

CITY OF ROSEVILLE

INFORMATION TECHNOLOGY ANALYST I INFORMATION TECHNOLOGY ANALYST II

DEFINITION

To perform a variety of professional level work involving support of the City's telecommunications, network infrastructure, service desk and/or server/storage activities; to manage operational systems such as host systems, network infrastructure and communication systems. Positions will be assigned a functional area. Periodically employees may be temporarily assigned duties of other functional areas or rotated based on operational needs.

DISTINGUISHING CHARACTERISTICS

Information Technology Analyst I– This is the entry level class in the Information Technology Analyst series. This class is distinguished from the journey level by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters allocated to the journey level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under general supervision while learning job tasks.

Information Technology Analyst II– This is the journey level class within the Information Technology Analyst series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

This class is distinguished from the Senior Information Technology Analyst in that the latter performs the most difficult and responsible types of duties assigned to classes within this series including assigned responsibilities for overall implementation of an assigned information technology area and exercising technical and functional supervision as appropriate.

SUPERVISION RECEIVED AND EXERCISED

Information Technology Analyst I

Receives general supervision from an assigned Information Technology Program Manager or Supervisor and may receive technical and functional supervision from a Senior Information Technology Analyst.

May exercise technical and functional supervision over technical and administrative support personnel.

Information Technology Analyst II

Receives direction from an Information Technology Program Manager or Supervisor and may receive technical and functional supervision from a Senior Information Technology Analyst.

May exercise technical and functional supervision over lower level professional, technical and administrative support personnel.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

All Functional Areas:

Prepare and maintain system procedures and documentation; monitor assigned systems and resources; and maintain and administer security systems and methodologies.

Monitor disk storage space and backup management; updates, patch, secure and maintain computing environment.

Analyze and solve operating problems; make system modifications as necessary; evaluate and make recommendations regarding requests from departments related to communications systems.

Manage projects, within an assigned discipline, involving multiple City departments.

Provide Tier I and Tier II support of City communications, storage, and computing systems that have 24/7 criticality; maintain systems outside of normal business hours.

Prepare technical and administrative reports; train users in operational procedures and prepare related written instructions.

Build and maintain positive working relationships with co-workers, other City employees, vendors, other public agencies and the public using principles of good customer service.

Perform related duties as assigned.

Communications Functional Area:

Provide systems support for the City's communications infrastructure, including architecture, implementation, analysis, diagnosis, maintenance and troubleshooting of telephony, radio, fire station alerting, cardkey access and camera/video systems.

Maintain servers and related infrastructure; maintain telephone and voicemail systems, desk phones, call center system, call accounting, fax systems, cardkey systems, camera system, multiple radio systems, dispatch consoles and field subscribers.

Manage the City's FCC licenses, including maintaining, tracking, updating, and coordinating with local frequency coordinator and FCC.

Maintain, support, manage, and procure inventory; program all primary and secondary user radios for all City voice communication systems.

Provide interoperability support including system use agreements, mutual aid agreements, encryption agreements, system ID assignments, encryption key coordination, system change coordination, letters of concurrence; develop incident-driven ICS communication plans and build regional relationships.

Manage radio tower site maintenance and support per basic preventative maintenance schedule and as environmental issues occur; plan and implement upgrades or changes to tower site facilities and technologies.

Inventory, manage, support and troubleshoot radio infrastructure including antenna systems, combiners, repeaters, controllers, site-to-site connectivity equipment, and components for simulcast and voting services.

Manage, design, integrate and maintain logging recorder solutions as they relate to telephony and radio systems.

Design, implement, and maintain voice communications network infrastructure; develop cabling plans and hardware specifications for changes and updates to the citywide voice communications network.

Maintain and implement internal control, network security and other security systems for telecommunication data, systems and hardware protection.

Monitor radio spectrum for interference using spectrum analyzers; track signal and work with FCC to eliminate source.

Analyze, procure, and coordinate data and voice antenna systems for new Police and Fire vehicles.

Design, implement, maintain, and troubleshoot the City's disaster recovery and business continuity planning as it relates to telecommunications and radio infrastructure; coordinate with all subject matter experts as well as various departments and regional partners to provide fault tolerant and highly available phone and radio services.

Network Functional Area:

Provide systems support for the City's network and server infrastructure, including analysis, diagnosis, maintenance and troubleshooting.

