

Ross Nesbitt

Senior Network, DLP, SMTP & Linux Systems Specialist

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Professional Summary

Highly accomplished Senior Network & Systems Engineer with over 25 years of extensive hands-on experience in designing, implementing, and managing high-performance Linux-based network infrastructure, mission-critical email security systems (including 12+ years specializing in Proofpoint technologies), and complex cloud solutions. Deep expertise in SMTP protocols, advanced command-line network troubleshooting (strace, tcpdump, Wireshark), MySQL/MariaDB administration, and developing shell/Python scripts for automation, rapid triage, and remediation. Proven ability to lead enterprise-wide migrations, optimize system performance, and ensure robust security frameworks in fast-moving environments. Excels at direct technical collaboration with enterprise customers, internal engineering, and IT/OT teams to diagnose issues, validate fixes, and manage staged production rollouts. My focus is on permanently resolving issues and automating tasks with a proactive, "fix-it-right, fix-it-once" approach.

Technical Skills

* Operating Systems:

- * Linux (Expert: RHEL, CentOS, Ubuntu, Debian – Administration, Performance Tuning, Security Hardening, Kernel-level troubleshooting)

- * UNIX, Solaris, Windows Server

* Networking & Protocols:

- * TCP/IP, SMTP (Deep Expertise), HTTP/S, DNS, DHCP, LDAP, VPNs

- * Network Engineering: Load Balancing, Firewalls (iptables, ACLs), Network Segmentation

- * Advanced Troubleshooting: tcpdump, Wireshark, strace, netstat, lsof, ngrep, gdb

* **Email Security & Authentication:**

- * Proofpoint Suite (Expertise with TPRS, SER; deep understanding of core Email Protection, Information Protection, and Threat Response modules from extensive ecosystem experience)

- * DMARC, SPF, DKIM, TLS/SSL (SMTP over TLS), Message Tracking, Anti-Spam/Phishing

* **Databases & Systems:**

- * MySQL/MariaDB (Administration, Performance Tuning, Replication, Backup/Recovery, Percona Toolkit)

- * Oracle (familiarity), Apache, Nginx, Redis

* **Scripting & Automation:**

- * Python, Bash, Perl, sed, awk (for system administration, automation, rapid triage, and remediation scripts)

- * PowerShell, VBS (context-specific)

* **Cloud Platforms & Virtualization:**

- * Supporting applications and infrastructure on cloud platforms (e.g., AWS, Azure with Defender, GCP concepts)

- * VMware (ESX, KVM), Docker (Compose)

* **Engineering Practices & Tools:**

- * Technical Documentation (Runbooks, Design Specs), Incident & Problem Management, Root Cause Analysis

- * Change Management, Vendor Technical Liaison, Customer-Facing Technical Escalation & Support

- * Patch Validation & Staged Rollout Coordination

- * Jira, Confluence, OpenSSL, ServiceNow, Splunk, Nagios, Grafana

Professional Experience

Senior Solutions Architect (DLP & Email Security Focus) | Wells Fargo | (Contract)

Jan 2024 – May 2025

- * Led enterprise-wide Data Loss Prevention (DLP) and DMARC remediation, architecting and implementing solutions compliant with stringent financial industry security policies.

- * Engineered and deployed Proofpoint Trusted Party Relay Service (TPRS) and Proofpoint Secure Email Relay (SER), enhancing secure email communication across complex hybrid-cloud infrastructures.

- * Developed and troubleshoot advanced SMTP routing configurations for cloud, SaaS, and on-premises applications, optimizing secure data flow.
- * Strengthened email authentication (SPF, DKIM, DMARC) and optimized Proofpoint firewall configurations to prevent data exfiltration and improve system efficiency.
- * Collaborated directly with application owners and security teams to define technical requirements and refine email security policies.

Email Security Architect | Graphic Packaging Inc. | (Contract)

Jun 2022 – Sept 2023

- * Managed and enhanced email security infrastructure, focusing on Proofpoint configurations, mail flow optimization, and security policy enforcement.
- * Ensured security configurations and system migrations complied with internal technical controls and industry best practices.

Systems Engineer / DR Planning & Testing | Morgan Stanley | (Contract)

Jun 2021 – Jan 2022

- * Planned and executed critical MySQL database migrations, prioritizing data integrity, security, and post-migration operational stability under tight deadlines.
- * Developed detailed Disaster Recovery runbooks for critical infrastructure, outlining technical operational procedures and validation steps.

Technical Analyst | TRACE3 | (Contract)

Jul 2020 – Jan 2021

- * Authored technical Runbooks for mission-critical applications, documenting IT processes, system configurations, and incident response procedures for operational stability.

