FedCASIC 2012
Going Mobile: Ensuring Security of New Data Collection Platforms

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U.S. DEPARTMENT OF LABOR

Going Mobile?

Overview of security risks, and potential protections related to mobile and/or social network data collection activities

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Why Mobile/Social?

It makes business/mission sense …

- Reduce Cost
- Increase Response Rates
- Improve Data Quality

Engage with collection staff and respondents using the types of devices and social networking sites with which they are accustomed and familiar

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What about security?

What are the risks to data collection, and/or related activities, via tablets, smartphones, Facebook, and other social tools?

Can we provide adequate security for these methods? Can we safely say "yes"?

In This Session …

Explore the challenges, and potential solutions, to ensuring that data collection activities using mobile devices, through social media sites, or using social site tools maintain necessary security and compliance protections

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What are Security Concerns?

- Confidentiality – protect data from unauthorized disclosure
- Integrity – the data and system are protected from unauthorized modification
- Availability – the information must be available and usable when it is needed

Brief History of Data Collection: A Natural Progression

- Face-to-Face

- "Hand" Written Person-Person

Brief History of Data Collection: A Natural Progression (Cont.)

- Telephone

- "Bulk" mailings

- FAX

Brief History of Data Collection: A Natural Progression (Cont.)

- TDE

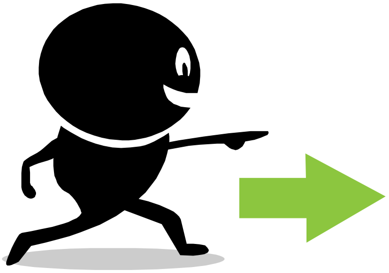
- Electronic Transfer

- Email

- Web Collection

What Can We Tell From History?

History of data collection … follows (trails) societal trends …



- A communication method becomes accessible and acceptable to the public
- Data collection follows
- Each had (and still has) their unique security challenges

“New” Methods of Communication for Data Collection Activities

- Platforms or Form Factor

- Community

facebook

LinkedIn

- Tools

skype

Dropbox

yammer

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Again - Why Mobile/Social?

It makes business/mission sense …

- Reduce Cost
- Increase Response Rates
- Improve Data Quality

There’s an App for That Respondent Use

Smart Phone/Tablet Form Factor

Security Landscape

- Secure connection to collector point
- Credentialed or un-credentialed access
- App security … development guidance … reputational risk for “bad” app
- Issues with security of respondent handheld … is that my problem?
- $$$$ - Banks use it! Traders use it!

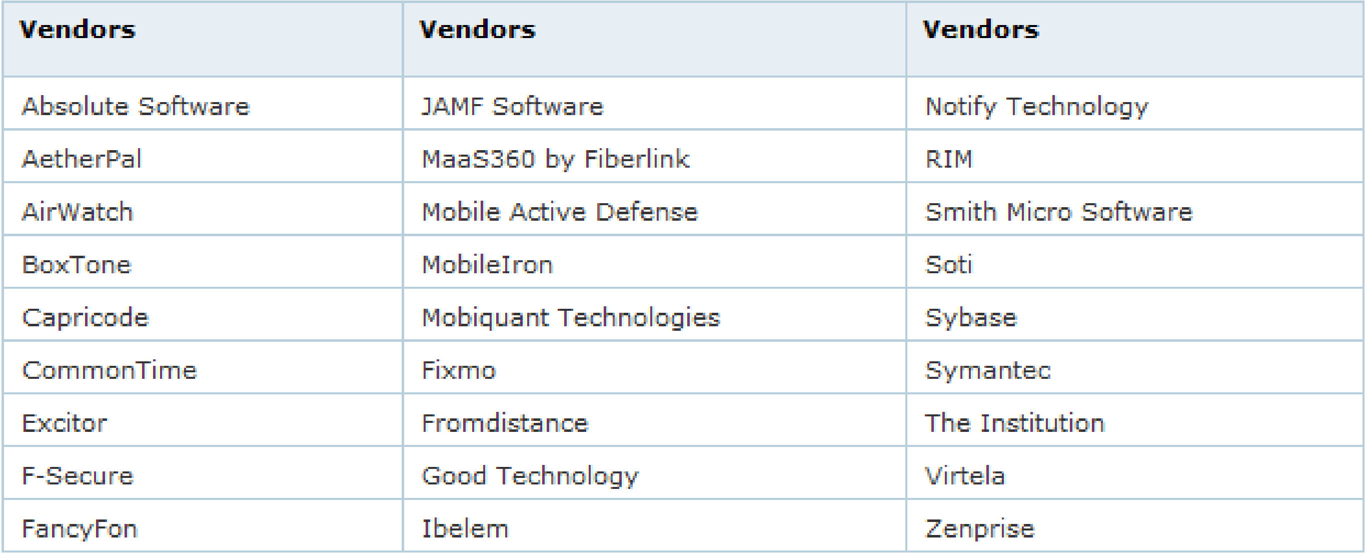
There’s an App for That
Data Collector Use

