



IT Infrastructure Engineer

Class Code:
4916

Bargaining Unit: Alameda County Management Employees
Association

SUPERIOR COURT OF CALIFORNIA, COUNTY OF ALAMEDA
Established Date: Aug 1, 2007
Revision Date: June 2, 2026

SALARY RANGE

SEE SALARY SCHEDULE

JOB DESCRIPTION:

JOB DEFINITION

Under general direction, supports the design, operation, and improvement of the organization's physical and virtual core infrastructure by working across servers, networks, email systems, telephony and cloud platforms; performing varied technical tasks related to configuration, troubleshooting, maintenance, and monitoring.

DISTINGUISHING FEATURES

This is the first working level of the class responsible for performing routine technical assignments, projects, and analyses in support of organizational infrastructure. As experience is gained, incumbents develop comprehensive knowledge of concepts, practices, procedures, and policies of assigned function and assignments. The IT infrastructure engineer will contribute to assigned projects, implement solutions based on documented standards, and provide technical assistance to other IT staff and organizational users. The IT Infrastructure Engineer is distinguished from the Senior IT Infrastructure Engineer role by the expectation to apply technical expertise within assigned infrastructure systems and follow established standards and procedures. They collaborate with senior staff and other IT Infrastructure Engineers on technical implementations, contribute to the analysis and implementation of infrastructure projects, and provide IT security support. Complex or unprecedented issues are escalated to senior staff as needed. Whereas, the Sr. IT Infrastructure Engineer designs, architects, analyzes and serves as the technical lead and expert on various infrastructure projects, provides advanced IT security support and provides direction and guidance to the IT Infrastructure Engineer.

EXAMPLES OF DUTIES:

NOTE: The following are duties performed by employees in this classification; however, employees may perform other related duties at an equivalent level. Each individual in the classification does not necessarily perform all listed duties.

1. Manages and maintains server environments, including directory services, name resolution, network services, and policy management.
2. Provides network support and troubleshooting for routing, switching, virtual networks, firewall configurations, network connectivity issues, and network security implementations.
3. Administers database systems, including installations, configuration, patching, backups, and performance monitoring.
4. Administers cloud resources such as virtual machines, storage, networking, identity, and security tools.
5. Manages and supports email server environments, including mail flow, connectivity, security, and troubleshooting.
6. Administers voice communication systems and unified communications platforms.
7. Maintains documentation for systems, standards, and procedures following established guidelines.
8. Assists with incident response efforts and perform root cause analysis on technical issues.
9. Supports backup operations, disaster recovery procedures, and business continuity tasks.
10. Provides technical assistance and guidance to other IT staff and organizational users in areas of responsibility, and communicates with stakeholders, including vendors and suppliers.
11. Performs other related duties as assigned.

MINIMUM QUALIFICATIONS:

Education:

Possession of a Bachelor's degree in information technology, computer science, or a related field from an accredited college or university.

Additional qualifying experience supporting infrastructure technologies may substitute for education on a year-to-year basis.

And

Experience:

The equivalent to two years supporting infrastructure technologies, which may include various compute platforms, networking, virtualization, cloud, email, and telephony services.

KNOWLEDGE AND ABILITIES:

Knowledge of various infrastructure technologies and platforms, which may include server environments, directory services, name resolution, and policy management systems; cloud platforms including compute, storage, networking, identity, security, and hybrid cloud integration; network architecture including routing, switching, virtual networks, VPNs, and firewall design; virtualization platforms including clustering and infrastructure design; database administration including high-availability solutions, disaster recovery, and performance optimization; database administration including high-availability solutions, disaster recovery, and performance optimization; email server architecture, mail flow design, and troubleshooting; telephony systems and unified communications platforms; scripting and automation for infrastructure management; physical and virtual server hardware and storage systems architecture; and principles of high availability, redundancy, disaster recovery, and business continuity planning.

Ability to diagnose and resolve technical issues across servers, networks, storage, and cloud platforms using established procedures and best practices; analyze and solve infrastructure challenges; to provide technical assistance to other IT staff and organizational users in areas of responsibility; learn and apply technical standards and contribute to design decisions; communicate skills to document systems and procedures and collaborate effectively with diverse audiences; contribute to projects, establish and maintain highly effective, customer-focused working relationships with stakeholders, and exercise sound judgment when implementing solutions to technical issues.

CLASSIFICATION HISTORY:

Date established: 8/2007

CW/cw