LOS ANGELES UNIFIED SCHOOL DISTRICT
PERSONNEL COMMISSION

CLASS DESCRIPTION
Management-Unit J
Class Codes

ASSOCIATE STRATEGIC PLANNING SYSTEMS ENGINEER	1203
STRATEGIC PLANNING SYSTEMS ENGINEER	1200

DEFINITION

A Strategic Planning Systems Engineer plans and develops the integrated systems infrastructure throughout the District. The systems include all Enterprise Architecture, LAN, WAN, telecommunications, information systems, Internet/Intranet, management, support, and administration. An Associate Strategic Planning Systems Engineer assists a Strategic Planning Systems Engineer in systems planning and implementation of the integrated systems infrastructure.

TYPICAL DUTIES

- Performs complex systems management architecture integration with other system solutions to ensure an integrated system with automated management capabilities where feasible.
- Develops architectures and plans for enterprise wide tactical and strategic requirements, systems definition, and feasibility determination within a complex systems environment.
- Establishes the Enterprise Architecture and ensures architected solutions are in line with established architecture to meet the requirements of the customers.
- Develop and maintain Enterprise Architecture models.
- Plans, analyzes, and coordinates systems requirements using in-depth knowledge of District's complex environments.
- Review performance and capacity of current and future IT infrastructure at regular intervals to determine if sufficient capacity and performance exists to deliver against service level agreements.
- Plan, propose, and design solutions and services that align with current and future District business strategies and priorities.
- Communicates and negotiates with vendors on an ongoing basis to stay aware of new technical solutions to complex problems.
- Oversees the systems configuration and recommends topology changes, as necessary.
- Oversees the implementation of large systems architecture projects throughout the various stages and turns it over to operations once implemented.
- Oversees the maintenance of a systems inventory.
- Is responsible for implementing District-wide technical architectures.
- Coordinates with all other IT functional areas to provide planning guidance and direction for systems connectivity issues.
- Represents the District in systems operation matters and serves as ITD's liaison with regulators, auditors, suppliers, and other outside entities as required.
- Publishes enterprise architecture communications, processes, standards, principles, and guidelines.
- Develops technical requirements and specifications.
- Maintains optimal alignment of technology architecture with data architecture, and application architecture.
- Leads and reviews IT project implementations, system architecture designs, and procurement plans for compliance with IT standards and architectural plans.
- Provides advice and guidance to the Deputy Chief Information Officer and/or Chief Information Officer relative to systems plans including technical solutions, need for equipment/ software upgrading, and priority matters.

Develop and maintain a short and long term strategic technology infrastructure plan that includes systems architecture, technological direction, acquisition plans, standards, optimal costs, migration strategies, and contingencies.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Strategic Planning Systems Engineer is responsible for complex systems planning and implementation throughout the District and may supervise and coordinate efforts of Associate Strategic Planning Systems Engineers.

An Associate Strategic Planning Systems Engineer assists a Strategic Planning Systems Engineer in systems planning and implementation of the integrated systems infrastructure.

The Chief Information Officer is responsible for the development of strategic, innovative information services and plans the day-to-day operations of the information services function.

A Senior Technical Project Manager directs major activities involved in planning, development, and implementation of a major software applications system and may supervise and coordinate efforts of Technical Project Managers.

SUPERVISION

A Strategic Planning Systems Engineer receives administrative direction from the Chief Information Officer or a Senior Administrator and provides administrative direction to Associate Strategic Planning Systems Engineers and lower-level Information Technology Division staff. An Associate Strategic Planning Systems Engineer receives administrative direction from a Strategic Planning Systems Engineer or higher-level administrator and provides general direction to lower-level Information Technology Division staff.

CLASS QUALIFICATIONS

Knowledge of:

- Project management, including the development of budgets, time lines and allocation of staff
- Accounting and procurement procedures and practices
- Risk management on large scale technology projects
- Personnel practices and policies
- Principles of training, employee evaluation, and employee relations
- Project scheduling
- Request for Proposal (RFP) processes
- Windows ~~NT~~ workstation/server, MS Project and Access
- Internet applications such as e-mail, internet, netnews, etc.
- Security controls for networking devices, operating systems, application, web, and cloud-based solutions
- Network Systems Emphasis:
  - Cisco/Xylan routers and addressing schemes
  - LAN/WAN network architecture, integration, and implementation
  - Networking, application systems, Internet, Intranet, client server operation, and network security including firewalls and secure network architecture
  - Ethernet and Token Ring LANs, Internet tools (e.g. FTP, Telnet, WWW, etc.), routers, MAUS, repeaters, bridges, switches, SNMP, SNA, Microsoft SNA server, FDDI, and SONET rings
  - Principles of LAN architecture, traffic engineering, and network security administration
  - IBM OS390 and RS6000 or equivalent computers and peripherals
  - Copper and fiber cable topologies

