



# COUNTY OF NYE

## CLASS TITLE: Network Engineer

### BASIC FUNCTION:

Under the general administrative direction of the Director Management Information Services (MIS), provide design, installation and maintenance on Local Area Network (LAN)/Wide Area Network (WAN) fiber optic, twisted pair, broadband link infrastructure, routers, firewalls, switches, gateways, DNS servers, DHCP servers, VOIP, clustering solutions, and related hardware, software, and services. Test and document system behavior, performance, and security. Providing tier 4 support and network disaster recovery expertise, to include preparation of cost / benefit analysis and alternate network design solutions. Provide diagnostic expertise to data communications staff including assistance in the analysis, identification and isolation of complex, high-impact problems. Configure and maintain proper security procedures within the campus data network and action needed to ensure optimal performance. Develop configuration, performance and fault isolation network engineering procedures. Develop documentation of network design and configuration. Design and recommend access methods to site data network using routers, hubs, switches, bridges, terminal servers and remote-access devices. Conduct in-house laboratory functional, stress and interoperability testing. Provide direct assistance to customers with respect to data networking technologies.

**REPRESENTATIVE DUTIES:** *(Performance of these functions is the reason the job exists. Assigned job tasks/duties are not limited to the representative duties).*

1. Network administration: serves as the router, switch, external network connectivity resource; analyzes, recommends, and subsequently implements networking design concepts including routers, switches, firewalls, hubs; develops disaster recovery strategies and fault tolerances; evaluates network load, capacities and monitors individual activities and generates reports; and manages County domain names.
2. Website design/maintenance: serves as the internal and external point of contact for the Nye County website; implements and supports complex applications; creates and maintains the County websites and multi-media needs; develops database programming interfaces, web scripting and graphic formats.
3. Project management: serves as the internal/external connectivity resource for MIS projects, facilitates projects from requirements gathering through deployed applications; analyzes complex business requirements and develops implementation plans; organizes County/department MIS projects requirements and documents them including technical, financial and operations aspects for funding and justification considerations; analyzes and recommends to management viable options for off-the-shelf software purchases versus software development.
4. Information security: serves as the internal/external resource for information security, oversees and manages all network and systems security resources

including password maintenance, new user logon and setup, file access permissions, data protection procedures, firewall configuration, secure server configuration, and security patches on all computing devices.

5. Conducts a variety of organizational and operational studies and investigations; recommends modifications to information technology programs, policies and procedures as appropriate.
6. Attends and participates in professional group meetings; stay abreast of new trends, products and innovations in the assigned fields and functions.

**Knowledge of:**

Information systems analysis, design and development and programming techniques; Strong analytical problem solving skills; Networking concepts including switches, firewalls, routers, and local/wide area networking protocols; network and server infrastructures to support County operations; proprietary and open source systems; Backup, disaster recovery and fault tolerance strategies; technology and automation; Complex and diverse support information systems; Data collection and research techniques/methodologies and vendor support services.

**Ability to:**

Develop and maintain cooperative working team relationships with all levels of County employees, outside vendors, and other governmental agencies; Complete needs assessments; coordinate multiple tasks efficiently; communicate effectively verbally and in writing; maintain files, records and generate timely reports and updates; Think clearly and initiate best course of action in high pressure situations; Change focus and direction as County needs change.

**EDUCATION AND EXPERIENCE:**

Any combination of training, education, and experience that would provide the required knowledge and abilities. A typical way to gain the required knowledge and ability is: Bachelor's degree in Computer Science, Business or Public Administration, Finance, Economics, or a field related to the work and six (6) years of administrative and/or professional level experience in information systems development and operations as well as experience in developing and supporting the operation of large complex, multi-vendor, multi-protocol data networks, and campus environment preferred. Possession of an advanced degree in an appropriate field and experience in a larger, centralized information systems setting are desirable. Equivalent combination of formal education and appropriate related experience may be considered. CCNA certification strongly desired. Motorola P25 trunked, P25 non trunked, network transport microwave, multiplexing, channel banks, high and low voltage redundant power systems, switching equipment, R-56/NFPA standards, RF exposure limits, site development and maintenance would be a plus.

**LICENSES:**

Valid Nevada Driver's license.

**WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES:**

Varies in relation to the nature and scope of individual work assignments and as directed by the Director Management Information Services.

**CONTACTS:**

County Manager, Board of County Commissioners, elected officials, department directors and employees, staff members of other counties, professional organizations, federal and state agencies, and various outside vendors/businesses.

**PHYSICAL EFFORT:**

The physical and mental requirements described here are representative of those that must be met by an employee to successfully perform the essential functions of the job.

Normal office and computer information systems environment, be able to operate a car, climb a ladder and lift up to 100 pounds. Ability to work in a standard office and computer systems environment; operate office equipment, including computers, telephones, calculators, copiers and fax machines; and work occasional evenings and weekends.

In compliance with applicable disability laws, reasonable accommodations may be provided for qualified individuals with a disability who require and request such accommodations. Incumbents and individuals who have been offered employment are encouraged to discuss potential accommodations with the employer.

**WORKING CONDITIONS:**

Work is performed under the following conditions: Frequent day, and at times, nighttime travel by automobile within and outside the County. Air travel may also be required at times. Occasional evening meetings and evening/weekend work.