# Jordan School District CLASSIFIED JOB DESCRIPTION

Job Title: Systems Engineer (V05)			Job Family: 03		
Department: Information Systems			Lane Placement: 19		
Supervisor's Title: Director of Information Systems Systems & Security Manager			Contract: 245 Days		
FLSA Classification:	, , ,		_	Hours per Day:	8
Original date: 03/09	Revised: <u>12/16</u>	_Revised:_	11/23	Revised:	

## **GENERAL FUNCTION**

Under supervision of the systems & security manager, the **Systems Engineer** is responsible for deploying and maintaining the operation, integrity and security of enterprise level servers and systems including business systems, administrative student systems, instructional systems and office systems. Designs, develops, maintains and tunes servers and operating systems to ensure optimal performance for databases and computer application systems. Designs, configures and manages enterprise storage area networks, VMWare server infrastructure, and client device management systems.

The incumbent is responsible to follow all policies and guidelines as detailed by District policy.

# ESSENTIAL FUNCTIONS

- Deploy and maintain the operation, integrity and security of enterprise level servers and systems including business systems, administrative student systems, instructional systems and office systems.
- Design, develop, maintain and tune servers and operating systems to ensure optimal performance for databases and computer application systems.
- Design, configure and manage enterprise storage area networks, VMWare server infrastructure, client device management systems and SQL databases.
- System administration responsibilities include installation, configuration, performance monitoring and systems tuning for UNIX, LINUX, Windows and OSX servers and desktops.
- Provide leadership in project planning, design and implementation of new services and applications. Provide input into setting standards and formulating system-related policies, work rules, and procedures.
- Design, develop and maintain fiber channel storage area network (SAN).
- Analyze and assist in resolving computer system problems or user needs including providing follow-up instruction and direction to users and/or outlining recommended procedures or projects to the user support team.
- Design, develop and maintain the appropriate systems infrastructure to provide reliable and secure operation of all mission critical servers and associated services.
- Ensure proper server system security/connectivity for end users to allow appropriate access to enterprise systems. Contribute to the design of system infrastructure and security policy standards and maintain the standards in daily operations.
- Develop and maintain integrity of server accounts and data.
- Configure and maintain system services (e.g., active/open directory applications, file storage, printing, mail, web, FTP, Google applications, cloud services, etc.).
- Manage and maintain servers to host applications and network services (e.g., DNS, DHCP, security, filtering, access, etc.).
- Monitor system logs and activities on all servers and remediate problems, as needed.
- Implement and support business continuation/disaster recovery efforts including backup scheduling and contingency planning and evaluation; performs periodic auditing to ensure proper backup.
- Research, install and test software updates and patches to supported applications and various operating systems.
- Verifies system operation by conducting functionality, data integrity, system integration and system testing.

- Research new technologies and present major hardware and software recommendations. Provide input into both short and long term technology planning efforts for the District.
- Replaces defective hardware on clients and servers as necessary.
- Maintains software and hardware inventory and associated documentation.
- Provide scripting support to all major server systems.
- Provide training to IS staff and end-users on an as-needed basis.
- Assist the District administration in fulfilling requests from the Board of Education by collecting data, preparing reports and distributing information.
- Requires occasional late night or weekend work to meet established priorities.
- Will travel to other District buildings using a personal vehicle.
- This position requires punctual and regular daily attendance at assigned location.

## **NON-ESSENTIAL FUNCTIONS**

- Maintains professional competence by reviewing appropriate literature and participating in appropriate organizations.
- Other duties as assigned.
- This description should not be construed to contain every function/responsibility that may be required to be
  performed by an incumbent assigned to this position.
- Incumbent is required to perform other related functions as assigned. Other related functions can be
  performed for no more than 20% of an employee's normal workweek (i.e. eight (8) hours per week, or
  thirty-two (32) hours per month).

## **QUALIFICATION REQUIREMENTS**

• Incumbent must be fingerprinted and clear a criminal background check.

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the education, knowledge and experience requirements; the machine, tools and equipment used; and any licenses or certifications required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

## Minimum Job Qualifications:

- Requires High School diploma, GED or equivalent as reviewed by the Department of Human Resources. Verification may be required.
- Requires a Bachelor's degree in computer science, software engineering, information management or related field plus five years of work related experience with increasing levels of responsibility with demonstrated competence or an equivalent combination of education and experience.
- Requires experience in designing and maintaining Active/Open directory and group policy administration in a multi-operating system environment.
- Requires experience configuring and maintaining large-scale server farms and storage area network systems. Requires experience maintaining servers for standard services such as active directory, open directory, DNS, SMTP, DHCP, mail, web, printing and FTP service.
- Requires experience configuring and maintaining servers for services such as DHCP, mail, web, printing, and FTP. Must be familiar with virtual server concepts.
- o Current Windows, OSX/IOS, Unix/Linux and VMWare certifications/training preferred.
- Requires Server Systems Administration experience in at least in one of the following: Windows, Unix/Linux, OSX.
- Requires experience with enterprise level servers, domain and workgroup concepts/permissions, multiple domain architecture, active directory, open directory, access and management policies, e-mail, printing, file storage.
- Requires familiarity with DNS, network configuration on local hosts, LDAP services, DHCP, LAN/WAN/WLAN environments, basic network security, and TCP/IP.
- Requires experience with server configuration and installation; performance and monitoring tools; operating systems upgrades and migrations; strong troubleshooting skills with hardware and software. Requires the ability to write scripts.
- Must have an understanding and working knowledge of the administration of database servers, web servers, standard backup infrastructures and procedures, server system and program installation, compilation and configuration, and system-level security procedures.

- Must be knowledgeable about industry-standard change management procedures.
- Experience with K-12 administrative applications is preferred.
- o Must demonstrate competence in reading, writing and advanced mathematical and logic skills.
- Requires effective interpersonal skills. Has significant interaction with personnel representing all aspects of the department, District administrators, principals, school and office staffs, State agencies and the vendor community.
- Requires the ability to conduct systems training to groups or individuals.
- Project prioritization in determining how to effectively address multiple priorities.
- Ability to handle unusual system problems and work through highly complex troubleshooting processes within established deadlines.
- o Ability to work well with frequent interruptions.
- Ability to work varying hours and shifts and serve on-call when necessary.
- Required to provide own transportation to travel to District locations.
- o Must be self-motivated and proactive in completing tasks with minimal direction.

NOTE: The Administration reserves the right to require specific training for this position. However, depending upon the type and quality of prior work experience and availability of formal training programs, some exchanges can be made between training and experience.

## Machines, Tools & Equipment Used:

- Standard office equipment and machines.
- o Computer hardware and software and related equipment.

#### <u>Physical Requirements – Not limited to the following:</u>

- Continuous sitting and keyboarding/mousing.
- Occasional driving a personal vehicle. Occasional walking and/or standing. Occasional lifting up to 50 pounds
- Occasional (0-33%) Frequent (34-66%) Constant (66-100%)
- $\circ$  Physical ability to perform the essential functions listed above with or without reasonable accommodation.
- Possess the physical, mental and emotional stability to work under stressful condition, including but not limited to: deadlines, contract requirements, inspection requirements and interaction with critical personnel.
- **NOTE:** This list of essential and marginal functions and of physical requirements is not exhaustive and may be supplemented in accordance with the requirements of the job.