

## Duties and responsibilities of a system administrator

### **System Administration Engineering and Provisioning**

1. Engineering of system administration related solutions for various project and operational needs.
2. Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements.
3. Install and configure systems such as JIRA or Asset Management applications.
4. Develop and maintain installation and configuration procedures.
5. Contribute to and maintain system standards.
6. Research and recommend innovative, and where possible automated approaches for system administration tasks. Identify approaches that leverage our resources and provide economies of scale.

### **Operations and Support**

7. 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.
8. Perform regular security monitoring to identify any possible intrusions.
9. 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.
10. Perform regular file archival and purge as necessary.
11. Create, change, and delete user accounts per request.
12. Provide Tier III/other support per request from various constituencies. Investigate and troubleshoot issues.
13. Repair and recover from hardware or software failures. Coordinate and communicate with impacted constituencies.

### **Maintenance**

14. Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary.
15. Upgrade and configure system software that supports JIRA or Asset Management applications per project or operational needs.
16. Maintain operational, configuration, or other procedures.
17. Perform periodic performance reporting to support capacity planning.

18. Perform ongoing performance tuning, hardware upgrades, and resource optimization as required. Configure CPU, memory, and disk partitions as required.

19. Maintain data center environmental and monitoring equipment.

## **Requirements for the position:**

1. Bachelor (4-year) degree, with a technical major, such as engineering or computer science.
2. Systems Administration/System Engineer certification in Linux.
3. Four to six years system administration experience.
4. Experience with Python programming and MongoDB administration