



JOB DESCRIPTION

Network Engineer

Department	Information Systems
Reports to	Assistant Vice President, Information Systems
Supervises	N/A
Pay Grade	Exempt Grade 32

Job Summary

Under minimal supervision serves as operating lead for network systems and network communications. Designs, installs, and manages networking and communication solutions. Proactively locates and corrects potential areas of trouble. Configures and manages Cisco ASA and Palo Alto firewalls, SD-WAN architecture and routing, IDS/IPS, and network security systems. Assists the team in ensuring member services are operational 24x7 and supports organization strategic goals and objectives.

Essential Functions

- Architects, designs, implements, and supports credit union network infrastructure including switches, routers, firewalls, IDS/IPS, SD-WAN, wireless, telephony, vendor circuits, and other communication systems.
- Architects, designs, implements, and supports credit union network to ensure high availability of systems including Citrix, Microsoft Windows Server, Email, Virtual Servers (HyperV), Web Filtering, and Database Systems. Designs and implements solutions which operate efficiently, generate a minimum of support calls, and result in few or no emergency actions after deployment.
- Architects and directs the implementation of remote service solutions including cloud-based D/R systems, cellular backups, VPNs, remote access for staff, vendor communication, Internet, and site-to-site connections. Provides escalated support for the Systems Administrator as needed.
- Implements security networking topologies and features such as VLAN separation, access lists, IPSEC VPN tunnels, AAA authentication, and network load balancing.
- Documents and educates Information Systems and Information Security staff on network system operation and support. Maintains detailed documentation of network data flow diagrams, network topologies, and procedures to assist with exams, audits, and network operations and support.
- As needed, assists the I.S. team with support issues and escalated problems.

- Serves as an escalation resource for the Service Desk, Information Security team, and System Administrators.
- Proactively identifies areas needing improvements in disaster recovery / business continuity and implements changes as directed.
- Analyzes network performance and recommends improvements in communications and security, and implements as needed.
- Supports the Information Security and System Administration teams in continuous security improvement and vulnerability management.
- Ensures all new information systems conform to security policy and utilize security best practices.
- Monitors and stays current on technical developments in the networking, Internet, communication, and telephony software space. Regularly identifies and recommends new technologies appropriate for the credit union.
- Audits network and communication systems and software for license compliance, security readiness, and vulnerability concerns as directed by management.
- Identifies cost savings and efficiency improvement opportunities and presents recommendations to management.
- Attends out-of-area training and seminars (requiring overnight stays) as appropriate.
- Able to work flexible hours, including nights, weekends, and holidays as assigned.
- Performs other duties as assigned.

Required Knowledge, Skills, and Abilities

- Extensive knowledge of key networking protocols including TCP/IP and UDP, and routing protocols such as BGP and OSPF.
- Extensive knowledge of Cisco ASA and Palo Alto firewalls and routing.
- Extensive knowledge of SD-WAN and VLAN environments.
- Understands and accurately responds to complex verbal and written communications with clear and accurate verbal and written responses.
- Communicates and works effectively and collaboratively with other teams across all levels of the credit union. Explains technology clearly.
- Operates, maintains and troubleshoots a variety of security hardware and software.
- Reads and comprehends technology and security manuals, instructions, correspondence, and online documentation in support of current and new technology.
- Creates and edits technical documentation, providing clearly understandable and grammatically accurate information for employees. Reviews existing documentation to ensure accuracy and ensure it is understandable by non-IS employees.

- Exercises mathematical and conceptual abilities in the development of cost/benefits analysis and other projects requiring abstract reasoning and judgment.
- Demonstrates a willingness and enthusiasm for learning and self-development.

Education and Experience

- Requires a four-year college degree in Computer Science, Computer or Systems Engineering, Information Systems, or similar computer field, or equivalent experience.
- Requires at least one Palo Alto Networks Specialist certification.
- Requires knowledge and demonstrated experience in Networking Systems, such as Cisco, Palo Alto Networks, Fiber/MPLS/T1, VPN systems, Firewall Administration, Routers, Switches, and SD-WAN.
- Minimum of 5 years experience architecting, designing, and implementing network solutions such as Cisco switches and routers, VPNs, Cisco ASA and Palo Alto firewalls, IDS/IPS, and SD-WAN.
- Experience with complex Windows environments including Windows Server, Windows Domains, multi-segment LANs, distributed server environments, and virtual servers, is desirable.
- Minimum of 10 years total experience implementing, upgrading, and maintaining network and computer systems in a high-availability environment.
- Financial services experience is desirable.

Additional Requirements

- Incumbent must be bondable.

Physical Requirements

This is a moderately sedentary office classification although standing and walking between work areas is required. Individual(s) in this class must possess the mobility to work in a standard office setting and use standard office equipment, including a computer; visual acuity to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator at a reasonable speed, and to operate standard office equipment. Person(s) in this classification occasionally bends, stoops, kneels, reaches, climbs, and walks; and pushes and pulls drawers open and closed to retrieve and file information. Employee must possess the ability to lift, carry, push, and pull materials and objects weighing up to 10 pounds regularly, and up to 50 pounds occasionally. Works in an office environment with moderate noise levels.