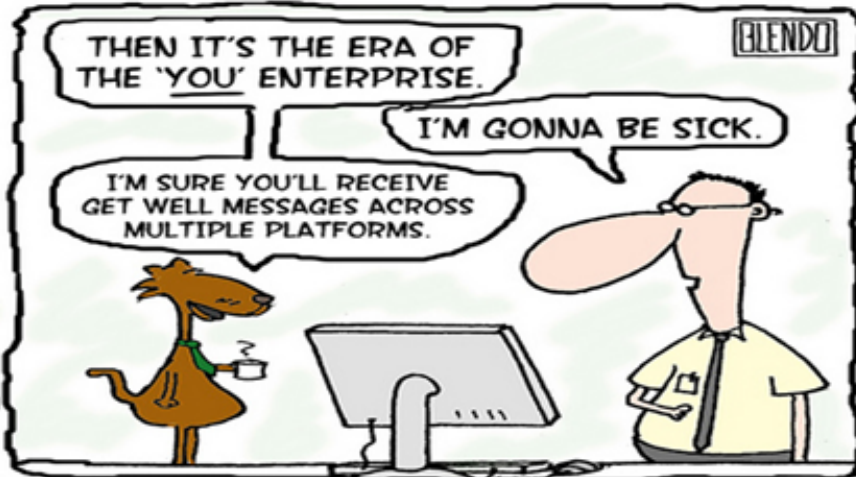


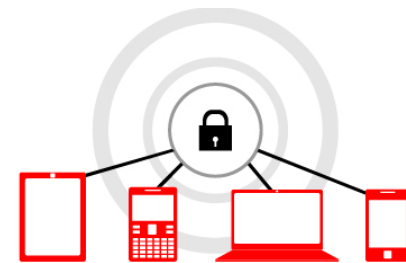
CHIEF & CHUCK





How BYOD has changed the security map of enterprises and how “Peregrine Guard” help tackle it?

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i7 Networks

Agentless BYOD Control

Summary of the Deck

- ◆ Security Problem due to BYODs
- ◆ How do we Solve?
- ◆ How are we different?
- ◆ What we find
- ◆ Deployment
- ◆ How we differ with competition?
- ◆ Current product status
- ◆ How we use Azure and Adv. Of Azure

Problems due to BYOD

BYODs bring in three issues mainly...

- ◆ Attacks on corporate network (& data loss) can come via
 - ◆ Unauthorized & insecure devices,
 - ◆ Compromised/malicious devices,
 - ◆ Older & vulnerable OS & apps
 - ◆ Non-integrity devices (jailbroken/rooted), and
- ◆ Unable to control access to internal data from these devices. Role-based privileges are not enough.
- ◆ Stolen/Lost devices with corporate data on it.

How we solve?

- ◆ **Auto-detection of all devices**
 - ◆ Irrespective of how they join or try to join the network (Regular, Unauthorized (Spoofing/Hot-spotting etc.))
- ◆ **Auto-check on health of the device such as**
 - ◆ compromised devices (including jailbroken/Rooted)
 - ◆ those below corporate suggested baseline
 - ◆ those with vulnerable OS/Apps
 - ◆ those that are malicious (malicious traffic)

How we solve?

- ◆ Give a vulnerability index to each of the device (DVItm)
- ◆ Policy Enforcement (Allow/Deny/Differential Access) using DUAL-TIER

How we solve? (Optional)

- ◆ Strong Authentication via AD or RADIUS or LDAP
- ◆ Differential access to assets based on user, role, device, location, branch-office, Apps and other parameters (DUAL-TIER).
- ◆ Ensuring that no access to corporate network until it is registered with EAS (or any MDM solutions) and hence providing that “Safety Net”
- ◆ Integration with EAS or other MDM solutions ensures remote wipeout.
- ◆ Also integrating with MS InTune

How do we do? How are we Different?

