

# Information Technology

University of Florida

IFAS



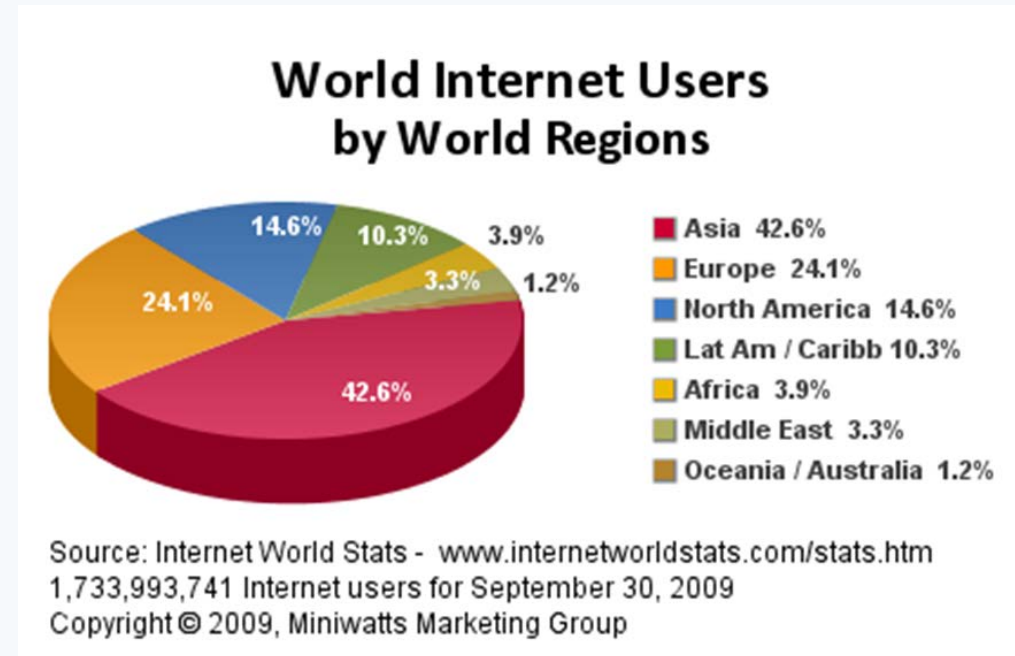
# About me

- Bill Black
- I got my first computer in 1986
- My first computer was a IBM pc at 4.77mhz 640K ram 10mb hard drive
- My degree is in Electrical Engineering with minor in Computer Science
- UF/IFAS IT South Central District

# World Wide Web Facts

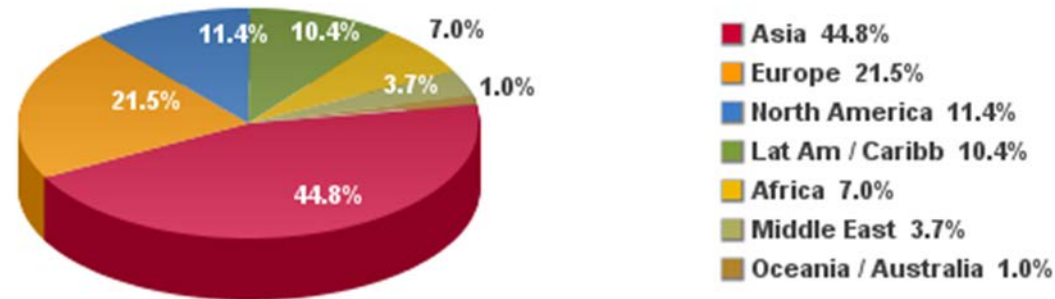
- Began in the late 1960's. Primarily for the Military
- Evolved into the " INTERNET" in the 1990-92
- In 1997 320 Million Pages
- In 2006 5 to 6 billion pages
- In 2008 it is estimated at 29.7 billion pages
- In 2011 over 1 Trillion and counting !!!
- First Language English
- Second Language Chinese
- Third Language Spanish

# Countries and Internet Usage



# Countries and Internet Usage

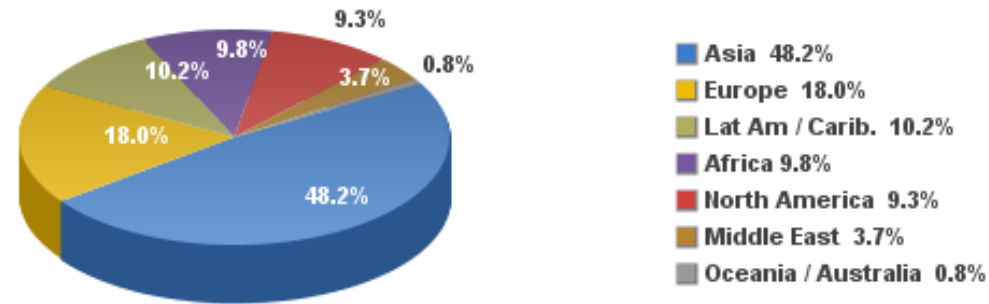
**Internet Users in the World  
Distribution by World Regions - 2012 Q2**



Source: Internet World Stats - [www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)  
Basis: 2,405,518,376 Internet users on June 30, 2012  
Copyright © 2012, Miniwatts Marketing Group

# Countries and Internet Usage

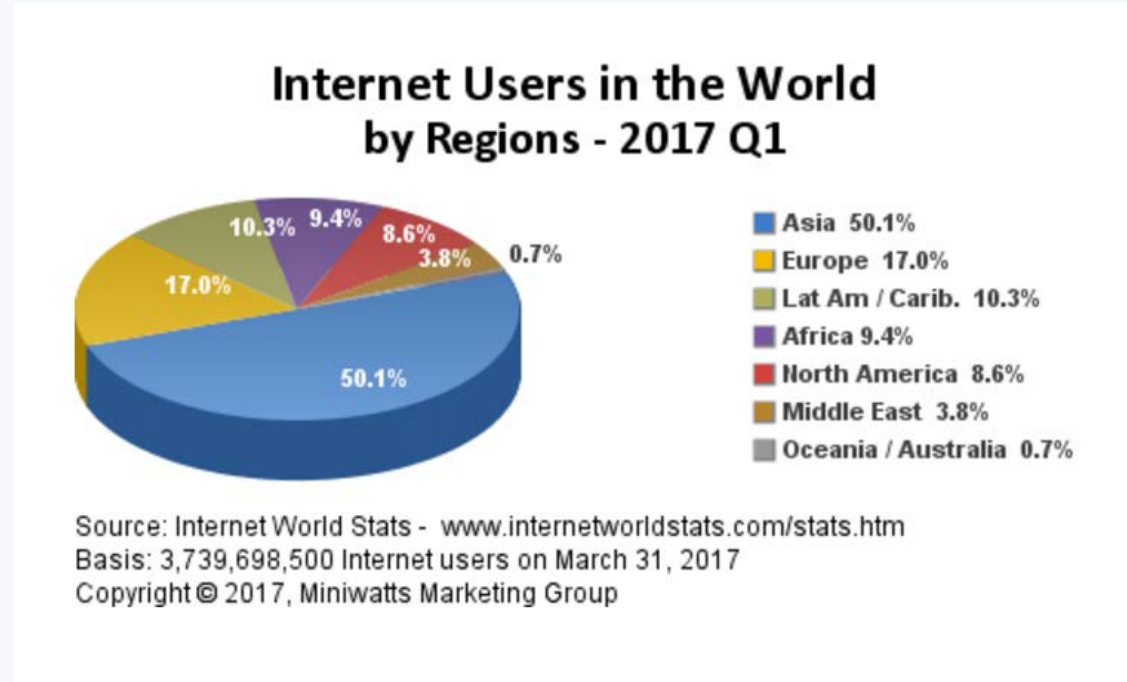
**Internet Users in the World by Regions  
November 2015**



Source: Internet World Stats - [www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)  
Basis: 3,366,261,156 Internet users on November 30, 2015  
Copyright © 2015, Miniwatts Marketing Group

<http://www.internetworldstats.com/stats.htm>

# Countries and Internet Usage



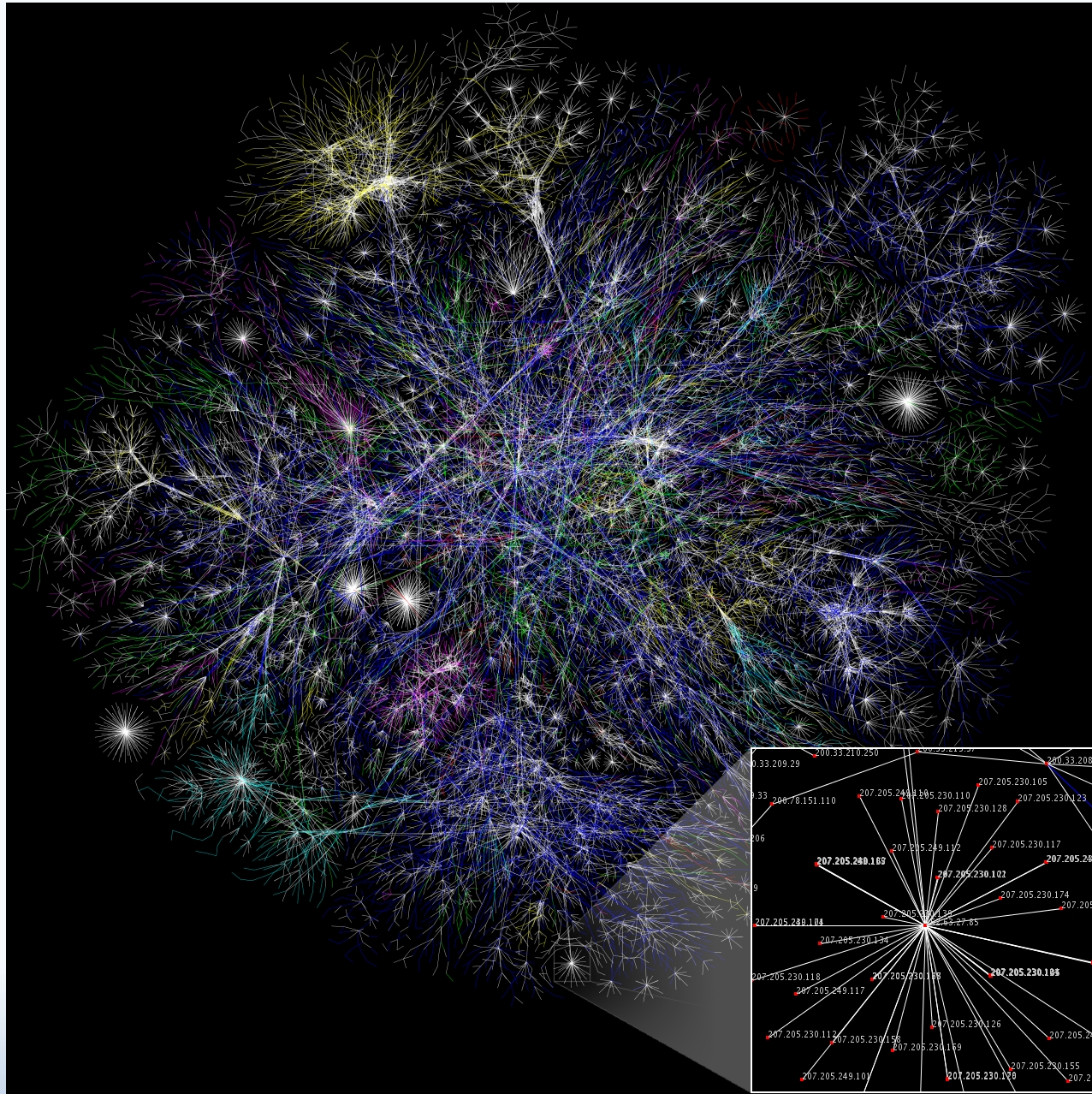
<http://www.internetworldstats.com/stats.htm>



# Common User Questions

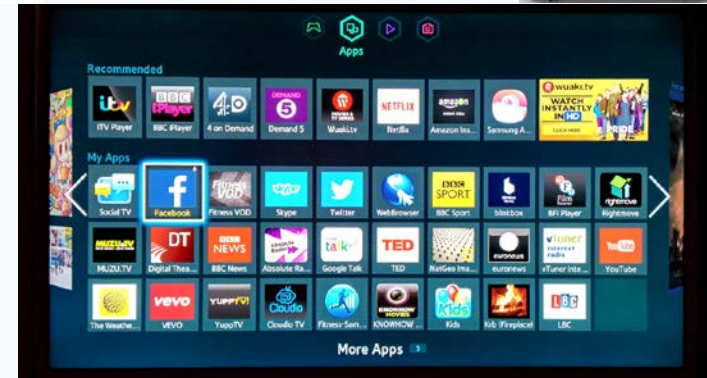
- Who Owns the Internet?
- No one actually owns the [Internet](#).
- Many organizations, corporations, governments, schools, private citizens and service providers own small pieces.





# Devices that contain Web Browsers

- Personal Computers
- Apple/Mac's
- Cell Phone
- Smart Phone
- Embedded Devices



# SEARCHING TIPS



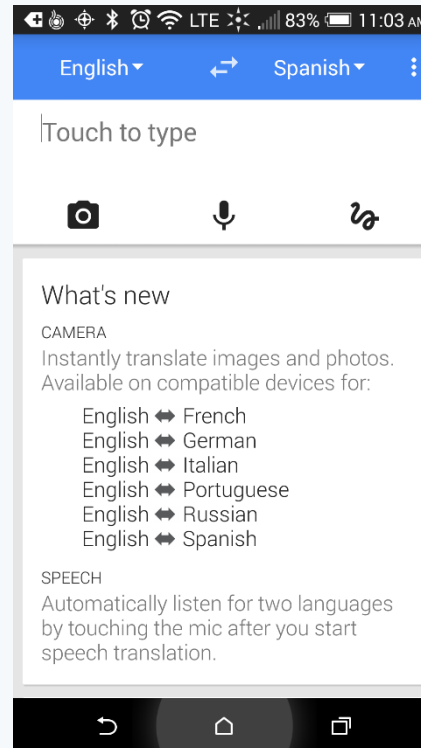
# Tips for searching in Google

- **Explicit Phrase or Phrase Searching:**  
Instead of just typing [Crape Myrtle](#) into the Google search box, you will likely be better off searching explicitly for the phrase. To do this, simply enclose the search phrase within double quotes.
- Example: "Crape Myrtle"
- **Site Specific Search:**  
Often, you want to search a specific website for content that matches a certain phrase. Simply use the "site:edu" modifier.
- Example: "Crape Myrtle" site:edu

# Tips for searching in Google

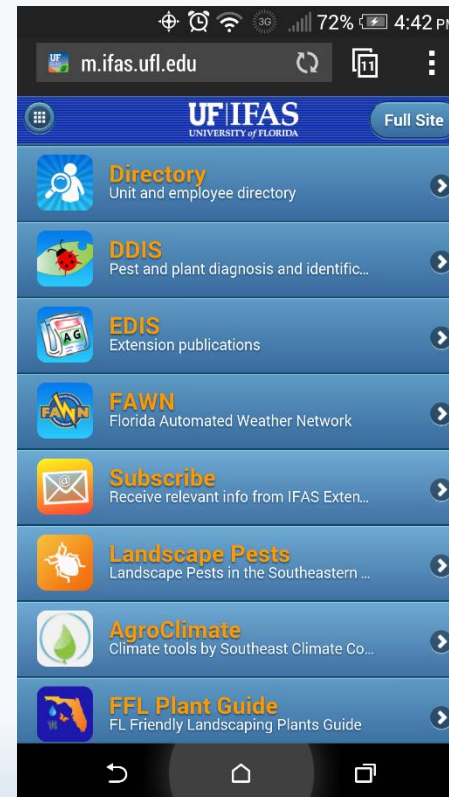
- **Specific Document Types:**  
If you're looking to find results that are of a specific type, you can use the modifier "filetype:". For example, you might want to find only PowerPoint presentations related to Crape Myrtle.
- Example: "Crape Myrtle" filetype:pptx
- Other common file types: docx, xlsx, txt, pdf, wmv, mp4, flv, mov
  
