

UW HEALTH JOB DESCRIPTION

Network Infrastructure Security Engineer

Job Code: 330039	FLSA Status: Exempt	Mgt. Approval: B. Gross	Date: December 2022
Department: IS - Infrastructure		HR Approval: M. Grayson	Date: December 2022

JOB SUMMARY

The Network Infrastructure Security Engineer is responsible for design, installation, administration, and support for network and security infrastructure, including data network at the edge, core and data center, load balancing, firewall, wireless, DHCP and DNS, client based and site to site VPNs, PKI, Azure cloud connectivity, and multi-site connectivity. The Network Infrastructure Security Engineer utilizes a broad knowledge of network, server, and troubleshooting skills to maintain highly available systems in a critical 24x7x365 environment.

The Network Infrastructure Security Engineer monitors system performance and recommends adjustments as needed, including expansion, security patches, and replacement. The Network Infrastructure Security Engineer participates in customer and business partner meetings and is involved in team level project design and implementation.

This position is responsible for after-hours on-call, monitors incident management queues, and follows service level agreements (SLAs) to align with operational performance goals.

MAJOR RESPONSIBILITIES

Deliver Network Security Services

- Provide end to end ownership and accountability for the service delivery, maintenance, and support of the network infrastructure and all components.
- Maintain network infrastructure services, including the installation, architecture, design, setup, programming, troubleshooting, and maintenance of network software and hardware in a mixed vendor environment.
- Install, configure, manage, support, and maintain routers, switches, access points, DNS and DHCP appliances, load balancers in both an on-premises environment and an Azure cloud environment.
- Troubleshoot and resolve internetwork communication problems.
- Make recommendations for appropriate new technologies.
- Install, configure, and maintain network security services such as layer 7 firewalls, site to site VPNs, and Client based VPNs such as Global Protect.
- Coordinates with Facilities and Planning on network cabling efforts including new data closet installations and connectivity.

Improve Processes and Standards

- Work with other IS staff to identify opportunities for automation and continuous improvement.
- Analyze network performance and capacity and make appropriate remediations for network expansion/reconfiguration.
- Develop and maintain technical standards, procedures, and techniques for the resolution of network and security infrastructure issues to ensure maximum system availability and performance levels.
- Troubleshoots network, system, and application performance issues using various tools and methods.

Effective Team Member

- Monitor and report on system health to ensure the stability of infrastructure services.
- Lead and plan Network refresh projects and code upgrades.
- Participate in daily on call rotation.
- Provide guidance and mentorship to team members and other IS staff.

Technical Growth

- Maintain professional growth and development through courses, online training, conferences, and self-directed research.

Leadership

- Provide oversight of the coordination and delivery of voice circuits to remote locations.
- Work with IT teams, internal customers, data and voice network carriers, and vendors to identify and resolve issues in the environment.

Technical Responsibility

- Work with WAN service providers in support of the UW Health WAN.
- Provide subject matter expertise (SME) for enterprise-class network and security infrastructure system.

ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.

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JOB REQUIREMENTS		
Education	Minimum	Associate Degree in Healthcare, Information Technology, Business, or related field Two (2) years combination of relevant experience and education may be considered in lieu of degree
	Preferred	Bachelor's degree in Healthcare, Information Technology, Business, or related field
Work Experience	Minimum	Demonstrated success designing, configuring, and supporting network and security infrastructure Demonstrated success troubleshooting and resolving problems in a large technology environment
	Preferred	Three (3) years' relevant experience working in critical infrastructure Two (2) years' relevant experience supporting network and security infrastructure
Licenses & Certifications	Minimum	None
	Preferred	CCNA/CCNP, PCNSE, or equivalent mid-level network certification
Required Skills, Knowledge and Abilities		<p><u>Information Services (IS) Core Competencies:</u></p> <p>Intermediate competency in the following areas:</p> <ul style="list-style-type: none"> • Leadership includes leads with integrity, maintains strategic orientation, demonstrates business & financial acumen, champions innovation, manages execution, leads & develops people • Communication • Effective team member • Critical thinking • Mentoring and teaching <p>Emerging competency in the following areas:</p> <ul style="list-style-type: none"> • Leading highly empowered, self-directed teams including cross-functional teams • Technical leadership of applicable products or platforms • Applying lean management tools • Applying agile methodologies <p><u>Position Specific Competencies:</u></p> <p>Intermediate competency in at least four Network competencies including:</p> <ul style="list-style-type: none"> • Understanding of load balance technology and methodologies • Ability to create solutions to incorporate business needs or solve existing business challenges • Ability to design, install, and troubleshoot core network services such as DNS, DHCP, NTP, RADIUS and TACACS • Understanding of network protocols such as TCP, UDP, SSL, STP, and multicast • Ability to design, configure, and troubleshoot connectivity within Cisco ACI or other data center switching technologies • Understanding of QOS implementation on wired and wireless networks • Understanding of routing protocols such as OSPF, EIGRP, and BGP • Knowledge of configuring and supporting Cisco layer 3 switches • Knowledge of configuring and maintaining network firewalls such as Cisco ASA and Palo Alto • Knowledge and experience troubleshooting multiple layers of the OSI model • Knowledge of 802.11 wireless protocols such as 802.11ax/ac/n/a/g/b • Designing, supporting, and optimizing large wireless environments over multiple sites • Ability to design, support, and troubleshoot VXLAN and EVPN • Understanding of port-channels and virtual-port channels • Ability to manipulate, maintain, and create tools to assist in data storage and manipulation (Excel, MySQL, syslog, XML, JSON) • Understanding of GSLB design and how to implement it for disaster recovery

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	<ul style="list-style-type: none"> Ability to design, install, upgrade and troubleshoot NetScaler SDX appliances Understanding of advanced NetScaler features such as rate limiting, policies, http callout, IP reputation, AppFW, Appflow, and Bot management Knowledge of 802.1X and Cisco ISE policies <p><u>Other Preferred Skills, Knowledge, Abilities:</u></p> <ul style="list-style-type: none"> Knowledge of DevOps technologies and programming languages such as Bash, PHP, Python, PowerShell and Service Now flow designer Ability to design and support critical infrastructure in a 24x7x365 environment Understanding of network security concepts and best practices Ability to work with people of varying skills and personalities
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PHYSICAL REQUIREMENTS

Indicate the appropriate physical requirements of this job in the course of a shift. *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

Physical Demand Level		Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
	Sedentary: Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as dockets, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	Up to 10#	Negligible	Negligible
	Light: Ability to lift up to 20 pounds maximum with frequent lifting and/or carrying of objects weighing up to 10 pounds. Even though the weight lifted may only be a negligible amount, a job is in this category when it requires walking or standing to a significant degree.	Up to 20#	Up to 10# or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	Negligible or constant push/pull of items of negligible weight
X	Medium: Ability to lift up to 50 pounds maximum with frequent lifting and/or carrying objects weighing up to 25 pounds.	20-50#	10-25#	Negligible-10#
	Heavy: Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	50-100#	25-50#	10-20#
	Very Heavy: Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	Over 100#	Over 50#	Over 20#
Other - list any other physical requirements or bona fide occupational qualifications not indicated above:				

Note: The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.