CDSE CYBER AWARENESS UPDATE

Provided by CDSE Cybersecurity Team

25 July 2015

CONTENTS

MALWARE

JULY 2015

MALWARE

FBI's Operation Shrouded Horizon

July 15: FBI announces that it has concluded the largest ever coordinated law enforcement effort against an online criminal forum. New vulnerabilities disclosed as a result.

Resources

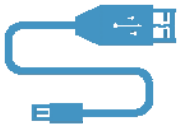
https://www.fbi.gov/pittsburgh/press-releases/2015/major-computer-hacking-forum-dismantled

KEY POINTS

- Operation reveals several new malware variants in the wild
  - FBI took down password-protected, "vetted" hacking and cybercrime forum
  - 20 nations involved, 70 arrests
- Examples
  - Dendroid: affects Google Android phones
  - Facebook Spreader: infects Facebook users' computers
  - Spam botnets designed to target cell phone users
  - Butterfly bot: targets financial information
- Mitigation
  - Antivirus updates and safe computing

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 1



HARDWARE

CDSE CYBER AWARENESS UPDATE

JULY 2015

HARDWARE

ANTlabs InnGate

ANTlabs provides network gateway products for mobile hotspot users. Commonly found in airports, hotels, etc.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-196

KEY POINTS

- Allows attacker to inject arbitrary code
- Attacker may obtain admin credentials
- Versions affected:
  - InnGate 3.01E
  - InnGate 3.10E
  - InnGate 3.10M
  - SG4
  - SSG4
- Mitigation
  - Firmware update has been released

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 2

JULY 2015

HARDWARE
Samsung Galaxy S5

Released by Samsung in April 2014.

KEY POINTS

- Vulnerability allows remote attacker to execute arbitrary files
- Versions affected:
  - Samsung Galaxy S5
- Mitigation
  - Firmware update has been released

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-194

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 3

SOFTWARE

CDSE CYBER AWARENESS UPDATE

JULY 2015

SOFTWARE
Oracle

Software developer best known for its Solaris operating system and database software such as MySQL. MySQL is the second-most widely used relational database management system in the world.

KEY POINTS

- Oracle released security fixes for 193 vulnerabilities
  - 63 products affected
  - Releases patches quarterly. This quarter's release was on July 14
  - Mitigation: Review and install security patches as needed

Resources

https://www.us-cert.gov/ncas/current-activity/2015/07/14/Oracle-Releases-July-2015-Security-Advisory

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 4

JULY 2015

SOFTWARE
Microsoft

Software developer best known for the Windows operating system and office suites

Resources

https://www.us-cert.gov/ncas/current-activity/2015/07/14/Microsoft-Releases-July-2015-Security-Bulletin

KEY POINTS

- Microsoft released security updates for multiple products
  - 14 vulnerabilities covering 84 software implementations
  - Releases a patch rollup monthly; this month's release was on July 14
  - Mitigation: Review and install security patches as needed

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

JULY 2015

SOFTWARE
Firefox

A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-194

KEY POINTS

- Firefox - Vulnerable Versions before version 39.0
  - Allow denial of service
  - Possibly executing arbitrary code
  - May allow attacker to obtain sensitive information from memory
- Mitigation: Update/Patch

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

JULY 2015

SOFTWARE
Internet Explorer

A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-194

KEY POINTS

- Internet Explorer versions 6 -11
  - Allow denial of service
  - Possibly executing arbitrary code
- Mitigation: Update/Patch

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

JULY 2015

SOFTWARE
Adobe Flash Player

Adobe Flash Player (labeled Shockwave Flash in Internet Explorer and Firefox) is freeware software for using content created on the Adobe Flash platform, including viewing multimedia, executing rich Internet applications, and streaming video and audio. Flash Player can run from a web browser as a browser plug-in or on supported mobile devices

