KWANTLEN POLYTECHNIC UNIVERSITY	**JOB DESCRIPTION**
Dept.: Information Technology,	**Working Title**: Senior Network Analyst
Date: Dec 2024	**Job Class**: 16-14

PRIMARY FUNCTION:

To provide technical direction and leadership for communication systems, data/voice/cable enhancements and maintenance and to provide leadership to the support staff responsible for supporting these services.

JOB DUTIES AND TASKS:

1. Provides communication management and technology planning for Kwantlen Polytechnic University:
    a. Plan Kwantlen Polytechnic University's communication architecture.
    b. Assist Kwantlen Polytechnic University divisions in defining their communication requirements, analyze needs; plan, develop and implement solutions.
    c. Analyze Kwantlen Polytechnic University's communication requirements and propose recommendations.
    d. Develop and maintain communication contingency and security plans, policies and procedures for communications infrastructure.
    e. Determine policies and procedures for LAN, WAN, voice processing and cable infrastructure administration.
    f. Supervise downtime and perform configuration, upgrades, maintenance and repairs on servers/network/telecommunication devices.
    g. Supervise day to day system/network/telecommunication administration.
    h. Monitor security access.
    i. Analyze and diagnose technical multi-platform system/network/telecommunication problems.
    j. Monitor the operation of system/network/telecommunications performance.
    k. Monitor network (data, voice) reliability and plan for replacement and enhancements
    l. Monitor network (data, voice), load and ensure adequate capacity.
    m. Plan and evaluate the implementation of the communication upgrades and new technologies.
    n. Direct technical staff in logging, analyzing and resolving communication problems.
    o. Develop contract language for communications systems, participate in contractor selection and monitor performance.
    p. Implement new communication technologies and develop support infrastructures, including standards and tools.

2. Manage the acquisition and maintenance of Kwantlen Polytechnic University's communication hardware and software:
    a. Maintain contact with technology/service providers to keep apprised of technological developments
    b. Recommend, monitor and evaluate supplier services
    c. Oversee the receipt, inventory, testing, maintenance and installation of communication equipment.

3. Supervise support staff and contractors, and manage projects:
    a. Establish unit goals and objectives and determine priorities.
    b. Monitor and assess project performance.
    c. Investigate and resolve escalated Service desk calls.
    d. Provide technical advice and recommendations for system/network/telecommunication products and services.
    e. Provide training on system/network operation.

4. Research, evaluate and plan:
    a. Research network/server/telecommunication technologies.
    b. Compile statistics/information and perform trend analysis for various systems.
    c. Research and evaluate technology to enhance system/network/telecommunication performance.
    d. Leads in the design and planning of system/network/telecommunication infrastructure.

5. Other related duties:
    a. Train and direct other workers on new communication applications, technology, communications administration and problem resolution.
    b. Provide input to strategic direction for communication, hardware/software acquisitions, contingency planning, disaster recovery and security.
    c. Participate in joint technical project teams.
    d. Ensure satisfactory completion of contract services.
    e. Lead preparation for requests for proposals.

SUPERVISION RECEIVED:

Reports to Manager, Network Operations.

SUPERVISION/DIRECTION EXERCISED:

Provide training on support and troubleshooting of telecommunication and network system to other workers; assign, direct and monitor work of other employees.

PHYSICAL ASSETS/INFORMATION MANAGEMENT:

Manage, plan, design and coordinate the implementation and maintenance of communication applications; develops and recommends policy, procedures and standards of the design, operation and security of communication services; assign, monitor and evaluate projects.

FINANCIAL RESOURCES:

Develop contract specifications for new and existing communication systems and verify satisfactory contract performance; perform cost benefit analysis for purchasing decisions for communications systems; verify accuracy of invoice charges from vendors.

The above statement reflects the general details considered necessary to describe and evaluate the principal functions of the job identified, and shall not be construed as a detailed description of all the work requirements that may be inherent in the job.

