



# **Work/Life separation**

## **Protecting enterprise data on user owned devices**

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**RSACONFERENCE2012**

# Agenda



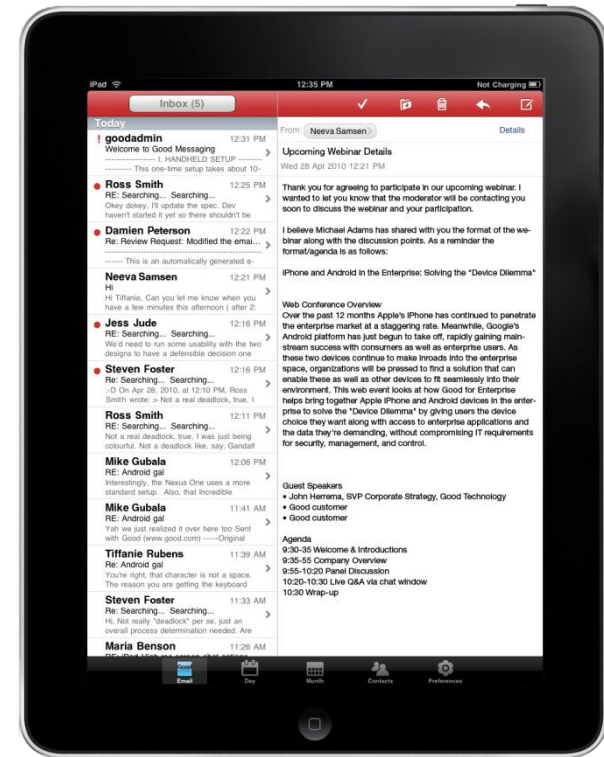
- Today's Mobility Landscape
- The New Security Risks
- Why existing tools are failing us
- The way forward for mobile security



# A Changing Mobility Landscape

From corporate-issued Blackberry devices

...to proliferation of non-Blackberry personal devices with easy access to a wide variety of apps

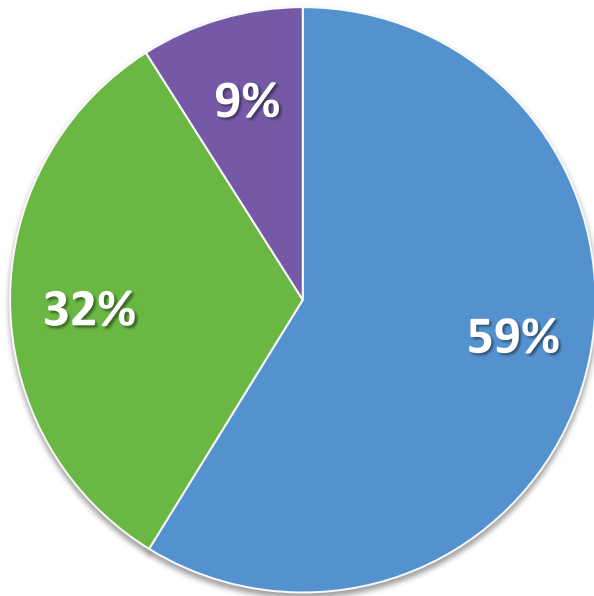


# Access to work data on personal devices

- Users **really** want to access their work data on their own mobile devices
  - They don't want two devices
  - Blackberries just aren't cool!
- You can't stop it happening
  - So embrace it before it's too late
- If you work out how to do it then you can save money
  - Save CapEx by not buying the devices
  - Save OpEx by not paying for the data plans



# “Bring-Your-Own-Device” It’s Already Here and Will Continue to Grow



Survey Question: Do you plan to support BYOD?

- Already Support
- Planning to Support
- No Plans to Support

- January 2011 survey to Good customers
  - 400+ respondents from variety of industries
  - Financial Services, Healthcare, Government, Legal & other Professional Services, Technology, & Manufacturing
- Nearly 59% already support BYOD model – another 32% plan to do so
- Financial Services accounted for the most responses, over 30%
- Financial Services showed most existing support for BYOD – 57% overall and 67% for firms with 3K+ employees



# New Technology Creates New Challenges

*Easy mobility combined with powerful consumer devices significantly increases the **risk of unplanned exposure of company information.***

**Gartner.**

Four Architectural Approaches to Limit Business Risk on Consumer Smartphones and Tablets