Design, develop, test, implement, troubleshoot, monitor and maintain LAN and WLAN network, server systems and wireless equipment to measure performance, identify deviations from existing service levels and implement timely solutions to issues adversely affecting network performance and systems.

Design, implement, maintain and troubleshoot email and related infrastructure on-premises and in

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the cloud; serve as subject matter expert for electronic messaging and confidential litigation/eDiscovery requests.

Design, implement, maintain, and troubleshoot the City's disaster recovery and business continuity planning as it relates to network infrastructure; coordinate with all subject matter experts to provide fault tolerant and highly available systems and networking infrastructure.

Implement, maintain and troubleshoot all DNS and DHCP servers.

Configure security controls in multiple protection systems and IT infrastructure in accordance with policy, standards, and procedures; respond to and remediate security incidents occurring on desktops or servers, in the cloud, or within a specific system including platforms like email.

Design, implement, maintain and troubleshoot data center network infrastructure; develop cabling plans and hardware specifications for changes and updates to the citywide network.

Maintain and support directory and authentication services, email and collaboration services and application service provision.

Monitor systems and network resources; maintain and administer security systems and methodologies.

Maintain and implement internal control, network security and other security systems for computer and telecommunication data, systems and hardware protection.

Design, implement, maintain and troubleshoot the City's SSO/MFA solution.

Server/Storage Functional Area

Design, implement, maintain, update, troubleshoot, plan for future needs, test, and procure the City's enterprise storage infrastructure; ensure proper backups are maintained; test recoveries and recover data as needed.

Design, implement, maintain, troubleshoot, plan for future needs, test, and procure the City's physical and virtual server infrastructure.

Design, implement, maintain, and troubleshoot VMWare vCenter/ESX/VDS and server infrastructure.

Maintain and support authentication services, email and collaboration services and application service provision.

Design, implement, maintain and troubleshoot the City's disaster recovery and business continuity planning as it relates to server and storage infrastructure; coordinate with all subject matter experts to provide fault tolerant and highly available server and storage infrastructure services.

Consult on troubleshooting various issues with various systems, integrations, and clients both on

premises and in the cloud.

Design, implement, maintain, and troubleshoot email infrastructure on-premises and in the cloud; serve as subject matter expert for electronic messaging and confidential litigation/eDiscovery requests.

Plan, implement, maintain, and monitor data center changes for environmental, physical, and power systems; plan and implement power, network, and racking solutions for technology equipment.

Design, build, configure, install, monitor and support the physical and virtual server environment, including cloud infrastructure, virtual platforms, operating systems, and security.

Design, configure, manage and monitor highly scalable physical and virtual storage environment, including multiple Storage Area Network and Network Attached Storage solutions.

Design, configure, manage and monitor data backup environment, including off-site disaster Recovery, Backup Libraries, and File Recovery utilizing multiple vendor solutions; regularly test backup files to check for data errors.

Install, configure, test and update server operating systems and related server-class software and monitoring systems for citywide server computing platforms, including cloud infrastructure.

Provide infrastructure support for enterprise applications, including meeting with business and application owners to define technology requirements prior to project implementation.

Implement, maintain and troubleshoot all DNS and DHCP servers.

Configure security controls in multiple protection systems and IT infrastructure in accordance with policy, standards, and procedures; respond to and remediate security incidents occurring on desktops or servers, in the cloud, or within a specific system.

Service Desk Functional Area:

Provide systems support including analysis, diagnosis, maintenance and troubleshooting of hardware and software.

Evaluate operations and activities of customer support; recommend improvements and modifications; prepare various reports on operations and activities.

Lead and participate in helpdesk activities; establish criteria for priority and urgency response; perform the most difficult troubleshooting and problem resolution related to hardware and software issues.

Design and create applications, packages and task sequences to install, upgrade and remove software from PC's.

Use, maintain and configure Service Desk incident management software to achieve maximum accuracy and efficiency.

Provide technical expertise to internal customers, advise them of appropriate actions to fulfill project requirements or solve immediate problems.

Coordinate tasks between Service Desk and other IT functions.

Oversee asset management related to personal computers, laptops, and related peripheral equipment.

Forecast technology needs of City programs, including but not limited to, PC replacements, printer replacement and best fit.

Coordinate and review hardware vendor sourcing strategies and conduct quarterly IT vendor reviews.