We do all of it :

- ◆ Completely Agentless and non-intrusive
- ◆ Don't even ask devices to go to a self-registration portal
- ◆ Provides a “safety-net” to enterprises by pulling all devices to management.
- ◆ Being client-less also helps EU Data protection act to a great extent

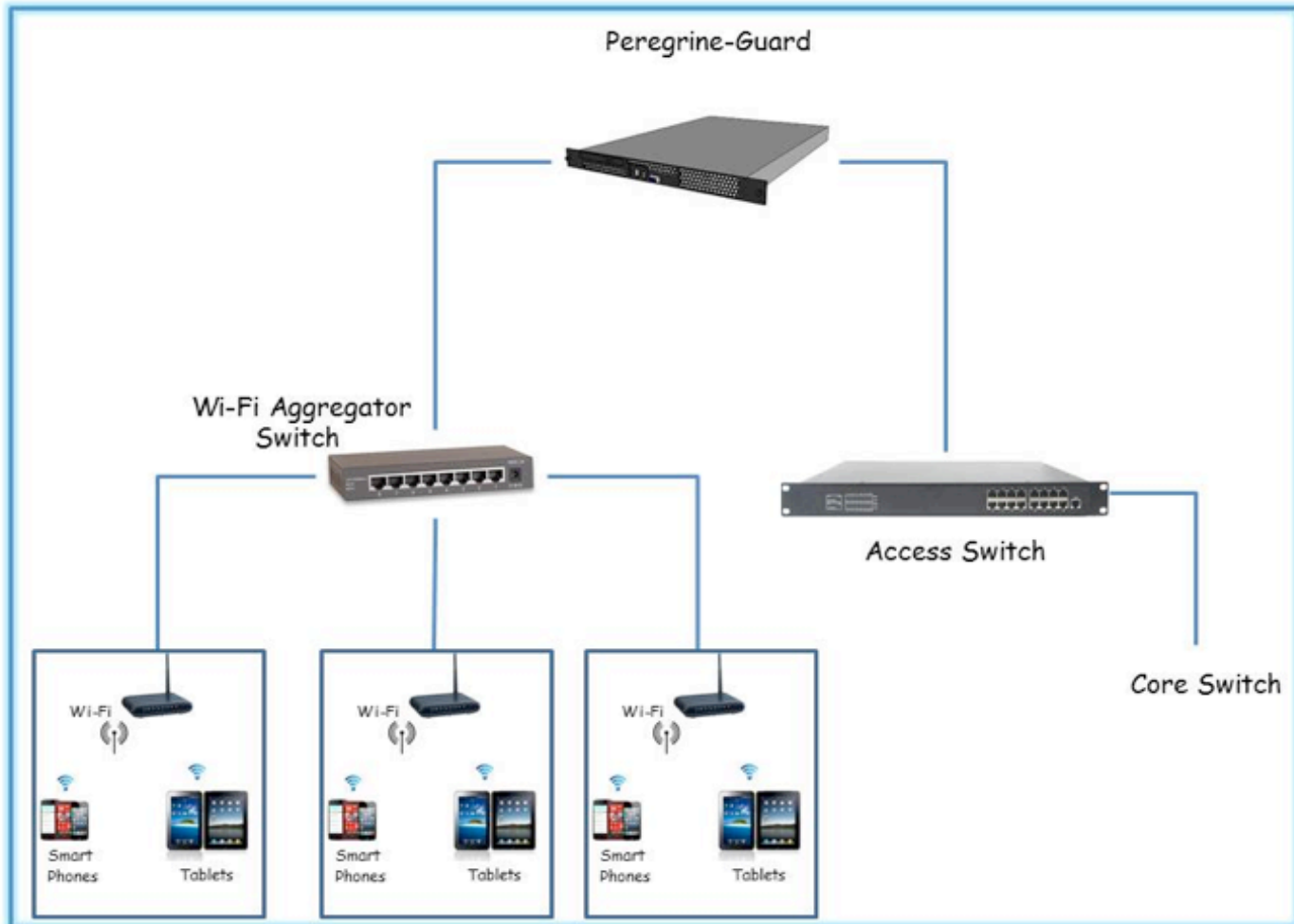
What we find?

