NETWORK OPERATIONS CENTER ENGINEER

DEFINITION

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

TYPICAL DUTIES

Implements, maintains, configures, augments, and integrates disparate tools for network management of wired, wireless and cloud infrastructure, and telecommunications systems.

Configures managed node domains within a distributed management system implementation.

Provides feedback to management on trends, recurring issues, and anticipated problems related to network and telecommunications 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 and telecommunications systems, and application performance analysis and reporting.

Provides daily monitoring of network and telecommunications infrastructure, detects equipment failure, and generates remedy services.

Collects 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 for wired and wireless infrastructure and telecommunications.

The IT Operations Manager plans, organizes, coordinates, and oversees the daily operations for a defined department within the Information Technology Division.

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

SUPERVISION

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

CLASS QUALIFICATIONS

Knowledge of:

Infosim StableNet, Hewlett-Packard (HP) IMC / Aruba Airwave, Cisco Prime /DNA, Netscout
    Fluke Truview, BMC solutions (such as Remedy, TrueSight, and Network Automation), and
    Nagios, or equivalent enterprise network and telecommunication monitoring and
    management 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
Cisco Unified Computing Systems
Cisco Unified Communication Manager and Unity Connection
Genetec Security Center and Federation Server
Internet Cloud services such as Amazon Cloud
Virtualization such as VMWare

Ability to:

Troubleshoot and diagnose problems
Design and configure network management and telecommunication 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
Install, configure and maintain Window OS and Unix/Linux physical or virtual servers and
    systems

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 and/or, configuration and maintenance of a large-
scale network management platforms such as, Infosim StableNet HP IMC/ Aruba Airwave,
ClearPass, Cisco Prime/DNA, Netscout Fluke Truview, BMC Solutions (such as Remedy,
TrueSight, and Network Automation)

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.

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JAP