Blayne Dreier

Network and Software Security Engineer

Phone: **980-254-6961**
Website: **http://www.blaynedreier.com**
Email: **blayne@blaynedreier.com**

Summary

- 2+ years of DevOps experience
- 2+ years of product and software security evaluation
- 8+ years of Cisco TAC experience with knowledge of how to handle cases correctly and efficiently
- BS in Computer Science with concentrations in math and business
- Quick and enthusiastic about learning absolutely anything
- Well-traveled with interests spanning across and beyond the tech world

Profile

- Experience recreating and troubleshooting Cisco networks.
- Experience evaluating Cisco products for security vulnerabilities.
- On-site experience working with teams to plan installations and solve problems.
- Attentive to detail, strong-willed, self-correcting, and perceptive.
- Ability to stay focused on large projects until completion.
- Motivated with a high aptitude for learning skills quickly.
- Able to maintain high energy. Worked 45-50 hours per week while attending school full-time.
- Effectively manage many different responsibilities simultaneously.

CCIE Security #10246

CERTIFICATIONS

CCIE Security #19340

Cisco Systems

November 2007 - November 2015

CISSP #442524

ISC2

SKILLS

IOS, Cisco Routers/Switches/Firewalls, ASA, Zone-Based Firewall, IOS-FW, DDoS, IDS/IPS, IOS-IPS, IDSM-2, NAC, ACS, CSM, CSA, Python, Java, C, C++, PHP, HTML, Javascript, XML, Windows, Linux, OSX, SQL, TCP/IP, Wireshark, OWASP, VMware VSphere ESX/ESXi

PUBLICATIONS

Patents

Method and apparatus for identifying a physical link interconnecting network devices
Issued
https://www.google.com/patents/US8675496

Visualization of Question and Related Informational Item Data
Pending
https://www.google.com/patents/US20140146051

Automatic correlation of dynamic system events within computing devices
Pending
https://www.google.com/patents/US20140172919

Method and system for delegating administrative control across domains
Pending

Kinetic event detection in microphones
Pending
https://www.google.com/patents/US20140270275

Visualizing a network connection's overall health and providing actionable information
Published
http://ip.com/IPCOM/000223070

Method for detection and indication of audio stream degradation in Voice over IP telecommunication sessions
Published
http://ip.com/IPCOM/000239553

CVEs

CVE-2014-0667
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0667
The RMI interface in Cisco Secure Access Control System (ACS) does not properly enforce authorization requirements, which allows remote authenticated users to read arbitrary files via a request to this interface, aka Bug ID CSCud75169.

CVE-2014-0656
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0656
Cisco Context Directory Agent (CDA) allows remote authenticated users to trigger the omission of certain user-interface data via crafted field values, aka Bug ID CSCuj45353.

CVE-2014-0655
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0655
The Identity Firewall (IDFW) functionality in Cisco Adaptive Security Appliance (ASA) Software allows remote attackers to change the user-cache contents via a replay attack involving crafted RADIUS Change of Authorization (CoA) messages, aka Bug ID CSCuj45332.

CVE-2014-0654
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0654
Cisco Context Directory Agent (CDA) allows remote attackers to modify the cache via a replay attack involving crafted RADIUS accounting messages, aka Bug ID CSCuj45383.

CVE-2014-0652
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0652
Cross-site scripting (XSS) vulnerability in the Mappings page in Cisco Context Directory Agent (CDA) allows remote attackers to inject arbitrary web script via a crafted URL, aka Bug ID CSCuj45358.

CVE-2014-0651
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0651
The administrative interface in Cisco Context Directory Agent (CDA) does not properly enforce authorization requirements, which allows remote authenticated users to obtain administrative access by hijacking a session, aka Bug ID CSCuj45347.

CVE-2014-0649
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-0649
The RMI interface in Cisco Secure Access Control System (ACS) 5.x before 5.5 does not properly enforce authorization requirements, which allows remote authenticated users to obtain superadmin access via a request to this interface, aka Bug ID CSCud75180.

