The University of Texas at San Antonio

Job Description

Job Title: Enterprise Research Solutions Engineer

Code: 17531

Salary Grade: 64

FLSA Status: Exempt

Department/Division: Office of Information Technology

Reports To: Director, Innovative Solutions Group

Summary

- Function: **S**upports and performs system administration duties on computer systems. Manages applications, virtualization, visualization applications, backups and restores and overall system administration duties.

- Scope: Responsible for designing, implementing, and administering all research computing equipment. This includes desktop systems, clustered servers, as well as stand-alone systems and visualization nodes.

Duties

- Typical:
    1. Design, implement and administer research computing systems, including desktop endpoint nodes and servers both in clustered and stand-alone environments.
    2. Install and rack physical servers and hardware.
    3. Configure and maintain interconnect and I/O platforms (InfiniBand, Fibre Channel, etc.) amongst servers.
    4. Perform system administration duties on multiple research computers and high performance multi-platform clusters, cluster management, virtualization and visualization clusters.
    5. Facilitate the acquisition of hardware and software products and services across campus and not limited to the Research Data Center.
    6. Responsible for upgrading/replacing existing research systems.
    7. Monitor the availability of patches and update and evaluate the importance to the environment and schedules installations accordingly.
    8. Monitor system performance (disk I/O, memory, disk, network, etc.) and provide guidance for improving system performance and reduce bottlenecks.
    9. Coordinate with vendors to resolve hardware and software problems to systems across campus.
    10. Maintain file and application setting backups and provides a mechanism for system.
    11. Participate in a 24-hour, 7-day on-call support rotation and off-hours maintenance windows.

12. Knowledge of all Microsoft Office software and able to learn and use institutional software systems. Complies with all State and University policies.
13. Other duties may be assigned.

Education

Required	Preferred
Bachelor's degree from four year college or university within area of assigned responsibility. Technical training and/or experience may be substituted for a degree on a year for year basis.	

Other Requirements

Required	Preferred
Ability to design, promote, and implement change control and configuration management, structured design and support methodologies. Experience installing, configuring, and supporting various research applications such as graphing, plotting, numerical computations applications, etc. Demonstrate experience in programming system maintain tasks in C, Java, Perl, batch/shell, or other general purpose programming language; perform complex performance analysis including system processes, I/O subsystems, networks and other related components. Must have advanced ability to analyze, design and architect complex IT systems.	

Experience

Required	Preferred
Five years of experience in the research field with a background in High Performance Computing, communications and general operating system support (Linux/Solaris and Windows Server).	

Equipment

Required	Possible
Personal computer and standard office equipment.	

Working Conditions

Usual	Special
Normal office environment. While performing the duties of this job, the employee is regularly required to sit and talk or hear. The employee is occasionally required to stand or walk.	The employee must occasionally lift and move up to 40 pounds. May require work to be perform work in data centers with loud equipment noise and cool temperatures.

Supervision

Received	Given
General supervision received from Director, Innovative Solutions Group	

Accuracy

Proficiency in all phases of the duties performed.

Security Sensitive

Specific job requirements or physical location of some positions allocated to this classification may render the position security sensitive, and thereby subject to the provisions of section 51.215 Texas Education Code.

Internal Control

Within the scope of position duties, responsible for seeing that operations are effective and efficient, assets are safeguarded, reliable financial data is maintained, and applicable laws, regulations, policies, and procedures are complied with.