Rich Adams

hi@richadams.me • https://richadams.me (about me) • https://wblinks.com (writings/articles)

I write things in Ruby, PHP, Python, HTML, CSS, JavaScript/jQuery, Java, SQL, Bash, *nix CLI.
I am interested in incident response, information security, and high-availability systems.
I mostly use Ubuntu Linux, Amazon Web Services, Chef, Git.

✸ CERTIFICATIONS

✅ Amazon Web Services, AWS

- AWS Certified Security (Specialty)
- AWS Certified DevOps Engineer (Professional)
- AWS Certified Solutions Architect (Associate)
- AWS Certified SysOps Administrator (Associate)
- AWS Certified Developer (Associate)

Federal Emergency Management Agency, FEMA

- Incident Command System (IS-100.b, IS-200.b)
- National Incident Management System (IS-700.a, IS-702.a, IS-703.a)
- Community Emergency Response Teams (IS-315, IS-317)

🎓 EDUCATION

Master of Engineering (Hons) in Computer Systems and Software Engineering
University of York, England

2003 - 2007

💼 EXPERIENCE

pd **PagerDuty**, Senior Engineer, Security & Incident Response
Nov 2016 - Present

- Designed, delivered, and open-sourced PagerDuty's annual employee security training courses.
- Major Incident Response Lead; Wrote and open-sourced the PagerDuty Incident Response Documentation. Developed both internal and customer-facing training courses on incident response/command, presented at customer sessions worldwide.
- Implemented SSH 2FA across entire infrastructure, working with all teams to provide a pain-free experience using Yubikeys.
- Leveraged AWS Config, Lambda, GuardDuty, and Amazon Macie to automate security & compliance within AWS.
- Liaise with teams across the entire organization on a variety of security issues; from reviewing customer contracts and questions, performing risk assessments, to training our executive teams on incident response procedures.

pd **PagerDuty**, Senior Engineer, Operations
Mar 2015 - Nov 2016

- Responsible for automating and improving PagerDuty's infrastructure, utilizing Chef for configuration management.
- Seamlessly transitioned AWS infrastructure from EC2-Classic to EC2-VPC, overhauled AWS accounts to follow latest security best practices, reduced AWS costs by over 30%, provided training on AWS best practices, and wrote extensive documentation.
- Major Incident Response Lead; Act as Incident Commander, provide training, and built chat tooling used during incidents.
- Strong focus on security; Wrote formal security incident response plan, overhauled public vulnerability reporting process, and wrote comprehensive documentation on security processes and best practices.
- Gave a talk about PagerDuty's Failure Friday program at the AWS Loft in San Francisco, for an Advanced AWS Meet-up.

🅖 **Gracenote**, Platform Lead, Server Engineering & Operations
Apr 2014 - Feb 2015

- Led the Server Engineering and Operations team for Global Professional Services at Gracenote's San Francisco office. Building products and tools for both internal initiatives, and international clients such as Bang & Olufsen, NET Serviços, and Sony.
- Responsibilities included designing and developing new back-end services, maintaining and expanding their AWS infrastructure, and providing mentorship to others within the organization.
- Provided continuous 24/7/365 primary on-call support for all server applications and systems.
- Responsible for application/system security. Continually performed reviews to ensure compliance with InfoSec directives. Stayed up-to-date with latest vulnerabilities to proactively mitigate new threats.
- Built a suite of prototypes to demonstrate Gracenote's latest APIs and tech, used as demos at trade shows and conferences.
- Managed team resources, and liaised with other teams to provide project scopings and deliverables.

Gracenote, Senior Systems Engineer, Mobile Apr 2012 - Apr 2014

- Responsible for provisioning, maintaining and improving upon server infrastructure, split between physical data centres and AWS. Experience with F5 BIG-IP and Synology hardware, and VMWare ESXi. Also provided 24/7/365 on-call support.
- Wrote scripts/tools to fully automate application deployment, configuration, self-repairing, and monitoring.
- A passionate advocate of Amazon Web Services within Gracenote, I migrated my department from a physical data centre environment to AWS. I also designed, built, and deployed a multitude applications utilizing almost all of the AWS stack.
- Built several stand-alone applications from scratch, including a service framework, event logging system, analytics platform, and various content management tools. Migrated existing applications from monolithic to service-oriented architecture.
- Designed and built the PHP services/APIs that support some of Gracenote's mobile applications, such as MusicID and HABU.
- Wrote several highly-interactive website demos using HTML5/CSS/JavaScript, for clients such as Sony, Rhapsody, and Nissan.

Gracenote, Systems Engineer, Mobile Oct 2010 – Apr 2012

- Administered application/database servers and MySQL (including performance optimisation and replication).
- Configured VMs and load balancers, and added/maintained monitoring for all production systems.
- Responsible for migrating existing services from a single data center to a co-located environment.
- Wrote and maintained comprehensive documentation on the applications and system architecture.
- Data Centre Experience; Performed various hardware upgrades and racked/cabled new servers.

Amadeus, Software Development Engineer, Airline IT Sep 2007 - Sep 2010

- Senior C++ developer on the Baggage Team for Departure Control Systems.
- Designed and developed a new baggage messaging framework, interacting with sortation, reconciliation, tracking and security screening systems at airports. The new framework resulted in faster and easier to maintain code, compatibility with more baggage systems, fewer corrupted messages, and fewer lost bags for passengers.
- Heavily involved in airline cut-overs, ranging from small domestic airlines to large international carriers.
- Constructed a variety of internal monitoring/investigative tools using Java and PHP, in my spare time. My tools became the preferred method of investigating baggage issues amongst development and support teams.
- Primary and secondary on-call as needed, resolving production issues in real-time under tight deadlines.
- Acting manager of the Baggage Team during manager absence, and for a 12 week transition period.

Self-Employed, Web Developer Jul 2003 - Sep 2007

- Designed and developed several small-to-medium websites for a variety of clients, using HTML/CSS and PHP/MySQL.
- Specialised in cross-browser compatibility, accessibility, and writing W3C standards compliant code.

</> PROJECTS

- PagerDuty Security Training · Security training courses covering both general and engineer-specific topics.
- PagerDuty Incident Response Documentation · Collection of best practices and training material for incident response.
- PagerDuty Chrome Notifier · A Chrome extension to display desktop notifications for PagerDuty.
- パチラジオ · Pachislo Radio, a random playlist generator, built for Music Hack Day Tokyo (2014) and featured in wired.jp.

✎ WRITING & SPEAKING

- "How to Respond to Any Crisis (IT or Otherwise) in an Organized Way" 🎙 Podcast, The New Stack Context (Feb 2019)
- "Our Approach to Employee Security Training" 🔊 Blog Post (Mar 2018)
- "PagerDuty Incident Response Training" 📣 Talk, Summit Series Chicago (Sep 2017)
- "BabyDuty or: How PagerDuty Accidentally Prepared me for Fatherhood" 🔊 Blog Post (Jul 2017)
- "Keeping PagerDuty Secure" 🎙 Podcast, The Secure Developer (Jul 2017)
- "PagerDuty's Failure Friday" 📣 Talk, Advanced AWS Meet-up (Dec 2015)
- "Site Reliability Engineering in the Cloud" 📣 Talk, SREcon14 (May 2014)
- "AWS Tips I Wish I'd Known Before I Started" 🔊 Blog Post (Feb 2014)
- "Music Recommendation using Collaborative Filtering with Similarity Fusion" 📄 Academic Paper (May 2007)