CVE-2013-5541
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2013-5541
Cross-site scripting (XSS) vulnerability in the file-upload interface in Cisco Identity Services Engine (ISE) allows remote authenticated users to inject

arbitrary web script or HTML via a crafted filename, aka Bug ID CSCui67495.

CVE-2013-5540
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2013-5540
The file-upload feature in Cisco Identity Services Engine (ISE) allows remote authenticated users to cause a denial of service (disk consumption and administration-interface outage) by uploading many files, aka Bug ID CSCui67519.

CVE-2013-5539
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2013-5539
The upload-dialog implementation in Cisco Identity Services Engine (ISE) allows remote authenticated users to upload files with an arbitrary file type, and consequently conduct attacks against unspecified other systems, via a crafted file, aka Bug ID CSCui67511.

CVE-2013-5538
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2013-5538
The Sponsor Portal in Cisco Identity Services Engine (ISE) uses weak permissions for uploaded files, which allows remote attackers to read arbitrary files via a direct request, aka Bug ID CSCui67506.

CVE-2012-5736
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2012-5736
** RESERVED ** This candidate has been reserved by an organization or individual that will use it when announcing a new security problem. When the candidate has been publicized, the details for this candidate will be provided.

CVE-2012-5035
http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2012-5035
** RESERVED ** This candidate has been reserved by an organization or individual that will use it when announcing a new security problem. When the candidate has been publicized, the details for this candidate will be provided.

PROJECTS

Customer Engagement

Public documentation

Applying different IPS policies to specific flows with the AIP-SSM
https://supportforums.cisco.com/blog/149951/applying-different-ips-policies-specific-flows-aip-ssm

Cut-Through and Direct ASA Authentication
http://www.cisco.com/c/en/us/support/docs/security/asa-5500-x-series-next-generation-firewalls/113363-asa-cut-through-config-00.html

Forum participation
https://supportforums.cisco.com/users/cdreier

Media

TAC Security Podcast
https://supportforums.cisco.com/document/48396/tac-security-podcast-show-information-and-episode-listing

Cisco IPS Software
https://supportforums.cisco.com/video/11927661/cisco-ips-software

TAC IPS Media Series
https://supportforums.cisco.com/document/48896/tac-ips-media-series-show-information-and-episode-listing

Tools

Zone-based Firewall Configuration Parser
https://www.blaynedreier.com/zbfp/

EXPERIENCE

Cisco Systems (Austin, TX)

March 2012 to January 2014

Security Researcher

- Perform security evaluations for Cisco products
- Review source code for security vulnerabilities
- Create defect reports to communicate security vulnerabilities to development
- Consolidate supporting security collateral to drive security vulnerabilities to resolution
- Work directly with development to resolve discovered vulnerabilities
- Test and verify fixes for resolved vulnerabilities
- Report to executive management about evaluation progress and outcome
- Lead and coordinate a team of security researchers to evaluate a product
- Write proof-of-concept code to validate vulnerabilities
- Create videos of vulnerability exploitation to drive security vulnerabilities to resolution

Cisco Systems (Richardson, TX)

August 2010 to March 2012

TAC Security Escalation

- Presented an 8-hour techtorial covering Cisco security products at Cisco Live
- Act as the last point of global escalation for customer cases involving Cisco security products
- Act as the global liaison for TAC-to-developer communication regarding software defects
- Assist in supplying fixes for software defects described in TAC-generated defect reports
- Lead Cisco CCIE Security training for TAC engineers
- Make significant contributions to internal and external technical written and video documentation

Cisco Systems (Richardson, TX)

March 2009 to August 2010

TAC Security Technical Lead

- Speaker at Cisco Live
- Assist TAC security team with significantly complex and difficult cases
- Assist high-profile customers in resolving network down scenarios
- Review and refine defects filed against Cisco security products
- Mentor new employees on practices and technology training.
- Provide technology training to other teams within Cisco.
- Review and publish technical documentation for internal and external use.

Cisco Systems (RTP, NC)

May 2005 to March 2009

TAC Security Engineer

- Troubleshoot customer networks in the area of system security.
- Resolve cases dealing with Firewall, IDS, VPN, and AAA.
- Work in groups with other engineers to solve customer network complications.
- Use recreation of a customer network to resolve issues hands-on.
- Give presentations on common attack tools and methods.
- Investigate software defects and file reports for resolution.