- **Location of Term:**
- You can search within certain location for a word.
- Example: inurl: , intitle: , intext:

# Google Translate App



# UF Mobile Apps

- m.ifas.ufl.edu It contains various important UF/IFAS links
- [Http://ifas.ufl.edu/mobileapps.shtml](http://ifas.ufl.edu/mobileapps.shtml)







# The Threats



## Malware Infections



# SPAM & PHISHING

- What is Phishing
- Phishing refers to the process of tricking recipients into sharing sensitive information with an unknown third party.
- All Phishing should be forwarded to [abuse@ufl.edu](mailto:abuse@ufl.edu)



# SPAM & PHISHING

- What is Spam?
- Spam is unsolicited bulk email, the electronic equivalent of junk mail, that comes to your inbox.
- All Spam should be forwarded to [report-spam@ufl.edu](mailto:report-spam@ufl.edu)



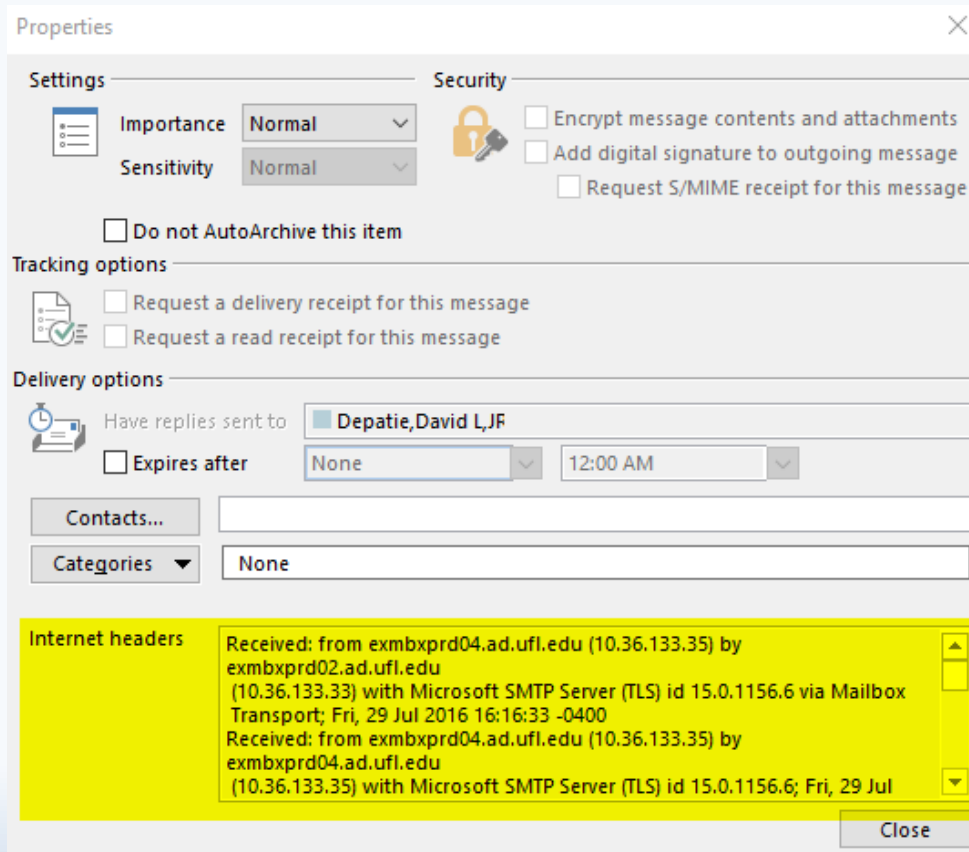
# SPAM & PHISHING

- All Ransomware should be forwarded to [abuse@ufl.edu](mailto:abuse@ufl.edu)
- Ransomware is malicious software that infects a computer and then restricts a user's access to their documents until a financial ransom is paid.
- Please include message header with your email report



# SPAM & PHISHING

- Internet Header information
- Provides information for email admins
- Helps with better filtering



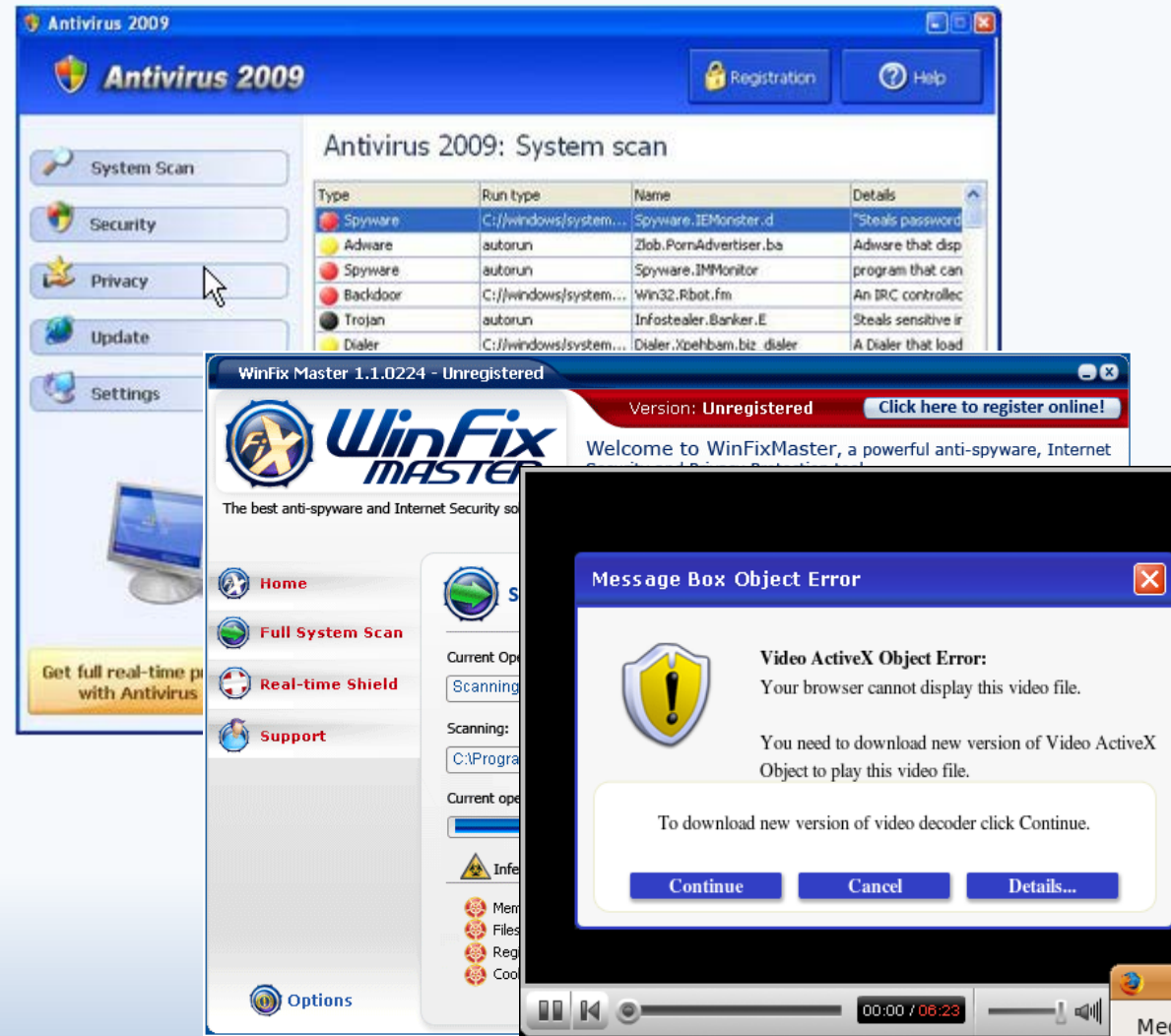
# SPAM & PHISHING

- All Spam should be forwarded to [report-spam@ufl.edu](mailto:report-spam@ufl.edu)
- All Phishing should be forwarded to [abuse@ufl.edu](mailto:abuse@ufl.edu)
- Report legitimate emails routed to spam [report-ham@ufl.edu](mailto:report-ham@ufl.edu)
- Please include message header with your email report



