RSAConference2015
San Francisco | April 20-24 | Moscone Center

CHANGE
Challenge today's security thinking

SESSION ID: MBS-F03

Mobile Security Shootout: Which Smartphones Are Up to the task?

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The landscape has settled

Is the market dictated by biases?

- Ask 10 techs, get 10 answers
- Android malware is scary
- Walled garden = safe & secure
- Fewer users means fewer attackers?

TRUTH

What are the questions?

- Safe from what?
- What are we protecting?
- Priorities
  - Data theft
  - Privacy
  - Productivity
  - Awareness and control

FLORIDA
0376
© 2012 RIMROCK FIREARMS
NO DAILY BAG LIMIT
ZOMBIE HUNTING PERMIT 2012/2013
RIFLES/HANDGUNS: .223 CALIBER OR LARGER
SHOTGUNS: B/BB OR LARGER. NO BIRDSHOT

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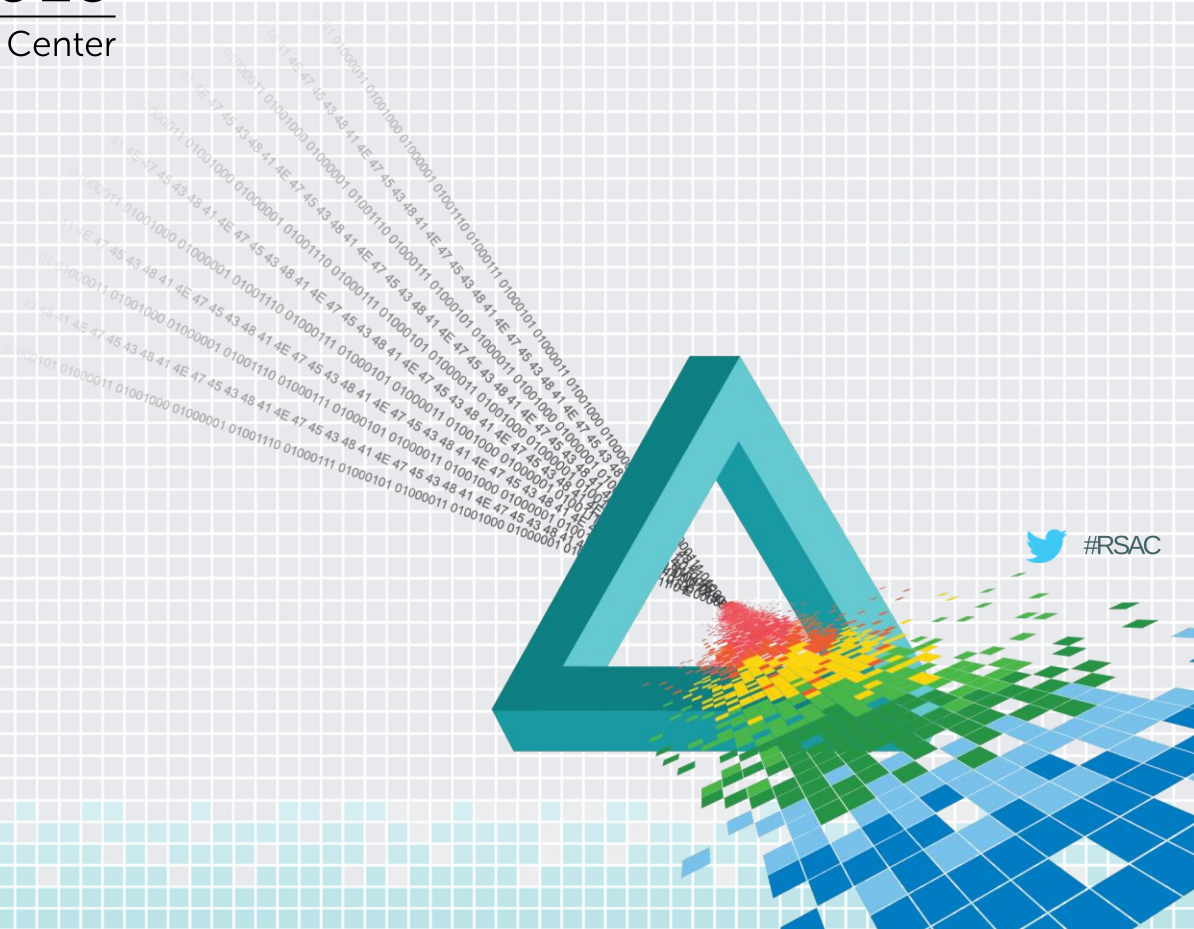
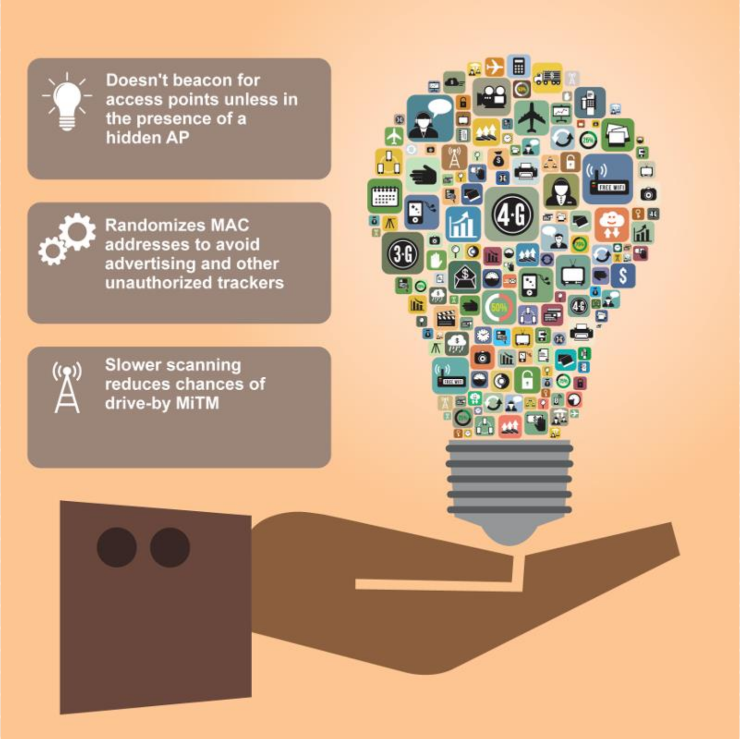


