

## INFORMATION TECHNOLOGY (IT) SYSTEM ARCHITECT

### JOB DESCRIPTION

**Classification Responsibilities:** An Information Technology (IT) System Architect is responsible for the architectural leadership, facilitation, analysis, and design tasks required to ensure that assigned information systems at Mesa are evolving appropriately; and ensuring that underlying infrastructure supports existing needs as well as evolving to meet changing application requirements. Primary responsibilities include: following the architecture development methodology established by Enterprise Architecture, example: develop documentation of current and future state, roadmaps, and transition plans that support system initiatives; defining, communicating, and documenting the standards and technology for the assigned discipline; soliciting regular feedback from internal customers and IT teams to understand how well each information system is serving its customers, and recommend improvements; understanding and communicating how the assigned discipline architectures interact, support, and integrate with other technologies and information systems in concert with other system architects; leading the analysis of the current technology environment to detect critical deficiencies and recommend solutions for improvement; and leading the analysis of the technology industry and market trends to determine their potential impact on the assigned discipline. Additional primary responsibilities include: defining high-level migration plans to address the gaps between the current and future state, typically in sync with the IT budgeting or other capital planning processes; overseeing, directing, or consulting on technology implementations, both project and operations, particularly where shared technology solutions span multiple technology verticals; consulting on projects to harmonize systems or infrastructure, and identify when it is necessary to modify the enterprise roadmap related to assigned discipline to accommodate immediate or future project needs; overseeing and facilitating the research, evaluation, and selection of hardware and software technology and product standards, as well as the design of standard configurations; documenting necessary architecture design and analysis work, possibly including project postmortem documentation and metric collection; leading the communication activities needed to ensure architecture success and use. Responsibilities may include supervising and coordinating day-to-day activities of technical staff (*by assignment*).

Based on assignment, a qualified candidate performs the leadership, facilitation, analysis, and design tasks required for the development of the enterprise services as noted below:

- Unified communications (example: unified communications, email, presence & instant messaging, electronic fax, ACD/IVR)
- Security, directory services & identity management (example: directory services, identity management, intrusion prevention, and legal policies including HIPAA, PCI, CJIS, and Supervisory Control and Data Acquisition (SCADA) requirements)
- Unified communications (example: voice communications, Telephony Architecture, ACD/IVR)
- Network, including Access Gateways (example: Network Security System Architecture, such as IDS, firewall, NAC), switches, routers, and firewalls (routing, switching, Network Traffic Management Architecture), IP Management (DNS, DHCP, IPAddress allocation and summarization), control systems (SCADA), Wireless & Radio Architecture), IP Traffic Management (layer 7 switching, packet shaping and QOS, WAN acceleration & optimization)
- Middleware & content delivery: application servers & search (example: Web Server Platform Architecture, Service Oriented Architecture (SOA), Java Application Services Platform Architecture, Search Architecture)

- Datacenter & server hosting: UNIX & Windows server systems, virtualization & clustering
- Storage: Storage Architecture (disc, tape, NAS, SAN, etc.), Backup & Recovery Architecture
- Database Architecture and models, policies and standards for the City's standards of SQL, and Oracle

**Distinguishing Features:** This classification has been designated as a non-classified, non-merit system, at-will position. The IT System Architect class is both a leadership and technical role defining and communicating architectural standards and roadmap direction for their assigned discipline. This class is distinguished from the IT Engineer III by its responsibility for overall technology architecture, standards, and integration with other disciplines, including migration plans, to address the deficiencies or gaps in that environment. This class independently oversees implementations (both project and operational) particularly where shared solutions span multiple technology verticals. This class consults on projects to harmonize systems or infrastructure, and identify when it is necessary to modify the enterprise roadmap related to assigned discipline to accommodate immediate or future project needs.

The IT System Architect class is distinguished from the IT Enterprise Architect class by the latter's responsibility for Mesa's enterprise architecture roadmap process across the portfolio of projects and enterprise operations, while supporting individual system or solution architects in that portfolio. This class has a high level of responsibility for supported systems and projects, and is responsible for the success of projects and systems of any size. An IT System Architect operates from established goals and objectives, is supervised by an IT Manager, and may be mentored by the IT Enterprise Architect class or designee who reviews performance through observation of work in progress, conferences, evaluation of results achieved, and customer and/or team feedback. Only highly specialized, advanced technical guidance may be needed from the vendors or IT Enterprise Architect. The IT System Architect class is responsible for researching, evaluating, recommending, and integrating new technology, and for providing technical mentoring to IT Technician I's and II's, IT Analyst I's and II's, and IT Engineer I's, II's and III's. Incumbents in this class assist management in planning, directing, and coordinating operational or procedural matters to meet goals and objectives. Employees in this class are required to participate in team on-call support 24-hours a day, 7 days a week. This class is FLSA exempt-computer professional.