Cable termination equipment and standards
Cable and bix block identification techniques
Wired and wireless network monitoring tools
Network Access Control Software such as Aruba Clearpass
Protocols such as SNA, IPX, and TCP/IP, etc.
MS BackOffice, MS Exchange
Network software
Encryption technologies, software, and applications
Configuration management, patch management, Windows/Unix, and database security
Knowledge of ORACLE, SQL server, .NET and Java environments
Identity management and API management
Cloud hosting

Information Systems Emphasis:

The Open Group Architectural Framework (TOGAF) for Enterprise Architecture
Systems technology, application architecture, applications integration methodologies, and system architecture
On-Line Transactional Programs (OLTP) principles and methodologies
On-Line Analytical Programs (OLAP) principles and methodologies
Cloud Computing principles and methodologies
Web Application and Portal principles and methodologies
Mobile Application principles and methodologies
Relational Database Management Systems (RDBMS) principles and methodologies
Enterprise Application Integration (EAI) principles and methodologies
Assess and secure source-code, custom applications, and websites

Ability to:

Manage multiple large projects simultaneously
Develop, plan, and implement short and long-range goals
Integrate and collaborate successfully with peers
Formulate and express ideas clearly and effectively in writing and orally
Set priorities and successfully complete tasks in a timely manner
Analyze and interpret materials and problems involving rules, procedures, documentation, and related matters
Maintain effective relationships with District personnel and representatives of manufacturers and other organizations
Motivate and lead employees
Transform business requirements into IT systems architecture

Special Physical Requirement:

Effective hearing and speaking to address systems issues promptly

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university with a bachelor's degree, preferably in electrical engineering, mathematics, computer science, telecommunications management, network engineering, information systems, data communications, or a related field. Qualifying experience in addition to that listed below may be substituted for the required education on a year-for-year basis provided that graduation from high school or evidence of equivalent

educational proficiency is met. An advanced degree in systems management, engineering, or computer science is preferable.

Experience:

Network Systems Emphasis:

Associate Strategic Planning Systems Engineer: three years of management or supervisory experience in systems engineering computer/ telecommunications industry. The aforementioned experience should include LAN/WAN and firewall architecting.

Strategic Planning Systems Engineer: five years of management or supervisory experience in systems engineering computer/ telecommunications industry. The aforementioned experience should include LAN/WAN and firewall architecting.

Or

Information Systems Emphasis:

Associate Strategic Planning Systems Engineer: three years of management or supervisory experience in information systems architecture and accessing user system needs. The aforementioned experience should include project management, data management, enterprise application integration, data warehousing, and decision support systems.

Strategic Planning Systems Engineer: five years of management or supervisory experience in information systems architecture and accessing user system needs. The aforementioned experience should include project management, data management, enterprise application integration, data warehousing, and decision support systems.

Special:

A valid California Driver License.
Use of an automobile.

Network Systems Emphasis:

Cisco Certified Network Professional (CCNP) or Cisco Certified Design Professional (CCDP) or equivalent certifications are required for the Strategic Planning Systems Engineer.

Cisco Certified Network Professional (CCNP) or Cisco Certified Design Professional (CCDP) or equivalent certifications are preferred for the Associate Strategic Planning Systems Engineer.

Cisco advanced certifications (such as CCIE), or Cisco Specialist Certifications are preferable.

Information Systems Emphasis:

Open Group Architecture Framework (TOGAF), Level 2 Certification or equivalent certification is preferred for the Strategic Planning Systems Engineer

Open Group Architecture Framework (TOGAF), Level 1 Certification or equivalent certification is preferred for the Associate Strategic Planning Systems Engineer

Project Management Professional (PMP), IT Infrastructure Library (ITIL), Open Group Certified Architect (Open CA), or Certified Business Continuity Professional (CBCP) certifications are preferable.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

Revised
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JAP