Smart Phone/Tablet Form Factor

Security Landscape

- Responsible for security of data collector handheld – Yes!
  - Strong user authentication to device
  - Stored data protection (encryption, remote wipe)
  - Malware prevention or protection
  - App control and management
  - Connectivity control – known “good” networks
  - Centrally-manage and control device security

Solution Providers for Mobile Device Security

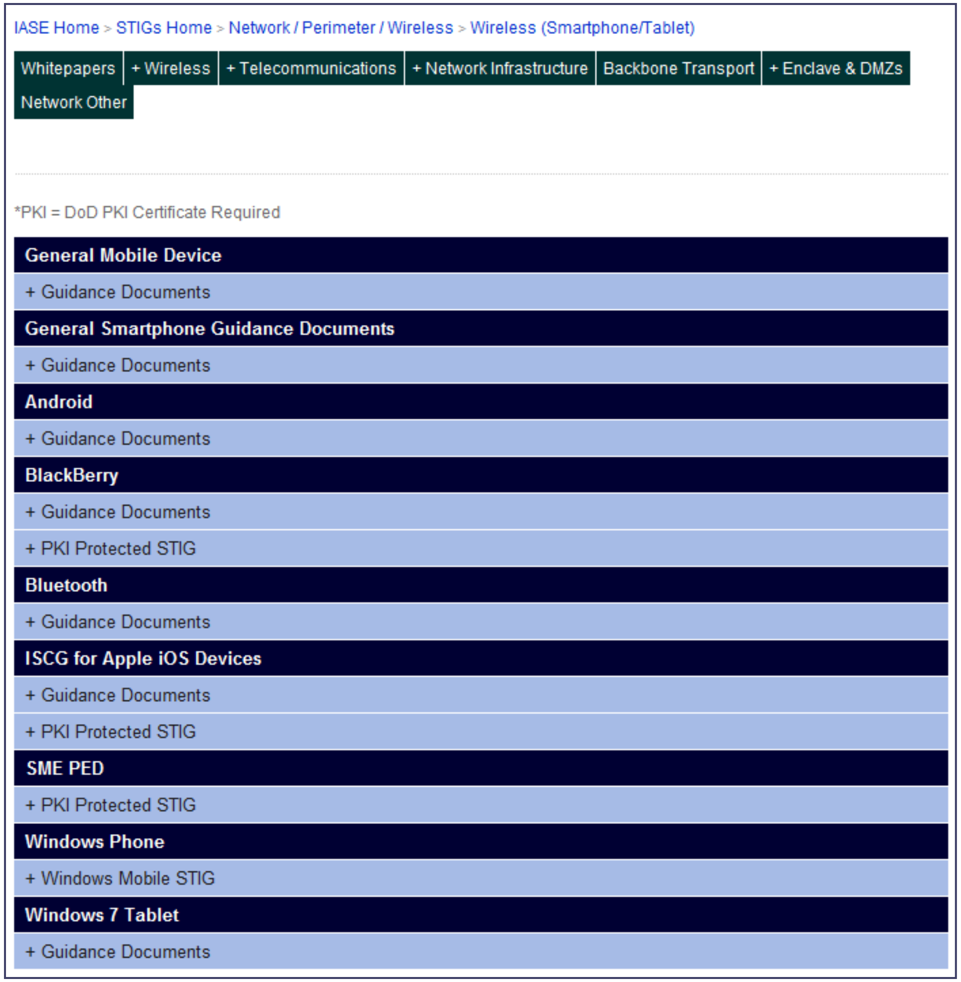


Vendors	Vendors	Vendors
Absolute Software	JAMF Software	Notify Technology
AetherPal	MaaS360 by Fiberlink	RIM
AirWatch	Mobile Active Defense	Smith Micro Software
BoxTone	MobileIron	Soti
Capricode	Mobiquant Technologies	Sybase
CommonTime	Fixmo	Symantec
Excitor	Fromdistance	The Institution
F-Secure	Good Technology	Virtela
FancyFon	Ibelem	Zenprise