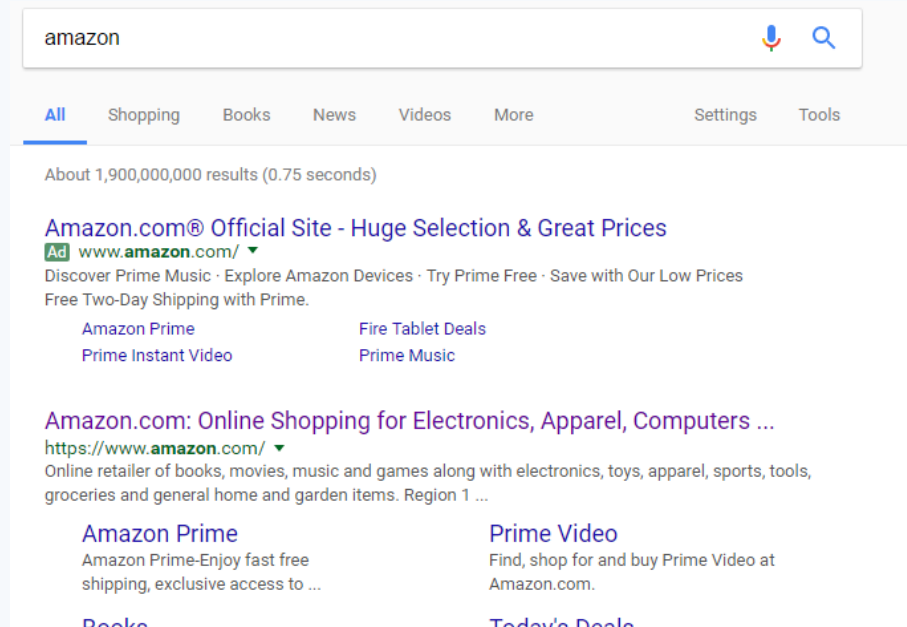
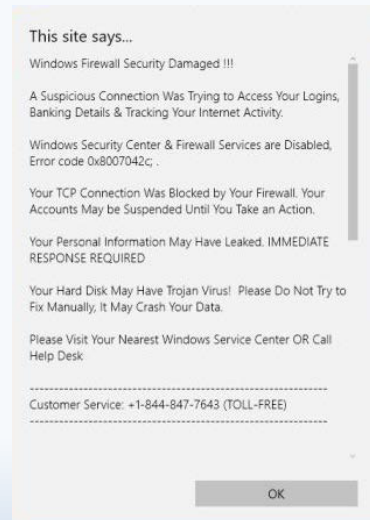
# Viruses and Bugs

- Never follow unsolicited links
- Don't open untrusted attachments
- Don't click links in email if in doubt
- Never click on unsolicited pop-ups



# Don't be scammed by bad links

- Beware of bad links
- Don't click on " AD "
- Don't call listed number
- Cntrl+Alt+Del to exit



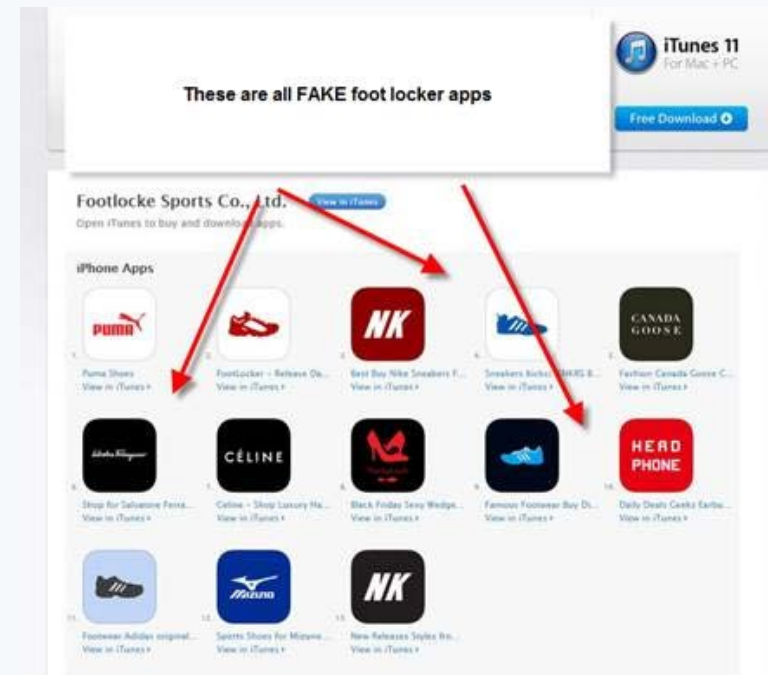
## Don't be scammed by bad devices

Be careful of Skimmers for your Credit card and especially Debit cards. Look for weird differences in the ATM or Gas station.



# Don't be scammed by bad Apps

Careful with downloading apps for Stores. If possible, go to the actual website of the merchant (ie Walmart.com) to download the app. There are fake apps on both Apple and Android market.



## Don't be scammed by bad phone call

New potential scam generated by a phone call

- They ask can you hear me
- You answer “ yes “....but please don't
- Don't answer calls you don't know
- Don't answer ?'s from unknowns
- IRS, DMV, and Courts communicate via mail



# It's Shopping time

## Action needed: Sign your agreement online!

Thank you for your recent purchase. We will process your order after you sign your agreement online.

[Sign Agreement](#)

Important things to do to avoid order delays or cancellation:

- Click the button above and use your PIN to sign in and access your agreement.
- Review the agreement and check the box shown to electronically sign.
- Complete these easy steps within 72 hours of order placement.

## Order summary

Name: Guillermo Black

Order number: [REDACTED]

To view complete details of your order and check its progress, enter your order number at [sprint.com/myorder](https://sprint.com/myorder).

### Items ordered:

Quantity	Item number	Item description
1	190198072276	IPHONE 7 GOLD 128GB KIT

Please save a copy of this email for your records.

[sprint.com](https://sprint.com) | [find a store](#)



# It's Shopping time

## My preferences

My address ▾

Notification settings

### Notification settings

Help

#### Sprint.com profile notifications

Let's stay in touch! We'll send you notes when you update your sprint.com profile and use this email address if you forget your username and password.

Email:\*

#### Email

We'll send you notes about any changes to your phone services or plan.

Send subscriber email to:

Be an insider. Sprint news & notifications

See more +

Save

Sprint will also send you exclusive news and offers to the email addresses you provided. You can opt out at any time.

# It's Shopping time


[Your Account](#) > [Change Account Settings](#) > [Advanced Security Settings](#)

## Advanced Security Settings

**Two-Step Verification** Disable

Enabled

**Preferred method** [Change](#)

 [Change](#)

Sent by text message

**Security Methods** [Change](#)

**Backup methods** [Add new app](#)

Authenticator App [Add new app](#)

1 app enrolled

[Add new phone](#)

**Devices that don't require codes**

You may choose not to require codes on some devices that you use frequently. Devices like your personal computer are good candidates. Public terminals or shared devices are not. To make sure your account is protected, some actions like changing your account security settings, may still require you to enter a code.

