

Yellowstone County

Class Specification

Class Title	IT Engineer
Class Code Number	1090
Grade	H
FLSA	Exempt
EEO Function	Financial Administration (1)
EEO Category	Technicians (3)
Date	November 2024

Job Summary

Design, implement and maintain Yellowstone County computer server infrastructure and networks. Research and evaluate emerging technologies and how they could be leveraged to benefit the County from a security, efficiency, and cost perspective.

Distinguishing Class Features

I.T Engineer possesses a thorough understanding of server configuration, infrastructure and networks. Whereas the IT Senior Computer Specialist possesses a thorough understanding of hardware and software support at the PC level and researches and resolves complicated hardware, software issues residing on the platform.

Essential Job Duties and Responsibilities

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions, which may be found in positions of this class.)

- ❑ Design, implement and maintain networks and server infrastructure using best practices and established policies;
- ❑ Upgrade server software, firmware and major third-party applications based on best practices and vendor procedures;
- ❑ Perform maintenance activities using best practices with minimal impact to the County;
- ❑ Support applications running on server infrastructure;
- ❑ Ensure all critical applications and data or backed up properly based on establish policies;
- ❑ Support and maintain all SAN infrastructure using best practices;
- ❑ Design, implement and administer a comprehensive Disaster Recovery plan following best practices and established policies;
- ❑ Train and develop junior staff to handle more complex activities for job redundancy and to free resources to work on more complex activities;
- ❑ Trouble shoot issues across server and network infrastructure;
- ❑ Patch networks and servers based on best practices and policies;
- ❑ Update third party server software based on best practice and policies;
- ❑ Perform or supervise third party software upgrades;
- ❑ Security audits of server and network infrastructure to identify and resolve vulnerabilities;
- ❑ Support core applications on server environments;
- ❑ Implement backup and recovery procedures;
- ❑ Validate environments are being properly backed up against established policies;

- ❑ Monitors and enforces County policies on computer information system access, data integrity, and security;
- ❑ Installs network infrastructure equipment including cabling, communications and backbone equipment;
- ❑ Recommend server and network equipment to meet County needs leveraging our third-party providers.

Required Knowledge and Abilities

Knowledge and understanding of:

- ❑ Possesses a thorough understanding of server configuration based on industry best practices;
- ❑ Data network design and configuration;
- ❑ Server hardware and software support principles;
- ❑ Network protocols and administration;
- ❑ Design, installation, compatibility, connectivity, and operating system principles;
- ❑ County department functions, procedures, and policies.

Skill to:

- ❑ Diagnose and resolve server hardware, software, and network problems;
- ❑ Collect and analyze a variety of network and server components that may be impacted by the introduction of new or improved technology;
- ❑ Research new technologies.

Ability to:

- ❑ Plan and implement projects;
- ❑ Establish and maintain effective working relationships;
- ❑ Maintain a technically proficient knowledge of a diverse range of hardware, software, and network developments within multiple county agencies;
- ❑ Stay current with new technology, implementing and preparing for the integration of new or upgraded technology;
- ❑ Communicate effectively with others.

Reporting Relationships

Decision- making Authority:

Will be a mentor to others in the I.T. organization.

Decisions made include determining what hardware and software is needed to implement an installation or upgrade; the type and the amount of support necessary to satisfy an agency or client request; and work closely with the third-party vendors in the design, configuration, and layout of computer networks and server infrastructure.

Decisions referred include final approval of installation dates, priorities based on budget restraints, and final approval of network planning strategies, policies, and standards.

Typically reports to IT Director. May receive work direction from the IT Network Administrator regarding LAN/WAN. Generally, does not supervise, but provides training, work direction, and technical expertise to other staff such as IT Support Specialist. Will keep the I.T. Director informed on all issues.

Minimum Qualifications

Education/Experience/Training:

- Graduation from a college or university of recognized standing with a bachelor's degree and one (1) year experience; **or**
- Associate degree in computer science, or closely related field **and** three (3) years' experience.; **or**
- Any equivalent combination of experience and training totaling five (5) years.
- Degrees best suited for this position are computer science, information systems, and software engineering. Requires five years of progressively responsible experience in the design and operation of information technology systems.

Required:

- Must pass a criminal and driving background check and meet any County-specific employment eligibility standards.

Certifications:

- Valid driver's license issued by the State of Montana.

Essential Physical Abilities

Essential Physical Abilities:

Physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The employee is regularly required to sit and use hands to fingers to operate computer;
- Frequently is required to reach with hands and arms;
- Must occasionally lift and/or move up to 50 pounds while transporting files and computer hardware;
- While performing the duties of this job, the employee is frequently required to crawl, stand, kneel, stoop, crouch, and use hands to handle, or feel while installing computer hardware;
- Specific vision abilities required by this job include close vision and looking into monitors for extended periods of time and ability to adjust focus which permits the employee to perform computer procedures, and to produce and review a wide variety of documents, correspondence, reports and related materials in both electronic and printed form;
- Clarity of speech and hearing that permits the employee to communicate well with others;
- Personal mobility that permits the employee to serve the general public, County departments and access files and other materials in the office;
- Personal mobility that permits the employee to enter, operate and exit motor vehicles.

Working Conditions:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The work environment is an office environment and working with computers throughout the County system;
- The noise level in the work environment is usually moderate;
- The position may be subject to on-call or after hours work to resolve or assist with resolving network problems.

Accepted - Board of County Commissioners

Date Stamp
November 2024

Amended to include background check requirement: