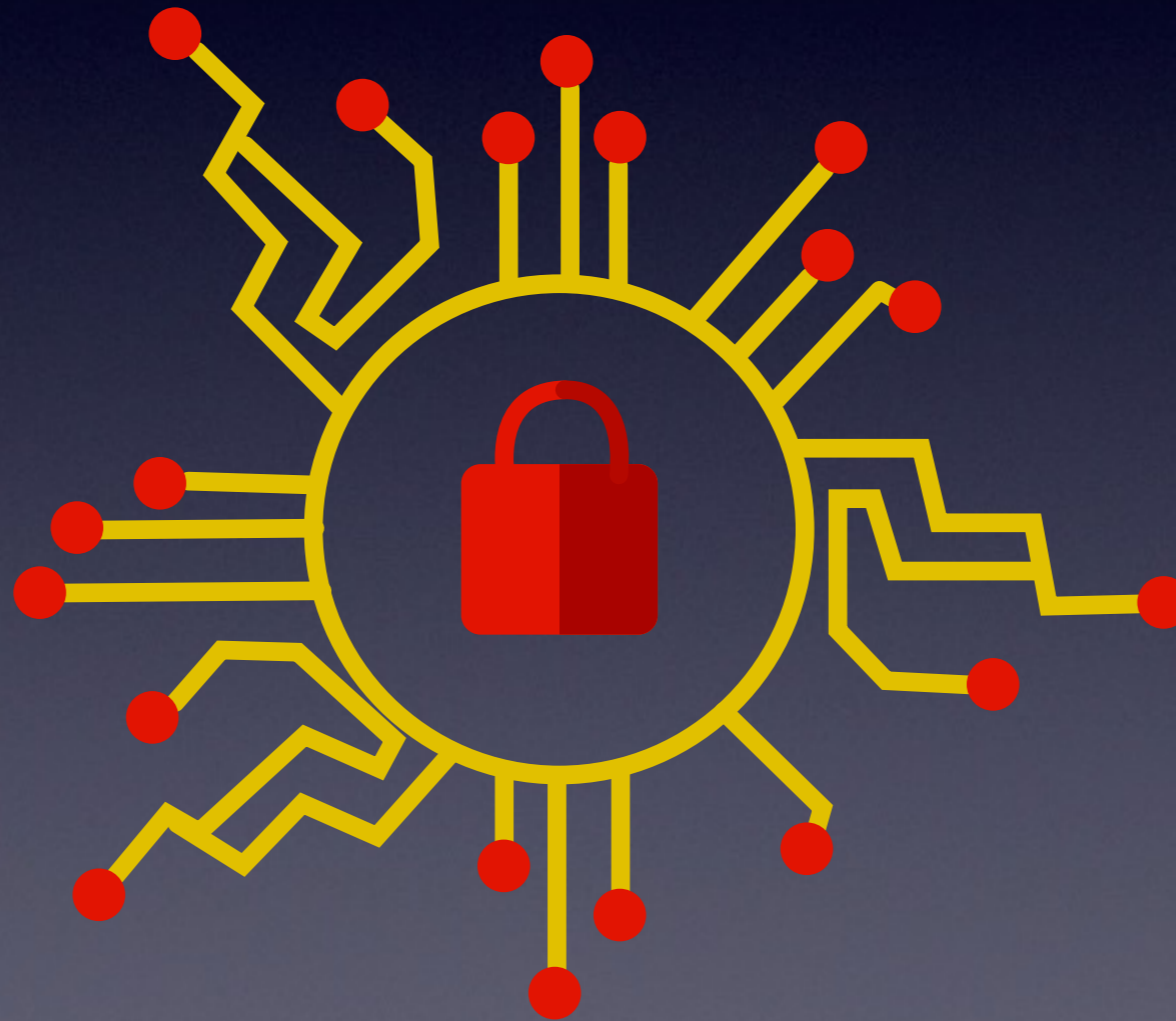


# Security on the Mac

June 12, 2019



# Update from 2010 & 2015 Presentations

## Security on the Mac

or

*How Paranoid are You?*



Bob van Lier

Wednesday, August 11, 2010

# BackUp, BackUp, BackUp ...

- ✓ First and foremost defense when something goes wrong
- ✓ Macs are reliable and well-built, but internal HDDs are commodity products
- ✓ HDDs will FAIL! It is only a matter of when?
- ✓ The most complete and practical solution is to use an external HDD
  - Multiple DVDs or CDs can be used for select folder, but no longer practical for today's HDDs
- ✓ Time Machine is included since macOS 10.5
- ✓ Secondary Backup system
  - Carbon Copy Cloner
  - SuperDuper!
  - Consider remote storage, or online service

