



SYSTEMS ENGINEER (DevOps) – Germantown, MD

SUMMARY

We are seeking a results-oriented, self-motivated systems engineer / developer who will be responsible for improving and maintaining the network infrastructure services and management platforms that support a nationwide enterprise network for the federal government. The engineer will develop scripts and web-based interfaces to visualize network operation metrics, orchestrate automated workflows between applications and devices, correlate event data from network devices, and generate reports. The engineer will maintain Linux servers and network management application software, both open source and COTS.

ESSENTIAL JOB FUNCTIONS & REQUIREMENTS

- **Must have proficiency with PHP and/or Perl** scripting and application development techniques for generating web-based interfaces to MySQL databases, rendering graphs from performance metrics, and automating system administration functions (e.g. parsing log data, generating notifications, etc.).
- This position requires developing and improving various tools that increase the capability of the operations team to maintain situational awareness and control the network infrastructure, with thousands of network switches, routers, VoIP phones, and other devices to manage. As other groups within the organization move applications to the cloud, optimizing and monitoring the enterprise network is a primary function for the operations team.
- The ideal candidate will have recent experience implementing network infrastructure and monitoring systems using open source technologies to support enterprise, service provider, or campus networks as a member of a 24x7 network and/or security operations team.
- Experience with system integration via API calls, developing plug-ins, and MySQL replication is a plus.
- Develop PHP or Perl web interfaces and command-line scripts that provide “glue” between various network systems, such as sending Wake-on-LAN requests based on user input with a MAC address via web interface, targeting the WOL request to the appropriate location in the network.
- Demonstrate a strong understanding of Linux system administration tasks and procedures.
- Automate configuration change monitoring across Linux and Cisco devices, ensuring standardized configuration requirements are enforced, and exceptions without prior approval generate notifications.
- Experience with system automation technologies such as Salt, Ansible, Chef, Puppet, or equivalent.
- Automate backups for critical components and virtual machines, replicating backup files between data centers. Verify backup images and periodically test recovery actions to ensure success.
- Experience administering applications and products associated with network operations is preferred, such as: Cisco Prime, SolarWinds, Nagios, Graphite, CollectD, SmokePing, etc.
- Knowledgeable in application transport, data format and network protocols (e.g. HTTP, REST, XML, JSON, LDAP, DNS, DHCP, RADIUS, SNMP).
- Recent experience with clustering, virtualization and cloud computing technologies is a plus.

OTHER JOB FUNCTIONS

In addition to the successful candidate's primary focus supporting network management platforms and scripting, this position will be called upon as a backup to the WAN and LAN network support staff.

- The most successful candidate for this position enjoys challenges and looks forward to coming into the office each day to work with the leading team in the organization that solves communications puzzles.
- As a senior member of the network operations team, the ideal candidate will be viewed as a mentor for the junior technical members of the team.
- Install and operate open source software to perform network performance testing and data collection. Leverage network management software to identify security events, fault detection, correlation of log events, performance metrics, and generate reports to support specific service level requirements.
- Develop documentation to improve current network operating procedures. Create and update process diagrams, checklists and associated documentation for network management applications.
- Contribute to the development of system security plans and certification and accreditation efforts.
- Must be flexible and able to work nights, weekends and holidays as needed to support planned and unplanned network maintenance and troubleshooting events. The successful candidate is expected to be available on-call 24x7.
- The successful candidate will demonstrate self-initiative and be able to operate without supervision. Must have strong time management, multi-tasking, organization and administrative skills.
- As part of the selection process, the candidate must demonstrate excellent verbal and written communication skills, with fluency in English equivalent to a native speaker.
- Past employment supporting the **U.S. Federal government and/or military experience is a plus.**
- Must be able to obtain a U.S. government security clearance.

PRIMARY WORK LOCATION

Germantown, MD or Washington, DC

KNOWLEDGE SKILLS AND ABILITIES

Perl, PHP, Git, MySQL, Linux, Apache, Cisco Routers, Switches, Nagios, MRTG, RRDTool, SNMP

WORK ENVIRONMENT AND PHYSICAL DEMANDS

The successful candidate will work in an IT data center (raised-floor) environment and be able to lift up to 50 pounds. Dress code is business casual.