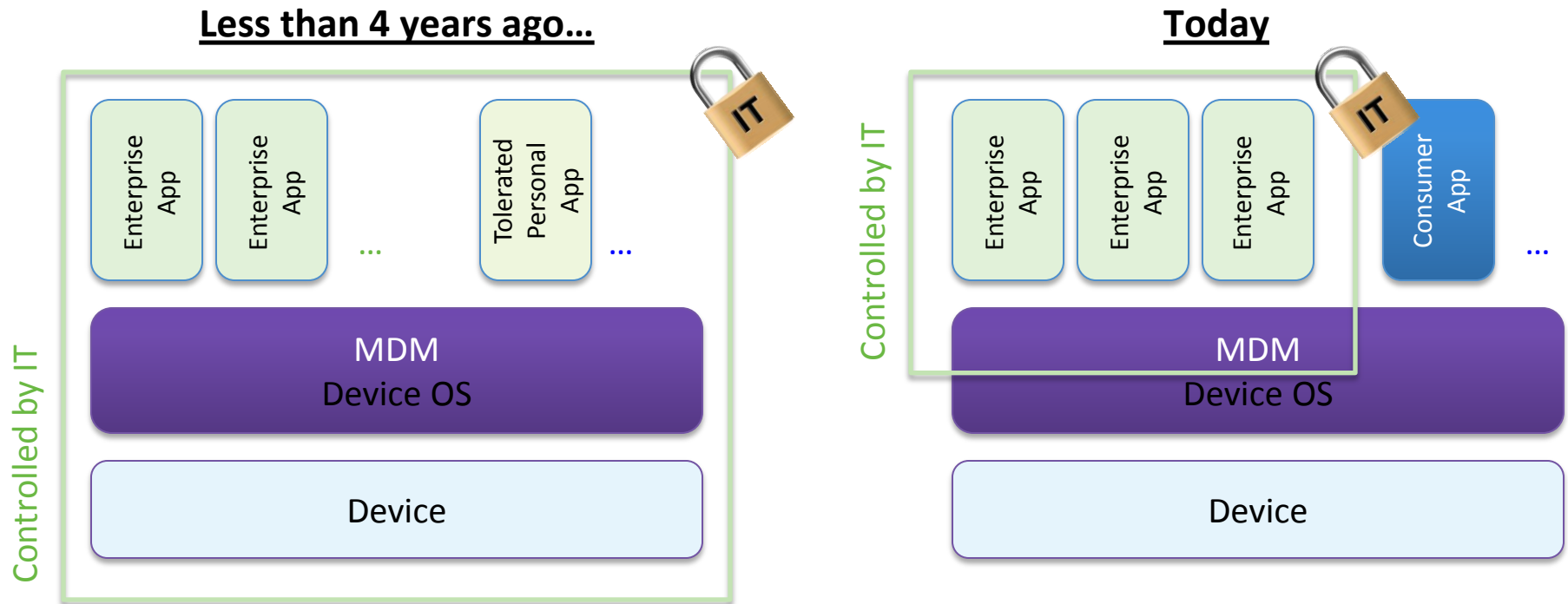
– Dec 2010, John Girard, Ken Dulaney

- Government and Enterprises IT organizations are grappling with
  - How do I secure non-Blackberry devices?
  - How do I minimize data loss on consumer mobile devices?
  - How do I support personally-owned and corporate issued devices cost-effectively?
  - How do I manage personally-owned devices while respecting employee privacy?