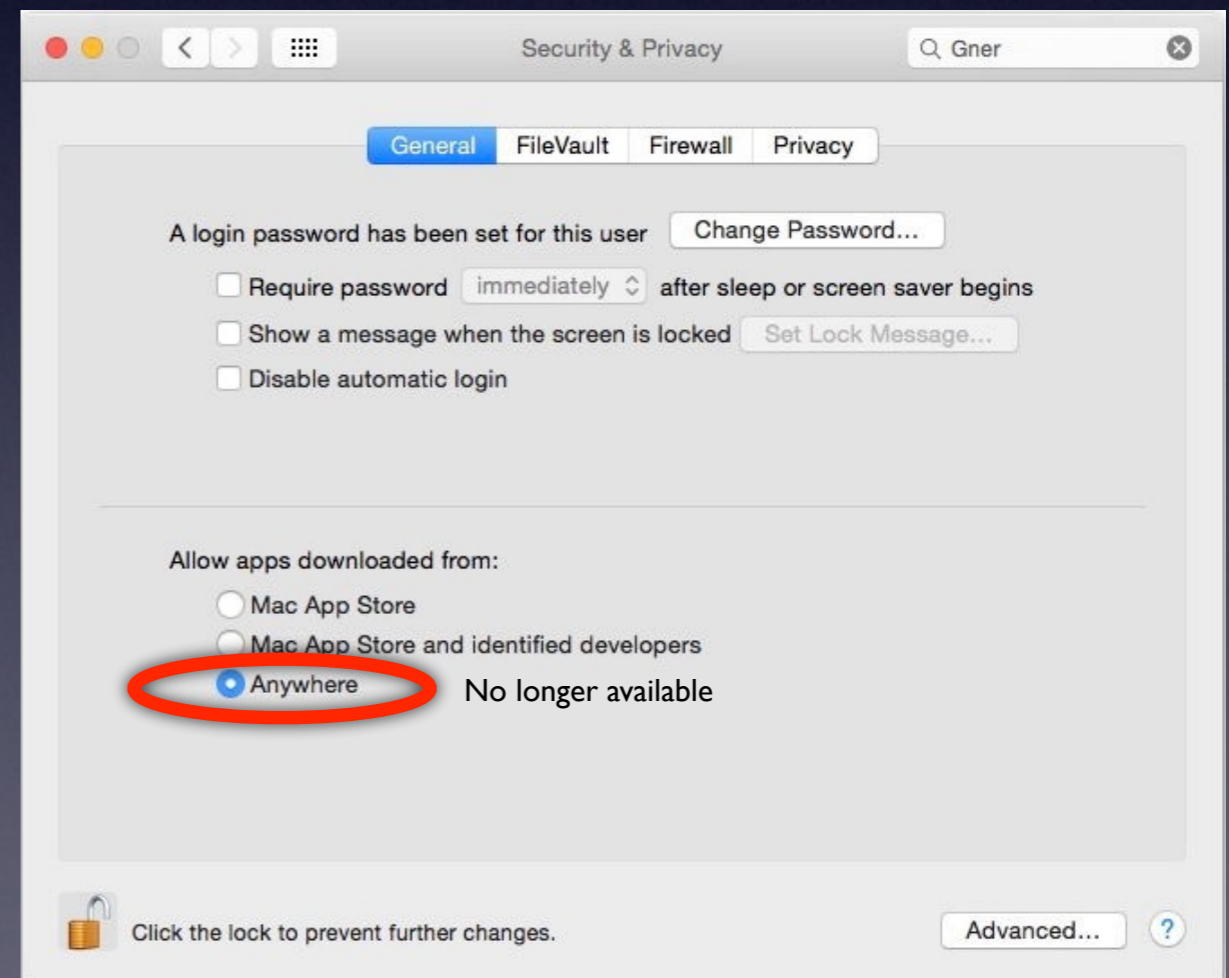


# Good Practices

- ✓ Do you need antivirus software?
- ✓ Keep software and OS up-to-date
- ✓ Download software only from trusted sites
- ✓ Don't upload contact DB to Facebook, LinkedIn, or other Social Network that uses ads for income
- ✓ User accounts
  - Administration
  - Standard
  - Managed with parental controls
  - Shared

