Job Description – System Administrator, LNMIIT Jaipur

JOB TITLE	System Administrator	DEPARTMENT	LUCS
REPORTS TO	Lead – LUCS	SUBORDINATES	-
LOCATION	Jaipur	DIVISION	Non-Teaching Technical
EMPLOYMENT TYPE	Regular	LEVEL	10

JOB PURPOSE

System Administrator is responsible for managing, configuring, and maintaining computer systems, servers, networks, and IT infrastructure to ensure high availability, security, and reliable operation. Their key tasks include installing and updating hardware and software, monitoring system performance, troubleshooting issues, implementing security measures, co-ordination with relevant team/person and providing technical support to users. System administrator require a broad set of technical and soft skills, and as technology evolves toward cloud, automation, and DevOps, their roles continue to adapt, offering opportunities to specialize in areas like site reliability or cloud engineering.

RESPONSIBILITIES

Key Activities

(a) Linux System Administration

- Installation, configuration, administration, and maintenance of Linux-based servers (RHEL / Rocky / Ubuntu / CentOS or equivalent).
- User management, authentication, access control, patching, monitoring, and performance tuning.
- Automation of administrative tasks using Shell scripting / Python / Ansible.

(b) HPC, GPU & AI Infrastructure

- Administration and operational support of High-Performance Computing (HPC) clusters, including compute, login, head, and storage nodes.
- Experience with job schedulers such as Slurm / PBS / Torque or equivalent.
- Administration and monitoring of NVIDIA DGX servers, GPU drivers, CUDA libraries, and system performance.
- User support for compute workloads, job optimization, and troubleshooting.

(c) Storage, Networking & Backup

- Management of shared storage systems (NFS / Lustre / Ceph or equivalent).
- Backup, archival, and disaster recovery planning.
- Ensuring proactive study of SERC/ISERC and similar authentic threats/ security advisory and ensuring timely upgrade, setting/ configuration, patch management and prevention of ransomware etc. apart from ensuring requisite security compliances.
- Review application logs, create and verify backups of data.
- Monitor the system daily and respond immediately to security or usability concerns.
- Coordination for high-speed networks (InfiniBand / high-throughput Ethernet).

(d) IT Security & Compliance

- Implementation of system hardening, firewall policies, log monitoring, and vulnerability management.
- Ensuring compliance with Institute IT security policies and data governance guidelines.

(e) Vendor Management

- Coordination with OEMs, system integrators, AMC providers, and service vendors for IT and HPC infrastructure.
- Monitoring vendor performance, SLA compliance, and service deliverables.
- Assistance in technical evaluation of vendors for procurement, upgrades, and renewals.

(f) IT Asset Management

- End-to-end management of IT assets, including servers, networking equipment, storage systems, and end-user devices.
- Maintenance of asset registers, tagging, warranty/AMC tracking, and lifecycle management.
- Provide technical support for both hardware, software and firmware issues that users encounter.
- Support in audits, verification, and compliance reporting.

- Install and test computer-related equipment as needed.

(g) FMS Management of Third-Party IT Teams

- Day-to-day supervision and coordination of third-party / outsourced IT support teams under FMS contracts.
- Allocation of tasks, monitoring performance, attendance, and adherence to SLAs.
- Ensuring quality service delivery for IT operations, labs, data centers, and campus-wide IT services.
- Acting as a single point of coordination between Institute stakeholders and outsourced IT personnel.

(h)Additional Duties & Responsibilities

- Ensure smooth, secure, and uninterrupted operation of Linux servers, HPC clusters, and GPU infrastructure.
- Manage vendors, assets, and FMS-based IT manpower in alignment with Institute policies.
- Provide technical support and guidance to faculty, researchers, students, and administrative units.
- Maintain documentation, SOPs, operational manuals, and compliance records.
- Assist in planning, procurement, deployment, and upgradation of IT and HPC infrastructure.
- Perform any other duties as assigned by the competent authority from time to time.
- Respond to and resolve requests received pertaining to hardware, software and networking related issues/complaints.
- Safeguard the confidentiality, security, privacy, integrity, and credibility of the institute data.
- Provide various data pertaining to the IT department as and when required as per need of the Institute.
- Provide support if any required in the smooth implementation of Enterprise resource planning (ERP).
- Ensure periodic performances, security audit of the system in consultation with the Center Lead LUCS.

EDUCATIONAL QUALIFICATION AND EXPERIENCE

Essential Qualifications and Experience:

- Bachelor's degree in computer science/ information technology/ computer engineering/ electronics/ electrical/ instrumentation engineering, or equivalent from a recognized University/ Institute.
- Minimum 5 years of relevant experience in Linux system administration, Network Management and IT Infrastructure support in an academic (preferred), research, or enterprise environment.

Desirable:

- Master's degree in a relevant discipline.
- Experience in managing Linux/Unix and windows Servers, HPC clusters, GPU/DGX based systems.
- Hands- on experience with NVIDIA DGX servers and CUDA ecosystem.
- Experience with SAN/NAS storage Servers, Backup and disaster recovery.
- Relevant certifications such as CCNA/CCNP/RHCSA/RHCE/Linux Foundation/NVIDIA/ITIL.
- Proficiency in Server Hardware, Virtualization and Cloud Platforms.
- Knowledge of system security, hardening, monitoring and redundancy strategies.
- Knowledge of Enterprise resource planning (ERP).
- Experience in Network Management including switching, routing, firewalls, VLANs and network monitoring tools.
- Experience in vendor coordination/management, IT asset lifecycle management, supervision of FMS operations and third-Party IT Teams.
- Proficiency in written and verbal communication in English.

Age:

- Preferably below 45 years