# Why is Risk Increasing?

- Securing Mobile Devices is re-defined

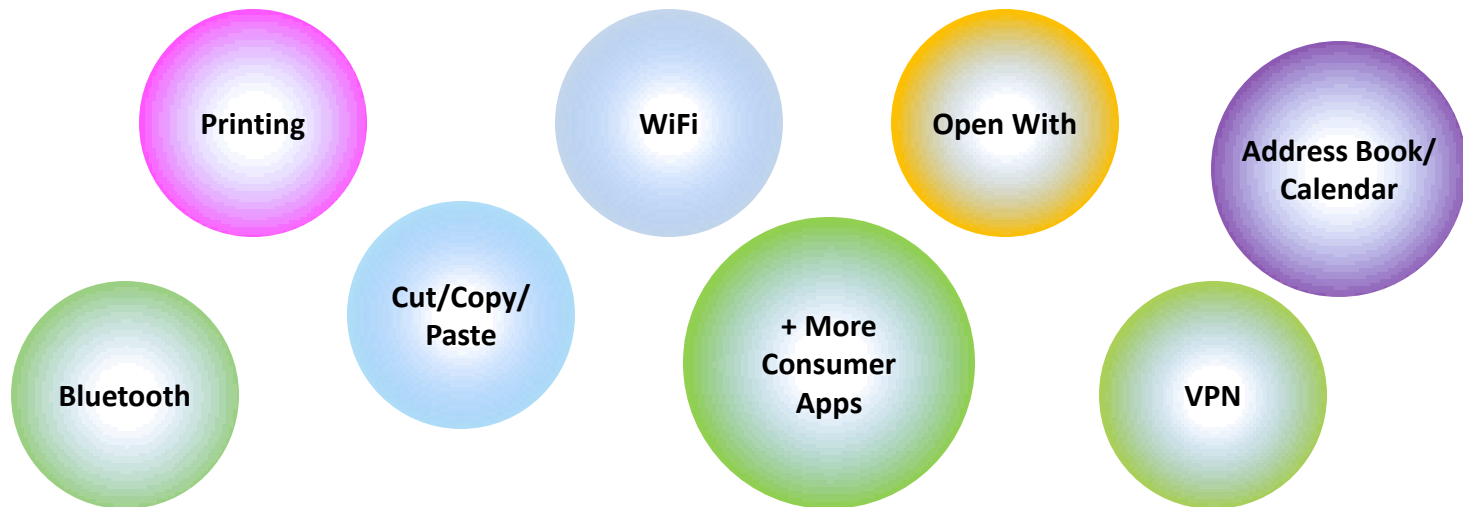


*On-device data encryption and secure back-end connectivity remain essential... but are not enough anymore to prevent data loss...*



# Myriad Opportunities for Data Loss

*Modern mobile OSes offer a whole host of ways for data to leave your control*



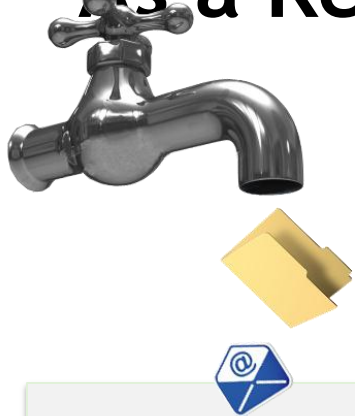
*Once activated, services offered at the OS level are available to both Enterprise and Personal Apps!*

*The OS vendors go out of their way to make it easy for Consumer and “Prosumer” apps to consume data exposed by native and enterprise apps*





# As a Result...



*This fundamental change significantly increases the Risk of Data Loss. This risk is exacerbated by a loss of control over consumer app availability.*

## ■ VPN Scenario

- Opening VPN provides OS level access to corporate intranet
- Any app store/marketplace browser can be used, including ones that integrate a 'drop box'
- Company docs can thus be downloaded in a non-secure app

## ■ Attachment "Open with"

- Email client provides the ability to "open with" attachment using any app store/marketplace app designed and registered to manipulate documents
- Once in the non-secured app, documents can be potentially leaked anywhere



# MDM Solutions to the Rescue?

*By nature, pure MDM solutions are not enough to prevent data loss.*



No pure MDM Solution can prevent the risk of data loss for the two previous scenario – unless App Store / Marketplace are turned off.

Blacklisting doesn't work either – not supported by all platforms and, even if it was, no realistic way to maintain when thousands of new apps are developed every day.



# Security Starts at the Application Level

*Managing these devices will help, but companies should also consider the roles of other technologies and application practices that reduce data exposure and leakage.*

**Gartner.**

Four Architectural Approaches to Limit Business Risk on Consumer Smartphones and Tablets – Dec 2010, John Girard, Ken Dulaney

## Gartner's Implementation Advice

- “Give preference to self-securing applications from independent software vendors (ISVs) and internal development groups”
- “Do not assume that device management policies will protect business interests and access controls...”

Source: Four Possible Architectural Approaches to Limit Business Risk on Consumer Smartphones and Tablets, G00208145, Gartner, Dec 2010



