LANE COUNTY
H031
09/07/11

SYSTEM / NETWORK ARCHITECT

DEFINITION

The System/Network Architect (S&NA) strategically designs and implements information systems and networked software architectures that support core organizational functions, and assures their high availability; S&NA gains organizational commitment for all systems and software plans, as well as evaluating and selecting all technologies required to complete those plans. In addition S&NA provides technical leadership across the organization, from strategic decision making down to the project planning level; and performs related duties as assigned.

CLASS CHARACTERISTICS

There are varying levels of complexity connected with the work in this series. Complexity levels relate to the tasks (the work being done) and are based on the factors that influence those particular tasks. These factors include the size, scope and criticality of the environment, the diversity of systems, degree of independence, available guidelines, etc.

This is the most advanced-level in the Information Technology Specialist (ITS) series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, knowledge, experience, and complexity. Positions in this class are often assigned responsibility for project coordination. Positions in this class will specialize in strategic and complex areas of technology and their integrations with other systems and/or services.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned management personnel. Provides functional and technical supervision to assigned staff.

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

- Provides customer service
- Design and implement long-term strategic goals and short-term tactical plans for managing and maintaining the organization's systems.
- Ensure that proposed and existing systems architectures are aligned with organizational goals and objectives.
- Researches complex technology products and services, prepares procurement specifications, evaluates vendor proposals and ensures compliance with standards and architectural plans.
- Performs technology design and capacity planning.
- Plans and schedules installations considering timing, version compatibility and other factors. Installations typically involve products new to the industry or significant

changes, such as overall system hardware upgrades or those that require creative network tuning.
- Analyzes system performance and addresses performance problems. Evaluates costs, specifications, and organizational policies to recommend system performance tuning.
- Performs administration of technology products and services including establishment of proper access control functions.
- Performs diagnosis and resolution of technology products and services problems.
- Performs necessary support activities outside scheduled work hours as needed to minimize computer systems, outages during critical periods.
- Shares on-call duties with other staff members and responds in a timely manner 24 hours per day when problems arise.
- Develop, implement and maintain policies, procedures and associated training plans for operating system resource administration, appropriate use, and disaster recovery.
- Establish service level agreements or memorandum of understanding with users.
- Coordinates large important projects.
- Facilitate group processes including meetings, electronic or verbal communications; internally and with outside groups.
- Maintains and improves technical knowledge and customer support skills.
- Conduct research on emerging technologies and standards in support of systems, and recommend technologies that will increase cost effectiveness and systems flexibility.
- Provide architectural expertise, direction, and assistance to others. .
- Shares knowledge and information with management, customers, and co-workers via written and verbal reports, presentations, training, and informal communication.
- May schedule, assign, coordinate, monitor, and review the work of assigned staff.

MINIMUM QUALIFICATIONS

Knowledge of

- Customer service practices.
- Team building concepts.
- Strategic business plans.
- Development of strategic systems architecture plans.
- Structure and capabilities of computer operating systems, network protocols, data access control, and database management systems.
- Purposes and internal functioning of computer and network equipment and software components.
- Data collection techniques, feasibility study methods and cost/benefit analysis procedures.
- System performance monitoring and tuning techniques.
- Data communications and distributed computing concepts.
- Development of standard configuration for server technology.

- Integration of application software onto server technology.
- Resolving advanced server technology configuration conflicts.
- Researching, integrating and administering server support tools.
- Designing and developing automated methods for server deployment
- Server data storage and services.
- Server access control and security functions.
- Server system monitoring and performance management
- Data integrity and access control considerations.
- Data storage concepts and management.
- Software development and customization methods.
- Change control and quality assurance processes.
- Principles of project management.
- Technology purchasing procedures.
- Techniques for facilitating group processes including meetings and electronic collaboration.
- Principles of functional and technical supervision.

Ability to

- Develop and maintain effective working relationships with customers, co-workers, managers, vendors, and suppliers.
- Participate harmoniously on teams formed to accomplish projects and provide ongoing support.
- Convey technical information simply and clearly, both in speech and in writing.
- Develop technical processes and procedures
- Quickly understand complex technical matters and apply technical knowledge in the development of general solutions.
- Acquire new network skills and continually update existing skills.
- Maintain awareness of current technology and future technological trends.
- Coordinate a workload that includes multiple assigned tasks.
- Use common personal software products including email, word processing, and spreadsheets.
- Develop command language scripts and small programs to automate and customize system processes.
- Diagnose and resolve complex technical problems.
- Plan and coordinate large, complex projects.
- Plan, coordinate, and document information technology architectures.

EXPERIENCE AND TRAINING

Training

- Equivalent to a Bachelor's degree from an accredited college or university with major course work in computer science or a related field.

Experience

- Eight years of increasingly responsible system network analyst experience.
- An equivalent combination of experience and training that will demonstrate the required knowledge and abilities is qualifying.

Special Requirements

- If required to drive, must be in possession of a valid driver's license at time of application, and a valid Oregon Driver's license by the time of appointment.
- Security Clearance - These positions require a criminal background investigation and, as a condition of employment, security clearance to have and be able to maintain access to the Area Information Records System (AIRS) and/or the Law Enforcement Data Systems (LEDS).