

RISK CONFERENCE 2019



Ste prepričani, da veste, kdo ali kaj se povezuje v vaše omrežje?

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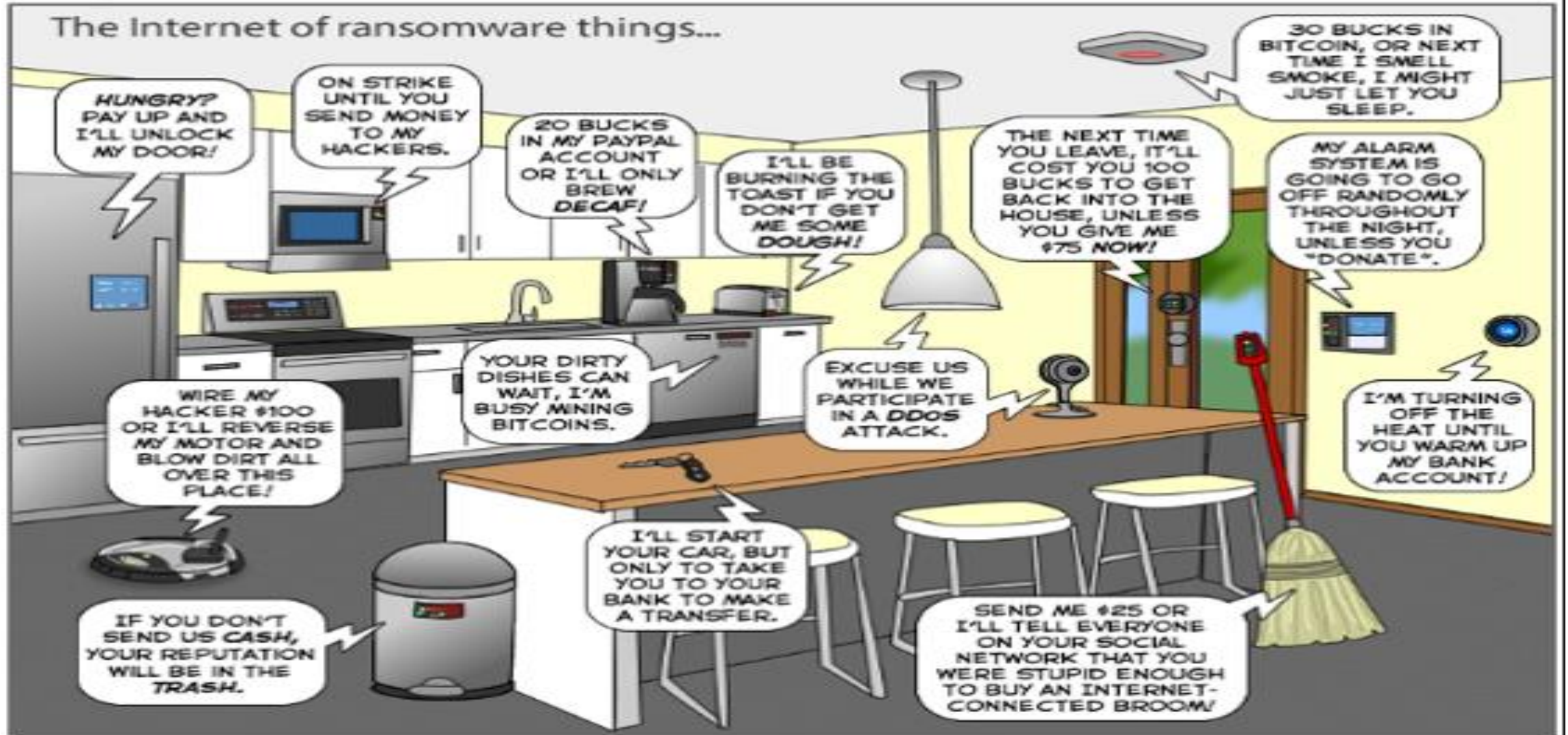
29. marec 2019



Kaj se povezuje v vaše omrežje?

The Joy of Tech™ by Nitrozac & Snaggy

The Internet of ransomware things...



- Tradicionalne nastavitve fizičnih vmesnikov
 - Statične ACL/VLAN nastavitve
 - MAC „whiteliste“
 - Port security
- Microsoft CA/PKI -> NPS (Network policy server)
- NAC (network access control)
 - BYOD, Guest portal, profiliranje naprav (CoA), MDM integracija, ...
 - Naprave z avtentikacijo
 - 802.1x (EAP/PEAP/TLS/...)
 - MAC
 - Captive portal
 - Naprave brez avtentikacije
 - OnConnect



VISIBILITY

- Know what's connected on your wired & wireless multivendor environment
- See who is authenticated by role



CONTROL

- Reduce risk and workload through Automation – All devices Authenticated or Authorized – NO UNKNOWN DEVICES



RESPONSE

- Change rules for users and devices based on behavior
- Adaptive response brokering with best of breed security solutions

