Spam/Malware

#### John Roy 5/31/12

#### Definitions

- Malware
  - software designed to disrupt computer operation, gather sensitive information, or gain unauthorized access to a computer system
- Spyware
  - collects information about users without their knowledge
- Spam
  - Unsolicited bulk electronic messages typically hawking unscrupulous products

## Typical Toxic Email





## What Do You Do?

#### • Delete, Delete, Delete

- Are you Cautious or Curious?
- Never click on any suspicious email even if it is from someone you know.

# Compromised Email Categories

- Your Computer is Infected
- Your Email Address has been Hacked
- A friend's computer with your email address has been compromised
- Your email address has been spoofed

# Your Computer is Infected

- Antivirus Software will not protect you from opening an infected email
- Antivirus Software may or may not detect what was propagated into your computer by opening an infected email
- You need to run ancillary Malware utilities such as Malwarebytes, Spybot Search & Destroy, etc.
- Note:
  - These utilities are in addition to anti-virus software. They should be run periodically. It's best to use more than one malware utility.

#### Your Email Address has been Hacked

- Contact your ISP
  - This may be difficult if using a free account
- Change your password
- Create a new Email Account
  - If you don't have access to your email account then it probably was hacked
  - Use the "I forgot my password" link to see if you can gain control and change your password

#### Another Computer (with your email address) has been Compromised

- Much more difficult to track back to the person that has your email in their address book
- If you get enough clues to determine who may be infected then they need to take the actions outlined for your personal computer

#### Your Email Address has been Spoofed

- The sender information shown in the "From" field has been changed. Spammers do this to hide the origin of their e-mails. It leads to problems such as misdirected bounces
- Address spoofing is like writing a forged return address using snail mail. As long as the letter fits the protocol, (i.e. stamp, postal code) the SMTP protocol will send the message.
- No Easy Solution for this
- Wait it out and hope it subsides or take actions previously outlined like closing your account and opening a new one.

## Avoid Questionable Email

• Be Cautious **NOT** Curious

#### • Delete, Delete, Delete

- Better to delete a suspicious email than to open it
- Your friend can always resend a legitimate email
- Never Respond or Opt-Out

# Notifying Known Sender

- If the questionable email came from a known sender you can advise that person of the hijacked email.
- Send a new email to known sender about the hijack
- Attach a Graphic of the Email Received
  - Ensures toxic link is not inadvertently clicked on

# Malware Software (Free)

- Malwarebytes
  - Free & Paid (\$25)
  - <u>http://www.malwarebytes.org</u>
- Spybot Search & Destroy
  - Free, donations accepted
  - <u>http://www.safer-networking.org/en/download/</u>
  - CAUTION: Do Not download "Spybot" it is a known worm
- Windows Defender
  - Free
  - <u>http://www.microsoft.com/en-us/download/details.aspx?id=17</u>

#### Malware Software (Free) Continued

- SuperAntispyware
  - Free & Paid (\$30)(Live CD available \$15)
  - <u>http://www.superantispyware.com/download.html</u>
- Ad Aware
  - Free & Paid (\$30)
  - <u>http://www.lavasoft.com/products/ad\_aware\_free.php</u>
- Combo Fix
  - Free but not advised for novice

# Other Malware Software (\$\$)

- Spyhunter (\$40+)
- Spyware Doctor (\$30)
- Stopzilla (\$40+)
- Spysweeper (\$40)

## Hijackthis

- Scans computer, displays browser hijacking locations
- Does **NOT** remove or detect spyware, adware
- Generates a plain text log file detailing all entries it finds.
- Advanced users can use to remove unwanted settings/files or obtain free help here
  - <a href="http://hijackthis.de/index.php?langselect=english">http://hijackthis.de/index.php?langselect=english</a>

#### Other Portable Utilities

- AVG Rescue Disk (free)
  - <u>www.avg.com/us-en/avg-rescue-cd</u>
  - Download and create a bootable media
  - If connected to Internet S/W will update before scanning
- Windows Defender Offline (free)
  - <u>http://windows.microsoft.com/en-US/windows/what-is-windows-defender-offline</u>
  - Download and create a bootable media
- Microsoft Safety Scanner (free)
  - <u>http://www.microsoft.com/security/scanner/en-us/default.aspx</u>

#### Microsoft Product Confusion

- Microsoft Security Essentials (MSE)
  - Active Real Time scanner
  - For spyware/adware, viruses, worms, some rootkits.
- Windows Defender (P/O Vista & Win7, free D/L WinXP)
  - Part of MSE
  - Only scans for spyware/adware
  - Stand alone portable scanner available (Windows Defender Offline)
- Microsoft Safety Scanner
  - Stand alone portable scanner (expires in 10 days)
  - For spyware/adware, viruses, worms, some rootkits.

#### Anti Spyware Comparisions http://www.2-spyware.com/compare.php

Excellent Very Good Good Fair Poor	504	Nate Dods	ALL AND ALL AN	Sweeper Windo	we det	ERANISON SOM	Nate Sall	still are synate	are nator	as particular
Total rank	GOLD	SILVER	BRONZE	4	5	6	(	8	9	10
Review	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW	READ REVIEW
Price	\$29.95	26,76	\$29.95	Free	\$29.95	Free	\$29.95	Free	\$29.95	\$19.97
Download product	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN LOAD	DOWN Load
Tutorial	Read		Read			Read			Read	
Ratings										
Total rating										
Average removal rate										
Detection technique										
Scan depth										
Real-time monitoring										
Average scan time										
Additional features										
Updates										
User-friendliness										
Look and feel										
Ease to setup/uninstall										

## Useful Security Information Links

- Microsoft Safety & Security Center
- www.microsoft.com/security/default.aspx
- Security Tips & Talk Blog
- <u>http://blogs.msdn.com/b/securitytipstalk/</u>
- Security Garden Blog
- http://securitygarden.blogspot.com/

# Parting Shots

- Protect your email address
- Preferably use a throw away email address when you signup for something at less known websites
- Use Blind Carbon Copy (BCC) to send generic email and train your family and friends to do the same
- When its necessary to publish your email address replace the "@" symbol with "at" to elude Spam web crawlers
- Create account passwords that are difficult to guess

#### Conclusion

# • Be Smart, it's better to delete a real email than to open an infected email

