

# **Protect Your Mobile World**

#### **Doward Wilkinson**

Mobile Strategic Trend's

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IEEE Conference

## It is a Fact – We Live in a Mobile World

**People** Devices **Apps** Access **Payments** Commerc Market **Opportuni** At Risk

2 billion with Internet Access, 2011 1 billion Smartphone shipments, 2015 44 billion total mobile app downloads, 5.6 billion mobile connections in 2011 \$241 billion in 2011; >\$1 trillion in 2015 1.8 billion mobile consumers, 2011; 2.5 \$3.6 billion mobile security software, 2016 \$1.1 trillion in global mobile revenues, All mobile users, devices, apps, access, transactions

#### In the Future!

#### And it is here Now!









Ubiquitous support for anytime, anywhere endpoint devices, including TVs, cars, home electronics



App stores become the primary software sources for users as Microsoft shifts focus away from win32 apps in favor of run "anywhere" apps



Protection strategies move to an app-centric and information focus security model

## **Forces Creating Urgency for Enterprise Mobility**

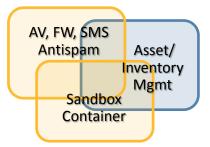
#### **Multiple Technologies for Protection**

#### Mobile/Consumerization

80% of employees will have two or more devices accessing corp info







#### **Evolving Threats**

Data loss, Jailbroken devices, malicious apps, e-discovery, corp vs personal data, location aware access



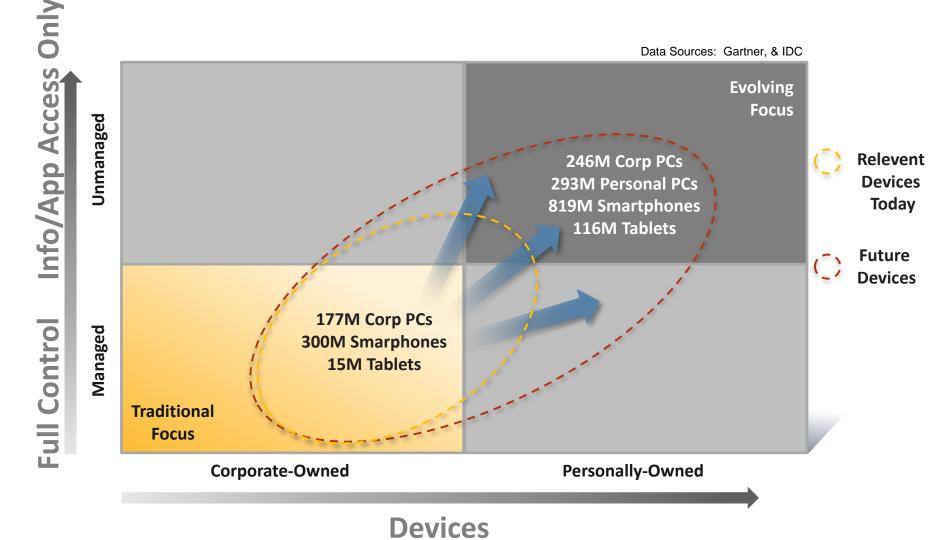
# Mobile & Cloud Applications





## Consumerization is Driving Disruption

Embracing the Personally-Owned & Unmanaged – "BYOD"



## And Why Should We be Concerned with BYOD



Do you ever text and walk? Ever walk into something?





What if your camera was on and showed where you were going?

## "There's an app for that..."



Found on 3rd party sites and torrents





95054

SMS

Hey, just downlaoded a pirated App off the Internet, Walk and Text for Android. Im stupid and cheap, it costed only 1 buck. Don't steal like I did!

IMEI, Name, Phone Number

Sent: 7:44PM

1. Sends info to a remote location

2. Sends an SMS to all your contacts

**Android.Walkinwat** 

# **Typical Mobile Malware**



## **Enterprise Mobility Protection Is Evolving!**

Digital protection is evolving from single-point solutions to encompassing data, application and hosted environment protection

"Embacing Consumerization"

Moving From Protecting the Device to Protecting the Native Apps, Data and Cloud Environments

Increased Mobile Complexity, Consumerization of Mobile Devices & Cloud

Access

#### **Tomorrow**

### **Today**

#### **Past**

#### **Focus on Restricting Access**

- Point solutions
- Desktop, laptop and Blackberry focused
- Largely on-prem connectivity focused for email
- Predominantly device control

#### **Access Compliance**

- Multiple devices
- Multiple OS
- Protection for relevant mobile platforms focus on device management, configuration and blacklisting of applications
- SaaS protection is becoming increasingly prevalent

