Employee Name:

Fresno State ID #

Classification:

Operating Systems Analyst - Foundation

Working Title: Systems Administrator

Prepared By (MPP/Chair): Vinay Gowdra HalappaDepartment:

Technology Services

Bargaining Unit: R09 FLSA Status: Non-exempt Date Prepared: 4/2024

**POSITION DESCRIPTION**

# Overview:

Working under the general direction of the Interim Director/Director of Infrastructure Services and the leadership and direction of OSA Expert-level Leads, Technology Services the Systems Administrators provide technical support, implementation, administration, and lifecycle planning of central servers and applications/services used by the campus community. This includes varying levels of analysis, installation, modification and maintenance of operating systems, utilities, databases, and related software and systems and maintaining the availability, integrity, security, and reliability of assigned systems housed in campus data centers and provisioned from cloud-based service providers.

Incumbents at the foundation level work closely with career and expert level staff to acquire the experience required to be proficient in performing work assignments defined for their position. This position is expected to have most of its ongoing work assignments in one or more of the core functions defined in Major and Secondary Duties below; however, work assignments from a related core function in other IT classifications may also be included. The incumbent is expected to develop basic familiarity with critical systems, participate in on-call responses to issues with those systems, and perform needed maintenance after hours and on weekends as required.

The employee shall allocate priority and time to the duties defined below based upon direction from the manager to whom this employee reports. The manager will communicate these priorities and time allocation at least annually and as necessary.

The incumbent will also be expected to maintain positive professional relationships with members of the workgroup, division, and campus community.

This would include:

* Maintaining positive customer relations by providing effective support for assigned systems and communicating in a timely and professional manner.
* Collaborating with colleagues and customers in a respectful manner.
* Working to meet or exceed the expectations of customers and co-workers.
* Comply with and maintain up to date knowledge of campus and system policies through ongoing training.
* Maintain regular attendance and respect the time of others by arriving promptly for work, meetings, and other events.

# General Expectations:

At the Foundation Level, the entry-level Operating Systems Analyst professional will work on assignments that are generally routine in nature, under direct lead direction, and with general autonomy. The entry-level professional should grow proficient with routine assignments and should be able to grow into more responsibilities to handle more complex assignments and projects, with more and more general lead direction and will grow to handle work assignments and projects with more and more autonomy.

# General Responsibilities:

All members of the Technology Services staff must perform their work in accordance with the principles below. Specific service levels and procedures associated with these responsibilities will be defined by the employee’s manager and may vary depending on the duties, tasks and projects assigned.

* Maintain positive working relationships and appropriate interpersonal interactions with colleagues and members of the University community. For example:
  + Show courtesy and respect towards others.
  + Communicate in an effective and timely manner and take steps to ensure proper understanding.
  + Collaborate willingly with others to help advance the goals of the division and University.
* Interact with customers, and those supporting services to customers, in a manner that ensures that we deliver the best possible service. For example:
  + Respond quickly and affirmatively to ensure that customers and support staff are aware that their issues are being addressed and know when they have been resolved.
  + Complete work of a quality that helps ensure ongoing customer satisfaction with the capability, performance and timeliness of services provided.

o Provide timely communication to customers and support staff so that they are kept up to date on the progress of their Incidents, Service Requests and Problems.

* + Communicate appropriately to internal and vendor support teams regarding operational matters.
* Work towards the stated goals and outcomes of the division and University and take an active role in maintaining your understanding of these goals and outcomes.
* Comply with University and division policies and take an active role in maintaining your understanding of these policies.
* Comply with University and departmental procedures and practices as defined by employee’s manager and take an active role in maintaining your understanding of these procedures and practices.
* Maintain regular attendance and respect your colleagues’ time by arriving promptly for work, shared tasks, and meetings.
* All professionals within the Information Technology Series have the expectation, regardless of classification or level, to protect the security, confidentiality and integrity of data and electronic information from incidental, intentional or preventable misuse or loss to the University.
* Fresno State has a long-standing commitment to make its programs, services, and activities accessible to the public and the entire campus community. This commitment covers all areas of information technology, which includes websites, computer hardware, software applications, and instructional and online content. All professionals classified within the Information Technology Series have the expectation to support practices and techniques that align with federal and state law, as well as the CSU Accessible Technology Initiative (ATI), coded memorandums, and executive orders.

# Major duties of the job include:

* **Operating Installation:** Ensure Linux operating system software is properly installed, patched, configured, and tested.