## QUALIFICATIONS

**Employee Values:** All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

**Minimum Qualifications Required.** Any combination of training, education, and experience equivalent to graduation from an accredited college or university with a Bachelor's Degree in Computer Science, Quantitative Systems, Management Information Systems, or a related field (such as Engineering or Geography [*by assignment*]). Extensive (5+ years) design and implementation experience in IT, with a deep knowledge in one of the following technical disciplines: network design, application development, middleware, servers and storage, database management, and security. Exposure to multiple, diverse technical configurations, technologies, and processing environments.

**Special Requirements.** Must possess a valid Class D Arizona Driver's License by hire date (*by assignment*). Because of the confidential, sensitive nature of information handled, successful completion of a background investigation and polygraph is required (*by assignment*). For this position,

an individual receiving a conditional offer of employment from the City of Mesa must pass a background investigation through the City of Mesa Police Department, the Arizona Department of Public Safety, and Federal Bureau of Investigation prior to commencing employment with the City of Mesa (*by assignment*).

**Substance Abuse Testing.** None.

**Preferred/Desirable Qualifications.** Considerable (3 - 5 years) technical, project leadership, and/or project management experience is highly desirable and may be required by assignment. Customer service experience is highly desirable. Teamwork is highly desirable. Supervisory experience may be preferred (*by assignment*).

## ESSENTIAL FUNCTIONS

**Communication:** Communicates both verbally and in writing with other City employees, vendors, leadership, and contractors in order to evaluate, document, and design architecture standards and roadmaps; communicates recommendations and specifications; coordinates the implementation of solutions; and provides project status reports. Communicates with team members in order to maintain continuity of customer service. Mentors others regarding computer systems analysis, design, documentation, programming, and testing and debugging techniques, and ensures adherence to standards. Makes formal presentations to City management and/or Department of Innovation and Technology (DoIT) management, staff, team members, and customers. Prepares written documents (such as memos, project plans, reports, Requests For Proposal (RFPs), etc.) and technical documentation with clearly organized thoughts using proper sentence structure, punctuation, and grammar. Works courteously with customers in situations that require tact and diplomacy in order to identify and resolve technical issues.

**Manual/Physical:** Enters data into a personal computer (PC) to create documentation, test and debug computer applications or system software, and/or write computer programs. Moves hardware weighing up to 50 pounds when necessary to provide customers with products (*by assignment*). Operates a motor vehicle requiring a standard Class D Arizona Driver's License to provide on-site technical support at customer locations (*by assignment*). Operates a variety of standard office equipment such as a PC, printer, telephone, and facsimile machine (fax). Meets scheduling and attendance requirements. Distinguishes colors to identify color-coded cable, wiring, and electronic components, and/or to input GIS data (*by assignment*).

**Mental:** Assists in financial estimates for department budget and project budgets (*by assignment*). Comprehends and makes inferences from written material, including technical documentation related to system hardware and/or software. Conducts research and/or analyzes system-related data to improve system performance and architecture. Learns technical skills through on-the-job training, in a classroom setting, or through other formats such as self-study or computer-based training. Organizes and directs the activities of staff members engaged in the installation and maintenance of system hardware and/or software. Resolves procedural, operational, and other work-related problems by analyzing problems from a Citywide perspective, and recommending resolutions or correcting problems.

**Knowledge/Skills/Abilities:**

Knowledge of:

financial models and budgeting; and  
information principles and processes.

Skill in:

interpersonal interaction in areas such as teamwork, facilitation, and negotiation;  
leadership;  
analytical and technical skills;  
written and verbal communication; and  
planning and organization.

Ability to:

understand the long-term ("big picture") and short-term perspectives of situations;  
quickly comprehend the functions and capabilities of new technologies;  
understand network and security architecture, and quickly comprehend the functions and capabilities of  
new technologies;  
understand the political climate of the enterprise, and how to respond to political challenges; and  
establish and maintain effective working relationships with DoIT management, staff, team members,  
subordinates, and customers.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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INCREMENTS 39-200

PAY GRADE: 59

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