

Systems Programmer

Microsoft Engineer

PURPOSE: The System Programmer (Microsoft Engineer) is responsible for the installation, administration, support and maintenance of the District's core Microsoft operating environment from a hardware, software, and a service delivery perspective. The Systems Programmer is responsible for the installation, customization, and maintenance of operating system software on Intel-based servers; acting as a lead technical resource in the Milwaukee Public School's Active Directory roll-out process, supporting and implementing widely used services such as email (Exchange), web (IIs), scheduling, authentication, and directory services and other third party software products.

The Systems Programmer will function as a resident expert recommending new services, new technology, and new versions of software to increase the efficiency of MPS district; acting as a key technical resource for other senior staff, providing advice, training and technical support for various projects.

ESSENTIAL FUNCTIONS:

SYSTEMS ENGINEERING AND ADMINISTRATION (Windows Environment)

- Providing systems engineering and administrative support for the enterprise systems and services.
- Coordinating the following tasks with other systems engineers and administrators:
 - Routine and non-routine systems administration tasks for daily operations of moderately complex production systems.
 - Collection, analysis, and reporting of operational data for use in maintenance, performance tuning, and capacity planning for future enhancements/upgrades.
- Acting as a key lead technical resource and implementer with MPS District's conversion from Novell servers to Microsoft Active Directory Servers.
- Ensuring the stability and performance of all data center servers and their key applications.
- Installing, configuring, and maintaining Intel based servers with Windows operating systems and services.
- Performing software management including service pack installations and patch rollouts.
- Resolving a variety of technical problems of moderate to difficult scope; initiating and coordinating the escalation of other computing systems and applications problems to other support staff, others in the District, or outside vendors.
- Conducting routine hardware and software audits of servers to ensure compliance with established standards and policies and configuration guidelines
- Researching, recommending, and implementing changes to production and corporate Microsoft systems, servers, workstations, etc.
- Recommending policies, procedures, and purchases related to systems administration, security, licensing, hardware, software, etc.

EMERGING TECHNOLOGIES RESEARCH, DEVELOPMENT & DEPLOYMENT

- Serving as a technical resource to investigate any emerging technologies considered by the organization and to provide direction, based on research and analysis, to management of the feasibility and reality of the technology considered.
- Developing, designing, implementing, and integrating new technologies with little supervision; coordinating with different functional areas.

SECURITY ENGINEERING AND ADMINISTRATION

- Providing security engineering and administrative support for the enterprise security technologies and services.
- Identifying security technologies, which may be utilized to effectively manage or reduce organizational risks.
- Developing, designing, and implementing new security technologies
- Maintaining Microsoft Exchange Server infrastructure to include mail routing, virus scanning and anti-spam control software.

PROJECT PLANNING AND IMPLEMENTATION

- Applying systems engineering expertise in the planning, analysis, design and implementation of enterprise systems and services, with the understanding of budgetary constraints.
- Recommending modifications, including upgrades, additions or deletions to moderately complex systems or services. Providing analysis and justification for recommendation, which may include operational data, feasibility, technological motivations, customer demand or need.
- Directing and/or performing systems administration tasks for project implementations which may include multiple, simultaneous activities.
- Providing technical direction and leadership through the planning and implementation processes
- Remaining active as a participant in the Microsoft Windows community through mailing lists, forum discussions or news groups to keep current of any new developments.
- Performing other job-related responsibilities as assigned.

MINIMUM REQUIREMENTS:

1. Bachelor's Degree in Computer Science, Information Technology or other related field from an accredited college or university.
2. Three years of software and security engineering experience performing duties closely related to this position including experience supporting Windows 2000/2003 Server, Active Directory and/or Microsoft Exchange.
Note: Equivalent combinations of education and experience may also be considered
3. Residence in the City of Milwaukee within six (6) months of appointment and throughout employment.

PREFERRED QUALIFICATIONS:

- Experience in an enterprise environment of greater than 500 employees.
- Experience in server virtualization
- Experience with maintaining SQL server databases
- Experience with Altiris software or equivalent
- Experience with creating hardware independent images (i.e., Microsoft Sysprep)

KNOWLEDGE, SKILLS, & ABILITIES REQUIRED:

- Advanced server administration skills in a Windows 2000/2003 Server environment.
- Administrative, managerial, and troubleshooting knowledge of a Microsoft Exchange environment including e-mail, security, and filtering.
- Ability to administer and implement Microsoft Web-Based technologies.
- Knowledge of general server hardware (Intel based).
- Ability to administer, maintain, deploy and support enterprise level directory services (Active Directory).
- Knowledge (functional) of scripting languages (i.e., Visual Basic, VBA and ASP.net).
- Knowledge (functional) of standards-based (TCP/IP) applications (e.g. account management, directory and authentication services, SMTP, POP, HTTP, IMAP).
- Ability to provide both end-user and operational technical support within a Microsoft Windows production environment.
- Technical troubleshooting skills.
- Ability to work productively in teams.
- Ability to manage multiple projects.
- Ability and motivation to learn new technologies quickly and with minimal support and guidance.
- Interpersonal skills.
- Oral communication skills.
- Written communication skills.
- Ability to interact professionally with a diverse group of clients and staff.
- Knowledge of Standards-based network resource technologies (i.e., RADIUS, TACACS, DNS, DHCP) is preferred.
- Knowledge of general networking concepts (i.e., TCP/IP, LAN/WAN, routers, switches) is preferred.
- Knowledge of Dell server equipment is preferred.
- Knowledge of security technologies and concepts, including: encryption/cryptography (e.g., openssl, secure shell, IPSec), systems security, OS hardening, firewall technology, secure protocols is preferred.
- Ability to write technical specifications, operational documentation, and end user documentation is also preferred.

THE CURRENT SALARY RANGE IS: \$57,233 - \$67,677 annually with excellent benefits.

#06-055—JRS (SM)

6/9/06