



Title: Infrastructure Systems Manager

Location: Tucson, AZ

Employee Type: Full-Time

Hours Per Week: 40

Travel: Occasional

Relocation Covered: Possible

Desired Start Date: As soon as possible

Salary: \$90,000 - \$110,000 DOE

Benefits: Medical and dental insurance, life insurance, disability, retirement plan, and more.

PSI will not sponsor applicants for work visas.

Summary Job Description:

The Planetary Science Institute (PSI) is seeking to hire an Infrastructure Systems Manager to ensure the reliability, stability, security, utility, and consistency of PSI's onsite and cloud-based computing infrastructure. This position will also work with the IT manager and scientists to facilitate a dynamic research environment by providing researchers with technical ideas, solutions, and infrastructure. Duties to include off-hour systems support. Position will have a supervisory role.

Work Environment:

PSI is a virtual organization with over 180 members dispersed across many states and countries. There is a main office in Tucson, AZ and a satellite office in Lakewood, CO. The main server room and collocation facilities are in Tucson. All three sites are linked via a Layer 2 tunnel. There is a mixture of onsite hardware and cloud-hosted services. PSI also has an onsite high-performance computing cluster.

Primary Responsibilities/Activities: System, Security, and Network Administration

- Develop, design, implement, and oversee the infrastructure.
- Analyze PSI's computer and communications system and identify components that could be altered to better suit PSI's needs.
- Conduct complex technical evaluation and design review, and propose essential changes in performance adjustments, physical architecture, and infrastructure design.
- Maintain current patch levels on server firmware and operating systems.
- Analyze and address daily system and service logs for potential problems.
- Setup onsite and cloud server monitoring systems and respond to automated notifications of system emergency triggers.
- Maintain and modify as necessary server-based software firewalls (iptables).
- Ensure systems and applications (custom and off-the-shelf) adhere to the organization's security policies.
- Maintain network segments (intranet, extranet, DMZ, VOIP, etc.).
- Support the connectivity at branch office locations.
- Maintain onsite server room and collocation facilities.
- Interact with vendors on purchasing, licensing, and support.
- Juniper hardware (firewall and VPN) maintenance.
- Switch maintenance and configuration.
- Review infrastructure performance and security; recommends upgrades and design improvements.

- Project manager for infrastructure-related projects.
- Manage IT technical support and security personnel, network engineer, software developer (with respect to in-house applications).
- Establish SLA and ensure staff adheres to that standard.

Note: Management may assign or reassign duties and responsibilities to this job at any time.

Required Knowledge, Skills, and Abilities:

- Tomcat, Apache
- Enterprise user management systems (LDAP/Active Directory)
- Knowledge as a database administrator
- Linux system administration (Red Hat Enterprise Linux and variants)
- Clustering, replication, and high-availability methodologies
- Red Hat KVM Server virtualization
- AWS and Azure cloud administration
- Google Workspace administration
- Pulse/Ivanti VPN appliances
- Juniper SRX gateways
- NAS hardware configuration and maintenance
- Configuration of security certificates (e.g., SSL for https)
- Networking and security concepts
- Layer 2 Tunneling
- Proven disaster recovery and business continuity experience
- Knowledge of the Windows, OS X, and Linux desktop environments
- Ability to support hardware via out-of-band and serial connections
- Project management
- Budgeting and recruitment
- Staff supervision
- Able to communicate effectively verbally and in writing

Preferred Knowledge, Skills, and Abilities:

- Red Hat certifications
- Support in collocation environments
- Zabbix or OSSIM monitoring systems
- HP, Pogo, and Penguin Computing storage units
- Virtual organization support
- Infrastructure support at an academic or non-profit research organization

Minimum Qualifications:

- Bachelors or higher in computer science or related field, and
- Three or more years of experience supervising IT professionals in an academic enterprise computing environment, and
- At least seven years of IT systems and network administration experience in an academic enterprise computing environment, or
- Any equivalent combination of experience, training and/or education.

Must be able to perform essential physical, mental, and environmental conditions of the job:

- Mobility: frequent use of keyboard and mouse; frequent sitting for long periods of time.
- Physical: may need to carry and lift equipment up to 50 pounds and push or pull equipment on a hand truck or cart of up to 100 pounds. It may be necessary to bend, kneel, and reach to connect and disconnect equipment. It may be necessary to handle objects to build computer racks and shelves. Some tasks may require the use of a foot stool or step ladder.
- Vision: constant use of overall vision; frequent reading and close-up work; frequent color and occasional depth vision.
- Dexterity: frequent repetitive motion.
- Hearing/Talking: frequent hearing and talking, in-person and on the phone.

- Emotional/Psychological: frequent decision-making and concentration; frequent independent work and learning; frequent coordination of tasks with other co-workers; occasional off-hours responsibilities; may on occasion need to speak to groups.
- Reading/Comprehension: frequent interpretation and understanding of written (print and electronic) technical documentation, reports, web research results and user requests.
- Environmental: periodic exposure to noise and cold in the server room.

To apply for the position:

If you are interested in applying for this position, have the required skills, and you meet the minimum qualifications, please submit the following documents to apply@psi.edu:

- A cover letter that addresses your interest and qualifications for this position.
- Resume
- Completed Application and Voluntary Self-Identification form (can be found on www.psi.edu or by sending a request to apply@psi.edu).

Planetary Science Institute
Human Resources
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Email: hr@psi.edu

PSI is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran, or any other characteristic protected by law.

The Planetary Science Institute is a private, nonprofit 501(c)(3) corporation dedicated to Solar System exploration. It is headquartered in Tucson, Arizona, where it was founded in 1972. PSI scientists are involved in NASA and international missions, the study of Mars and other planets, the Moon, asteroids, comets, interplanetary dust, impact physics, the origin of the Solar System, extra-solar planet formation, dynamic evolution of planetary systems, the rise of life, and other areas of research. They conduct fieldwork on all continents around the world. They also are actively involved in science education and public outreach through school programs, children's books, popular science books and art. PSI scientists and educators are based in 31 states and the District of Columbia, and work from various international locations.