Facebook, Twitter & Privacy

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What do users really share

- •Information users share:
 - -Media (photos, videos, etc.)
 - -Geographical location
 - -Status
- •Information companies gather through electronic tracking:
 - –Liked pages
 - -Friends
- •What companies do with users' data:
 - -Track and store data
 - -Build a user profile



Privacy Policies

- •Not fit for purpose:
 - -Many times are unclear.
- •Delivery issues:
 - -Language.
 - -Length.
- •Result:
 - -Users usually do not read.



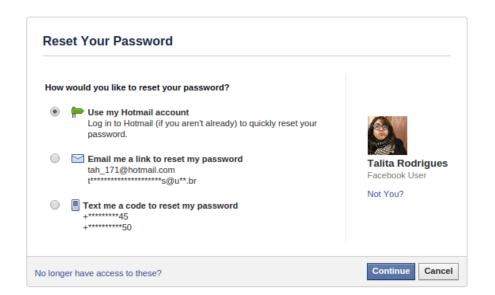
Examples

- •Life Insurance companies.
 - -Look at customers' behavior.
- Jobseekers.
 - –Look at candidates' profile.
- Facebook/Twitter connect button.
 - -Mining data.



Facebook privacy leak

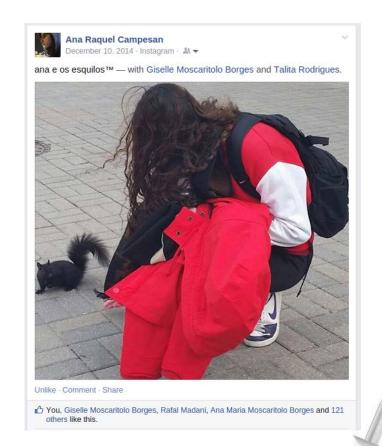
- Mapping email addresses to real names
- -There is no way to not allow it by Facebook settings.
- -The hacker can discover the real name and how the user looks like.





Facebook privacy leak

- Reconstruction of a friend's friend list:
- Even though the user's friend list is blocked, a potential friend attacker can reconstruct it by analyzing the user's posts.
- When a friend likes or comments a post, his or her ID appears to all user's friend.



Twitter privacy leak

- Social network relay attacks:
 - -Fake profiles.
- -Attackers get access to twitter contents of an user and start to copy it to a fake profile.



Twitter privacy leak

- Users' average age:
 - -Twitter users are several years older than Facebook users.
- -Twitter has a default privacy settings, but just these settings are not enough to keep a user's profile safe.
- -Because of the age of Twitter's users, they don't care too much about technical details and how the privacy settings are configured.



The RIOT Software

- Created by Raytheon
- Got data from Twitter, Facebook & Foursquare.
- •Built a snapshot of people.
 - -Friends, places, preferences, etc.
- Could predict behaviors and movements.
- •Shared with the US Government (2010).
- •Raytheon authorized to export the software to foreign nations/corporations.



The Perfect Citizen Software

- Created by NSA.
- Research and development Project.
- •"Big Brother" style tracking.
- •Documents suggest that Raytheon had participated on the development of Perfect Citizen.



Conclusion

1. How would you protect yourself?

 Always logout, use different browsers, be selective about what you accept, follow friends only policy, etc.

2. Which are the differences between RIOT and Public Citizen?

- RIOT can predict a user's behavior.
- Public Citizen is a spy software.

3. What are the advantages of mining data?

- Help to find things easier.
- Help to find potential customers and employees.



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