



INFORMATION TECHNOLOGY ANALYST - CLOUD SYSTEMS

DEFINITION

Under general direction, provides lead direction, training, and performs advanced and specialized analytical duties of a professional nature in the design, engineering, enhancement, administration, and maintenance of County cloud systems and related systems, including developing and modifying scalable architecture to support applications and infrastructure; identifying cloud solutions, incorporating security measures and privacy requirements into cloud hardware, software, and applications; designs controls and processes using audit tools; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned supervisory or management personnel. Exercises technical and functional direction over and provides training to technical, paraprofessional, and professional staff.

CLASS CHARACTERISTICS

This is a technical subject matter expert classification in the Information Technology Department. Incumbents in this class are responsible for performing the most difficult, complex, and/or sensitive duties related to supporting and administering the hybrid Microsoft Cloud Tenant and an on-premises environment. This includes replication of the local directory (Active Directory) to the cloud assets, identifying best practices, creating workflows, reviewing system logs and alerts, and responding according to documented procedures. Incumbents may also coordinate complex projects that are large in size and scope, requiring coordination of multiple staff and the procurement/utilization of significant resources. Incumbents also provide technical and functional leadership over other staff on both projects and on day-to-day assignments as assigned. Advanced technical skills and knowledge is required to collect the needed information to resolve issues, support, and maintain applications such as Exchange Online, Exchange Online Protection, OneDrive, Teams, Endpoint Configuration Manager (inTune), Office 365 Suite (M365), and additional products. Performance of the work requires the use of independence, initiative, and discretion within established guidelines. Incumbents may act in an advisory role to technical and analytical staff and provide strategic input within this area of specialization.

This class is distinguished from the Supervising Information Technology Analyst in that the latter performs full supervisory responsibilities.

Examples of Duties (Illustrative Only)

- Performs advanced and complex duties of a professional nature in the design, configuration, enhancement, administration, and maintenance of County cloud systems and related systems, including supporting relevant cloud technology and applications.
- Designs, configures, implements, and maintains various M365 applications & technologies (Exchange Online, Teams, OneDrive, SharePoint, etc).
- Documents best practices for supporting M365 and assisting with the development of an appropriate support model.
- Works with colleagues and clients to resolve issues related to M365 client connectivity, client software distribution, and mobile installation issues.
- Updates M365 licenses, subscriptions, and user management as necessary.

- Administers and supports M365, Azure, Teams, and Exchange policies.
- Identifies bottlenecks and troubleshoots potential solutions.
- Writes and maintains custom scripts (PowerShell) to maintain and administer systems and remediate issues.
- Designs, implements and manages Active Directory and Group Policy in a mixed Windows environment using experience, procedures, and applies industry best practices.
- Troubleshoots and resolves Group Policy Object (GPO), Active Directory and Azure AD replication, security, and permissions.
- Work collaboratively with the Project Management office to deliver solutions that meet the customer's needs.
- Supports the training and skills enhancement of all colleagues as required for cloud system technologies (Azure/M365).
- Provide support and administration of a hybrid M365 Exchange environment to include replication of the local directory to the cloud assets.
- Review system logs and alerts and respond according to the documented procedure and if gaps are found, provide guidance and strategy to protect County data
- Creates new or updates current procedures and policies as new technology and/or items are discovered within the current environment
- Support network backup, recovery, and archiving activities.
- Document all resolution activities and customer contact (calls, E-Mails, web forms, chat sessions, or voicemails) into the correct ITSM tool.
- Conduct desk-side support when required to resolve customer incidents or request tickets.
- Ensure proper IT system and data security is always practiced and if gaps are found, provide guidance and strategy to protect County data
- Support management reporting, information flow, and process planning.
- Show initiative and act independently to resolve tickets, manages multiple priorities, and follow through on projects and tasks to completion.
- Track and manage tickets to ensure timely and agreed resolutions and solutions.
- Concisely and effectively communicate progress, status, and issues to the customer and management.
- Ensure actions support documented processes and procedures are met or exceed operational Service Level Agreements (SLA) with the business partners.
- Acts as liaison between vendors, technical support, and departments to cloud system impairments; coordinates and implements corrective measures.
- Serves as a technical expert within the area of assignment, providing guidance and direction to technical, paraprofessional, and professional staff and resolving the most complex problems; participates in the development of strategic plans for systems development and modification as assigned.
- Writes and maintains comprehensive technical documentation for assigned projects including workflow diagrams, system support specifications, and policies and procedures for the utilization of specific hardware and/or software.
- Provides training for County staff as assigned.
- Conducts research and stays current on new trends; recommends new technologies to improve the operational effectiveness of the business base.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Advanced principles and techniques for working with groups and fostering effective team interaction.
- Microsoft Office 365, including Exchange Online, SharePoint, OneDrive, Teams, Azure AD, and related technologies.