# Integration and Automation - Write scripts, utilize APIs and integration tools to increase efficiency and quality to business processes.

* **Operating System Programming/Modification:** Customize and upgrade operating and related systems to meet ongoing user needs. Create and modify code to interface with systems, applications, databases, and third-party APIs to meet ongoing campus needs.
* **Operating Systems Maintenance:** Monitor and maintain operating and related systems to ensure minimal interruption of production systems and to maintain maximum system availability.
* **Problem Diagnosis and Resolution:** Diagnose and resolve operating system, hardware, and program failures.
* **Operating Systems Performance and Capacity Analysis:** Evaluate level of systems operation and recommend measures to improve overall performance. Evaluate utilized and available capacity of systems and recommend measures to ensure adequate capacity for operations and growth.
* **Operations Support:** Provide technical support to computer support and applications programming staff to ensure availability of production systems. Consult with department staff and other members of the University community on technical issues. Provide end-user support for campus systems and applications when needed.
* **Security Management:** Ensure safety and security of information system assets and protect systems and data from inappropriate access or destruction. Maintain appropriate security and confidentiality in working with data, including PeopleSoft views.

**Secondary duties of the job include:**

* **Systems Integration:** Plan and implement fully integrated systems; operating systems, network and database systems and applications.
* **Database Maintenance/Management:** Design, create, manage, and maintain databases including database storage management, procedures and tools for access, database security, and monitoring and tuning the database to ensure ongoing operation and access.
* **Technology Evaluation:** Evaluate and recommend hardware, system software and third-party software procurements.
* **Storage Administration:** Design storage systems to provide for efficient and timely response and operating time. Maintain, monitor health of storage systems, and plan capacity.
* Perform other duties as assigned.

Supervisory Responsibility:

|  |  |
| --- | --- |
| Who Supervises this Position: | Interim Director/ Director of Infrastructure Services |
| Who is Responsible for completing the Performance Appraisal: | Interim Director/ Director of Infrastructure Services |
| What other classifications does this position supervise or provide lead, work oversight: | None |

# Minimum Requirements: Knowledge, Skills, and Abilities:

* General knowledge of industry standard systems and infrastructure security practices.
* Working knowledge of Linux operating systems, systems analysis, and/or systems-level programming in a distributed network environment.
* General knowledge of enterprise network communications.
* Knowledge and experience with enterprise storage, including performance and capacity planning.
* Ability to:
* Establish and document plans, operations procedures, and as-built specs.
* Use performance-monitoring software and interpret results.
* Install and maintain operating systems, utilities, and hardware.
* Participate with colleagues in applying this body of work to deliver solutions that match the computing needs of the University.
* Participate in fault isolation and problem solving.
* Engage in multiple tasks and projects under competing deadlines and maintain flexibility in response to shifting priorities.
* Strong customer service skills and a proactive, customer focused attitude.
* Strong communication skills (verbal and written).
* Proficiency using standard campus applications, desktops, and laptops.
* A history of regular attendance and positive performance evaluations.

# Education and Experience:

* A bachelor’s degree, preferably in computer science or related technical field, or four years of equivalent training and experience.
* One year of experience with Oracle Linux or similar variant.

**Specialized Skills: (***Specialized Skills are* ***required*** *for candidates to be considered for the position.)*

* Knowledge of Directory Services such as LDAP, Windows Active Directory.
* Knowledge of SSH, SSL and PKI. Comfortable interacting with the command line interface.
* Knowledge of network architecture and configuration of protocols and interfaces.
* Knowledge of Cloud Storage technologies.

**Preferred Skills:**

* Knowledge of database architecture including database design, structured development, new features, daily operations, programming, and data access.
* Ability to review and evaluate existing technology for the purpose of creating and implementing change plans.
* Familiarity with enterprise backup and restore technologies such as IBM Spectrum Protect
* Ability to research, survey and recommend productivity tools.
* Ability to develop and execute disaster recovery plans.
* Knowledge of listserv administration.
* Familiarity with cloud hosting services such as Google, AWS, Azure, or Rackspace
* Knowledge of Apache, Tomcat, HTML, XML, JavaScript, CSS, JSON, and SSL certificates.