MINIMUM QUALIFICATIONS

Information Technology Analyst I

Knowledge of:

All Functional Areas:

Network fundamentals including software-defined networking.

Methods for application troubleshooting in server-client environment.

Servers, server operations and operating systems.

Computer operating systems, local area networks and data communications software and hardware and network technology and environment.

Information Technology Service Management practices and processes.

Various operating systems including Microsoft Windows and Linux.

Principles of power, effective radiated power, voltage, grounding, electrical wiring and basic electronics.

Fundamentals of Uninterruptable Power Systems design and maintenance.

Applicable laws, codes, policies and standards including HIPAA, CJIS, PKI., NIST, and PCI.

Records storage and handling techniques.

Principles and practices of customer service.

Communications Functional Area:

Principles and practices of radio and phone system architecture and programming.

RF Radio Systems including conventional, trunking, simulcast and voting system technologies as well as various frequency spectrum including VHF and 800MHz.

Radio principles including wavelength, decibels, voltage standing wave ratio, transmit, and receive.

Transmission, broadcasting, switching, control, and operation of telecommunications and radio systems.

Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Information technology security concepts for voice, radio and digital communications; principles and practices of physical security systems and hardware.

Phone system architecture and programming fundamentals.

Cable plant wiring including fiber, copper and punch blocks.

Network Functional Area:

Principles and practices of network and server infrastructure related analysis and design.

Various operating systems including iOS, Cisco IOS XE and Cisco NX-OS.

Principles and practices of security and maintenance.

Principles and practices of virtualization technologies and various operating systems.

Principles and practices of data communications, data center architecture, UPS design and maintenance and environmental design and monitoring.

Networking protocols, services and concepts, including, but not limited to, TCP/IP, HTTP, HTTPS, SSH, SNMP, FTP, TFTP, BGP, OSPF, HSRP, STP, VLANs, subnetting and the OSI model.

Network monitoring tools and techniques used to perform troubleshooting including packet capture and protocol analysis tools.

IEEE 802.11/Wi-Fi standards, technologies, tools, and signal analysis.

Principles and practices of authenticating users and devices including Active Directory and Public Key Infrastructure.

Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Server/Storage Functional Area:

Principles and practices of server and storage infrastructure and related analysis and design.

Virtualization technologies including VMWare.

File storage technologies, file structures, and file systems.

Storage hardware buildup, maintenance, and troubleshooting.

Principles and practices of data communications, data center architecture, UPS design and maintenance and environmental design and monitoring.

IT security concepts for OS, networking, file systems and system integration.

Principles and practices of authenticating users and devices including Active Directory and Public Key Infrastructure.

Service Desk Functional Area:

Principles and practices of computer systems and related analysis and design.

iOS and Android Systems.

Principles and techniques of troubleshooting for desktop computers, software, and printers in a network environment.

Principles and practices of software development, testing and deployment.

ITIL processes and the five service lifecycles.

Ability to:

All Functional Areas:

On a continuous basis, know and understand all aspects of the job. Intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time. Intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; intermittently climb stairs and/or ladders to rooftops and walk rooftops perimeter; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 50 pounds or less.

Maintain and administer a variety of security systems and methodologies.

Perform cost-benefit analysis.

Train or instruct users in the use of computer equipment and operating procedures.

Prepare a variety of reports and maintain accurate records and files.

Assist in renewal process for all related support and licensing.

Evaluate and recommend technical solutions.

Maintain confidentiality as necessary.

Work weekends, evenings or standby, as required.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Communications Functional Area:

Perform professional work in support of the City's communications network infrastructure.

Intermittently drive for long period of time stopping to exit the car frequently to find elevated spots and walk location with computer and antenna.

Analyze, diagnose, program, upgrade, maintain and troubleshoot telephone, radio and video/camera systems.

Maintain and update console aliases for City and non-City radios.

Integrate subscribers with and provide support for related systems including Fire vehicle intercom systems, deskset solutions, Fire Station Alerting systems and the Emergency Operations Center.

Use test equipment to install, measure integrity, and troubleshoot cable plant including fiber, copper and Ethernet.

Network Functional Area:

Perform professional work in support of the City's network and server infrastructure.

Analyze, diagnose, maintain, and troubleshoot network and server infrastructure.

Perform statistical analysis to troubleshoot enterprise-level issues.