# Anywhere Protection: Apps & Data

- Seemingly unlimited devices, multiple OSs, M2M and a multitude of apps
- Protection will include HTML5 webbased platforms, network security for over-the-air (OTA) communication, hosted environment protection and native apps
- Protection notions to expand beyond data and also incorporate SaaS connection protection and flexibility to support any app, any time



# Cloud Firewall O<sub>3</sub>

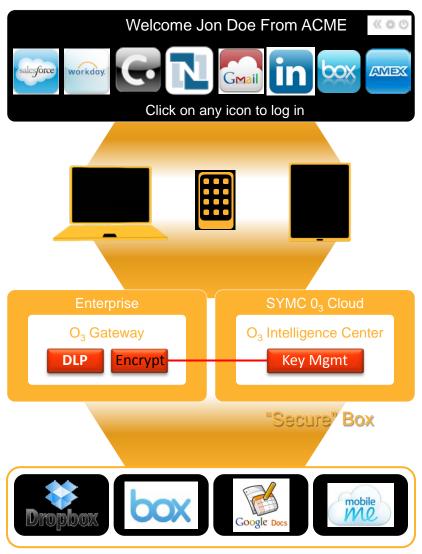
 Allows enterprise IT to define and enforce their own security independently of the cloud platform providers

#### **Cloud Based Protection**

- Primarily access control and information protection
- Access control: "who can access what cloud applications" (authentication, authorization, federation)
- Information protection: "what information can flow to the cloud" (DLP, encryption)

#### **Disruptive Technology**

- "Cloud Firewall" concept
- Both as software (large enterprises) or as SaaS (SME)
- For the first time, identity and information security combined into a single security control point

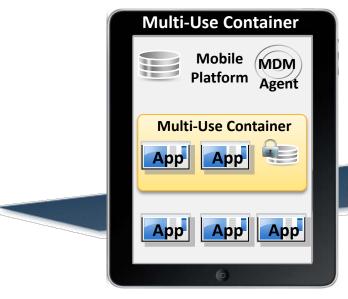


**Box in the Cloud** 



## **BYOD: Multi-Use Container vs App Wrapping**

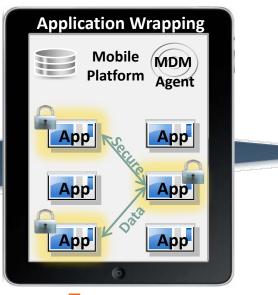
While both container and app wrapping technologies address application security needs, app wrapping provides a more seamless user experience





#### **Sandboxing Corporate Applications**

- Typically include core IT services, like email, calendar and contacts
- Apps require source code customization to operate in the container
  - One set of policies for the container
  - If container is breached, all apps are at risk



**Tomorrow** 

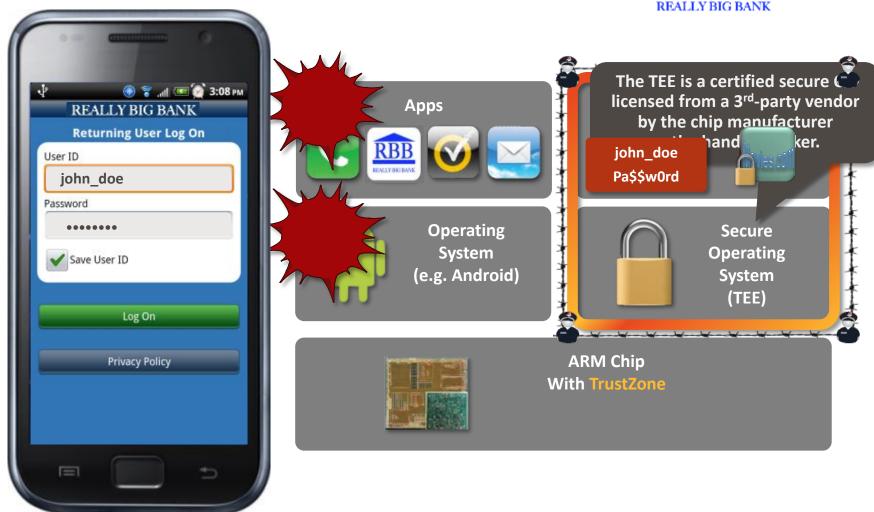
#### **Embracing a Native Experience**

- All apps are wrapped and provisioned individually, embracing a native experience
  - No separate corporate and personal environment
- Communication policies between apps is solvable but only in concept



## **TrustZone Security Model**





### What's Ahead in 2012?

Macs are not immune

Attackers will capitalize on work/personal info on mobiles

Targeted attacks will continue

Cloud computing and mobile will force IT to rethink security

# **Thank You**