EMPLOYER REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

General Requirements:

1. Completion of a university degree/diploma in computing/networking studies,
2. In depth experience leading design/planning/implementation of enterprise computing/networking and data communication projects.
3. Expert knowledge of computer, networking and telecommunication system and services.
4. In depth knowledge of communication system operations, including the ability to quickly grasp new concepts and plan services using new technology.
5. Expert knowledge of network security technologies and secure design principles, including various firewall technologies (such as Palo Alto and Juniper SRX), IDS/IPS, device hardening and configuration best practices.
6. Experience with PCI Compliance activities such as penetration test result analysis, remediation activities, etc.
7. Excellent verbal and written communication skills and well-developed interpersonal skills.
8. Ability to work under minimal supervision, under own initiative and as an effective team member.
9. Ability to independently organize work to achieve predetermined goals and meet deadlines.
10. Understanding of key trends and players in the software industry, particularly with respect to enterprise solutions, and cloud-based technologies.
11. Superior organizational skills with the ability to set priorities, follow-up and ability to manage multiple concurrent initiatives to meet challenging deadlines.
12. Ability to research, evaluate and plan the implementation of emerging technology.
13. Excellent interpersonal and relationship-building skills for collaborating with team members and various business units.
14. Ability to lead complex technical network support and preventive maintenance improvement projects.
15. Understanding of key trends and players in the network industry.
16. Superior organizational skills with the ability to set priorities, follow-up and meet challenging deadlines.
17. Ability to take a leadership role in implementing network projects.
18. Proven ability to work in a team environment.
19. Excellent business writing skills.
20. Ability to work independently in an extremely busy, varied and diverse environment with changing priorities.
21. Ability to communicate complex and technical concepts clearly with non-technical as well as technical personnel at all levels of the organization.
22. A high degree of initiative and self-motivation.
23. The ability to manage multiple concurrent initiatives.
24. Required to work occasionally on Saturday, Sunday, evening and travel between campuses.

Red Hat and Office 365 Administration (in addition to the General Requirements above):
1. Minimum of 7 years' progressive experience in Red Hat and Office 365 Administration.
2. Minimum 2 years hands on experience in administrating Red Hat Enterprise Linux Operating system in an enterprise environment (Red Hat Certified System Administrator (RHCSA) certification is an asset)
3. Minimum 2 years hands on experience in Microsoft Windows Server Operating systems administration in an enterprise environment
4. Minimum 2 years hand on experience in scripting and automation with advanced knowledge in PowerShell and Linux shell scripting required. JSON, YAML, Python is an asset.
5. Minimum 2 years experience in MS Exchange administration (on-prem and Online)
6. Minimum 2 years experience in Microsoft 365 administration including but not limited to Azure AD, Exchange Online, MS Teams, SharePoint Online
7. Experienced in administering MS Teams with enterprise voice
8. Experienced in MS Active Directory and Domain administration

Network, Server and Storage Administration (in addition to the General Requirements above):

1. Minimum of 15 years' progressive experience in Network, Server and Storage Administration.
2. Expert knowledge of data communication infrastructure technology and cable/wiring management systems.
3. Ability to troubleshoot and resolve complex issues through packet capture and analysis and other tools.
4. Expert knowledge of network routing/switching/QoS technologies (such as 802.1Q, 802.1X, RIP, OSPF) and their implementation, particularly with the University network platform (Juniper).
5. Expert knowledge and experience with design/planning/implementation of Wireless network technology in large (enterprise) deployments.
6. Expert knowledge and experience with network infrastructure support technologies such as DHCP, DNS, IPAM, Radius.
7. Expert knowledge and experience with configuration and administration of storage technologies such as SAN, NAS (NFS and CIFS), Fibre Channel, iSCSI.
8. Expert knowledge and experience with network load balancing and SSL/TLS offload technologies such as NetScaler.
9. Expert knowledge and experience with NetApp SAN, NAS technologies.
10. Skills in monitoring, maintenance and administration of the University network infrastructure, including products such as Juniper, Brocade, Dell, Palo Alto, NetScaler, NetApp, BlueCat.