# The New Security Risk: The Well Intentioned User

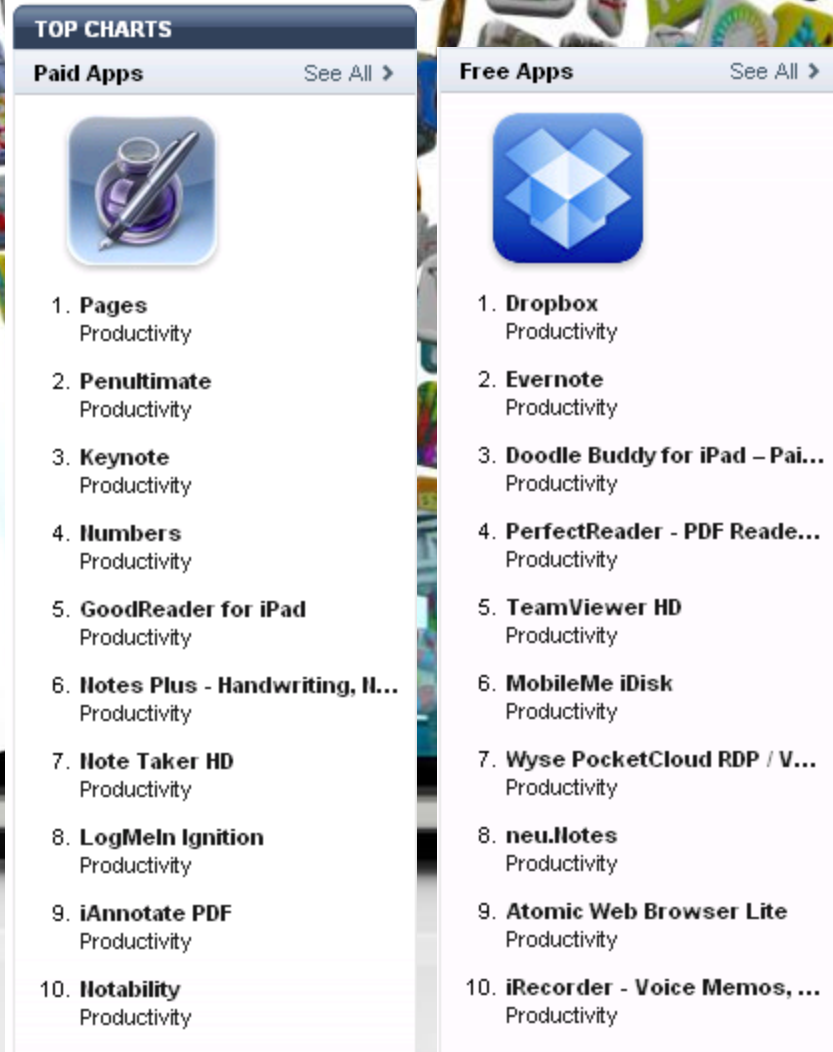


**What do they have in common?**

- Tech savvy
- Access to powerful computing tools
- Will do whatever it takes to get the job done
- Will try to find a way around IT security measures



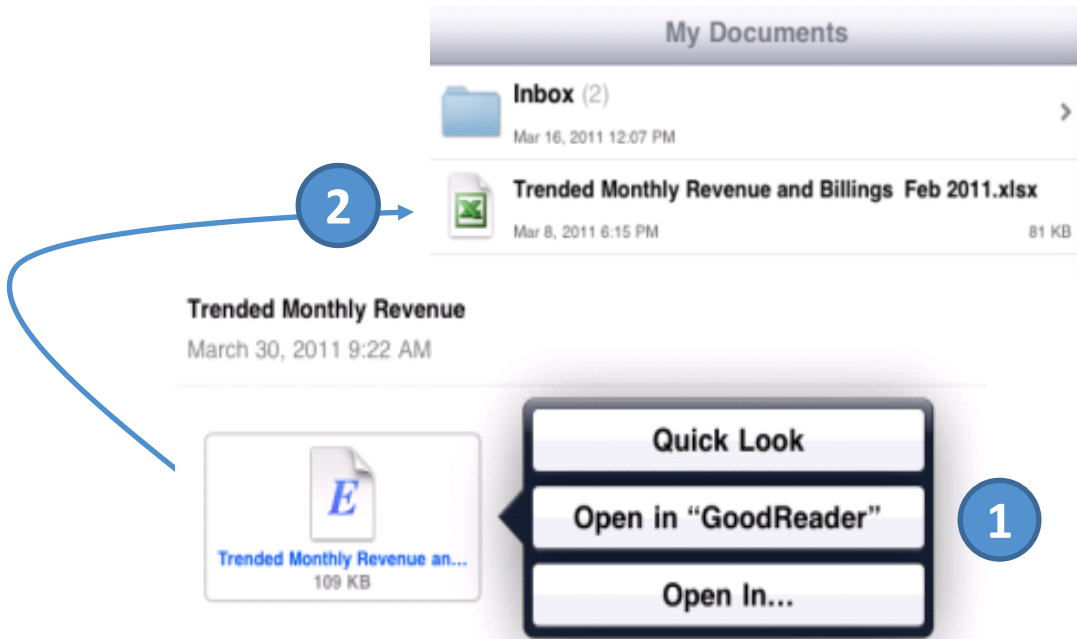
# Rise of Consumer Mobile Apps Increases Risk



- “There’s an app for that”
- Most popular business apps
  - Document Handling
  - Annotation/Notes/Memos
  - Remote Desktop/Apps
  - Remote Printing
  - Web Conferencing
- Increases productivity, but also increases risk



