

Next Direction Technologies

How Secure are My Mobile Cloud Apps?

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Agenda

- Different operating systems
- Different application development platforms
- Different distribution channels
- Different backend services



tl;dr

- Mobile apps aren't secure or consistent. But they may be worth the risk.



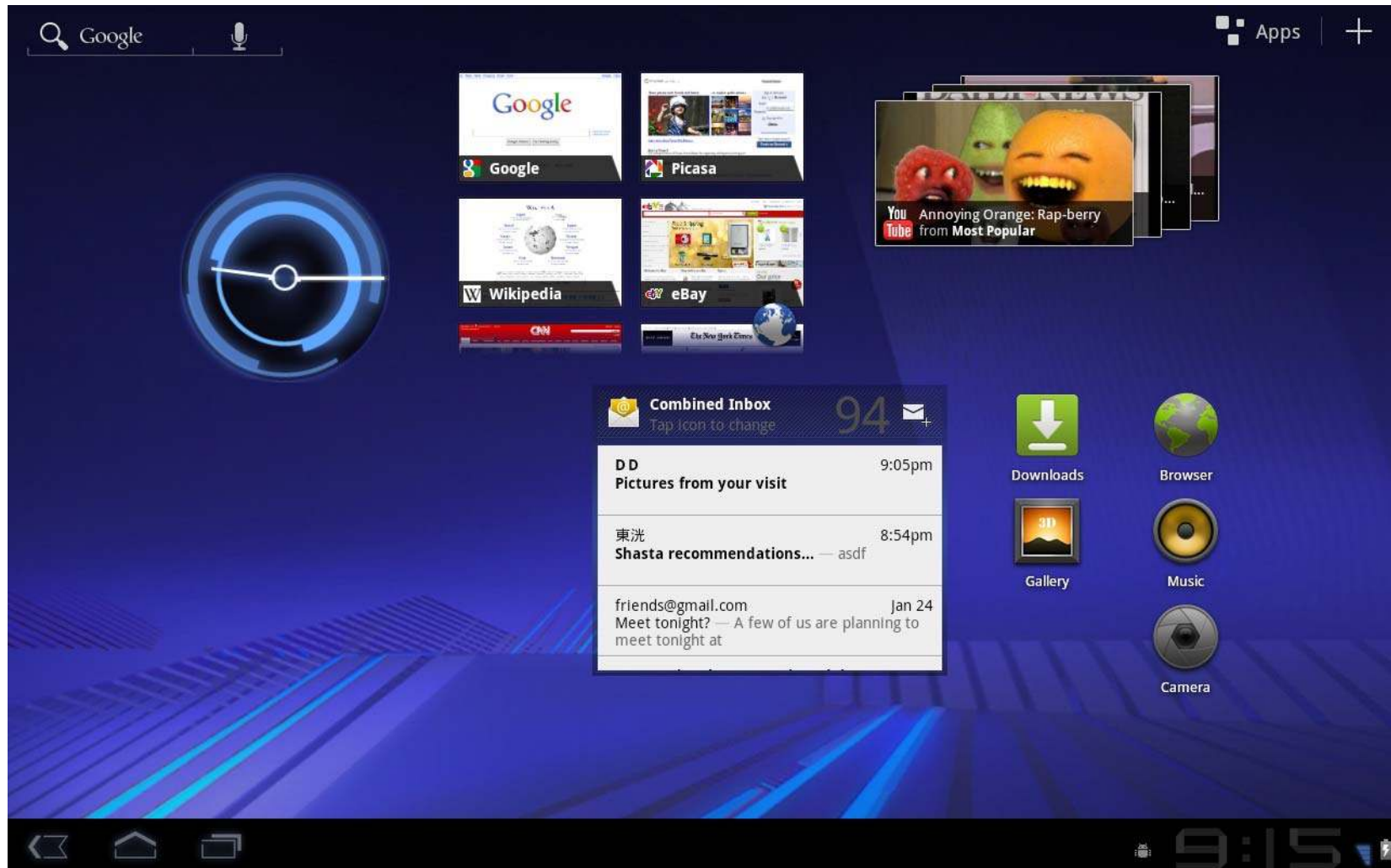
Different Operating Systems



iOS (Apple)



Android (Google)



Blackberry OS (Research In Motion)



Symbian (Accenture)



Windows Phone (Microsoft)



Different Application Development Platforms



Take Your Pick

- They're all different enough to be a concern
- No standards and little common ground
- The only common element is the Internet
 - HTML 5
 - Java
 - Flash (?)



Different Distribution Channels



App Store Ecosystem

- Each platform has one or more app stores
- Each app store and platform creates its own ecosystem



Root Causes of Diversity

- Developer revenue
- Platform control
- Platform perception
- Artificial competition generation



App Store Ecosystem Security

- Each app store has its own unique
 - Acceptable app definitions
 - Bad behavior definitions
 - Submission criteria
 - Financial terms
 - App validation process
 - App distribution process
 - App maintenance policy and requirements
 - Security requirements...



Different Backend Services



App Is Just A Presentation Layer

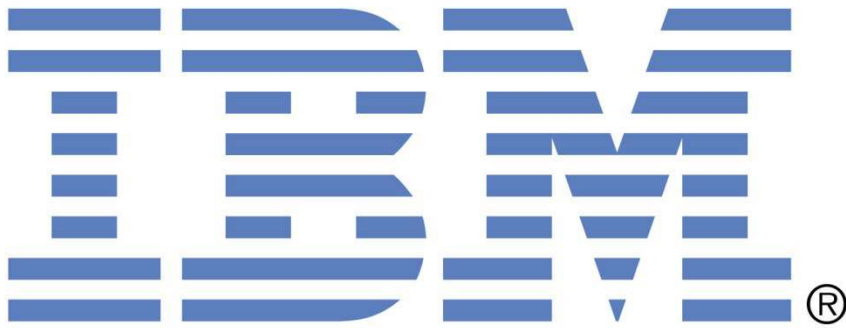
- You must still trust the backend service
- Backend service examples include
 - Applications
 - Services
 - Storage



Cloud Storage Providers... The NASCAR Slide!



ckspace®



Dropbox



Doing The Math



Different operating systems
+ Different code paths
+ Different developers
+ Different network pipes
+ Different app stores
+ Different risk postures

= Different risks



Every App Is Different

- Every app requires its own vulnerability assessment
- Example: Box
 - Box on Windows
 - Box on OSX
 - Box on Android
 - Box on iPad
 - Box.com
- Each app requires a unique assessment
- Some overlap exists on backend and vendor assessments



Recommendations

- Examine benefits of mobile apps, devices, operating systems at an atomic level
- Enable and distribute approved applications
- Disable unapproved and rejected applications
- Educate IT staff and users



Summary

- Generally, mobile apps are not secure
- Researching the app, the app provider, and the platform helps assure trustworthiness



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Thank You!

