



STORAGE ENGINEER

Department: Information Technology
Unit: 5210
Level: 6 Non-Exempt

Supervisor's Title: Data Center &
Disaster Recovery Systems Manager
Supervises: No staff

Provides full-time management, system administration, maintenance, and support of all Enterprise Storage Solutions and Fiber Channel Switches. The key technologies are EMC PowerStore and PowerMax and Brocade Fiber Channel switches. Need to have deep understanding and expertise in storage management, zoning, and data protection practices, with a strong focus on maintaining the operational health, security, and performance of enterprise storage systems.

ESSENTIAL JOB TASKS:

Manages all aspects including the daily operations of Massport's Storage Area Network Infrastructure.

1. Designs and deploys enterprise EMC storage solutions in a complex, multi-site data center adhering to industry best practices and aligning with organizational objectives.
2. Installs, configures, maintains and manages all aspects of the organization's EMC storage area network platforms includes providing capacity management, forecasting and reporting.
3. Installs, configures, and maintains enterprise data protection solutions ensuring the availability and integrity of organization's disaster recovery process and business continuity.
4. Installs, configures, maintains and manages all aspects of the organization's Brocade fiber channel infrastructure ensuring optimal performance, reliability and security.
5. Assists with the management of VMWare Infrastructure, including virtual machines and virtualized networks.
6. Assists with the management of Linux, Ubuntu, and Windows (desktop and server) based systems.
7. Rewires and connects servers, storage, switches and devices to the network as needed.
8. Manages security, access rights, administrative controls and configures monitoring of assigned information systems.
9. Ensures system integrity of assigned information systems.
10. Monitors daily error and security logs of assigned IT Systems and responds

appropriately.

11. Reports and makes recommendations of assigned systems to Management.

Ensure that all system security guidelines and steps have been taken.

1. Ensures that information system servers are logically and physically secure from unauthorized use and inappropriate access.
2. Ensure that all manufacturers' suggested security-related patches are correctly installed and tested from the primary operating systems (OS) as well as for any applications using those OS facilities.
3. Ensures that system account access methods (passwords, biometrics, smart cards, etc.) are accountable, secure and accurate.
4. Ensures that, upon request, all user activities (log in attempts, process running, etc.) are fully auditable.
5. Ensures that all system logs, audit reports, work plans, etc. that have sensitive account or system design information are physically and logically secure.
6. Responsible for the management of maintenance and support service contracts for system servers and associated software.

Ensures the integrity and reliability of each system's hardware and software components.

1. Ensures that all hardware-operating conditions are acceptable (as determined by the manufacturers) including power requirements and environment conditions.
2. Ensure that all systems are appropriately designed, configured and maintained so that all applications run efficiently and effectively.
3. Ensures that each system is appropriately identified on the Massport network and that all required communication protocols to and from the systems are correctly configured and are efficient.
4. Ensures that each system has the appropriate resources needed to effectively run applications and efficiently store all required data.
5. Monitors systems for performance and reports on exceptional activities.
6. Ensures that the system up time is at least 99.99%.

Ensures that all changes to the system, including system reconfiguration, patching, upgrading, modifications and enhancements are managed appropriately.

1. For each system change, develop work plans identifying the work to be accomplished, the reason for the work, the expected impact of the work on the users, a test plan for determining success or failure, a recovery/backout plan and a time-line based schedule of the work detailing who will be responsible for each aspect of the impending work.
2. Maintains a clear and concise running log of all system activities for each system detailing change dates, versions, comments, etc.
3. Creates and maintains detailed documentation, procedure and troubleshooting guides of assigned information systems as well as day-to-day tasks.

SECONDARY JOB TASKS

1. Completes projects and tasks as assigned.
2. Act as a point of contact for any Massport authorized employees or consultants

working on the computer network or on any aspect of a system.

3. Make suitable recommendations regarding hardware/software solutions enterprise wide.
4. Monitors and tracks compliance of third-party licensing usage.
5. Serves in an advisory capacity on projects for developing or updating applications.
6. Provides system usage statistics and metrics as needed.
7. Perform other tasks as necessary.

JOB REQUIREMENTS AND QUALIFICATIONS

Education

Bachelor's degree in computer science or a related field or equivalent professional experience required.

Experience

Minimum of 5–7 years of experience in storage engineering with a focus on EMC and Brocade technologies.

UNIQUE EXPERTISE/CERTIFICATION/REGISTRATIONS

1. Strong interpersonal and communication skills and the ability to collaborate effectively with cross functional IT teams.
2. Expert level understanding of Storage Area Networks, Network Attached Storage and SAN replication solutions.
3. Troubleshoots complex SAN infrastructure issues relating I/O latency and disk performance and providing root cause analysis reports.
4. Knowledge of multipathing technology such as PowerPath and etc.
5. Knowledge of modern virtualization technology and how they interact with storage, VMWare vSphere/ESXi virtualization platform preferred.
6. Knowledge of computer operating systems such as Windows, Linux, Solaris, and Ubuntu is required.
7. Understanding of Microsoft SQL and Oracle database Systems and how they interact with storage.
8. The ability to write scripts in some administrative language such as PowerShell, Python, VBScript, or similar scripts for automation tasks.
9. Ability to pass a Massport controlled substance test and security background check required.
10. Ability to obtain a Massport Security Badge required.

WORKING CONDITIONS

Environmental Parameters

Ability to work in an office and to travel to all Massport facilities. Ability to work in an airport environment with conditions that may include: fumes, odors, gases, chemicals, and dust as well as decibels in the range of 65 - 100; and in all weather conditions (hot, cold, humid, dry, and wet).

Physical Demands

Strength: Ability to exert up to 30 pounds of force to lift, carry, push, pull or otherwise move an object.

Type: Ability to match and sort items based on color; to distinguish between different colors. Ability to walk or stand for long periods of time. Expressing or exchanging ideas by means of spoken word, and perceiving nature of sounds. Clarity of vision at 20 inches or less.

WORK SCHEDULE

Ability to work a 37.5-hour workweek. Ability to carry and respond to a pager 7 days per week, 24 hours per day.

EQUIPMENT USED

Blueprints, calculator, camera, charts, computer, contracts, diagrams, directives, forms, handbooks, intercom, light table, ledgers, manuals, maps, measuring devices, monitors, overhead projectors, publications, reference books, schedules, tape recorder, computer screen projectors, telephone, two-way radio, VCR's, video equipment, and other equipment.