■ Profiling

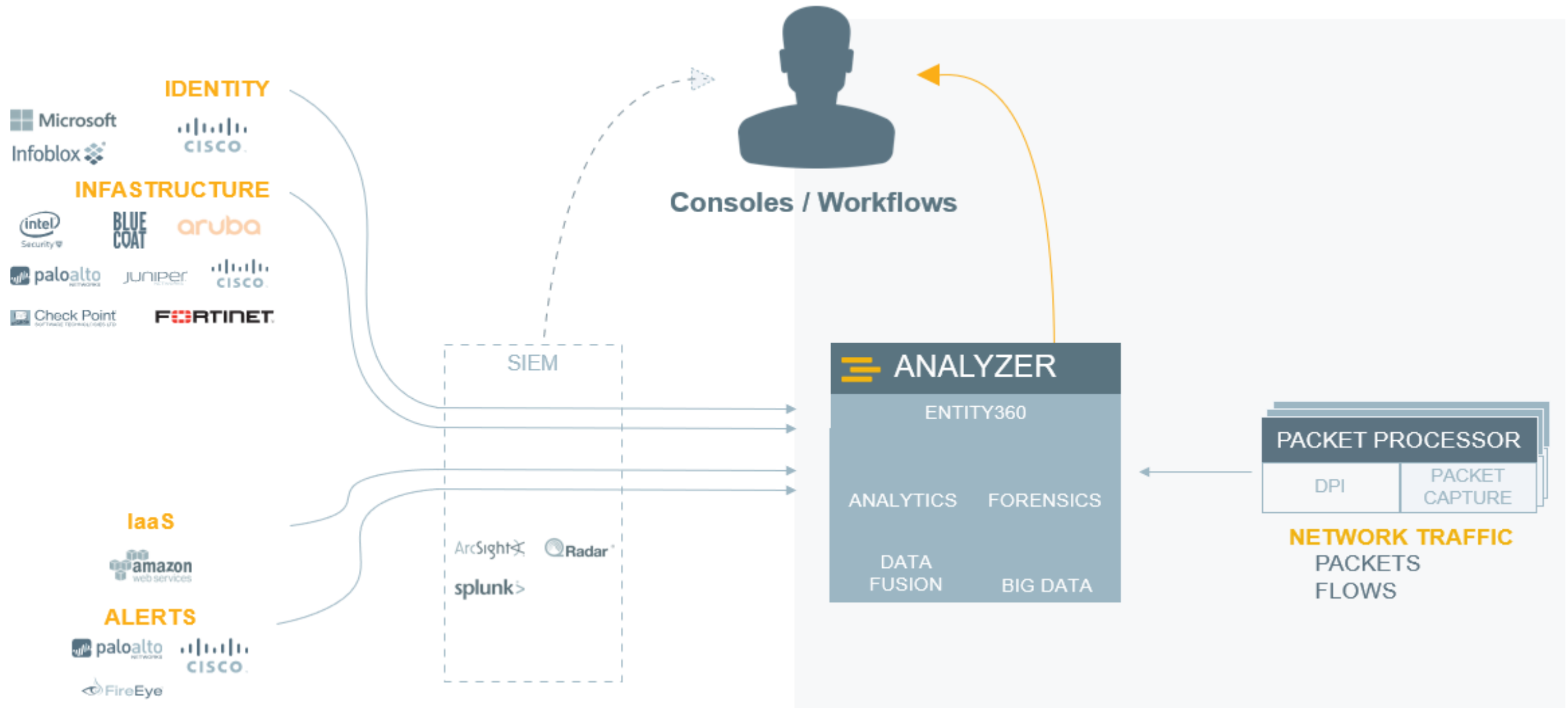
Passive Profiling

- DHCP Fingerprinting (MAC OUI & Certain Options)
 - DHCP Relay or SPAN
- HTTP User-Agent
 - AOS IF-MAP Interface, Guest and Onboard Workflows
- TCP Fingerprinting (SYN, SYN/ACK)
 - SPAN
- ARP
 - SPAN
- Cisco Device Sensor
- Netflow/IPFIX

Active Profiling

- Windows Management Instrumentation (WMI)
- Nmap
- MDM/EMM
- SSH
- ARP Table
 - SNMP
- MAC/Interface Table
 - SNMP
- CDP/LLDP Table
 - SNMP

Aruba IntroSpect - UEBA



Aruba ClearPass in IntroSpect

1. Discover and Authorize

Wired/Wireless
Device Authentication



**ClearPass
Policy Manager**

User/Device
Context



Actionable
Alerts

IntroSpect UEBA



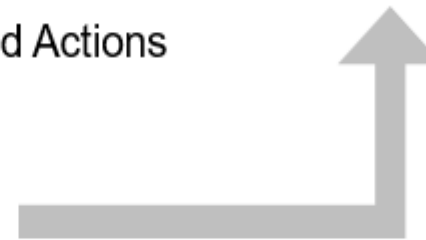
Entity360 Profile
with Risk Scoring

2. Monitor and Alert

3. Decide and Act

ClearPass Real-time Policy-based Actions

- Real-time quarantine
- Re-authentication
- Bandwidth Control
- Blacklist



Zakaj Aruba ClearPass

- Vidljivost v realnem času, nadzor in možnost odziva (brez dodatnih agentov)
- Neodvisnost od proizvajalca opreme in integracija z drugimi ponudniki (PaloAlto, McAfee, AirWatch/MobileIron, ...)
- Enostavna registracija BYOD naprav
- Razširljivost (clustering)
- Uporaba veliko dodatnih virov informacij pri pripravi politike (2FA, MDM, ...)
- Profiler - IoT
- Ena rešitev za vse načine avtentikacije
 - Osnovane na AAA
 - MAC avtentikacija
 - 802.1x (uporabnik/geslo in certifikat)
 - Captive Portal
 - Brez AAA
 - OnConnect

Koraki prikaza za DEMO

- Vmesnik na stikalu deaktiviramo
- Izbrišemo MAC naslov AP-ja iz baze
- Vmesnik na stikalu aktiviramo
- Preverimo dogodke na stikalu
- Preverimo in pokažemo dogodke na ClearPass-u

Stikalo
10.0.1.55



Vmesnik z

- 802.1x in MAC auth
- VLANi se dinamično dodeljujejo s strani ClearPass

ClearPass
10.100.0.50



AP





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