# Built-in Features

- ✓ Screen Password
- ✓ Firmware Password
- ✓ T2 chip, secure boot ensures that only legitimate macOS loads
- ✓ System Integrity Protection
  - Restricts Root User
- ✓ Security and Privacy Preferences
  - General
  - FileVault
  - Firewall
  - Privacy by Application
- ✓ Find my Mac through iCloud
- ✓ Gatekeeper







# OSX Security Settings



- ✓ Use of “standard account” rather than admin account for routine usage
- ✓ Deselect automatic login
- ✓ Keep software up to date so latest security patches are applied
- ✓ Set Screensaver password
- ✓ Parental Controls in Managed account
- ✓ Use Private Browsing when exploring web sites you don't want others to know you visited
- ✓ FileVault 2
  - FileVault 2 provides full-disk encryption by using XTS-AES-128 encryption with a 256-bit key to help prevent unauthorized access to the information on your startup disk.
- ✓ Mohave is much more critical about giving access to other applications

# Password Manager

- ✓ Don't use same password on multiple accounts Video
- ✓ Don't use sticky notes or unprotected file
- ✓ iCloud Keychain 
- ✓ LastPass 
- ✓ 1Password 
- ✓ KeePassX 

# Online Password Security

## ✓ Improving your passwords

- random collection of letters, digits, and punctuation
- nonsensical collection of words

## ✓ Use different passwords everywhere

## ✓ Moving to two-factor authentication

## ✓ Dealing with security questions

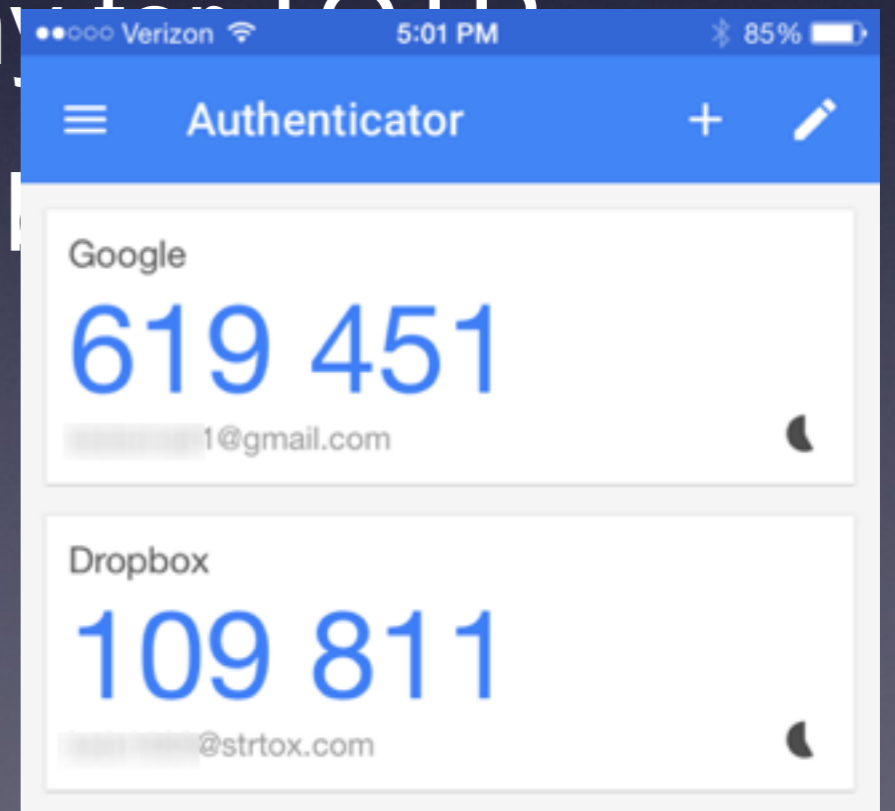
- Provide non-guessable answers, then record answers and store somewhere safe