- User accounts and user licenses through the M365 admin center in the Microsoft cloud platform or Windows PowerShell cmdlets.
- Current policies, procedures, and technologies to ensure Exchange server security through secure access.
- Deployment and migration knowledge on M365 standalone and hybrid environments.
- Mailbox management including mailbox permission, delegation, quota management, mail tracking, and mail transport rule creation/modification.
- Knowledge of key trends and emerging technologies that can enhance the solution architecture to maximize the value of Cloud offerings.
- Understand cross product integration and the implications.
- Customer-focused with an ability to learn and adapt quickly to new technologies and environments while being able to see and present the "big picture."
- Familiarity with public cloud security principles.
- Multi-Factor Authentication security technologies.
- Advanced principles and techniques for working with groups and fostering effective team interaction.
- Advanced design, installation, deployment, administration, and maintenance of department or enterprise infrastructure client/server systems, including operating system resource requirements.
- Advanced methods and techniques of analyzing business processes and developing solutions.
- Advanced principles and functions of core server platforms and operating systems, including Active Directory, and related technologies.
- Principles and practices of project management and workflow analysis.
- Principles of providing functional direction and training.
- Principles and practices of leadership.
- Development of utility programs and shell scripts.
- Methods and techniques of evaluating technology products for potential modification to meet business specifications.
- Methods and techniques of designing and coordinating information technology testing processes, including security vulnerability and penetration testing.
- Industry best practices of data center virtualization, management, and controls.
- Disaster recovery concepts.
- Methods and techniques of conducting research and technical problem-solving.
- Methods and techniques of developing and delivering training.
- Principles and practices of producing effective project and technical documentation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

Ability to:

- Work with little supervision and considerable independence and initiative.
- Document, migrate, and deploy cloud-based solutions.
- Use knowledge, experience, and documented procedures to provide Tier-3 IT services and support.
- Handle difficult situations and customers.
- Plan, organize, and coordinate the work of technical, paraprofessional, and professional staff.
- Provide staff leadership and work direction.
- Train others in proper and safe work procedures.
- Provide advanced professional support to a diverse range of enterprise-wide and department-specific systems used throughout the County.
- Identify complex technology solutions to business process improvements and efficiencies.
- Recognize server problems, develop recommendations and solutions, and manage corrections.
- Integrate department and/or enterprise infrastructure client/server systems.
- Administer and maintain centralized directory, file, and print services.

- Manage client/server user permissions and accounts.
- Enforce server security policies and procedures using account, directory, and file rights filters.
- Develop and implement testing models.
- Evaluate, install, test, and implement new servers and server operating systems.
- Install new versions, releases, or maintenance levels of existing server operating systems and related components through centralized resources.
- Coordinate activities with vendors, clients, and staff.
- Collaborate with colleagues in developing and documenting process workflows, applications specifications, and models.
- Understand complex information technology systems and issues.
- Prepare clear and concise reports, correspondence, documentation, and other written material.
- Plan, organize, and coordinate the work of technical, paraprofessional, and professional staff.
- Make technical oral presentations to technical and non-technical audiences.
- Use sound independent judgment within established guidelines.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

A combination of the required experience, education, and training that would provide the essential knowledge, skills, and abilities is qualifying; however, education may not solely substitute for the required experience.

Equivalent to a bachelor’s degree from an accredited four-year college or university with major coursework in information technology, computer science, or a closely related field; possession of one or more approved nationally recognized industry-specific technology certifications may be substituted for some or all of the education; and three (3) years of professional experience providing analytical support related to the development and administration of enterprise or customized information technology systems;

OR

Six (6) years of professional experience providing analytical support related to the development and administration of enterprise or customized information technology systems;

OR

Four (4) years of professional experience at a level equivalent to the County’s class of Information Technology Analyst III – Server Design and Administration.

Licenses and Certifications:

- Possession of, or ability to obtain and maintain, a valid California or Nevada Driver’s License and a satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in an office setting; use standard office equipment, including a computer; some positions may be required to operate a motor vehicle; vision to read printed materials and a computer

screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds. Reasonable accommodations will be made for individuals on a case-by-case basis.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with loud to moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

Must be willing to work after hours, weekends, and holidays as needed. Must be able to pass a thorough background investigation.