Adware

What it is, how not to get it, and what to do about it

Introduction

- Adware has long been a problem in the Windows world.

- Now it is becoming a problem in the Macintosh world also

- Not all adware is bad, there are some legitimate applications. See the next slide

- There are some gray area, and some really bad malware that uses adware techniques to say try and extort money from you

Legitimate Adware

- Yes there is some legitimate Adware out there. This is using the original definition of Adware being advertising supported software.

- In these types of programs, there will often be a free ad supported program and a premium ad free version

  - The ads will only be within the specific program

  - The vendor will be upfront about what ads will show up and what the program will do with your information

Adware Gray area

- This is the type of Adware that:

  - Displays Advertisements where non should exist (Note there are plenty of websites with Ads, some even with pop up ads)

  - Changes your homepage

  - Changes you preferred search engine

- The software itself may be legitimate, but may use tricks to get you to install it. You may not even be aware the software is installed till after the fact

Adware Gray area (cont'd)

- An example is the <u>ask.com</u> toolbar.

  - You Could go to <u>ask.com</u> and install the toolbar if you want it

  - Oracle's Java installer will install this program unless you opt out.

- Adware that injects ads will be indiscriminate, affecting all your browsers. If you don't want it, you might consider it malware.

- The issue with the Gray area is that anti-virus software and Apples Xprotect won't always detect them. (ie get sued for blocking/ removing legitimate software)

Adware Gray area (cont'd)

- Xprotect is apples anti-malware system introduced in OS X 10.6 snow leopard. It alerts the user to dangerous files that are downloaded. The user sees a dialog box about this.

    - It won't work if you click open anyway

    - Apple has put a number of adware definitions into updates

- In theory Gatekeeper (introduced in 10.7.5) which is another Apple malware prevention system; should stop adware.

    - The catch is the adware developer gets his application signed anyway

    - While Apple can revoke the signing, previously signed application will continue to run.

Adware: the Evil

- Some Adware will send personal information back to the company. Say your browsing history or your contacts.

- You won't be given a choice to not install the adware

- Some will serve up fake alerts that your computer has problems and asks you to call a number to "Fix" your computer

  - Your computer doesn't have a problem but they charge your credit card

- We can be talking about Criminal activity

Ethics

- More specifically business ethics

- Business has costs: development, support, server costs etc.

- Some companies with poor ethics will follow bad practices or allow questionable applications to be bundled with there application in exchange for payments for each download

Ethics (cont'd)

- An example is Mackeeper (in my opinion)

  - Marketed as a performance optimizer / antivirus

  - Unethically marketed (had fake websites on typos of other vendors urls)

  - Fake positive reviews

  - Creates system Instability

  - Performance hit

  - seems to use adware advertising

  - AVOID THIS PRODUCT

Avoiding Adware

- Practice good computer security (current updates, don't download programs just because someone tells you to; do you really need it?)

- Read the installation steps. Don't just click next. Some adware may be part of the installation

- If you see "program xxx has been downloaded from the internet, do you want to open it" and you did not download it, **DO NOT CLICK YES**!

- Avoid <u>download.com</u> or Softonic sites for shareware downloads. They have been bundling adware with their downloads.

- It goes without saying to avoid torrent or pirate sites

- Zero risk may not be possible

What to do about it

- Apple has a article on this:

- https://support.apple.com/en-us/HT203987

- The is a good program called Adawaremedic

  - Is donationware

- http://www.adwaremedic.com/index.php

- A companion website has a lot of good info:

- http://www.thesafemac.com

Safari-got on a bad adware page and can't get out

- Try quitting Safari (CMD-Q)

- If not force quit Safari (cmd-opt -esc)

- Restart Safari and hold down the shift key

  - This will prevent the last page from reloading

- Go to CLEAR HISTORY AND WEBSITE DATA.. under the Safari menu.