Architect, implement, maintain, and troubleshoot the City's business continuity plan as it relates to redundant and secure infrastructure.

Coordinate with SMEs to provide secure, fault tolerant and highly available systems and

networking infrastructure.

Server/Storage Functional Area:

Perform professional work in support of the City's operating systems, enterprise storage, servers, security, datacenter hardware, software and systems infrastructure.

Perform statical analysis to troubleshoot enterprise-level issues.

Analyze, diagnose, maintain, and troubleshoot operating systems, enterprise storage, and servers.

Provide data recovery services as per the City's data retention policy.

Service Desk Functional Area:

Perform professional work in support of the City's asset management and service desk tasks. Analyze, diagnose, maintain, and troubleshoot hardware and software.

Maintain and administer security systems and methodologies.

Experience and Training

Experience:

No professional experience is required.

AND

Training:

A Bachelor's degree from an accredited college or university, preferably with major course work in computer science, information systems or a related field.

License or Certificate:

Possession of a valid California driver's license by date of appointment

Information Technology Analyst II

In addition to the qualifications for the Information Technology Analyst I:

Knowledge of:

All Functional Areas:

Principles and practices of complex operating system design, analysis, and documentation.

Computer logic and mathematics.

Incident command system principles, structure and communication-related roles and forms.

Security practices and standards.

Project management methodologies.

System licensing, auditing and compliance.

Communications Functional Areas:

FCC spectrum allocation, policies, regulations and FCC license requirements.

Principles and techniques of various data communication systems.

Network Functional Areas:

Principles and practices of complex network and server infrastructure-related analysis and design.

Techniques, equipment, and diagnostic software used in the assembly, troubleshooting and repair of server and network infrastructure.

Methods of application integration within a heterogenous environment.

Single sign-on, Multi-factor Authentication and SAML concepts and applications.

Server/Storage Functional Area:

Principles and practices of complex operating system design, analysis and documentation as it relates to servers, storage and authentication.

Public Key Infrastructure.

Methods for application integration within a heterogeneous environment.

Web-based and client-server application development standards.

Principles and techniques of various Internet and data communication systems.

Internet security practices and standards.

System licensing, auditing and compliance.

Single sign-on, Multi-factor Authentication and SAML concepts and applications.

Service Desk Functional Area:

Asset management practices that support life cycle management related to personal computers, printers and related peripheral equipment.

Techniques, equipment and diagnostic software used in the assembly, troubleshooting and repair of personal computers and printers.

Ability to:

All Functional Areas:

Write operating instructions, procedures and training materials for electronic data processing machine applications.

Provide Tier 2 end-user support, including researching user complaints and issues and answering technical questions.

Understand and determine system and/or business requirements in collaboration with other Information Technology staff, users and vendors.

Participate in, or lead, cross functional teams and meetings.

Communications Functional Area:

Independently perform professional work in support of the City's communications network infrastructure, telephony, infrastructure, and radio infrastructure.

Analyze, design, program, install and maintain highly technical and complex communication systems.

Analyze, design, provide, and maintain various forms of training on multiple subscriber manufactures and models both within and outside of the City.

Manage interoperability on behalf of the City of Roseville including collaboration with other agencies on use agreements, ID coordination and communication plans.

Network Functional Area:

Independently perform professional work in support of the City's network and server infrastructure.

Use network monitoring tools and techniques to perform troubleshooting including packet capture and protocol analysis tools.

When Assigned to Server/Storage:

Independently perform professional work in support of the City's operating systems, enterprise storage, servers, security, datacenter hardware, software and systems infrastructure.

Analyze, design, program, install and maintain highly technical and complex operating systems, storage and servers.

Service Desk Functional Area:

Independently coordinate service desk functions with other divisions and departments.

Experience and Training

Experience:

Two years of responsible experience performing duties similar to that of an Information Technology Analyst I, within the respective functional area(s), with the City of Roseville.

AND

Training:

A Bachelor's degree from an accredited college or university, preferably with major course work in computer science, information systems or a related field.

License or Certificate

Possession of a valid California driver's license by date of appointment.

04-09-22

11-15-18

05-24-17

05-14-13

08-25-12

Information Technology Analyst I/II

Systems Administrator

07-01-04

Network Analyst I/II

04-26-02

GIS Analyst I/II

07-01-99