Cyber@UC Meeting 59

Actually Doing Star Night!

If You're New!

- Join our Slack: <u>ucyber.slack.com</u>
- SIGN IN! (Slackbot will post the link in #general)
- Feel free to get involved with one of our committees:
 - Content Finance Public Affairs Outreach Recruitment
- Ongoing Projects:
 - o RAPIDS Lab!

Announcements

- Hope you all enjoyed the 4th of July!
- US Bank VIP visiting next Wednesday at 2pm!
- We need to nail down what we want in a logo
- Working out our budget!

Public Affairs

Useful videos and weekly livestreams on YouTube:

youtube.com/channel/UCWcJuk7A_1nDj4m-cHWvIFw

Follow us for club updates and cybersecurity news:

Twitter: @CyberAtUC

Facebook: @CyberAtUC

Instagram: @CyberAtUC

For more info: cyberatuc.org

Weekly Content

Trustwave sued over failure to detect malware

- Heartland was subject to a major breach in 2009
 - Details for >100 million payment cards from >650 customers were stolen
- Heartland paid >\$148 million in settlement fees
- Two insurance firms paid Heartland 20 and 10 million respectively
- Civil suit filed in late June claims Trustwave failed to honor the service contract
- Claim Trustwave failed to detect an attacker used a SQL Injection attack to breach Heartland in 2007
- Trustwave also allegedly failed to detect malware installed on payment processor servers in 2008

Trustwave (Continued)

- Lawsuit points out that Trustwave did not detect any suspicious activity during its security audits provided to Heartland for almost two years which included PCI DSS compliance and attestation
- Visa's review of Heartland's servers found that Trustwave incorrectly certified Heartland as PCI DSS compliant
- Lawsuit claims Visa discovered Trustwave ignored that Heartland didn't run a
 firewall, used vendor-supplied passwords, didn't have sufficient protection for
 the storage system used for card data, didn't have unique identification for
 each user, didn't monitor servers and data at regular intervals-comp rules
- Trustwave states they did not manage Heartland InfoSec

IOS USB restricted mode bypass

- IOS 11.4.1 added usb restricted mode feature, designed to make it harder to break into an iphone/ipad through the data port
- Disables data connection capabilities of the lightning port if the device has been locked for >=1 hour, still allows charging
- Attaching a USB device within 1 hour of locking will reset the timer
- Pressing the power button five times will apparently immediately enter the device into USB restricted mode

https://thehackernews.com/2018/07/bypass-ios-usb-restricted-mode_html

Hybridized malware, is your computer worth it?

- New variant of Rakhni ransomware judges your computer and decides on the most profitable malware scheme
- If you computer is deemed worthy infecting it will choose between a ransomware and a cryptominer
 - Ransomware: Bitcoin folder in AppData section
 - Cryptominer: no Bitcoin folder in AppData and >= 2 logical processors
 - Worm: neither of the above, worms onto other computers in local network
- Initially infects through a malicious word file sent through phishing email

https://thehackernews.com/2018/07/cryptocurrency-mining-ransemware.html

Recommended Reading

https://www.welivesecurity.com/2018/07/11/polar-flow-app-exposes-geolocation-data-soldiers-secret-agents/

https://www.welivesecurity.com/2018/07/02/principle-least-privilege-strategy/

https://thehackernews.com/2018/07/facebook-cambridge-analytica.html

https://thehackernews.com/2018/07/intel-spectre-vulnerability.html

https://thehackernews.com/2018/07/arch-linux-aur-malware.html

https://thehackernews.com/2018/07/gaza-palestin-hacker.htm

Recommended Reading (continued)

https://krebsonsecurity.com/2018/07/exxonmobil-bungles-rewards-card-debut/

https://krebsonsecurity.com/2018/07/notorious-hijack-factory-shunned-from-web/

https://krebsonsecurity.com/2018/06/plant-your-flag-mark-your-territory/

GitHub Star Night!

Rickify

https://github.com/kjempelodott/rickify

- Spotify for Android streams over insecure HTTP for a few secs when it starts.
- This Python script MITMs the app to replace the audio with "Never Gonna Give You Up".



More stars from Hayden

- Scripts that make PHP segfault: <u>github.com/hannob/php-crashers</u>
- Encryption/encoding/etc Swiss army knife: github.com/gchq/CyberChef
- Just visit it and find out... <u>superlogout.github.io</u>

Not a Star but a Cool Site

https://car.mitre.org/caret/#/

- Based on MITRE's ATT&CK Matrix
- Outlines various APT groups
- Shows techniques known to be used by each group
- Notes the analytical data to detect on each technique
- Includes sensors used to grab specified data

WiFi Pumpkin!

https://github.com/P0cL4bs/WiFi-Pumpkin

- Software that can be used to make your own "wifi pineapple"
- Claims to support partial HSTS bypass
- Phishing manager
- MITM capabilities
- Planning on using this for my HackPack project :)

Mobile Security Framework

https://github.com/MobSF/Mobile-Security-Framework-MobSF

- Supports dynamic analysis of Android iOS Windows apps
- Would be awesome to setup in our lab
- They have a docker image :)
- Looks like a Cuckoo type of project but focused on mobile

Iodine! DNS Tunneling

https://github.com/yarrick/iodine

- Very popular way to exfiltrate data from isolated environments
- Worth while for us to learn how to use for red v blue missions
- Allows you to tunnel IPv4 data through DNS Server
- DNS queries are typically allowed

Cuckoo! Malware Sandbox

https://github.com/cuckoosandbox/cuckoo

- I plan to set this up in our lab
- Most sandboxing services are modified Cuckoo instances
- Highly configurable
 - Integrates with Suricata, Moloch, MISP, VT, and more!
- We already have some experience in setting this up.

WinPwnage

https://github.com/rootm0s/WinPwnage

- Full of:
 - Payload scripts
 - Scanning scripts for flying undetected
 - Helpful links
 - Commented code :)

Chris Morrison's Stars Page

- (Red) https://github.com/dafthack/DomainPasswordSpray
- (Red) https://github.com/deepzec/Bad-Pdf
- (Radio) https://github.com/ChristopheJacquet/PiFmRds
- (Blue) https://github.com/EgeBalci/The-Eye
- (Red) https://github.com/securestate/king-phisher
- (Misc) https://github.com/KnightOS/KnightOS
- (Red) https://github.com/0x90/wifi-arsenal
- (Red) https://github.com/offensive-security/exploit-database
- (Red) https://github.com/mattifestation/PowerShellArsenal
- (Blue) https://github.com/jpr5/ngrep
- (Radio) https://github.com/jopohl/urh

Invoke-WMILM

https://github.com/Cybereason/Invoke-WMILM

 Neat post-exploitation script for launching processes on locally networked windows machines (pivoting)

^{*}Also nice for remote installs if you don't have any remote management tools installed

Just For Fun

https://github.com/g0tmi1k/VulnInjector

https://github.com/chrislgarry/Apollo-11

https://github.com/NiklasFauth/hoverboard-firmware-hack

https://github.com/google/gif-for-cli