You have 1 device that doesn't require codes Require codes on all devices

[Get help with Two-Step Verification](#)



# It's Shopping time

[Your Account](#) › [Change Account Settings](#) › [Advanced Security Settings](#) › [Two-Step Verification](#)

Step 1 of 3

## Choose how you'll receive codes

**Text message (SMS)** Receive codes on your phone

Tell us the mobile phone number where you would like to receive Two-step Verification codes. This phone should be available whenever you sign in to your Amazon account and must be able to receive SMS messages.

Enter the phone number where you want to receive codes.

United States +1

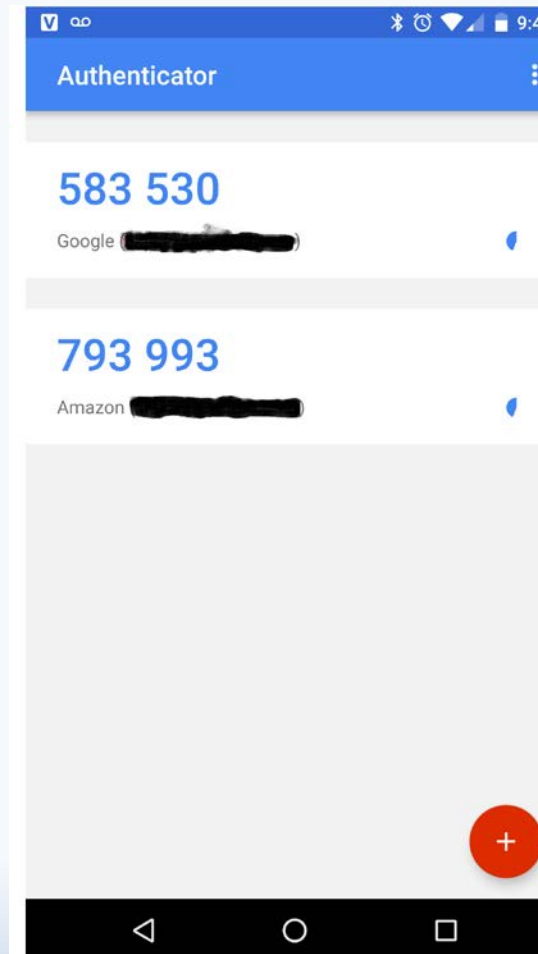
We have texted you a code. It may take a few minutes to arrive.

Enter the code that is sent to your device

Message and data rates may apply.

**Authenticator App** Generate codes even when you don't have cell service

# It's Shopping time

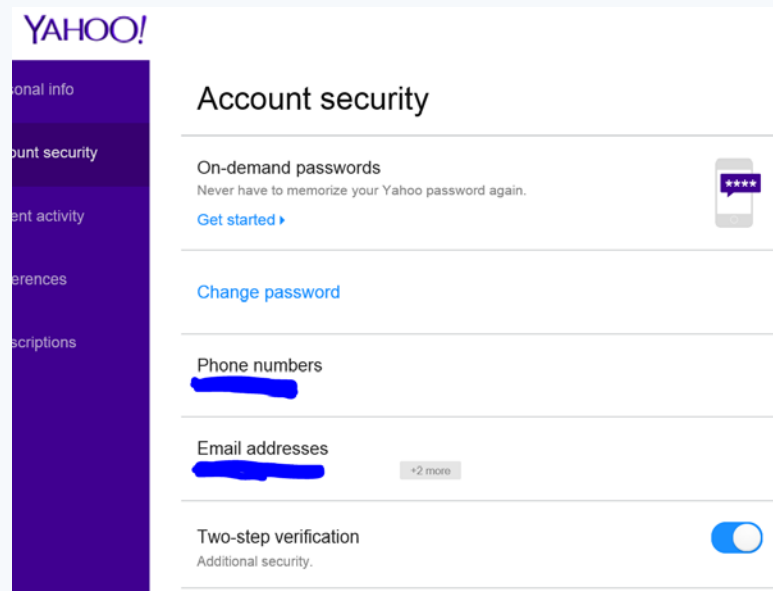


# It's Shopping time

- Setup Notifications
- Use Two Step Process
- Use long passwords
- Change logins at some interval
- Don't forget to lock your phone !!!



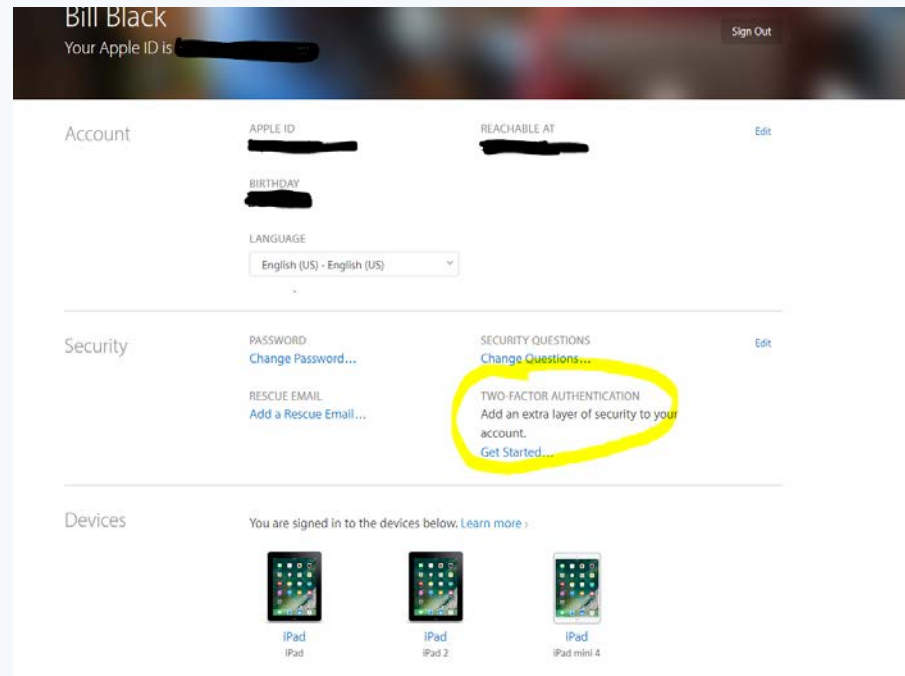
# Two step Verification



- Prevents access to account even if they know the password.
- Online accounts provide for two steps to verify account
  - You can either use an App
  - You can use a Text message
  - You can use an email
  - You can use a Phone call
- Secures the account online

# Two step Verification

<https://appleid.apple.com>



# Two step Verification

<https://myaccount.google.com>

## Signing in to Google

Control your password and account access, along with backup options if you get locked out of your account.

### Make sure you choose a strong password

A strong password contains a mix of numbers, letters, and symbols. It is hard to guess, does not resemble a real word, and is only used for this account.

### Password & sign-in method

Your password protects your account. You can also add a second layer of protection with 2-Step Verification, which sends a single-use code to your phone for you to enter when you sign in. So even if somebody manages to steal your password, it is not enough to get into your account.

Note: To change these settings, you will need to confirm your password.

Password	██████████	>
2-Step Verification	██████████	>
App passwords	██████	>

### Account recovery options

If you forget your password or cannot access your account, we will use this information to help you get back in.

Recovery email	██████████	>
Recovery phone	██████	>
Secret question	██	>

# Internet Precautions.....

There was an analysis done on the Passwords from Sony Pictures PlayStation.

