BYOD the HP Way: Secure, Device-Agnostic Network Access Management

Jochen Fischer – Solution Architect (MASE)
September 2013
Bring Your Own ????
Bring Your Own Device cannot be ignored

About
50%
Workers are using three or more devices for work, but IT doesn’t see it.¹

Approximately
4.5 billion
Personal client devices will be on the network in 2015²

More than
2X
Through 2014, employee-owned devices will be compromised by malware at more than double the rate of corporate-owned devices³

SIMPLICITY
SCALABILITY
SECURITY

² IDC: The Empowered IT User: How Individuals Are Using Technology & Redefining IT (March 2012), Doc #DR2012_GS4_DL
BYOD in the news

Consumerization of IT will have a positive impact on user satisfaction over the next 12-18 months

“80% of the IT folks surveyed see BYOD as a big win.”
The new end-user for IT – the “Prosumer”

The Prosumer uses the platforms and devices they choose in order to access data and applications they feel makes them more productive.

The Prosumer is always connected, consuming services on their terms.
Pressure on IT
How to remain relevant in this new era?

Employees/business units have been driving the device agenda, forcing the introduction of less secure platforms and non-enterprise grade cloud services.

IT is currently reacting ......
BYOD - Enabling connectivity

Secure Wireless Device Access
Securing wireless/wired and supporting BYOD

MDM/MAM
Mobile Device Security
Mobile App Management
Mobile Content
Management Mobile Device Management

BYOD
User
Device
Network
Connectivity
Management

MobileIron
Sybase
Sybase Anywhere
Afaria
Challenges for enabling connectivity
Legacy networks unprepared for BYOD
Complex, limited and vulnerable

Vulnerable Network Edge

Separate Networks & Management

Limited BYOD Essentials

Wired

Wireless
Requirements for enabling connectivity
Top three most-wanted BYOD capabilities

- Centralized Functionality
- Logging, Monitoring & Reporting
- Ease of Deployment

SANS Mobility/BYOD Security Survey March 2012
Unified Bring Your Own Device (BYOD) solution to enable connectivity
Complete unified Bring Your Own Device (BYOD) solution
Simple, Scalable and Secure
Delivering a complete unified solution for BYOD

Comprehensive unified wired-wireless access products and management solution
Considerations for simplifying and securing BYOD

Admin Needs

Who are you?
Is your device compliant?
Is your device clean?
What is your role and device type?
What are you accessing?
Ugh! How do I keep my network safe?

Onboard

I’d like access
User or Guest Credentials
Yes, may I connect?
Should be. What can I access?
Guest with Windows 8 Mobile
Email, search, social media

Provision

Monitor

User Expectations

Expectations

Provision

Monitor

Onboard

I’d like access
User or Guest Credentials
Yes, may I connect?
Should be. What can I access?
Guest with Windows 8 Mobile
Email, search, social media
Unified BYOD essentials

Process for on-boarding, provisioning and monitoring BYOD users, devices

1. **On-board**
   - Automated onboarding with user self registration
   - Advanced device identification

2. **Provision**
   - Multi-vendor unified wired and wireless enforcement
   - Apply consistent user policies

3. **Monitor**
   - Monitor threats & quarantine
   - Integrates with User Behavior Auditor for access history
   - Analytics to optimize user experience

**Corporate Network**

**Admin**
- I have access

**User**
- I’m on
- Network is running well

**Intelligent Management Center (IMC)**
- Single pane-of-glass management
- Unifies wired-wireless networks
- Simplifies implementation & operation
Essential BYOD building blocks
IMC – centralized functionality and ease of deployment

Single pane-of-glass management

Comprehensive management for
- Wired & wireless networks
- BYOD – users & devices

Modular Service Oriented Architecture (SOA) delivering
- Security policy provisioning & enforcement
- Network traffic monitoring
- User behavior analysis by user & device type
- Posture check & agent control

Unified Infrastructure & Access Management for BYOD, Wired & Wireless
Simplifying with IMC Smart Connect Virtual Appliance

Introducing a plug-and-play BYOD management solution

Single pane-of-glass management virtual appliance
- Intelligent Management Center IMC User Access Manager
- Integrated database and OS
- Optional WLAN manager

Fully integrated user access policy
Speeds installation, easier to use

Simplicity from order to deploy –
One part number, one file, one license!
Industry’s leading unified wired-wireless switch

Introducing 830 Unified Wired-WLAN switches

- Unified control plane & policies
- Wired & WLAN managed by IMC
- 8 and 24 GbE PoE+ port switches
- Wi-Fi Clear Connect technology for optimized connectivity

67% reduction in management tools

Up to 38% reduction in CAPEX

* Vs Cisco Catalyst 3850 with 24 APs – HP competitive analysis
Scalable unified wired-WLAN modular switch

Integrates into HP 10500/7500 software creating a unified wired-WLAN modular switch

- Higher performance & fewer devices
- New benchmark for scale
- Unified management, security and QoS
- Clear Connect optimizes mobile experience
- Investment protection
  - Integrates with switch software
  - Supports existing access points

Up to 54% lower CAPEX

2X more wireless scalability per chassis

- Vs Cisco WiSM2 on Catalyst 6500—HP Competitive Analysis
- Based on internal HP testing
Introducing the HP 2920 Switch Series

Delivers future-proof unified access & SDN capabilities

- High-performance stacking simplifies
- Stacking pay-as-you-grow economics
- PoE+ for access points & cameras, conference phones
- Energy Efficient Ethernet (EEE), ASICs lower power consumption

- Up to 45% lower latency
- Up to 100% higher performance
- Up to 400% faster stack failover time
Sentinel security application
Complete unified Bring Your Own Device (BYOD) solution

Simple, Scalable and Secure

Software-Defined Networking (SDN)

Unified Wired & Wireless Network & Management

Limited BYOD Essentials

- Monitoring
- Provisioning
- On-boarding

SDN Architecture

- Application Layer
- Control Layer
- Infrastructure Layer

Management
Sentinel security application
Delivering real-time BYOD network threat protection with SDN

- Protects from malicious traffic
- Delivers real-time threat characterization
- Improved visibility & accuracy with ArcSight
- Leverages OpenFlow on switches
Education

IMC Single-Pane-of-Glass Management

Core Layer

Access Layer

Wi-Fi Clear Connect

HP 2920 Switch

Cost effective

Easy access

Scalability

Up to 1000 devices at remote sites

Automated WLAN optimization tools

50% lower licensing vs. competition

42% reduction in HW CAPEX

Main Campus

Remote Campus

HP10500 with Unified Wired-WLAN Module

Clear Connect

IP phone

Desktops

Access point

WAN

HP 830 Unified Switch

Clear Connect

SmartMobile

Access point

IP phone

Desktops

PoE+PoE+

SmartMobile

Tablet

PoE+

SmartMobile

Desktops

Tablet
HP BYOD solution strengths

**Multi-tiered security**
- Universal policy across wired & wireless
- Choice of policy enforcement: user and/or device
- Advanced device fingerprinting

**Simplified operations**
- Single pane-of-glass management
- Unified wired & wireless
- Device & user level monitoring

**Superior user experience**
- User behavior analysis
- High-density, self-healing WLAN
Danke schön