

Information Technology Architect

JOB FAMILY DEFINITION

This classification does not fall within a specific job family within Information Technology as its purpose is to provide strategic technology planning for the most complex enterprise-level information technology architecture, network infrastructure, application development, and business systems projects. As such, this classification is utilized only within the Information Technology office. This class specification represents the type and level of work performed recognizing that specific work assignments may differ from one incumbent to another.

CLASS SUMMARY

Information Technology Architects report directly to the Chief Information Officer (CIO) and act as the highest level advisors to the CIO on organization and branch-wide Information Technology (IT) initiatives. Incumbents create comprehensive strategic and tactical IT plans that align with and support the long-term business needs of the Judicial Council and client court environments. Incumbents are considered master-level subject matter experts with unique functional and technical expertise responsible for analyzing, designing, and implementing complex IT solutions that have broad impact across multiple technologies throughout the enterprise. Information Technology Architects assess and/or review the overall business and technical risk to the branch of proposed solutions and the impact of new application or infrastructure architecture, hardware, software, configurations, and business process changes on other systems within the enterprise. Incumbents operate across organizational and computing silos to drive common approaches and expose information assets and processes across the enterprise. Incumbents are the highest point of technical escalation in their assigned area within the organization and are held accountable for the overall design and interoperability of projects and systems. Therefore, each of the areas outlined below is limited to a single incumbent.

Work assignment in the enterprise architecture domain includes the overall responsibility for defining, upholding, and communicating the vision of the IT architecture and solutions that support the business strategies of the Judicial Council. A single incumbent serves as the highest point of escalation for each of the following areas; (1) the Judicial Branch Enterprise Architect provides architectural leadership to ensure interoperability of IT solutions across organizational and computing silos to tie infrastructure and applications together, (2) the Judicial Branch Infrastructure Architect provides architectural leadership to ensure that network, computing, and storage technologies work together to provide a secure and resilient IT foundation, (3) the Judicial Branch Application Architect provides architectural leadership to ensure development standards, development tools, and development approaches are employed to provide interoperability between applications.

Work assignment in the network architecture domain includes the overall responsibility for the design and validation of court network infrastructure needed to support internal and external telecommunication. A single incumbent provides the highest level of technical oversight throughout the deployment and testing of each network infrastructure and security architecture project at all trial court facilities. Due to the number of courts requiring this level of expertise, a single incumbent serves as the highest point of technical escalation for each of the following areas; (1) the Northern Region, and (2) the Southern Region. The incumbent works with Judicial Council staff, court IT staff, and third party vendors throughout the deployment of each court project and provides assistance to court IT staff during

and after implementation. The position leads and guides teams responsible for making operational changes to network devices. The incumbent is ultimately responsible for ensuring the provision of secure and reliable connectivity to justice partners.

Work assignment in the network program management domain includes the overall responsibility for the portfolio of projects supporting network and telecommunications infrastructure. This single incumbent position creates high-level plans providing guidance to subordinate projects; monitors subordinate projects and ongoing work through governance structures; and manages the financial aspects of the program. Duties include overall responsibility for the delivery of program services; the refresh of data networking infrastructure prior to the end of its service life; the collection and maintenance of accurate asset procurement and deployment information; the maintenance of support coverage for critical infrastructure components; the provisioning and delivery of managed network security services; and the administration of support and training initiatives.

Work assignment in the applications domain includes serving as the ultimate expert for all aspects of the development of system design, execution, and maintenance of selected mission critical, complex, enterprise-level applications. A single incumbent serves as the highest point of technical escalation for each of the following applications: (1) the Appellate Court Case Management System (ACCMS), (2) the Phoenix SAP system, and (3) the Tririga Computer Aided Facilities Management (CAFM) system. For the assigned application, the incumbent develops system solutions and recommends the appropriate mix of current technologies to internal management and client courts. The incumbent serves as the ultimate expert for all aspects of the specified system's application design, development and maintenance and provides mentorship for others within the application support team.

DISTINGUISHING CHARACTERISTICS

The IT Architect is distinguished from other classes in the Information Technology job families in that the IT Architect serves as a visionary and strategic project manager, mentor or master-level subject matter expert for the largest and/or most complex enterprise-level technology projects, and provides guidance and direction for work assigned to project teams. The IT Architect is the highest point of technical escalation for enterprise-wide information technology issues. The incumbent has the highest level of responsibility for supported systems and projects, and is held accountable for the overall design and interoperability of projects and systems.