1. Most people chose plain text
  - summer
  - abc123
  - 123456
2. The most common password was " **sienfeld** "
3. Most Passwords are 6 to 8 characters long
4. Most People reuse their passwords.
5. Most People did not use special characters: !  
% ^ \$ # ( +



# Internet Precautions.....

GRC's Interactive Brute Force Password "Search Space" Calculator  
*(NOTHING you do here ever leaves your browser. What happens here, stays here.)*

No Uppercase    No Lowercase    6 Digits    No Symbols  

**123456**

Enter and edit your test passwords in the field above while viewing the analysis below.

**Brute Force Search Space Analysis:**

Search Space Depth (Alphabet):	10
Search Space Length (Characters):	6 characters
Exact Search Space Size (Count): (count of all possible passwords with this alphabet size and up to this password's length)	1,111,110
Search Space Size (as a power of 10):	$1.11 \times 10^6$

**Time Required to Exhaustively Search this Password's Space:**

Online Attack Scenario: (Assuming one thousand guesses per second)	18.52 minutes
Offline Fast Attack Scenario: (Assuming one hundred billion guesses per second)	0.0000111 seconds
Massive Cracking Array Scenario: (Assuming one hundred trillion guesses per second)	0.0000000111 seconds

Note that typical attacks will be online password guessing limited to, at most, a few hundred guesses per second.

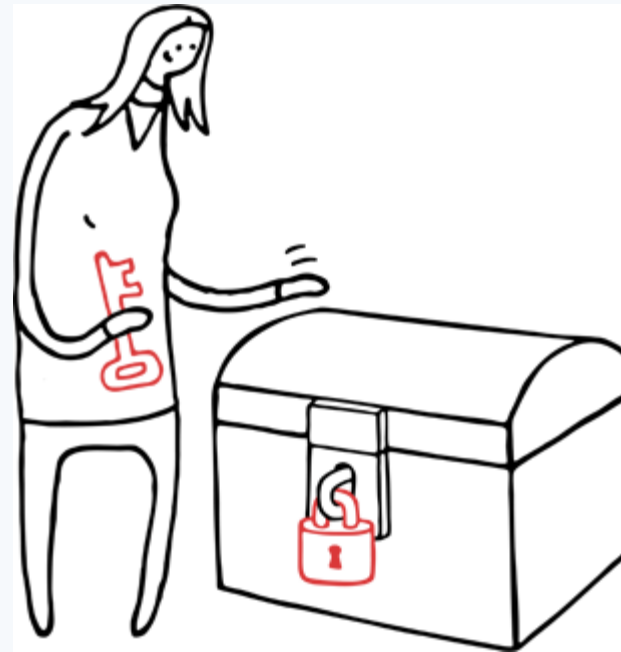
<https://www.grc.com/haystack.htm>



# Internet Precautions.....Recap

## 5 Tips For Staying Safe On The Web

1. Choose Strong, Unique Passwords
2. Enable 2 Step Verification
3. Install all updates right away
4. Be wary of suspicious emails and offers
5. Regularly scan you computer with a trusted antivirus program



# IoT devices

- Apple TV
- Dimmer Switch
- Wi-Fi Light
- Smart Plug
- Thermostat
- Chromecast
- Amazon Dash Button



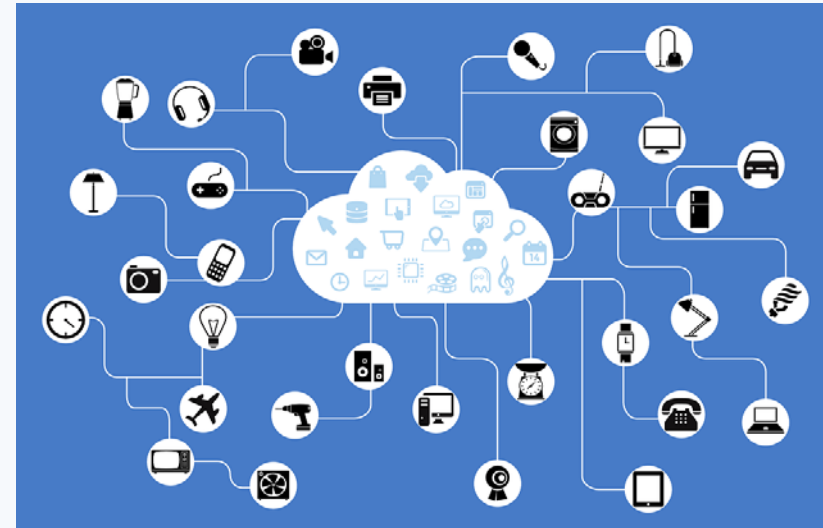
# IoT devices

- In 2017, 8.4 Billion devices
- China, North America, Western Europe contains 67% of devices
- Consumers are largest users
- Business is second in use
- Rise in breaches of the devices



# IoT devices

- Keep Firmware updated
  - Turn on auto-update
  - Keep track of patches
- Change default password
  - Change “admin”
  - Change “12345”
- Disable remote login
- Update your routers firmware and security settings
  - Use WPA and WPA2
  - Disable WPS
  - Make router’s administration page not accessible from internet
- Secure your network with a firewall
  - Turn off UPNP



# What is your phone saying behind your back?

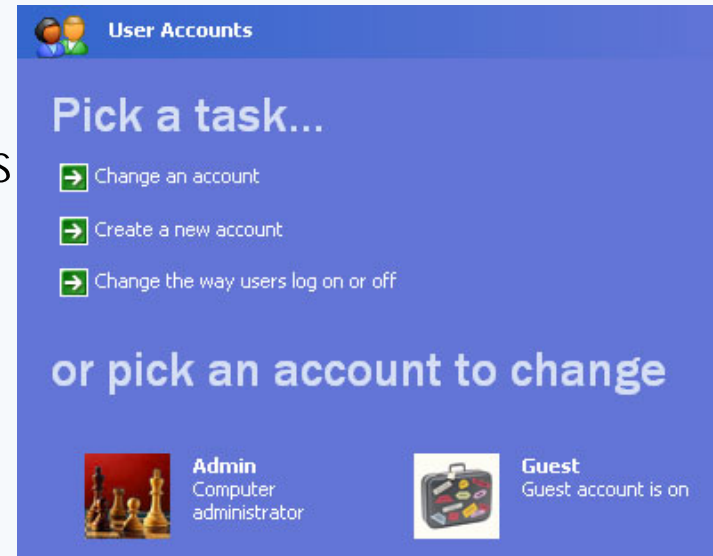
- Never leave WiFi on just because.....
- You WiFi can connect to a fake WiFi zone
- Your information on the phone could possibly be made public.



# Common User Questions

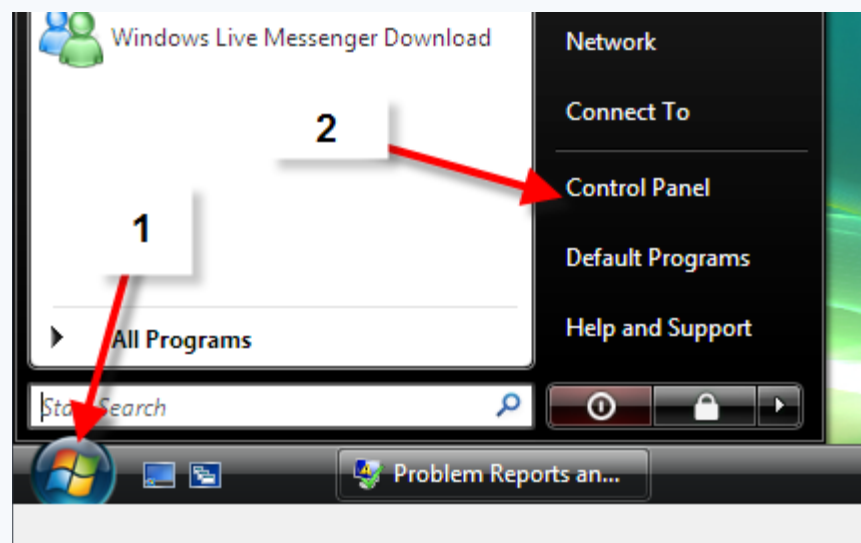
## What are User Accounts

- A **user account** is a collection of information that tells Windows what files and folders you can access, make changes, and your personal preferences.
- Three (3) basic classes:
  - **Standard User**– Use the computer but cannot make Global changes
  - **Administrator**– Make **any** changes on the computer
  - **Guest**—Basic use of the computer—  
No Personalization of Computer



