

## Job Description

The **System Administrator** (SA) is responsible for effective provisioning, installation/configuration, operation, and maintenance of systems hardware and software and related infrastructure. This individual participates in technical research and development to enable continuing innovation within the infrastructure. This individual ensures that system hardware, operating systems, software systems, and related procedures adhere to organizational values, enabling staff, volunteers, and Partners.

## Responsibilities

- Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements.
- Develop and maintain installation and configuration procedures
- Develop tools, procedures, and training sessions for Operations, Client Support and Systems Development staff to assist with work.
- Research and recommend innovative, and where possible automated approaches for system administration tasks.
- Propose Infrastructure architecture solutions (hardware/software) for various project and operational needs
- Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups.
- Perform regular security monitoring to identify any possible intrusions.
- Perform daily backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media, recovery tapes or disks are created, and media is recycled and sent off site as necessary.
- Repair and recover from hardware or software failures. Coordinate and communicate with impacted constituencies.
- Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary.
- Perform ongoing performance tuning, hardware upgrades, and resource optimization

as required. Configure CPU, memory, and disk partitions as required.

## **Knowledge/Skills**

- Experience in Unix / Linux (Unix / Linux certifications and/or high level of experience preferred)
- Experience in administration of standard Unix services: http (apache / nginx), ftp (proftpd, vsftpd), dns (named), smtp (postfix/sendmail), imap/pop3 (cyrus/courier), syslog, tftp, snmp, authentication systems (ldap)
- Experience in scripting (bash / perl / php)
- Knowledge of network storage technologies (iSCSI, NFS, CIFS)
- Knowledge of virtualization platforms (xen preferred)
- Experience with puppet / chef
- Experience with jenkins, vagrant, capistrano is preferred

## **Nice to have**

- Experience with cloud technologies such as Amazon Web Services
- Hands-on understanding of IaaS, PaaS and SaaS Cloud computing models