Work of the IT Architect requires the consistent exercise of discretion and independent judgment, using master-level advanced knowledge, to analyze and interpret information and make recommendations.

EXAMPLES OF ESSENTIAL DUTIES *(The duties listed are illustrative only and represent the core areas of responsibilities; specific position assignments will vary depending on business needs.)*

- Serves as a strategic and visionary project manager and subject matter expert for the largest and/or most complex enterprise systems, network and infrastructure projects.
- Advises and communicates with business leaders across the branch to build awareness of branch, court, and Judicial Council business trends, processes, priorities and related technology strategies.
- Leads research, investigation and evaluation of emerging technologies in support of judicial branch goals; produces Whitepapers with findings.
- Collaborates with other IT Architects to provide secure, efficient, and balanced enterprise solutions.
- Analyzes and assesses the impact of changes to enterprise-wide integrated systems, networks and infrastructure; conceptualizes and formulates potential solutions or modifications including system, network, application, and infrastructure designs.
- Leads large scale implementations and deployments; provides the highest-level oversight and input

in area of expertise; coordinates the development of test plans, test criteria, and user test scripts; guides system and application testing; maintains application and/or network/infrastructure configurations, oversees the development of training materials and systems documentation.

- Actively participates in the technology procurement process to ensure selected technologies meet the business needs and provide the best solution.
- Works with consultants and vendors, reviewing and advising on measures to improve performance.
- Prepares progress and status reports for internal management and client courts.
- Performs other duties of a similar nature and level as assigned.

EXAMPLES OF POSITION SPECIFIC RESPONSIBILITIES *(Illustrative Only)*

Positions assigned to enterprise architecture may be responsible for:

- Acting as a central expert for the branch, providing oversight and acting as a bridge for the various technology platforms to ensure the continuity of direction, leveraging judicial branch assets, best practices, and overall integration;
- Establishing architectural standards, best practices and other guidelines to be followed across the enterprise;
- Developing and maintaining the enterprise architecture roadmap to ensure cross-platform architectural components integrate successfully;
- Developing enterprise architectural diagrams for development and production systems;
- Overseeing adoption of enterprise software standards;
- Consulting with infrastructure and project teams to fit, as well as modify, projects and infrastructure to accommodate enterprise architecture needs;
- Advising executives, court leaders and Judicial Council office leaders on new technologies and the impact of business needs on technology strategies; and
- Assessing the effectiveness of technologies supporting Judicial Council and client court business plans.

Positions assigned to network architecture may be responsible for:

- Providing the highest level technical oversight and support directly to court IT staff during the implementation network initiatives;
- Developing and maintaining network policies, standards, and guidelines supporting the branch and trial courts;
- Collecting network requirements and providing expert-level subject matter expertise along with third party vendors; producing and maintaining detailed network diagrams;
- Ensuring that all network requirements are documented, technically correct, and in compliance with information security policies;
- Providing expert-level direction and subject matter expertise in the analysis and resolution of complex networking problems;
- Conducting feasibility network assessments; and
- Validating that vendor implementation aligns with Judicial Council networking design standards and requirements.

Positions assigned to network program management may be responsible for:

- Overseeing the branch-wide portfolio of projects supporting data network and telecommunications infrastructure;
- Developing program-wide plans; maintaining the program roadmap; reporting and communicating results to the Judicial Council;
- Establishing and maintaining multi-year budget forecasts in support of the program;

- Determining approval and prioritization of projects;
- Managing relationships and facilitating program-level communications to stakeholders; and
- Monitoring subordinate projects and ongoing work through governance structures.

Positions assigned to applications may be responsible for:

- Guiding project roadmap planning and providing expert-level guidance on application technology utilizing knowledge of the latest technology trends, practices, and approaches;
- Recommending system solutions and the appropriate mix of current technologies;
- Providing expert knowledge in performing research, technical requirements definitions, analysis, development, acquisition, and implementation of hardware, software, and applications systems;
- Detailing architectural improvements based on design reviews, code inspections, and system monitoring;
- Conducting research, consulting with business clients and collaborating with technical staff to inform build vs buy decisions;
- Providing guidance on hosting solutions, development tooling, application patterns and reusability;
- Providing oversight of production support process definitions including migrations, patching, and monitoring; and
- Recognizing and remediating application security risks.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE

Bachelor's degree, and seven (7) years of experience providing technical and/or business process support, analysis, or project management for systems, applications, infrastructure or network.

