NETWORK ANALYST

Purpose Statement

Under general supervision, the Network Analyst acts as a technical resource for planning, installation, configuration and maintenance of computer network hardware and software needs for the San Diego County Office of Education (SDCOE) and/or local school districts.

Diversity Statement:

Because each person is born with inherent worth and dignity, and because equitable access and opportunity are essential to a just, educated society, SDCOE employee commitments include being respectful of differences and diverse perspectives, and being accountable for one's actions and the resulting impact.

Representative Duties:

This position description is intended to describe the general nature and level of work being performed by the employee assigned to the position. This description is not an exhaustive list of all duties, responsibilities, knowledge, skills, abilities, and working conditions associated with the position. Incumbents may be required to perform any combination of these duties. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

Essential Functions

- Plans and coordinates the network configuration of new Windows, Linux, VMWare and Unix servers.
- Maintains Windows desktop operating system patches.
- Configures and maintains Windows Active Directory, Linux and Unix user login accounts, user and file permissions, file shares, storage quotas, server printer drivers and print shares.
- Installs and maintains Juniper, Cisco, and related routers and switches.
- Configures appropriate routing tables and routing protocols, network interfaces and wide area network connections for routers.
- Installs, configures and maintains VLANs, port security and access lists on infrastructure ~~Cisco~~ Ethernet switches.
- Installs, configures and maintains wireless networks.
- Configures and maintains essential IP services including DNS/BIND, DHCP, SMTP and SNMP on Windows and Linux servers and desktop systems.
- Maintains and configures address translations and port security access lists for Internet firewall systems.
- Configures and maintains web content filtering system(s).
- Configures and maintains intrusion prevention systems in collaboration with the SDCOE Cybersecurity department.
- Troubleshoots and repairs broken category 5/6 and telephone wiring jacks.
- Configures and maintains SDCOE VOIP telephone systems.
- Provides telephone, e-mail and in-person support for network related problems.
- Provides support for IP video conferencing.

- Provides server configuration and maintenance for webcast and video streaming services.
- Maintains user accounts, quotas, connectors, and e-mail routing configurations for Office 365/Exchange online systems.
- Conducts routine security scanning for malicious software and suspicious network activity.
- Conducts protocol analysis to identify and remedy network performance issues.
- Configures and maintains Netflow, JFlow, and SFlow data collection and monitoring.
- Monitors network activity between local and remote locations.
- Configures and monitors bandwidth analysis tools.
- Monitors critical equipment and connectivity 7x24.
- Reports circuit outages to telecommunications carrier.
- Coordinates with telecommunications carrier's technical staff to resolve outages.
- Consults with school district and program technical personnel regarding the acquisition, configuration, installation and technical support of technology products and initiatives.
- Provides training in the use of network-related computer hardware and software.

Other Functions

Performs related duties as required.

Job Requirements: Minimum Qualifications

Knowledge and Abilities

KNOWLEDGE OF:

THOROUGH TECHNICAL KNOWLEDGE OF:

Windows, Linux, Hyper-V, VMWare and Unix operating systems and their uses;

Requirements and procedures for configuring computer equipment in a secure manner;

Commercial "off the shelf" software typical in an office setting;

Computer data communication concepts, capabilities, and methods;

Computer scripting languages such as Power Shell and Python; programming languages;

Ethernet networking protocols and analysis;

Wireless networking configuration and management;

DNS, SMTP and SNMP protocols;

Data security design, principles and practices;

Junos and Cisco IOS for routers, switches and firewalls;

BICSI and related cabling standards;

IEEE networking standards.

ABILITY TO:

Install computer equipment, and system-level and commercially-packaged software;Work effectively with staff;

Independently analyze problems and implement solutions;

Communicate effectively orally and in writing.

<u>Working Environment</u>

Office and field settings, Ability to travel to and from school or work sites to service equipment and provide training.

The usual and customary methods of performing the job's functions require the following physical demands: carrying, pushing, and/or pulling, and significant fine finger dexterity, and the ability to lift objects up to 30 pounds. Generally the job requires 80% sitting, 10% walking, and 10% standing. This job is performed in a generally clean and healthy office and classroom environment. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

<u>Experience:</u> Three (3) years job-related experience in a network analyst or related position configuring and managing security and performance of wide and local area networks; troubleshooting and resolving network performance problems; conducting Ethernet protocol analysis; configuring and maintaining DNS, SMTP and SNMP services and hands-on use of Juniper and Cisco IOS configuring routers, switches and firewalls. Palo Alto firewall experience is highly preferred.

<u>Education:</u> College-level coursework and/or formal training in network design and management.

<u>Equivalency:</u> A combination of education and experience equivalent to college-level coursework and/or formal training in network design and management, and three (3) years job-related experience in a network analyst or related position configuring and managing security and performance of wide and local area networks; troubleshooting and resolving network performance problems; conducting Ethernet protocol analysis; configuring and maintaining DNS, SMTP and SNMP services and hands-on use of Juniper and Cisco IOS configuring routers, switches and firewalls. Palo Alto firewall experience is highly preferred.

<u>Required Testing</u>

N/A

<u>Certificates</u>

N/A

<u>Continuing Educ./Training</u>

Maintains Certificates and/or Licenses, if applicable

<u>Clearances</u>

Criminal Justice Fingerprint/Background Clearance

Drug Test and TB Clearance

<u>FLSA State:</u>   Non-Exempt

<u>Salary Range:</u>   Classified Support Grade 066

Personnel Commission Approved: May 12, 1992

Revised: 05/2005, 02/2007, 07/2010, 05/2016; 05/2021; 06/2023