# 2-Factor Authentication

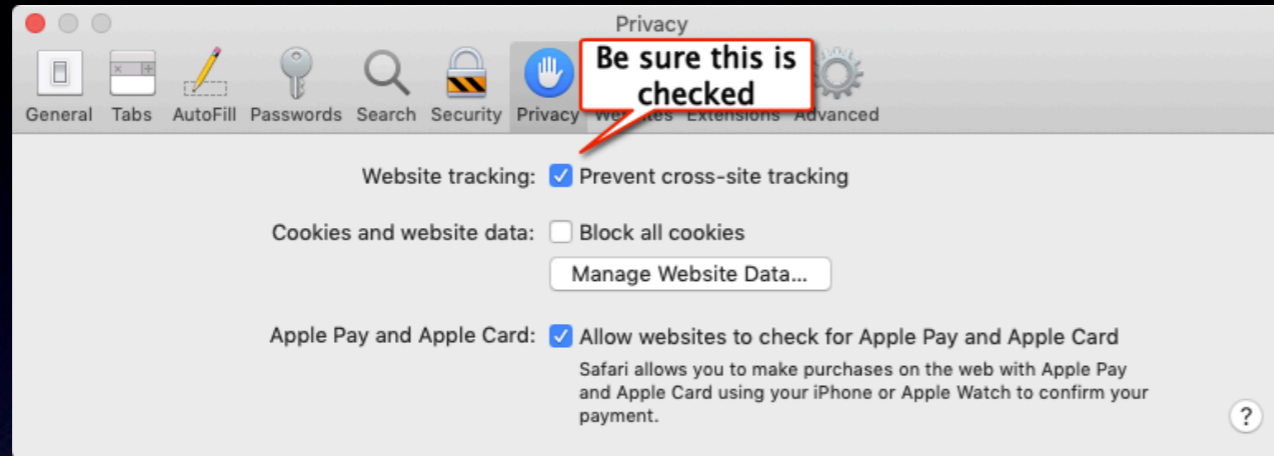


- ✓ Apple ID - sends temporary PIN to your registered online devices
- ✓ Many others send SMS or phone call
- ✓ Use Authenticator or Authy for TOTP
  - DropBox, Google, Facebook
  - [twofactorauth.org](http://twofactorauth.org)
- ✓ FIDO-certified token