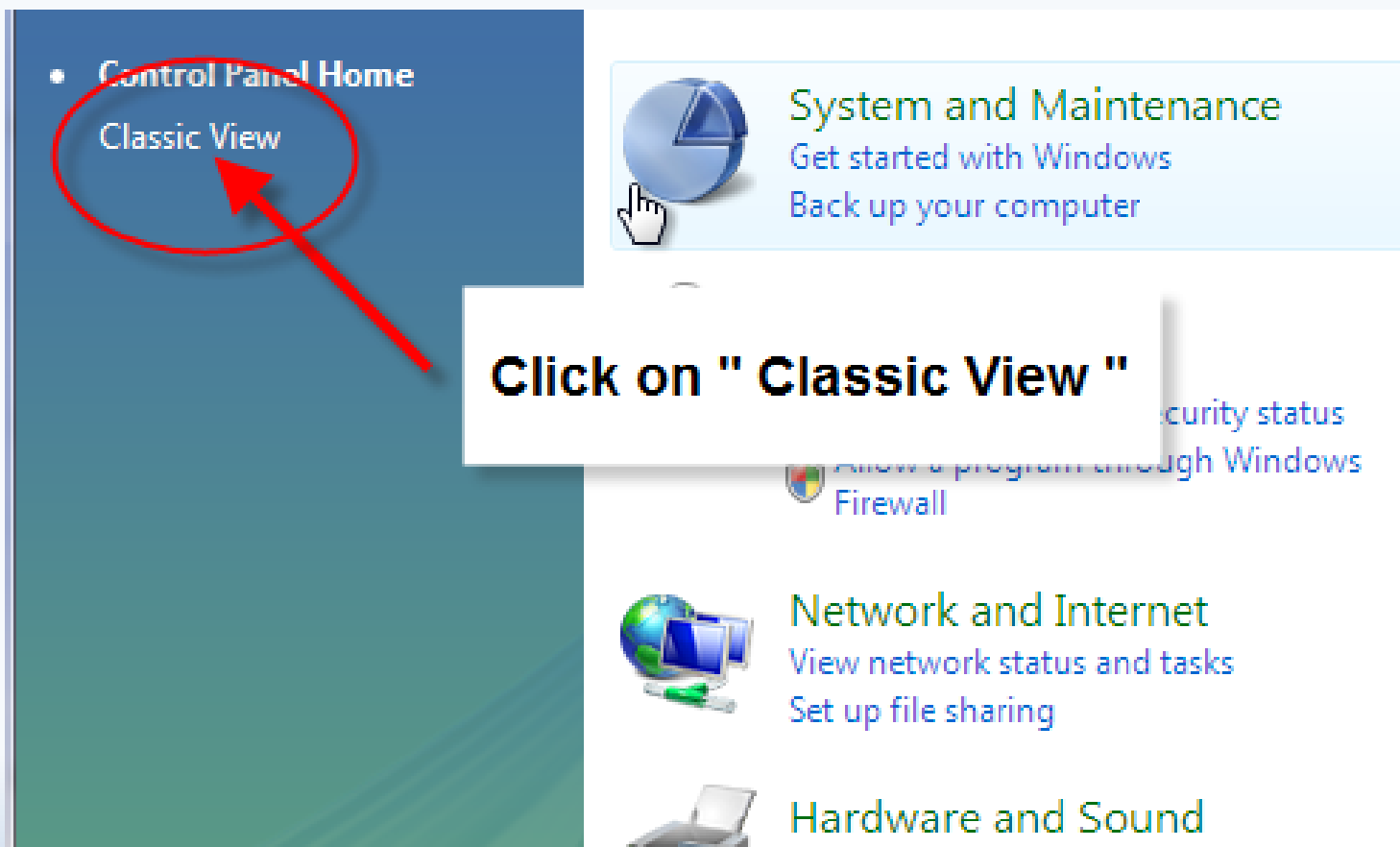
# **Adding User Account on Windows 7**

# Adding User Account on Windows 7





# Adding User Account on Windows 7



The image shows a screenshot of the Windows 7 Control Panel Home page. On the left side, there is a navigation pane with a blue background. It contains the following items:

- Control Panel Home
- Classic View

The 'Classic View' item is circled in red, and a red arrow points to it from a white callout box. The callout box contains the text: **Click on " Classic View "**

The main content area of the Control Panel Home page is white and displays several system and maintenance tiles:

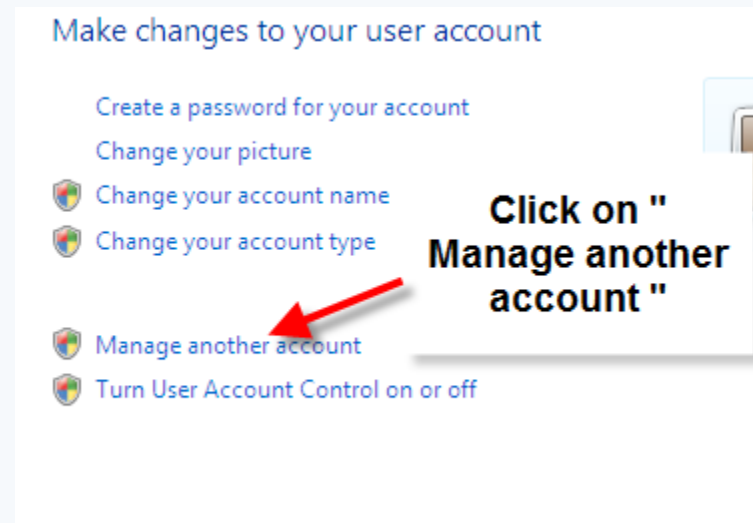
- System and Maintenance**: Get started with Windows, Back up your computer
- Network and Internet**: View network status and tasks, Set up file sharing
- Hardware and Sound**

Other visible elements include a 'Security status' tile and a 'Firewall' tile.