Possession of a bachelor's degree in a directly related field such as computer science, management information systems, etc., may be substituted for one of the years of required experience. *An additional four years of professional experience as noted above may substitute for the bachelor's degree. Or, additional directly related experience and/or education may be substituted on a year-for-year basis.*

OR

Five years as a Senior Business Systems Analyst, Senior Application Development Analyst or Senior Technical Analyst with the Judicial Council of California or five years of experience performing the duties of a class comparable in the level of responsibility to that of a Senior Business Systems Analyst, Senior Application Development Analyst or Senior Technical Analyst in a California Superior Court or California state-level government entity.

OR

Two years as an Information Systems Supervisor, or Business Systems Supervisor with the Judicial Council of California or two years of experience performing the duties of a class comparable in the level of responsibility to that of an Information Systems Supervisor, or Business Systems Supervisor in a California Superior Court or California state-level government entity.

LICENSING AND CERTIFICATIONS

- None

KNOWLEDGE OF

- Enterprise architecture, including a broad understanding of hardware and systems software technologies, network infrastructure, data integrity and distribution design, application and execution architecture design, and system performance and optimization design as required;
- Enterprise infrastructure design concepts, including multi-tier design, client/server system architecture, system security processes, data center technology infrastructure, web-based application deployment, and multi-vender platform integration;
- Common system integration and services frameworks such as Service-Oriented Architecture (SOA); Microsoft Active Directory infrastructure, information security, business process modeling and application infrastructure, databases (e.g., Oracle, SQL Server), and mobile applications as required;
- Full life cycle experience and common architecture frameworks (e.g. Zachman, TOGAF, DoDAF, MODAF, FEAF);
- Cisco ASA firewalls; Cisco 1900, 2900, 3900 and ASR routers; Cisco Catalyst switches; Cisco Nexus switches; Cisco VPN solutions; Cisco IPS platform; Cisco wireless platform; BGP and EIGRP routing; and AT&T MPLS / DMVPN / AVPN solutions as required;
- Enterprise network security strategy and design;
- Advanced principles of IT architecture and strategic information technology planning;
- Techniques and principles for project management and coordination, budget estimation and preparation for large complex technology initiatives;
- Using enterprise architecture to facilitate change and investment decisions;
- Extensive experience in recognizing and remediating application security risks;
- Master level expertise in integrated system quality assurance methodologies; and
- Procurement and contract management for large scale technology acquisitions for products and services.

SKILL IN

- Leading or facilitating complex, mission critical projects; monitoring project schedules; evaluating strategies for current and emerging technologies; facilitating meetings with multi-disciplinary work teams;
- Performing risk analysis of technical strategies, products and services;
- Developing and maintaining blueprints for a technology solution portfolio; and codifying different approaches and strategies into a unified architectural blueprint, able to facilitate migration to a new environment;
- Assessing business operations and the application of complex technology to improve operational efficiencies;
- Communicating verbally and in writing with executives about enterprise architecture solutions in a way that establishes rapport and gains understanding;
- Preparing project resource requirement estimates, budgets, and required contract documentation for goods and services;
- Developing and evaluating complex business process models, use cases, system requirements, and technical specifications;
- Developing solutions for improving coordination between and across supporting systems;
- Identifying impacts of technology and configuration changes on other modules and systems;
- Designing the architecture for Web based applications and content management systems;

- Troubleshooting complex technical issues requiring advanced analysis skills;
- Summarizing complex technical information; and advocating for technical recommendations to non-technical users and management;
- Preparing management reports on systems projects; status and program metrics; and
- Promoting and maintaining effective working relationships with colleagues, customers, and the public.

WORKING CONDITIONS, ADA AND OTHER REQUIREMENTS

The Judicial Council is an equal opportunity employer. The Judicial Council will comply with its obligations under the law to provide equal employment opportunities to qualified individuals with disabilities.

Positions in this class typically require: sitting, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, talking, hearing, seeing, and repetitive motions.

Sedentary Work: Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.

Incumbents generally work in a typical office environment with adequate light and temperature. The Judicial Council will make all reasonable efforts to minimize the need for employees to travel by taking advantage of virtual conferencing tools as much as possible. However, positions in this class may require local and statewide travel as necessary.

Please Note: *The Judicial Council classifies work based on organizational need. The distinguishing characteristics, essential duties and minimum qualifications described in this specification relate to the body of work required and not to the attributes of an incumbent assigned to perform the work.*