches leave visibility gaps.
- **Redundant Manageability and Control of Devices –** Complete device control requires the redundancy of simultaneous agentless and agent-based endpoint inspection and control.
- **Orchestration with Mandated Security and Network Management Solutions –** Compliance against DoD security policy requires out-of-the-box, bi-directional integration with DoD-mandated security tools.
- **Continuous Monitoring and Automated Remediation –** Compliance must be continually monitored and maintained for devices that were previously compliant when they initially connected to the network.

Comply-to-Connect Phases

- **Phase 1: Discover and Classify –** Complete real time visibility to discover/classify/locate every connecting device in an agentless manor
- **Phase 2: Authentication and Authorization –** Control network access at the access layer, with or without 802.1x
- **Phase 3: Pre-Connect Compliance –** At connection, control access based on compliance of security policies
- **Phase 4: Post-Connect Compliance –** Continuously monitor each device, control access/maintain compliance and cyber hygiene

C2C Impact and Outcomes

- **Raises Command Cyber Readiness Inspection (CCRI) scores –** Well above 90% and with reduced manpower
- **Satisfies FY17 NDAA mandates –** Delivers comply-to-connect, software license control, SCADA/ICS control
- **SecDec Scorecard –** Authoritative data source for the SecDef scorecard and automates reporting from third party tools
- **Reduces manpower –** Software and patch management requirements cut by as much as 75%

ForeScout Capabilities Overview

Enables Complete Network Visibility/Control/Integration

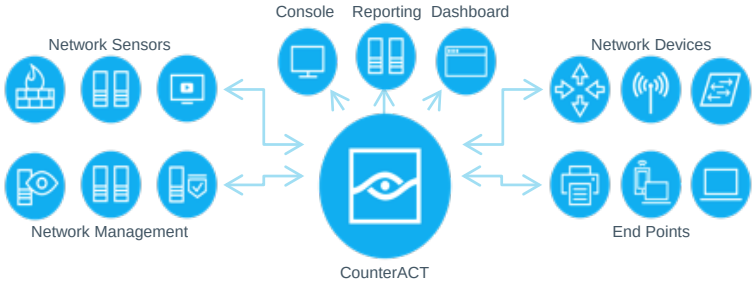
SEE

- Agentless discovery of every IP-based network device
- Categorize devices, users, applications and operating systems
- Continuously monitor every connection

CONTROL

- Notify administrators/users
- Remediate to conform to standards
- Allow, deny or limit network access

ORCHESTRATE



- Share contextual data
- Automate common processes/workflows
- Accelerate system-wide response

How ForeScout is Different

Fast and easy to deploy

- Agentless and non-disruptive
- Scalable, no re-architecting

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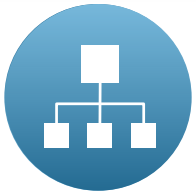

Infrastructure agnostic

- Works with mixed, legacy environment
- Avoid vendor lock-in

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Flexible and customizable

- Optimized for diversity and BYOD
- Supports open integration standards

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Thank You!

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