Source: Gartner (February 2012)

DISA-Approved Smartphone STIGs

http://iase.disa.mil/stigs/net_perimeter/wireless/smartphone.html



*PKI = DoD PKI Certificate Required

General Mobile Device

+ Guidance Documents

General Smartphone Guidance Documents

+ Guidance Documents

Android

+ Guidance Documents

BlackBerry

+ Guidance Documents

+ PKI Protected STIG

Bluetooth

+ Guidance Documents

ISCG for Apple iOS Devices

+ Guidance Documents

+ PKI Protected STIG

SME PED

+ PKI Protected STIG

Windows Phone

+ Windows Mobile STIG

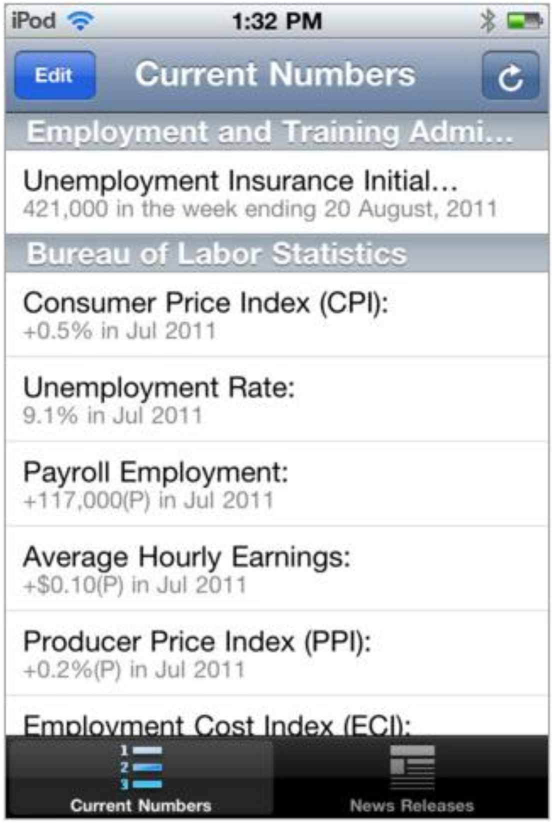
Windows 7 Tablet

+ Guidance Documents

DOL/BLS App (Shameless) Plug

DOL/BLS has an App!

For data dissemination, not data collection



Employment and Training Admi...

Unemployment Insurance Initial...
421,000 in the week ending 20 August, 2011

Bureau of Labor Statistics

Consumer Price Index (CPI):
+0.5% in Jul 2011

Unemployment Rate:
9.1% in Jul 2011

Payroll Employment:
+117,000(P) in Jul 2011

Average Hourly Earnings:
+$0.10(P) in Jul 2011

Producer Price Index (PPI):
+0.2%(P) in Jul 2011

Employment Cost Index (ECI):

Hey Buddy!

Community – Facebook, LinkedIn

Security Landscape

- Where is the data? Who “owns” the data? What rules apply?
- How strong is IAM at site?
- Is there enough comfort to collect data via these sites?
- What about for supporting activities – contact, reminder, logistics, etc.?

Establish policy & procedure for official organization presence in communities

Tools – Skype, DropBox, Yammer

Security Landscape

- First use initiated by respondent request
- Similar questions arise
  - Where is data, who owns data & meta data (usage reports)?
  - How secure is data at rest?
  - How secure is communication channel? FIPS-compliant?
  - How robust is IAM?

Look to establish contracts with vendors to include acceptable security provisions

Security Supports the Business

- Earliest survey data collection methods …

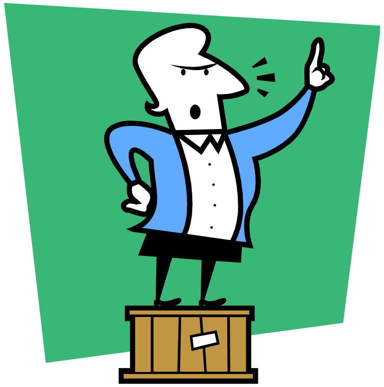
- To current edge …

facebook

Helps Business Make Risk-Aware Decisions

- “There is a risk” – Identify and understand risk
- Provides mitigation options (policies, procedure, training, technology, contract provisions)
- Quantifies the resulting risk for decision makers

Questions & Comments



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