



CLASS SPECIFICATION

Class Title: Network Systems Engineer
Department: Information Systems
FLSA: Exempt

Class Code: 3396/3410/3411
Grade: I-23/II-25/III-27
Eff. Date: 01/01/2000
Revised: 02/05/2025

GENERAL PURPOSE

Under general guidance and direction from the Deputy Director of Information Systems, supports County departments by developing and analyzing strategies and direction for storage, data, and telecommunications networks.

EXAMPLE OF DUTIES

Network Systems Engineer I

Works with Technical Support Team to resolve issues and requests; provides training to Technical Support Specialists and other county users on new technologies.

Monitors wired and wireless network, security (firewall), storage and server resources. Creates baselines for reporting and alerting.

Provides technical assistance to County departments in meeting their networking infrastructure requirements.

Maintains County Virtual Private Network Infrastructure and other remote access systems. Works with the Security Team to verify integrity.

Works with Technical Support Team to maintain physical connections in Data Closets and Office Spaces.

Works with the rest of the Infrastructure Team to install and maintain Security Door Access and Video Systems

Network Systems Engineer II

Works with the Technical Support and Infrastructure team for any problem or request escalations.

Develops strategies for county-wide network security standards, network infrastructure design and planning, capacity planning strategies, and growth estimates.

Identifies equipment needs and assists in analyzing cost justification decisions, cost recovery analysis, and rate structures.

Researches and analyzes issues that impact programs and makes recommendations to resolve problems or to increase efficiency and effectiveness of service.

Maintains and optimizes Wireless Network Infrastructure and Network Segmentation Strategies.

Works with the Security Team to optimize firewall rules and policies following industry's best practices.

Explains services available from the Information System department.

Network Systems Engineer III

Assesses the impact of new technologies and trends on back-end and departmental strategies; makes recommendations for responsible systems integration, migration and evolution.

Maintains and improves Network Load Balancing and Failover Infrastructure. Develops and tests County Disaster Recovery and Business Continuity Plans.

Communicates and coordinates plans and strategies to include use and sharing of technical resources. Assists in implementing a unified solution with the rest of the Infrastructure Team.

Assists the Director and Deputy Director in developing, implementing, and monitoring department budget, policies and procedures; assists in setting priorities; researches and tests new technologies and makes recommendations for implementation and integration.

All Levels

Operates a motor vehicle in a safe manner and in compliance with all Utah laws and regulations.

Performs related duties as assigned.

MINIMUM QUALIFICATIONS

1. Education and Experience:

Career Ladder: This position is part of a career ladder job series (I/II/III). Incumbents in this classification may be eligible for career ladder advancement on her or his eligibility date after meeting the minimum requirements for the position, if recommended by his or her supervisor and approved by the department administrative officer.

Career ladder level I:

Graduation from an accredited college or university with a Bachelor's Degree in computer science or a closely related field, plus six (4) years of directly related computer experience; OR an equivalent combination of related education and experience substituting one for the other on a year-for-year basis.

Preference for one or more of the following:

- Managing network infrastructure both wired and wireless.

- Managing network security functions.
- Managing a telecommunication network.
- Windows server management in a medium or large network environment.
- Team leadership experience or project management.

Career ladder level II:

Graduation from an accredited college or university with a Bachelor's Degree in computer science or a closely related field, plus six (6) years of directly related computer experience; OR an equivalent combination of related education and experience substituting one for the other on a year-for-year basis. At least one (1) year of experience must be directly related to managing network infrastructure, network security functions, network telecommunications functions, OR Windows server management in a medium or large network environment.

Career ladder level III:

Graduation from an accredited college or university with a Bachelor's Degree in computer science or a closely related field, plus six (6) years of directly related computer experience; OR an equivalent combination of related education and experience substituting one for the other on a year-for-year basis. At least three (3) years of experience must be directly related to managing network infrastructure and proficiency in at least two (2) of the following functions: network security, network telecommunications, or Windows server management in a medium or large network environment. An equivalent combination of related education and experience substituting one for the other on a year-for-year basis may be considered.

2. Special Requirements:

Must pass a criminal history background investigation.

Employees driving a personal or a County vehicle for job related travel must possess a valid driver license, maintain the minimum vehicle liability insurance as specified in the Utah Code, and must operate a motor vehicle in a safe manner; new employees with an out-of-state license must obtain a valid Utah Driver License within sixty (60) days of hire date (exceptions for military personnel and their dependents).

3. Necessary Knowledge, Skills and Abilities:

Knowledge of: analog and digital communications systems including voice, data and video; Windows server OS configuration and management; installation and support of native and third party server based software; Windows servers in a virtual environment utilizing a storage area network; planning methodologies and analysis techniques for developing information systems long-range strategic objectives, short-range tactical plans, and formulating customer requirements; project management tools, processes, procedures, and practices; technology trends; capital budgeting and operating budgeting methods for local government; development and implementation of policies and procedures

related to daily operations and county-wide IT strategies; local government organization and functions; modern management principles and practices.

Skill in installing, configuring, troubleshooting and monitoring wired and wireless network platforms and other network-related devices/systems such as load balancers, firewalls and VPNs. Preference for experience in Aruba, Arista, F5 and Palo Alto.

Ability to: formulate long-range IT plans and objectives; coordinate with County departments to assess requirements and solve problems; coordinate multiple tasks efficiently; maintain records and reports; work with minimal supervision; establish and maintain effective working relationships with supervisors, other employees and departments, other agencies, and the general public; communicate effectively (orally and in writing); follow written and oral instructions.

The above statements are intended to describe the general nature and level of work being performed by persons assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities and skills required of personnel so classified. ***All requirements are subject to possible modifications to reasonably accommodate individuals with disabilities.***