**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Network & Telephony Systems Specialist

**Job Number:** C-060

**NOC:** 2281

**Band:** 11

**Department:** Information Technology

**Supervisor Title:** Manager, Digital Service Delivery & Administration

**Last Reviewed:** May 15, 2009

**Job Purpose**

Reporting to the Manager, Digital Services Delivery and Administration, the Network & Telephony Systems Specialist is a member of a team responsible for server to desktop delivery of converged voice and data applications to the university community. This position requires a senior level technical subject matter expert, operating with minimal supervision and a wide latitude for independent judgment.

The Network & Telephony Systems Specialist’s primary focus is the delivery of core network connectivity services across the university. This requires a solid knowledge of TCP/IP networking hardware and protocols, as well as the Linux operating system used to deliver supporting services such as DNS and DHCP. Managing and evolving hardware and software platforms, managing performance and availability, and ensuring the security of deployed applications are all in scope for this position. This individual is sometimes also responsible for creating and maintaining applications used to support system administration.

**Key Activities**

1. Perform network, server, operating system, and application integration, analysis, optimization, and problem resolution within an enterprise-wide network services context where faults or errors can have very large impact to users throughout the university.
2. Maintain network devices including software configuration of servers, switches, routers, firewalls, printers, wireless access points, virtual private network equipment and associated data centre support equipment.
3. Plan, develop, maintain and operate server and network-based monitoring systems, automate network monitoring through scripts or software routines, and develop schemes for notification of faults for after-hours operational requirements.
4. Maintain telephony devices including software configuration of voice over IP servers and endpoints, voicemail systems, speech recognition systems, emergency communications systems, and associated data centre support equipment.
5. Work with the Senior Network Analyst to manage the corporate IP network, including topology design, address allocation, routing changes, network based access controls, and maintaining external connectivity.
6. Plan, maintain and evolve corporate security architecture, analyze threats, and design solutions to minimize risk.
7. Participate in an weekly 24x7 on-call rotation for after-hours/weekend IT operational support. While on call (normally 1 week out of 4), operate independently and assume primary operational responsibility for the university data centre, network, and services. This includes responding to critical outages, determining the appropriate response, and restoring services with limited assistance from others, and occasionally escalating to management for large impact events.

**Education**

Honours University Degree (4 year) in Computer Science, Electrical Engineering or similar field of technological study.

**Experience Required**

1. A minimum of 3 year of direct system and network operations experience in an enterprise network services environment, with prior experience being on-call and operating in a self-directed mode.
2. Ability to work independently from assigned objectives within a dynamic team, to plan work around a schedule, and to self-direct activities with minimal direct supervision.
3. Proven track record of optimizing technological designs to meet business and economic requirements.
4. Able to routinely work outside of normal business hours, and to accommodate other flexible scheduling to allow for extended shift coverage.

**Technical Competencies**

Advanced level technical skill and practical hands-on experience in implementation, maintenance, and problem resolution in the following core competencies:

*1) Linux Server Administration*

a. SUSE Enterprise Linux experience and/or certification is desirable.

b. LAMP stack administration.

c. SMTP, DNS, DHCP, LDAP, and RADIUS services.

d. Task automation with PHP, Perl, Expect, and Bash scripting.

e. System monitoring, performance tuning and capacity planning.

f. Backup and disaster recovery procedures.

*2) Internetworking*

1. Direct implementation and management experience with converged voice and data networking in a large enterprise environment.
2. Demonstrated ability to manage and implement medium-to-large-scale technology and/or service deployments.
3. Extensive knowledge of TCP/IP and related protocols, of routing protocols (BGP, OSPF, EIGRP).
4. Hands on experience with wireless networking, VPN, multicasting, and network access controls.
5. Experienced with Cisco IOS and the family of Cisco networking, switching, telephony and security platforms. (A Cisco CCNA or higher certification is desirable).
6. Demonstrated experience in the use of network traffic analysis to establish network baselines and troubleshoot IP connectivity.

*3) Voice Telephony*

1. Good knowledge of VOIP technologies (H.323, SIP, SCCP, G.703) and architectures.
2. Knowledge of the Cisco Call Manager platform.
3. Knowledge of the Asterisk PBX platform.

A keen interest and commitment to developing skills to a moderate level through on-the-job training, formal training, and self-learning in Novell and Microsoft server products are also required.