Application Support Engineer | USDA (U.S. Department of Agriculture) | (Contract)

Aug 2019 – Jul 2020

- * Provided Tier 3 support for backend systems including Linux servers, Kubernetes clusters (foundational exposure), and enterprise applications in a high-availability environment.

- * Developed and implemented monitoring scripts (Bash, PowerShell, Xymon, SmartBear) to ensure operational integrity and system performance.
- * Managed LDAP server integrations for secure authentication; performed server upgrades and patching.

Senior Customer Success & Application Engineer (Consultant via Roostify) | J.P. Morgan Chase

Mar 2017 – Aug 2019 (Consulting Engagement)

- * Embedded as a dedicated technical expert within J.P. Morgan Chase, supporting Roostify's SaaS mortgage platform (YAML front-end, Ruby on Rails backend) through its critical development, UAT, and rapid production rollout phases.
- * Led weekly technical review meetings with JPMC stakeholders to report on resolved issues, validate fixes, and gather new bug reports based on their production-condition testing.
- * Proactively identified and diagnosed complex integration and performance issues using Splunk monitoring, application logs, and network traces, often uncovering bugs missed during initial development smoke tests.
- * Drove the resolution of critical bugs by effectively bridging communication between JPMC technical teams and Roostify engineering, ensuring rapid turnaround in a fast-moving agile environment.
- * Meticulously validated engineering fixes and coordinated User Acceptance Testing (UAT) with JPMC teams, confirming solutions met stringent enterprise requirements before wider production deployment.

Team Lead & Senior Technical Support Engineer / Systems Engineer | Proofpoint

Oct 2004 – Jan 2017 (12+ years)

- * Led a team and provided expert-level backend engineering and Tier 3/4 operational support for Proofpoint's flagship email security and archiving SaaS offerings, deployed on thousands of Linux (RHEL, CentOS) systems in global enterprise environments.
- * Mastered advanced command-line troubleshooting (strace, tcpdump, Wireshark, netstat, lsof, gdb) to rapidly diagnose and resolve complex network, SMTP, MySQL/MariaDB performance, and Linux OS-level issues, ensuring 99.9%+ service availability.
- * Served as a critical technical liaison between enterprise customers, global support teams, and core engineering; meticulously reproduced complex issues, performed root cause analysis, and rigorously validated engineering patches before coordinating staged production rollouts.
- * Managed and executed staged patching and OS upgrade processes (including 32-bit to 64-bit Linux migrations) across extensive customer deployments, adapting to diverse and rapidly evolving customer environments.
- * Developed an extensive library of Bash, Perl, sed, and awk scripts for automating backend system diagnostics, log collection, data analysis, health checks, security hardening, and routine MySQL/MariaDB maintenance, drastically reducing manual effort and MTTR.
- * Administered and optimized MySQL/MariaDB databases (performance tuning with Percona tools, replication, backup/recovery, schema management) supporting core Proofpoint services.

- * Championed a proactive approach to system reliability by identifying root causes and implementing permanent fixes or robust automation for recurring problems, dramatically reducing chronic incidents.
- * Spearheaded early adoption of Puppet for configuration management and automated deployment of Proofpoint's SaaS (POD) infrastructure.

Senior Systems Administrator | Teraoptic Networks

Apr 2001 – Oct 2004

- * Managed and secured critical Linux and Solaris-based IT infrastructure for a dynamic R&D environment, including web servers, databases, and engineering tools, focusing on high availability and data integrity.
- * Implemented and maintained network security systems using Snort for intrusion detection.
- * Automated routine system administration tasks using scripting to improve efficiency.

Senior Network Engineer | Hostcentric

Jul 2000 – Apr 2001

- * Managed and maintained core network infrastructure for a rapidly scaling web hosting environment.
- * Developed security hardening procedures for new Linux/BSD OS installations and authored shell scripts for automating network backups and system monitoring.

Additional Earlier Experience

- * UNIX System Administrator | Health Systems Design, Inc. (Oct 1998 – Jul 2000)
- * UNIX Software Specialist | Handmade Software, Inc. (Jul 1995 – Oct 1998)
- * UNIX Software Specialist | ENCAD, Inc. (Sept 1993 – Jul 1995)

Early Career Experience

- * Instructor, SQL | San Marcos State University (Jul 1993 – Sept 1993)
- * Software Specialist | Blue Sky Software (Dec 1992 – Aug 1993)
- * Software Specialist | Ansier Technologies (Jun 1991 – Jan 1992)

Education

University of California San Diego | Dec. 10, 1994

Bachelor of Arts, General Literature (Harold E. Nesbitt III)