#RSAC

The platforms

Android

iOS



Doesn't beacon for access points unless in the presence of a hidden AP

Randomizes MAC addresses to avoid advertising and other unauthorized trackers

Slower scanning reduces chances of drive-by MiTM

Windows Phone

A big "Thanks!" to our Black Hat Review Board for their continued commitment and dedication:

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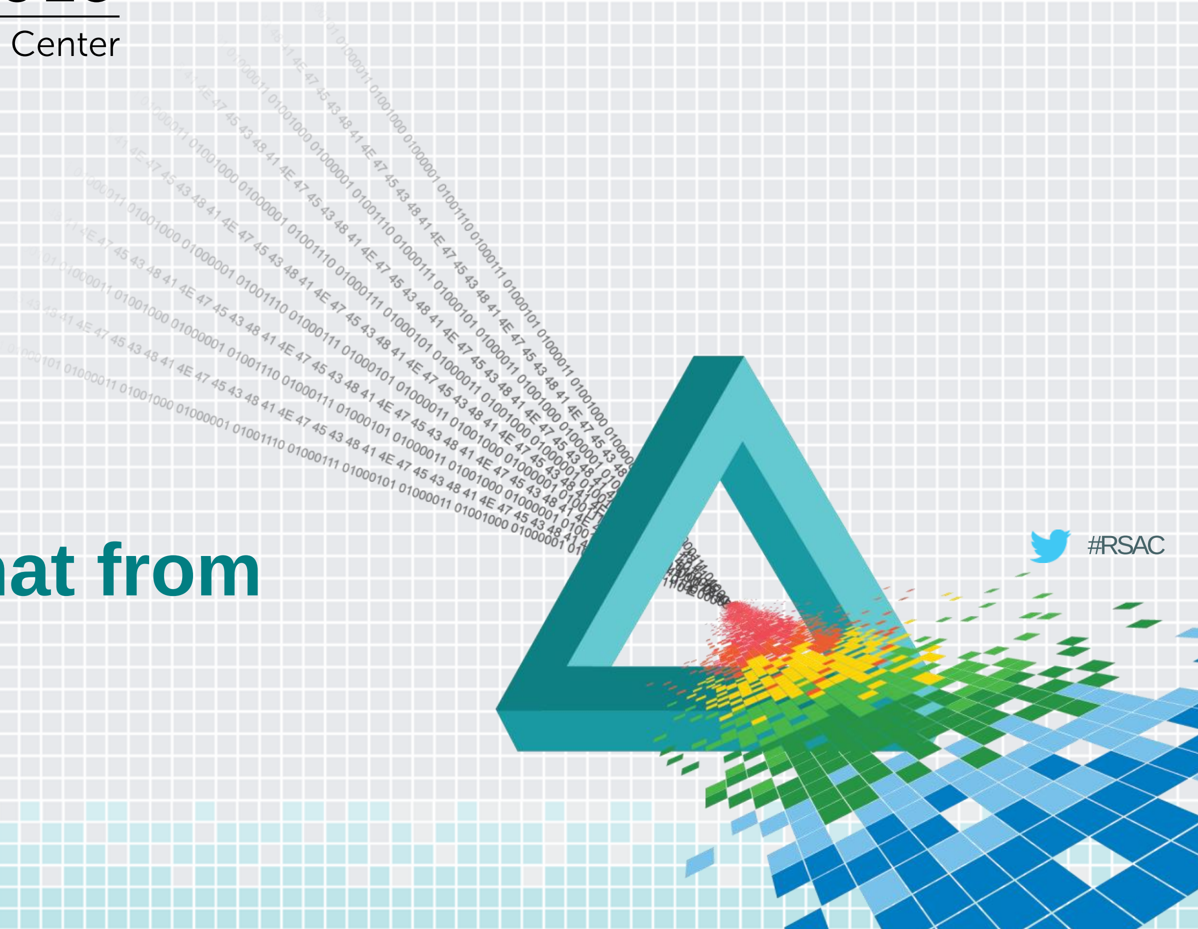
Who is getting what from our mobiles?



