

**SAN MATEO COUNTY OFFICE OF
EDUCATION**

CLASS TITLE: COORDINATOR, NETWORK ARCHITECTURE & CYBERSECURITY

BASIC FUNCTION:

Under the direction of the Chief Technology Officer or assigned Director or Manager, perform a variety of highly complex and specialized activities involved in the planning, design, configuration, development and modification of County Office and school district Local Area Network (LAN), Wide Area Network (WAN), Internet and other network and cloud systems and related services; Provide internal auditing, guidance and support in identifying, assessing and remediating County Office and district cybersecurity needs; assist in developing and testing network and cloud systems and providing leadership to county personnel on all cybersecurity-related matters.

ESSENTIAL DUTIES:

Perform a variety of highly complex and specialized technical activities involved in the planning, design, configuration, development and modification, of County Office and school district LAN, WAN, internet and other network and cloud systems and related; establish and maintain related timelines and priorities.

Provides security guidance to network staff for the maintenance of cybersecurity best practices of network, cloud and server systems.

Architect the design, installation, configuration and ensure an efficient operation of network hardware, cabling, servers, routers, switches, firewalls, cabling infrastructures and other network components, equipment and devices; design and ensure proper interoperability, connectivity and adaptability between network systems; design and oversee circuit installations and network cutovers; design on-site and cloud backup solutions.

Produce and maintain reports related to the SMCOE's cybersecurity posture for review by the Chief Technology Officer. Monitor system logs, SIEM tools and network traffic for unusual or suspicious activities and interprets such activity and makes recommendations for resolution.

Analyze network needs and develop and implement network plans, projects and specifications; review network maps, diagrams, drawings, spreadsheets and other documents for accuracy; review equipment, material, hardware, time and cost requirements for network upgrades; contact vendors and contractors to request pricing and product information.

Monitors internal control systems to ensure that appropriate access levels and security clearances are maintained.

Reviews, assesses, and suggests mitigation solutions for penetration test and vulnerability assessments on information systems and infrastructure.

Participates in incident response planning and investigation of network security incidents and breaches.

Periodically audit network protocols, practices and performance to ensure smooth and efficient operation and identify problems, concerns and security issues; monitor, control and assure proper network usage, security, traffic, operations, resources allocation, bandwidth and connectivity; monitor, analyze and modify systems to meet County Office user needs; ensure timely development of corrective action plan in response to network performance or security deficiencies.

Provide technical assistance and user support to County Office personnel, school districts, outside agencies and others concerning networks architecture and cyber security concerns; respond to inquiries and provide detailed and technical information concerning network design, equipment, hardware, software, security, connectivity, configuration, malfunctions, applications, practices, techniques and procedures.

Serve as a liaison and coordinate network-related projects, communications and information between the County Office, local school districts, vendors, consultants and various outside agencies; resolve related issues and conflicts in a proper and timely manner.

Act as an information security liaison during significant information security risks for both ongoing and planned operations.

Deliver cyber security related training to SMCOE and district technical personnel using a variety of presentation methods.

Research and evaluate new technologies for possible implementation; confer with users concerning system needs

Thoroughly document all HelpDesk tickets in a timely manner to ensure there is sufficient information to communicate what the problem was, how it was remediated, and to suggest actions to prevent a similar issue (where appropriate).

Maintain professional and technical knowledge by attending courses and system training, reviewing professional publications, and conferring and collaborating with others in the professional community

Coordinate, attend and conduct a variety of meetings as required.

Attend and participate in various trainings as assigned

Participate in building and implementing department and team's strategic plan.

Assist in the development of the Integrated Technology Services budget.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE OF:

Practices, procedures and techniques involved in the planning, design, installation, configuration, operation, development, modification, maintenance and repair of LAN, WAN, internet, cloud and other network systems and related services, equipment, hardware, software and applications.

Principles, methods and procedures of networks and peripheral equipment, system utilities, design and program applications.

Hypervisors, virtual infrastructure.

Networking standards, requirements, layout and infrastructure related to educational organizations.

Materials, methods and tools used in the design, operation, installation and monitoring of computer and network systems.

Advanced principles, theories and techniques of network design and cyber security practices, cybersecurity frameworks and penetration testing methodologies.

Computer operating systems and software applications utilized by the SMCOE.

WAN and LAN usage, implementation and network terminology.

Applicable types of cabling systems, servers, routers and other related equipment.

Principles and techniques of systems and network analysis.

Develop network strategies for growth.

Record-keeping and report preparation techniques.

Basic IT Project Management principles

Disaster recovery and business continuity best practices.

ABILITY TO:

Provide leadership in cyber security initiatives.

Perform a variety of highly complex and specialized activities involved in the planning, design, configuration, operation, development, modification of County Office and school district LAN,

WAN, internet and other network and cloud systems and related services, equipment, hardware, software and applications.

Analyze network needs and develop network plans, projects and specifications to address improvements.

Review, control and ensure proper network usage, security, traffic, operations, resources allocation, bandwidth and connectivity.

Audit network systems to ensure proper security, operation and performance; design remediation plans as needed.

Work independently with little direction.

Plan and organize work.

Communicate effectively orally and in writing.

Establish, model, and maintain cooperative and effective working relationships with others.

Maintain various records related to work performed.

Understand and follow oral and written instructions.

Meet schedules and timelines.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and five years of increasingly responsible direct experience involving cyber security audit and review, network planning, design, development and modification. Masters' degree highly desirable but not required.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

WORKING ENVIRONMENT:

Office environment

Driving a vehicle to conduct work.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard.

Hearing and speaking to exchange information.

Seeing to read a variety of materials and view a computer monitor.

Sitting or standing for extended periods of time.

Personnel Commission Approval:

October 12, 2022