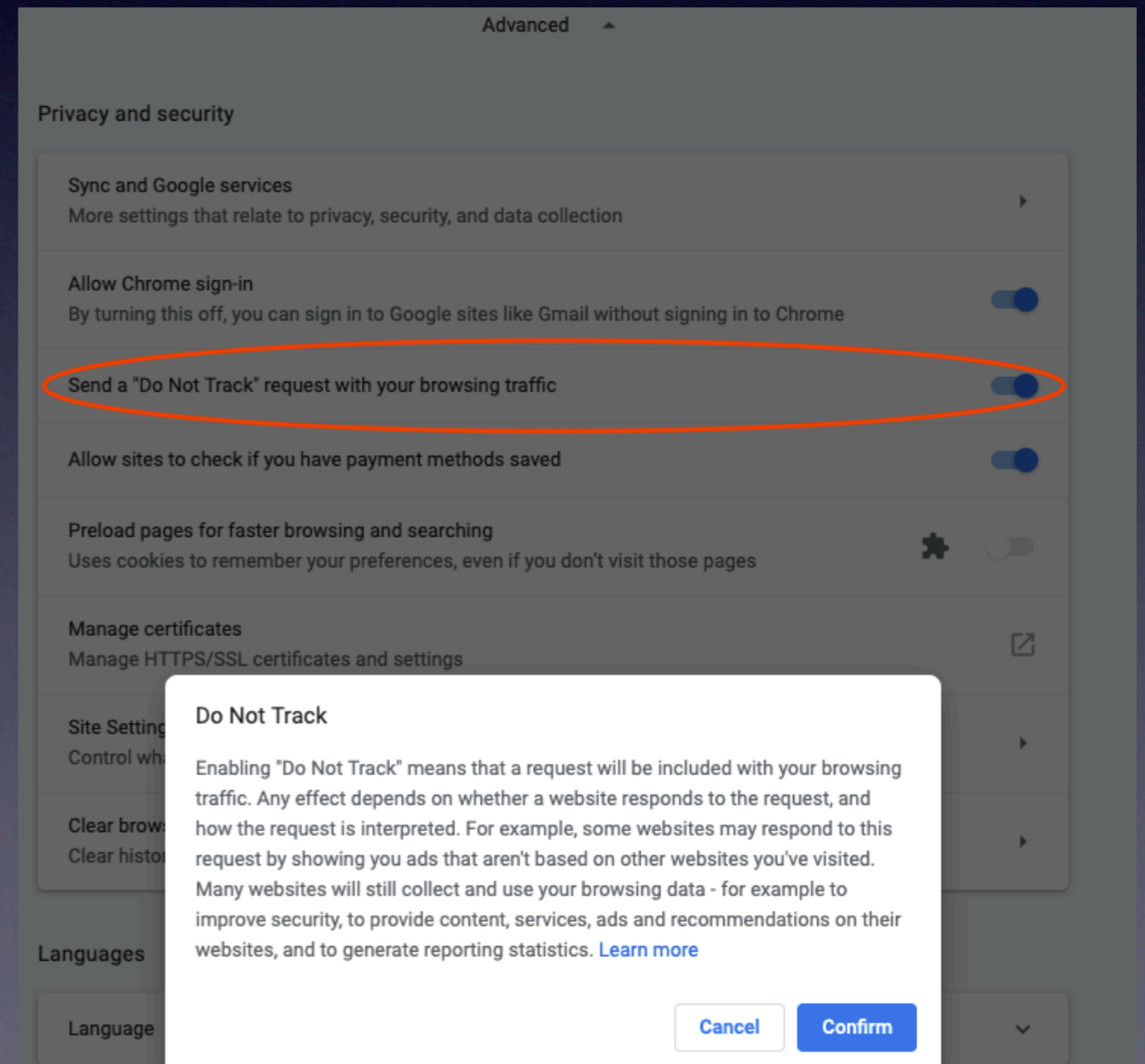


# Browser Settings

## Safari

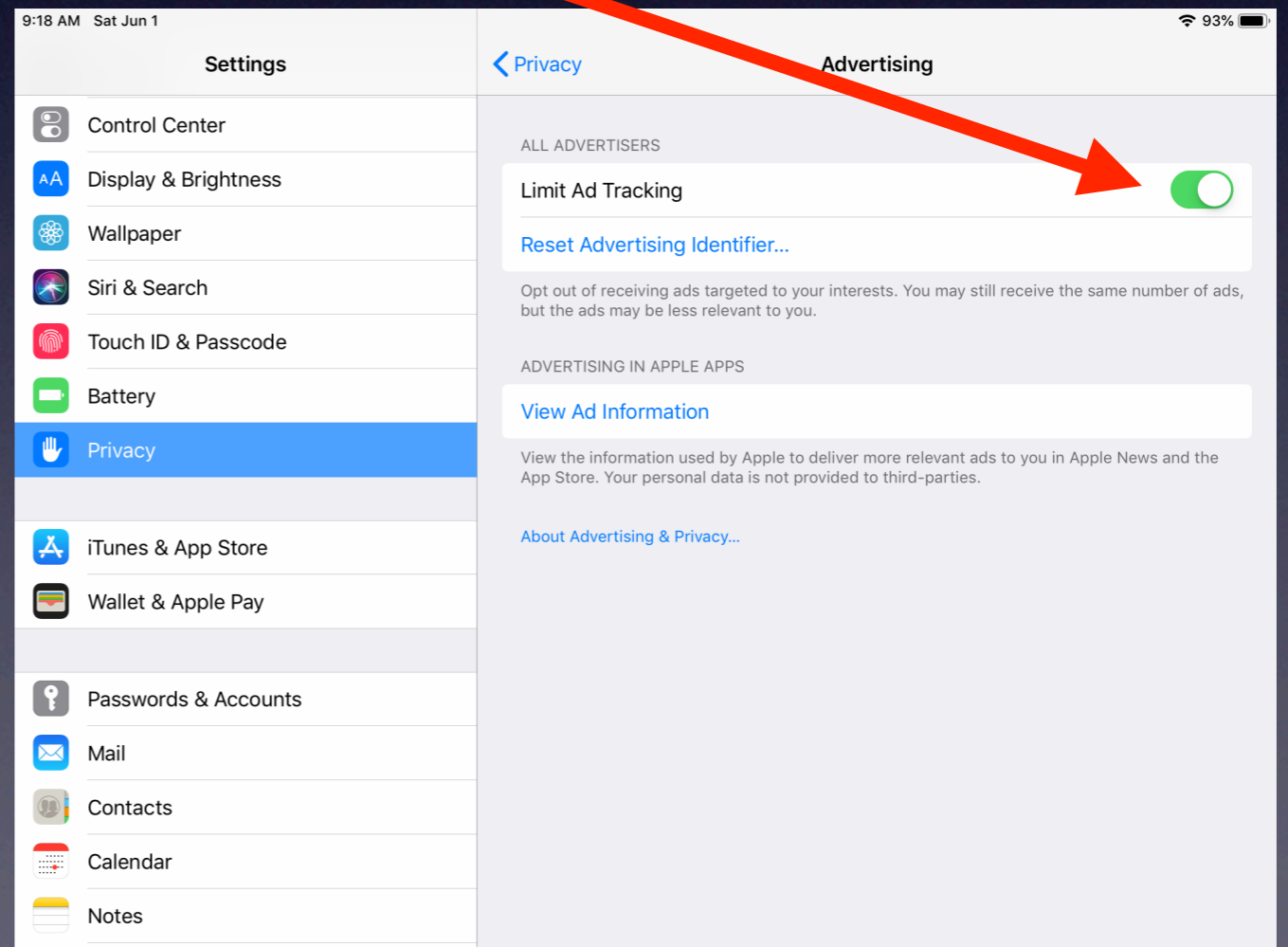


## Google Chrome



# iOS Privacy Settings

- ✓ Allow location settings only on Apps that really need it and only when in use
- ✓ Turn on Limit Ad Tracking



# Miscellaneous



- ✓ Create password-protected disk volumes using Disk Utility
- ✓ Using Little Snitch 
- ✓ Using VPN's to mask Internet traffic
- ✓ Use tracking blockers to limit personal information sharing
- ✓ Malwarebytes 

# Scams and Tricks

- ✓ Recognizing Phishing Scams
- ✓ Social Engineering Tricks
- ✓ Misleading Web Ads
- ✓ *If it's too good to be true, it probably is*

# Example

eBay Anniversary Sale

March 25, 2015 at 7:39 PM

To: [REDACTED]

Junk - [REDACTED]

EA

Reply-To: eBay Anniversary Sale

Exclusive Deal! Extra 9% off Gift Coupon for your purchase on LED TVs, Cameras, Shoes and More.

ebay.in

Hover and discover

EBAY GUARANTEE\*  
100% Satisfaction or Replacement / Refund

<http://kuch-bhi.in/show-mail?u=9JiNwYTNiojIhJCLiKDN2ADOzYzNiojIzJCLiQTN2IjI6IyYiwil5ATNiojIsJyeuETR>

SHOP. SCORE. WIN.

10 YEARS  
