

While Joe described the Internet Cloud as a "bus station" full of data thieves, the major actors (Facebook, Google, Netflix, Apple, Amazon) invest heavily in security. But news reports tell us these sites can and do get hacked. Joe described these breaches as "inside jobs" and said the average Internet user can protect his or her family by observing a few simple safety rules:

- 1) Change passwords at least every six months and make them complex.
- 2) Turn off idle computers, or at least log out.
- 3) Be careful of "clickbait"; that's where viruses lurk.
- 4) Install an antivirus program, make sure it's running and observe its warnings.
- 5) Update when prompted: antivirus programs, computer "firmware" and Windows. These updates usually are offered to enhance security.
- 6) Observe antivirus warnings. If you're told a site is unsafe, there's a reason.
- 7) Shop safely. Give payment information only to trusted sites. Use a low-limit credit card rather than a debit card.
- 8) Be aware. Learn to spot phishing and spear-phishing. A hackers' goal is to get you to download malware, keyloggers or ransomware ... always disguised as something interesting or useful.
- 9) Post carefully and don't share. Anything you post is there forever -- whether or not you delete it. Google and Facebook offer ways to lock down privacy but they make it hard to find because you are the produce. (which is why everything is free.) And never, never give out your password. Legit sites will never ask.
10. Avoid using public wi-fi for sensitive transactions. If you must operate away from a safe network, use your iPhone's hotspot or subscribe to a Virtual Private Network.
11. Back up your computer's Documents folder, which is where most spreadsheets, photos and documents are stored by default.

Practicing these precautions is the price we pay for the power and convenience of the Internet.

Joe recommended running an antivirus program from the PC Magazine Top Ten, which includes Russian-founded Kaspersky. Joe recommended against but which PC Mag says they'll recommend until rumors of an "inappropriate relationship" with the Russian government is proven.