

NETWORK OPERATIONS CENTER ENGINEER

DEFINITION

Installs, implements, configures, integrates, and maintains the Network Management Systems necessary to monitor the District's Enterprise Network.

TYPICAL DUTIES

Implements, maintains, configures, augments, and integrates disparate tools for network management.

Configures managed node domains within a distributed management system implementation. Provides feedback to management on trends, recurring issues, and anticipated problems related to network devices and their monitoring.

Configures and performs balancing of system resources and maintains remote access system. Develops and tests event reduction and correlation rules within a distributed management system implementation.

Develops and implements task-specific polling and monitoring scripts for integration with the management system.

Develops and implements network, system, and application performance analysis and reporting. Provides daily monitoring of network infrastructure, detects equipment failure, and generates remedy services.

Collects network performance data trends for long-term analysis and capacity planning. Evaluates new network management system products.

Assists in the development and documentation of technical standards and interfaces. Monitors protocol compatibility, performs system tuning, and makes recommendations for improvement.

Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Network Operations Center Engineer is responsible for the operation and configuration of the District's network monitoring tools.

The Network Operations Manager is responsible for managing the day-to-day activities of the Network Operations Center.

A WAN Specialist I maintains, services, repairs, configures, and monitors wide area network equipment from remote sites and diagnoses and prepares local area network hardware/software problems that affect connectivity to the wide area network.

SUPERVISION

General direction is received from the Network Operations Manager. No supervision is exercised.

CLASS QUALIFICATIONS

Knowledge of:

Peregrine Network Discover, Nagios, Hewlett-Packard (HP)/ Aruba Airwave, Cisco Prime, Netscout Fluke Truview, BMC solutions (such as Remedy, TrueSight, and Network Automation), and HP Business Technology Optimization or equivalent enterprise network monitoring products

One or more common scripting languages, such as Perl, TCL, Python, and PHP Java language programming

TCP/IP protocol stack and routed and switched network topologies and equipment

Usage of SNMP and other standard protocols for network management

Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS)

Addressing, flow control, error handling, encapsulation, protocols

Operating systems such as Microsoft Windows OS, Unix, and Linux

Ability to:

Troubleshoot and diagnose problems

Design and configure network management system fail-over capabilities for uninterrupted operations

Design and configure topology map filtering and task-specific/domain-specific views

Monitor network infrastructure, detect failed equipment, and generate remedy services

Integrate third-party management applications with the network monitoring system platform

Maintain effective working relationships with District personnel

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university, with a bachelor's degree in computer science, electrical engineering, or a related field. Additional qualifying experience may substitute for the required education on a year for year basis.

Experience:

Three years of experience in the installation, configuration, and maintenance of two or more large-scale network management platforms such as Peregrine Network Discovery, Nagios, Stablenet Infosim, HP/ Aruba Airwave, Cisco Primeworks, Netscout Fluke Truview, BMC Solutions (such as Remedy, TrueSight, and Network Automation), and HP business Technology Optimization.

Special:

Cisco Certified Network Associate (CCNA) certification.

Cisco Certified Network Professional (CCNP) certification, Cisco Certified Design Professional certification (CCDP), or BMC or HP equivalent certifications are preferable.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.