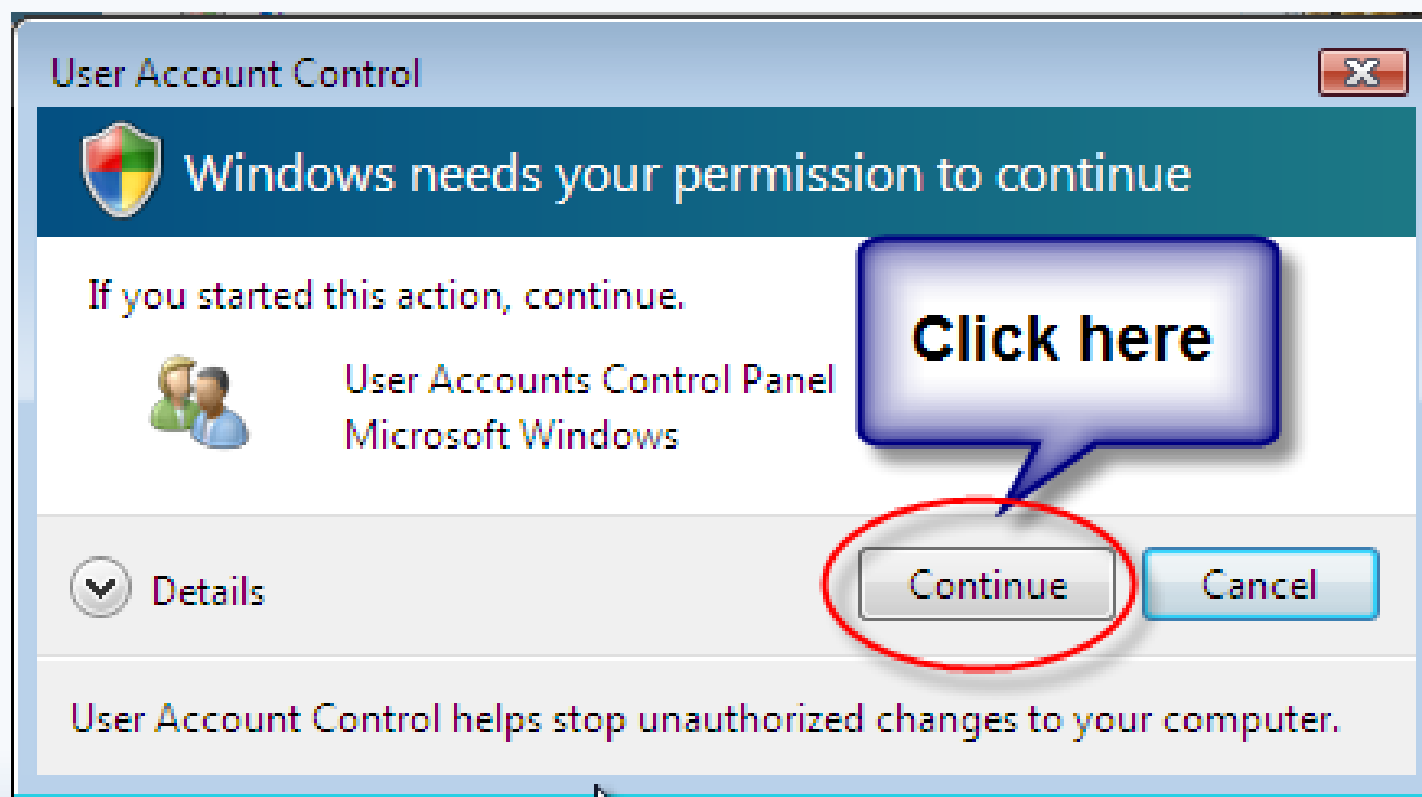
# Adding User Account on Windows 7



# Adding User Account on Windows 7

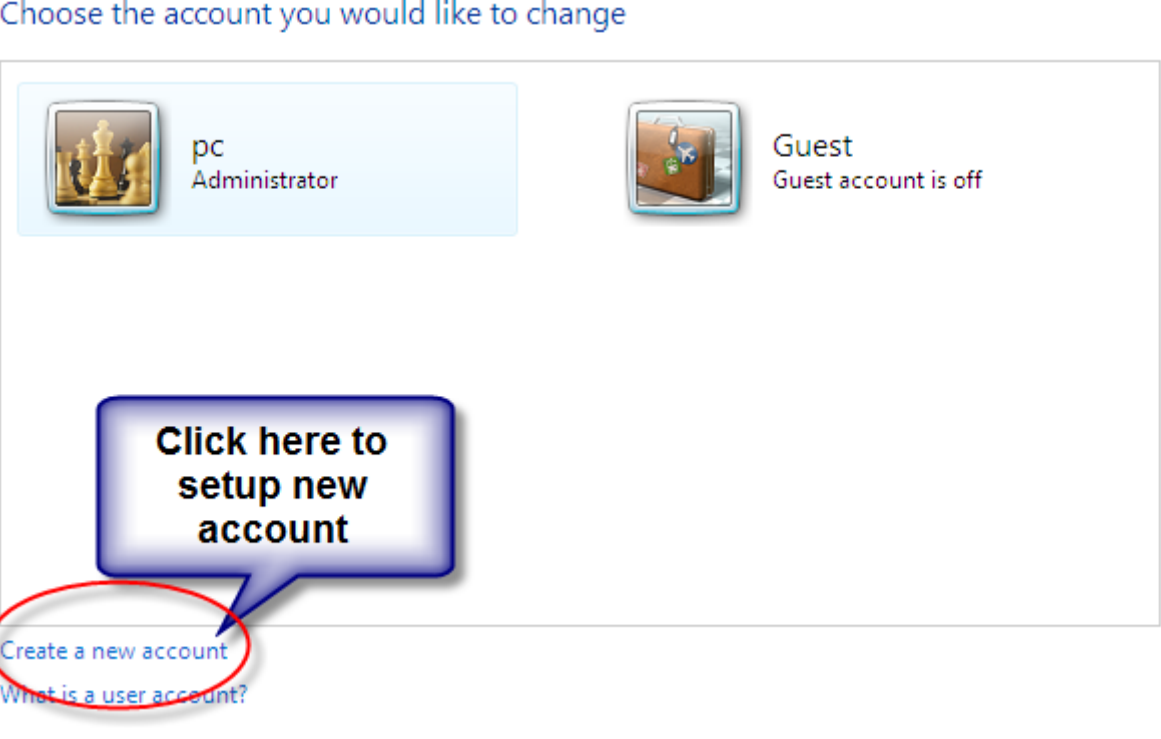


# Adding User Account on Windows 7



# Adding User Account on Windows 7

Choose the account you would like to change



pc  
Administrator

Guest  
Guest account is off

**Click here to  
setup new  
account**

[Create a new account](#)  
[What is a user account?](#)

# Adding User Account on Windows 7

Name the account and choose an account type

This name will appear on the Welcome screen and on the Start menu.

**Fill in name for the account**

Standard user  
Standard account users can use most software and change system settings that do not affect other users or the security of the computer.

Administrator  
Administrators have the computer more making changes the We recommend the

**Select " Standard user "**

**Click " Create Account " when the above is completed**

The image shows a screenshot of the Windows 7 user creation wizard. The title is "Name the account and choose an account type". Below the title, it says "This name will appear on the Welcome screen and on the Start menu." There is a text input field containing the word "User". A red arrow points from a callout box "Fill in name for the account" to this input field. Below the input field are two radio button options: "Standard user" (which is selected) and "Administrator". A red arrow points from a callout box "Select ' Standard user '" to the "Standard user" radio button. At the bottom of the window, there are two buttons: "Create Account" and "Cancel". A red circle highlights the "Create Account" button, and a blue callout box with white text says "Click ' Create Account ' when the above is completed" pointing to the button.

# Adding User Account on Windows 7

Choose the account you would like to change



pc  
Administrator



User  
Standard user



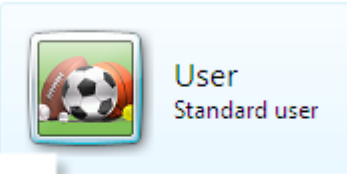
Guest  
Guest account is off

**Click here to set the  
password on the  
account**

# Adding User Account on Windows 7

Make changes to User's account

- Change the account name
- Create a password**
- Change the picture
- Change the account type
- Delete the account
- Manage another account



**Click here to set or change password**

The image shows a Windows 7 user account management interface. On the left, a list of options for managing a user account is displayed. The option 'Create a password' is circled in red, and a red arrow points from it to a callout box. The callout box contains the text 'Click here to set or change password'. To the right of the list is a user account card for 'User', which is a 'Standard user'. The card features a soccer ball icon. The background is white with a light blue gradient at the bottom.



# Adding User Account on Windows 7

Create a password for User's account



User  
Standard user

You are creating a password for User.

**If you do this, User will lose all EFS-encrypted files, personal certificates and stored passwords for Web sites or network resources.**

To avoid losing data in the future, ask User to make a password reset floppy disk.

**Create your password and confirm it**

If the password contains capital letters, they must be typed the same way every time.

[How to create a strong password](#)

The password hint will be visible to everyone who uses this computer.

[What is a password hint?](#)



**Account setup completed**