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-194

KEY POINTS

- Multiple versions allow remote attackers to bypass protection and write to file system
- Vulnerable versions
  - Adobe Flash Player before 13.0.0.302 and 14.x through 18.x before 18.0.0.180 on Windows and OS X and before 11.2.202.481 on Linux
  - Adobe AIR before 18.0.0.180
  - Adobe AIR SDK before 18.0.0.180
  - Adobe AIR SDK & Compiler before 18.0.0.180
- Mitigation
  - Update/patch

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 8

HUMAN

CDSE CYBER AWARENESS UPDATE

JULY 2015

HUMAN
OPM Cybersecurity Incidents

OPM Recently announced two data breaches that may have revealed personally identifiable information. The investigation is still ongoing

Resources

https://www.opm.gov/cybersecurity/

KEY POINTS

- Two related incidents:
  - April 2015: 4.2 million current and former federal employees impacted. Notifications were sent to those affected.
  - June 2015: OPM discovered an additional compromise affecting 21.5 million individuals. Notifications for this incident have not yet begun.
  - Current and former federal employees, contractors, job candidates, spouses, and co-habitants and family members may be impacted.
- Mitigation
  - Currently, there is no record of misuse of data
  - Monitor credit and bank records
  - Be aware of phishing scams
  - Think cybersecurity
  - Keep up to date: https://www.opm.gov/cybersecurity/

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

CDSE CYBER AWARENESS UPDATE 9

NETWORK

NETWORK
Solarwinds

Develops enterprise-level infrastructure management software, particularly network monitoring software.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-194

KEY POINTS

- Attacker can upload and execute malicious scripts
  - Authentication is not required to exploit
- Vulnerable versions
  - Storage Manager
- Mitigation: Hotfix is available from the vendor

NETWORK
Cisco

A network is information systems implemented with a collection of interconnect components. Such components may include routers, nubs, cabling, telecommunication, controllers, key distribution centers and technical control devices.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-201

KEY POINTS

- Multiple vulnerabilities in multiple products
  - Access server, web security system, wireless systems, etc. Allows remote attacks, sessions hijacks, file uploads, script injection, denial of service, and other attacks.
- Vulnerable versions
  - Cisco Unified Communications Manager 10.5
  - Cisco Email Security Appliance .5.6-073, 8.5.6-074, and 9.0.0-461
  - Cisco WebEx Meeting Center
  - Cisco unified Computing System software 1.5(3) and 1.6(0.16)
  - Multiple others
- Do you know hardware configuration? Does it impact you?
- Mitigation: Update

JULY 2015

NETWORK
Juniper

A network is information systems implemented with a collection of interconnect components. Such components may include routers, nubs, cabling, telecommunication, controllers, key distribution centers and technical control devices.

Resources

https://www.us-cert.gov/ncas/bulletins/SB15-201

KEY POINTS

- Multiple vulnerabilities in multiple products
  - Allows remote attacks, sessions hijacks, file uploads, script injection, denial of service, and other attacks.
- Vulnerable versions
  - Juniper SRX Series gateways
  - Multiple versions Juniper OS
- Hardware/Software baseline. Configuration management.
- Mitigation: Update

CENTER FOR DEVELOPMENT OF SECURITY EXCELLENCE

JULY 2015

"WHAT DO I NEED TO DO?"
Recommendations

"If you think technology can solve your security problems, then you don't understand the problems and you don't understand the technology."
- Bruce Schneier

Resources

CDSE:
http://www.cdse.edu

US CERT Bulletins:
https://www.us-cert.gov/ncas

Internet Crime Complaint Center:
http://www.ic3.gov/default.aspx

WHAT IS MY ROLE IN THIS?

1. Form a relationship/partnership with your IT and cybersecurity departments

2. Know what's on your network (hardware and software)

3. Review/sign up for alerts through US CERT

4. Use CDSE resources, such as webinars, free eLearning courses, and more

QUESTIONS / COMMENTS:

CYBERSECURITY.TRAINING@DSS.MIL

THANKS FOR JOINING US!

CHECK OUT OUR UPCOMING WEBINARS:

- RMF Steps 1-6 Courses: July 2015
- Additional OBMS Job Aids and resources coming in August 2015