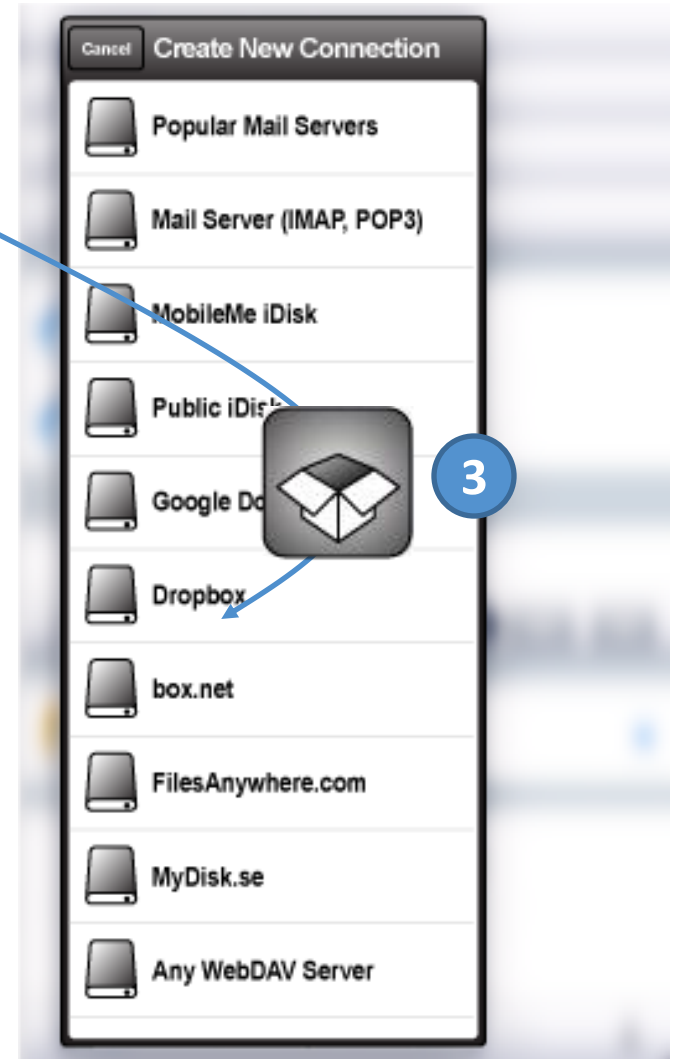
# Data Loss in 3 Easy Steps



This might happen ...



This is already happening!



# What's the Best Answer?

- Separate “personal” from “work” data
- Implement security, data loss prevention and management at the *application level* for all apps that need to see sensitive data
- Apply consistently across multiple mobile platforms – even where underlying platform doesn't support



# Separate Personal and Enterprise Data

## Personal Data

Devices remain personal, untouched by enterprise

- Justifies shared employee expense

Freely access your applications

- Music
- Pictures
- Videos



## Enterprise Data

Enterprise data lockdown

- Data encryption
- Password policies
- Remote wipe
- Secure data at rest

Access corporate apps

- Email, attachments & PIM
- Intranets
- Collaboration tools (e.g. Sharepoint)
- Web-enabled applications



Employees are more likely to accept an “enterprise-grade” mobile security policy when enterprise control is “contained” and does not impact personal experience, apps, or data



# The Power of the App Store™

- Simply locking your data into a single container is not enough
  - The power of modern mobile OSs comes from having a collection of small applications (Apps) that work together
  - Having a single, ridged sandbox around a single set of business functions means we fail to leverage this model
- To allow employees to make the most of their mobile devices for business we need to allow **authorized** apps to share information in a **secure** and **controlled** manner
  - We need to be able to enforce a single policy across a collection of apps, whether they come from ISVs or are developed in house



# Controlling the Flow of Data

- Once enterprise data reaches a container that container must enforce a policy regarding how that data can leave again
  - This policy needs to be set by the enterprise, not the app vendor
  - Policies need to be consistent across all of the deployed enterprise apps
- Fine grain control lets users make the most of their data while keeping it protected
  - It must be possible to control data transfers by content type, on a per-app basis



# HOWTO: Secure mobile enterprise data

- “Bring Your Own Device” is here, now, and it’s here to stay.
  - Get over it. **Embrace** it and the benefits it brings.
- Managing end users’ own devices is *not* the answer
  - **Apply** tools that manage the *data* rather than just the *device*
  - **Ensure** sure that any device management solution for BYOD complies with privacy laws
- Mobile platforms are deliberately designed to make information sharing easy
  - **Implement** appropriate controls over enterprise data that *enable* data sharing between containerized applications without allowing data to leak beyond your control





# Thank you

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