

Alan Baker

Linux Systems Engineer | Systems Administrator | RHEL Platform Engineer

alan@baker.click | (609) 516-2574 | Florence, NJ | [LinkedIn](#)

SUMMARY

Linux Systems Engineer with 20+ years of experience supporting mission-critical production environments across regulated industries including lottery/gaming, pharmacy automation, telecom, retail, and corporate IT. Expertise in RHEL platform engineering, Linux hardening, deployment automation, and production troubleshooting, with broad infrastructure support across Linux, Windows Server, networking, and application services.

SKILLS

Linux/Systems: RHEL 8–10, Debian, Ubuntu, systemd, GRUB2/BLS, EFI/Secure Boot, dracut/initramfs, Kickstart, PXE, dnsmasq, TFTP/HTTP boot

Automation/Development: Bash, Python, PowerShell, Ansible, Git/Gitea, PHP, JavaScript, Perl, release documentation

Application/Database: Apache, PHP, Tomcat, Java, PostgreSQL, MySQL, XML/application configuration

Security/Identity: SELinux, auditd, USBGuard, PKI/TLS, Wazuh, Suricata, Filebeat, OpenSearch, Active Directory, GPO, NPAS/RADIUS, Samba, Grafana, Prometheus

HA/Network/Backup: HAProxy, Keepalived, VLANs, DNS/DHCP, Cisco, Juniper, WireGuard, Bacula, LTO tape, disk imaging, backup/restore validation

Platforms/Tools: Nextcloud, Mantis, osTicket, MediaWiki, Snipe-IT, WSUS, Print Services, QuickBooks Desktop, CAD/license servers

Virtualization/Containers: KVM/libvirt, RHEL virtualization, Podman, VM provisioning, bridge networking, snapshots, image-based testing

EXPERIENCE

Smartplay International, Inc. — Edgewater Park, NJ

Dec 2023 – Oct 2025

Linux Systems Engineer

Led Linux systems engineering for proprietary, regulated lottery systems supporting large-scale domestic and international product deployments across distributed, compliance-sensitive environments. Managed RHEL platform engineering, OS hardening, deployment automation, production troubleshooting, backup/restore operations, and system imaging, while also supporting corporate IT infrastructure, including network device administration, Samba services, Windows Server, Active Directory, security monitoring, PKI/TLS workflows, and cross-platform integration.

- Drove RHEL 9 standardization and hardening across globally deployed lottery systems and corporate environments, improving consistency, security posture, and deployment repeatability.
- Automated lottery system deployments using standardized base images, PXE/Kickstart provisioning, post-install scripts, tar-based backup and restore workflows, boot customization, and disk imaging procedures.
- Built and maintained KVM/libvirt and Podman environments supporting Linux and Windows workloads for rapid provisioning, testing, and production validation.
- Supported proprietary lottery platforms built on Apache/PHP, PostgreSQL, and Java, resolving complex production issues across OS, application, database, hardware, and network layers.
- Designed, installed, and configured a multi-server Windows Server and Active Directory environment, including domain controllers, DNS, Group Policy, file services, Samba integration, and user migration.
- Engineered custom SELinux policy modules and file-context rules using AVC analysis to maintain enforcing mode for production applications.
- Implemented PKI/TLS workflows, including internal certificate authority support, certificate lifecycle management, trust chain deployment, and secure service integration.
- Deployed and troubleshot centralized security monitoring using Wazuh, Suricata, Filebeat, and OpenSearch across Linux, Windows, and network devices.
- Supported high-availability services using HAProxy and Keepalived, ensuring backend availability and failover continuity.
- Administered and automated Bacula backup infrastructure with PostgreSQL catalog and LTO tape storage, including job scheduling, retention policies, and recovery validation.
- Diagnosed Java and device-integration issues involving sockets, dependencies, logging, serial communication, and PostgreSQL-backed workflows.
- Configured and validated PostgreSQL-backed services, including schema deployment, XML/application updates, ODBC connectivity, and linked-server troubleshooting.
- Resolved complex boot and imaging issues involving Secure Boot/SBAT, GRUB2, BLS, EFI, initramfs rebuilds, filesystem repair, and SELinux relabeling.
- Developed internal web UI and system-control components using PHP, JavaScript, and CSS for system management and automation.
- Created MOPs, deployment documentation, validation procedures, rollback plans, and rollout guides for infrastructure and production changes.

- Managed internal platforms and deployment workflows for Nextcloud, Mantis, osTicket, MediaWiki, and Snipe-IT, including SSL renewals, QC procedures, and operational support.

Burlington County Bikes | REI | Hart's Cycles — NJ

Jul 2018 – Oct 2023

Technical Operations Roles

- Provided technical systems support, POS infrastructure support, workstation troubleshooting, inventory-system assistance, and operational continuity across retail environments.
- Resolved end-user, peripheral, networking, and application issues while supporting daily business operations and minimizing downtime.

Rite Aid Corporation (Central Fill) — Delran, NJ

Aug 2016 – Aug 2017

Systems Technician

- Supported high-volume automated pharmacy systems from startup through shutdown, maintaining workflow across robotics, conveyors, scanners, sorters, compressors, vial cappers, and labeling systems.
- Performed hardware, software, network, PLC, pneumatic, and user-interface troubleshooting with root-cause analysis to reduce recurring failures and production interruption.
- Collaborated with staff and vendors during critical production incidents while helping maintain daily throughput exceeding 40,000 prescriptions.

IT Distributors — Edison, NJ

Jan 2008 – Jul 2015

IT Engineer

- Led design verification, staging, assembly, configuration, factory testing, and QA for integrated technology systems, including structured cabling, cable lacing, hardware validation, and documentation.
- Executed end-to-end system integration deployments covering inventory, procurement coordination, equipment installation, DC power distribution, OS image customization, and acceptance testing.
- Supported compliance with Alcatel-Lucent, AT&T, Verizon Wireless, ISO, and TL9000 requirements while contributing to operations supporting approximately \$44M in annual revenue.

A2ZLogix Inc. (formerly HDLogix/Clique Communications) — Edison, NJ

Apr 2004 – Jul 2015

Systems Engineer

- Administered and maintained Linux/UNIX application infrastructure, middleware, messaging, web, database, directory, monitoring, and VoIP services with emphasis on reliability, backup, and performance tuning.
- Deployed and supported MySQL, Sendmail, Sun Java Messaging Server, Zimbra, Apache, Tomcat, Bind DNS, LDAP, RADIUS, SSL certificates, SIP, RTP/RTCP, STUN, Bugzilla, CVS, and Subversion.
- Administered DAS, NAS, and SAN environments using NFS, Fibre Channel, FCoE, and iSCSI; automated backup processes and preventative maintenance workflows.
- Integrated OpenSER/SIP Express Router with LDAP authentication using RADIUS.
- Generated network/service reporting through MRTG, RRDTOol, and Zabbix.
- Served as technical lead on major product and service initiatives, including Clique video phone platform implementation and production support.

ADDITIONAL EXPERIENCE

IT Specialist, OM Systems Solutions Inc., Princeton, NJ

Technical Support Specialist (Tier II), Vonage Holdings Inc., Edison, NJ

EDUCATION & CERTIFICATIONS

The Chubb Institute — New Brunswick, NJ | Diploma in Network Administration, Honors, 2002

CompTIA A+ CE

CompTIA Linux+

Red Hat Certified System Administrator (RHCSA), in progress — expected 2026