Cisco Systems (RTP, NC)

August 2004 to January 2005

Co-op/Pseudo-Engineer

- Troubleshoot customer networks in the area of system architecture.
- Resolve system crashes, memory leaks, and high CPU utilization.
- Attend engineering trainings to better develop knowledge in Cisco system architecture.
- Surf IOS C code to find and repair software related bugs.
- Communicate problem and resolution to customer via various channels.
- Communicate with software development engineers to resolve code instabilities.

Cisco Systems (RTP, NC)

January 2004 to May 2004

Co-op/Network Recreation and Engineering

- Recreate customer networks for engineering and troubleshooting.
- Build an understanding of the hardware architecture of nearly every Cisco platform.
- Become familiar with Cisco IOS commands, configuration and environment.
- Obtain Cisco CCNA certification.
- Conduct weekly lab audits to assure cleanliness and order.
- Help to maintain inventory of more than ten thousand Cisco machines and modules.
- Monitor a case queue of engineer-submitted recreate cases.
- Attend weekly training sessions to further conceptual and practical networking knowledge.
- Mentor incoming co-ops and transfer knowledge learned from previous rotations.

Appalachian State University (Boone, NC)

June 2001 to June 2002

Network Analyst/Software Administrator

- Install software packages for both faculty and student use.
- Obtain an understanding of schools network system and analyze traffic and usage.
- Assume liability of computer system security.
- Design software configurations for use by students and library staff.
- Troubleshoot and diagnose computer system malfunction.
- Provide assistance to others with personal computer problems.
- Repair malfunctioned computer and printer hardware.

Best Buy Corp. 175 (Gastonia, NC)

June 2000 to March 2001

Mobile Audio/Video Installation Technician

- Install mobile amplifiers, speakers, decks, television monitors, and alarms.
- Obtain an understanding of every car make and model's interior construction and wiring schematics.
- Assume liability while driving customers' cars into bay and throughout installation.
- Design and build component mobile audio and video systems.
- Troubleshoot and diagnose automobile electronic system malfunction.
- Track daily and weekly progress, competing with previous personal

numbers and other stores.

Best Buy Corp. 175 (Gastonia, NC)

July 1999 to May 2000

In-Store & On-Site Audio/Video/Computer Repair Technician

- Perform preventative maintenance, bench repair, diagnosis and parts ordering.
- Conduct in-house and on-site customer equipment orientation, training, and repair.
- Diagnose silicon boards to component level, soldering and replacing parts as needed.
- Maintain and repair test facilities and grounds.
- Complete electrical wiring and component installation from the ground up for industrial and personal computer networks.
- Support Internet providers by providing technical assistance with routers and other equipment.
- Utilize signal generators, AC/DC volt, ohm and amp meters (fluke), oscilloscope, and other precision measuring instruments.
- Attend technical conferences and seminars to stay informed about product developments.
- Prepare detailed documentation recording the repairs needed and test log information.
- Establish workload schedules, repairs priorities and assigned specific duties to personnel.
- Report weekly and monthly to regional manager, providing written and oral reports.

Best Buy Corp. 235 (Corpus Christi, TX)

September 1998 to April 1999

In-Store & On-Site Audio/Video/Computer Repair Technician

- Perform preventative maintenance, bench repair, diagnosis and parts ordering.
- Conduct in-house and on-site customer equipment orientation, training, and repair.
- Diagnose silicon boards to component level, soldering and replacing parts as needed.
- Maintain and repair test facilities and grounds.
- Complete electrical wiring and component installation from the ground up for industrial and personal computer networks.
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- Establish workload schedules, repairs priorities and assigned specific duties to personnel.
- Report weekly and monthly to regional manager, providing written and oral reports.

EDUCATION

University of North Carolina at Charlotte

August 2002 to May 2005

Bachelor of Science, Computer Science

- Graduated with honors
- Related concentrations in Math and Business