SOUTHWESTERN COMMUNITY COLLEGE DISTRICT

CLASS TITLE: NETWORK SECURITY SYSTEMS ANALYST

SUMMARY DESCRIPTION

Under the general direction of the Chief Information Systems Officer as a technical expert, serves as the District's primary source for information, consultation and recommendations on all electronic security matters related to network and Windows, Linux and database server performance, utilization, installation, maintenance and security This includes checking server and firewall logs, scrutinizing network traffic, establishing and updating virus scan, and troubling. The incumbent will also analyze and resolve security breaches and vulnerability issues using timely and accurate methods and will conduct user activity audits as necessary. The successful candidate will install, configure, maintain and monitor network and server equipment; monitor and report network and server performance and utilization; evaluate network activities and prepare and present recommendations for effective and efficient operations; and coordinate maintenance and support activities, vendor contracts and agreements. Additional responsibilities will include the system administration and project management of servers running a variety of applications but not limited to Windows, Linux, and database servers.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- 1. Continually evaluate existing network configurations, components and software; prepare and present recommendations for network enhancements and/or modifications. Evaluate new systems and products for security monitoring and response. *E*
- 2. Coordinate and administer Windows, Linux and SQL based servers; plan for future use; troubleshoot, resolve, and respond to user problems, issues, and requests; implement, maintain, and configure system enhancements and software fixes. *E*
- 3. Monitor, evaluate and report on network performance and utilization; prepare and present recommendations to maintain effective and efficient network performance. Access the need for security reconfiguration (minor or significant) and executes them as required. E
- 4. Monitor and maintain reasonable currency for District network software and security patches; evaluate new network software and prepare and present recommendations for appropriate changes and enhancements. E
- 5. Monitor, evaluate and report on all metrics related to the network performance such as; Internet connectivity, infrastructure power and cooling, and network traffic and latency.; prepare and present recommendations to maintain effective and efficient Network operation; install and configure hardware and software required to maintain effective and efficient connectivity. *E*
- 6. Coordinate network maintenance and support activities, contracts and agreements with vendors; ensure compliance with contract terms and conditions. *E*
- 7. Coordinate Windows, Linux and database server maintenance, security updates, and support activities, contracts and agreements with vendors; ensure compliance with contract terms and conditions. *E*
- 8. Monitor, evaluate and maintain network security; prepare and present recommendations to maintain effective and efficient network security; install and maintain network security measures. *E*
- 9. Monitor and evaluate overall network environments including connectivity and inter-operability with the District's network; prepare and present recommendations to maintain effective and efficient network connectivity and inter-operability. *E*

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- 10. Install and configure standard network and server operating systems to provide end to end connectivity to networked clients. *E*
- 11. Monitor and coordinate network and related equipment additions, deletions and changes including evaluation and recommendations related to facilities requirements. E
- 12. Monitor and coordinate Windows, Linux and database server related equipment additions, deletions and changes including evaluation and recommendations related to facilities requirements. *E*
- 13. Monitor and evaluate changes and enhancements in network technology and prepare and present recommendations for the proper utilization of new technologies within the District's network. E
- 14. Establish and maintain network and Windows, Linux and database server standards, policies and procedures including, but not limited to, disaster recovery policies, remote connectivity policies, and appropriate security actions to ensure the safety and integrity of District data, hardware and service delivery; monitor compliance with these policies and report noncompliance to management staff. *E*
- 15. Develop and maintain documentation on network configurations, release levels, policies and procedures. E
- 16. Develop and maintain documentation on Windows, Linux and database server configurations, release levels, policies and procedures. E
- 17. Attend and participate in professional group meetings; stay abreast of new trends and innovations in the field of information technology and network administration. *E*
- 18. Perform related duties and responsibilities as required.

KNOWLEDGE AND ABILITIES

Knowledge of:

Current industry standard security practices and methodology

Methods and techniques of network installation, configuration, maintenance and troubleshooting.

Methods and techniques of Windows, Linux and database server installation, configuration, maintenance and troubleshooting.

Advanced principles and practices of computer science and information technology.

Operational characteristics of sophisticated network environments and associated equipment Principles and operations of file servers within network environments.

Network security and disaster recovery measures.

Oral and written communication skills.

Ability to:

Identify and analyze network problems and recommend appropriate solutions,

Identify and analyze internet related problems and perform remedial actions.

Install, configure and maintain College networks.

Install, configure and maintain College Windows, Linux and database based servers and environment. Monitor and coordinate additions, deletions and changes to the network.

Monitor and evaluate network performance and prepare and present recommendations for appropriate actions.

Establish and maintain Internet connections with District network.

Install and maintain network environments.

Implement and maintain network security.

Ensure proper maintenance of network systems and related equipment.

Remain current in information technology concepts, tools, techniques, and applications.

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Operate office equipment including local computers and remote connections.

Prioritize work to meet schedules and time lines.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with and exhibit sensitivity to and understanding of the diverse racial, ethnic, disabled, sexual orientation, and cultural populations of community college students.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

EDUCATION AND EXPERIENCE

Any combination equivalent to: a Bachelor's degree from an accredited college or university with major course work in computer science, information technology, or a related field; and two years of increasingly responsible network installation, configuration and maintenance experience of which three years must be in a sophisticated network environment comparable in size and complexity to SWC. Professional certifications such as MCSE, MCSE/I, PMP or CNE and knowledge of VMware are desirable.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed primarily in a standard office setting with frequent interruptions and distractions; extended periods of time viewing computer monitor; possible exposure to dissatisfied individuals.

<u>Physical</u>: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, twist and crawl on floor, under desks and in tight places; to lift, carry, push, and/or pull light to moderate amounts of weight; work on ladders; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

<u>Vision</u>: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

Revised: March, 2006 Johnson & Associates

Revised: November, 2015

Human Resources (Replaces Network Systems Analyst)