ANNIVERSARY MEGA SALE

BEST PRICES ONLINE

10 INTERNATIONAL TRIPS FOR 2 FOR HIGHEST SCORER EVERYDAY



100 APPLE WATCHES FOR TOP SCORERS EVERYDAY



FLY TO SINGAPORE FOR EVERYONE WHO SHOPS ABOVE Rs. 1000



# Credit and Debit Cards

- ✓ Major vector for scams and theft
- ✓ CC are protected legally to \$50 on stolen cards via Fair Credit Billing Act
  - Most banks have \$0 liability
  - Purchase protection and dispute resolution
- ✓ Debit card liability capped at \$50 if notification is given within 2 days
- ✓ The fewer cards you have the better
- ✓ Consider using Privacy for securing payment trust
- ✓ Destroy unsolicited “preapproved” CC offers



# Credit Bureaus

- ✓ In case of identity theft freeze credit
- ✓ Free service by law
- ✓ Experian
- ✓ Equifax
- ✓ TransUnion
- ✓ Credit Lock is free at TransUnion and Equifax but \$10/mo at Experian



# Further sources...

- ✓ The Practical Guide to Mac Security
  - by Gary Rosenzweig, Second Edition, January 2017”
  - Series video course at Udemy
- ✓ Getting even with scammers videos
  - by Jim Browning
- ✓ Security Now Podcast
- ✓ Schneier on Security
- ✓ Krebs on Security