#RSAC

Apps

```
SELECT       Employee
FROM         Employees
WHERE        HireDate BETWEEN

SELECT EmployeeID, FirstName, LastN
WHERE City IN ('Seattle', 'Tacoma', 'Re

SELECT       EmployeeID, FirstName, Last
FROM         Employees
WHERE        HireDate NOT BETWEEN '1
```

- One tap login
- Optional PIN
- Location includes GPS, cell tower, provider, signal strength, type, roaming
- Uploads photos without explicit permission

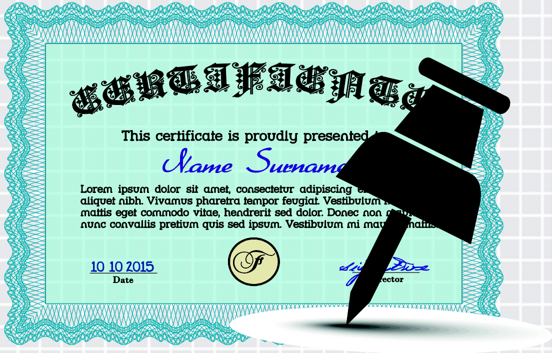
- Requires phone #
- Leaks email over HTTP
- Can hijack account over email
- Asks nicely for all permissions

- Leaks MAC address over HTTP
- Communicates with two ad networks
- Leaks internal IP address, phone #, carrier

Apps

- Leaks MAC address
- No cert validation (now fixed)
- Password sent
- Sends model, carrier, memory, storage, WiFi, battery info

- Sends off phone # and birthdate and password
- Sends location, battery, CPU, time zone, memory and storage
- No password reset verification
- Discloses if user or pw is wrong



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- Collects model, carrier, country

- All HTTPS
- No pinning
- No passwords transmitted
- No ads

What can happen – The flashlight app

- You probably don’t want this, which brings us to the tools that really matter. Control.

Taking action on what we've learned

ActiveSync to the rescue…?

- Not all platforms are created equal

Microsoft® Exchange ActiveSync®

Android 5.0, Lollipop

Windows Phone

Items to consider

- Is BYOD worth it?
- What information will you allow to be accessed from mobile devices?
- Certificates, passcodes, WiFi, VPN, Camera
- Most importantly: Application control
- The cloud.

Bottom line

STANDBY
MUTE
AUDIO
CH+
SUBTITLE
MENU
EXIT
VOL-
OK
VOL+
FAVOURITE
CH-
TV/RADIO
1
2
3
RETURN
4
5
6
NAVI
7
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9
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REV
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ZOOM
V.MODE
PLAY
PAUSE
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REPEAT
FILE
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