- ◆ Deterministic (before/when they connect)
 - ◆ Mac-id, OS (iOS or Android etc.), Device kind (iPad v/s iPhone etc.)
- ◆ Heuristic (while they operate)
 - ◆ Jailbroken/rooted
 - ◆ Malicious traffic
 - ◆ OS version
 - ◆ Malicious Apps, &
 - ◆ Vulnerability Index

Deployment

- ◆ Probes all over the network behind all main network aggregate points (wired and Wi-Fi) in passive mode (for Discovery)
- ◆ Policy enforcement appliance in-line and behind main Wi-Fi aggregator.
- ◆ **DIRISC**: easily **D**eployable, **I**nvisible, less **R**esource intensive, **I**ntegrates well with the existing infrastructure, easily **S**calable, & truly **C**ross-platform.

Deployment



How are we differ with competition?

WE	Competition
<ul style="list-style-type: none">⦿ Agentless and Non-Intrusive.⦿ Auto device enrolment/on-boarding	<ul style="list-style-type: none">⦿ Agent (client) based⦿ Require on-boarding of devices⦿ Visiting a self-registration portal
Covers to all devices (Heterogeneous)	Only managed devices
Detect backdoors, spoofs (MAC-id, IP, Hotspots).	Not done/not applicable
Supports <u>ANY</u> connected devices	Only support of smart mobile devices/ OS for which they have clients
<ul style="list-style-type: none">⦿ Reports Network behavior patterns⦿ Recognizes malicious traffic & anomalies	No tracking of network usage patters or anomalies.

How are we differ with competition?

WE	Competition
Check device health including detecting jailbroken, rooted & compromised devices	With agents and again only for managed devices.
Cross-platform, scalable and less resource intensive. Easy to provision.	<ul style="list-style-type: none">⦿ Device/OS specific solutions. Provisioning can be cumbersome.⦿ Not scalable & highly resource intensive.
Absolutely no change in user behavior or user experience;	Changes in the profile, user behavior, user experience

Current Product Status

- ❑ Available in two flavors:
 - ❖ Just the discovery module (PG lite) – deployed passively.
 - ❖ Both discovery and policy enforcement modules – deployed inline mode
 - ❖ Supported platforms: Windows, Linux and FreeBSD
- ❑ Beta version: April 7, 2013
- ❑ GA : by Mid of May, 2013
- ❑ We are demoing and announcing the launch in CITE conference June 1-3, 2013 @ SFO

How do we use Azure?

- ◆ PG was built over FreeBSD but has been ported to Linux and Windows
- ◆ i7 Networks got selected as final 13 among 500 companies by the **MS Azure Accelerator Program** and we are deploying the same on Azure
- ◆ We needed a Strong Authentication and Active Directory provided the right way and Azure AD was far easier for us to integrate (Work in Progress)

How do we use Azure?

- ◆ We are also integrating all our reporting into Azure to provide one single centralized reporting on the cloud (Work in Progress)
- ◆ It supports Linux VMs too and hence made our life easy to setup testing on multiple test beds
- ◆ Azure Accelerator program needs first rights and hence cannot show the integrations or snapshots yet ☹️

Azure learning's...

- ◆ Easy to deploy and run Windows Server and Linux virtual machines.
- ◆ Migrate applications and infrastructure without changing existing code
- ◆ Process, analyze, and gain new insights from big data using the power of Apache Hadoop. (to store mobile data and draw analytics)
- ◆ **Mobile Services** – to build app so that we can do a reporting app with role based access for reports

Working with MS..

- ◆ Early stages on working integrating our solution into Systems Center
- ◆ Early stages again in working with integrating our solution into MS InTune, their MDM solutions
- ◆ Integrated with Azure AD
- ◆ Working with integrating into MS EAS so that we provide safety net for getting all devices under EAS

Questions?

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