**SPECIAL CONDITIONS OF EMPLOYMENT AND POSITION DESIGNATIONS:**

This position will have a duty to report to the Campus Title IX Officer information pertaining to victims of sex discrimination, sexual harassment, sexual misconduct, dating/domestic violence, and stalking as required by [CSU](http://www.calstate.edu/eo/EO-1095-rev-6-23-15.html) [Executive Order 1095.](http://www.calstate.edu/eo/EO-1095-rev-6-23-15.html)

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| --- | --- | --- |
| Employee Name: | | Position: Systems Administrator |
| Department: | Technology Services – Systems  Administration | Date Prepared: 4/2024 |

**WORKING ENVIRONMENT**

Check the appropriate box which most accurately describes the extent of the specific activity performed by the employee on a daily basis. If the activity is performed less than one (1) hour each day, check the N/A box.

**PHYSICAL EFFORT**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of hours/day | | | | |  |  | Number of hours/day | | | |  |
| N/A | | 1-2 | 3-4 | 5-6 | 7+ |  | N/A | 1-2 | 3-4 | 5-6 | 7+ |
| 1. Sitting | **☐** | **☐** | **☐** | **☐** | **☒** | 12. Lifting or carrying | **☐** | **☐** | **☐** | **☐** | **☐** |
| 2. Standing | **☒** | **☐** | **☐** | **☐** | **☐** | A. 10 lbs. or less | **☐** | **☒** | **☐** | **☐** | **☐** |
| 3. Walking | **☒** | **☐** | **☐** | **☐** | **☐** | B. 11 to 25 lbs. | **☒** | **☐** | **☐** | **☐** | **☐** |
| 4. Bending Over | **☐** | **☒** | **☐** | **☐** | **☐** | C. 26 to 50 lbs. | **☒** | **☐** | **☐** | **☐** | **☐** |
| 5. Crawling | **☒** | **☐** | **☐** | **☐** | **☐** | D. 51 to 75 lbs. | **☒** | **☐** | **☐** | **☐** | **☐** |
| 6. Climbing | **☒** | **☐** | **☐** | **☐** | **☐** | E. 76 to 100 lbs. | **☒** | **☐** | **☐** | **☐** | **☐** |
| 7. Reaching overhead | **☐** | **☒** | **☐** | **☐** | **☐** | F. Over 100 lbs. | **☒** | **☐** | **☐** | **☐** | **☐** |
| 8. Crouching | **☒** | **☐** | **☐** | **☐** | **☐** | 13. Repetitive use of hands/arms | **☐** | **☐** | **☐** | **☐** | **☒** |
| 9. Kneeling | **☒** | **☐** | **☐** | **☐** | **☐** | 14. Repetitive use of legs | **☐** | **☒** | **☐** | **☐** | **☐** |
| 10. Balancing | **☒** | **☐** | **☐** | **☐** | **☐** | 15. Eye/hand coordination | **☐** | **☐** | **☐** | **☐** | **☒** |
| 11. Pushing or pulling | **☐** | **☒** | **☐** | **☐** | **☐** |  |  |  |  |  |  |
|  |  |  |  |  | Yes | No |  |  |  |  |  |
| 16. Driving cars, trucks, forklifts and other equipment | | | | | ☐ | ☒ |  |  |  |  |  |
| 17. Being around scientific equipment and machinery | | | | | ☐ | ☒ |  |  |  |  |  |
| 18. Walking on uneven ground |  |  |  |  | ☐ | ☒ |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MENTAL EFFORT** | | |  |  |  | **ENVIRONMENTAL FACTORS** | | | | |  |
| Number of hours/day | | | | |  | Number of hours/day | | | | |  |
|  | N/A | 1-2 | 3-4 | 5-6 | 7+ |  | N/A | 1-2 | 3-4 | 5-6 | 7+ |
| 1. Directing Others | **☐** | **☐** | **☐** | **☐** | **☒** | 1. Inside | **☐** | **☐** | **☐** | **☐** | **☒** |
| 2. Writing | **☐** | **☐** | **☐** | **☐** | **☒** | 2. Outside | **☐** | **☒** | **☐** | **☐** | **☐** |
| 3. Using math/calculations | **☐** | **☐** | **☒** | **☐** | **☐** | 3. Humid | **☒** | **☐** | **☐** | **☐** | **☐** |
| 4. Talking | **☐** | **☐** | **☐** | **☐** | **☒** | 4. Hazards | **☒** | **☐** | **☐** | **☐** | **☐** |
| 5. Working at various tempos | **☐** | **☐** | **☐** | **☐** | **☒** | 5. High places | **☒** | **☐** | **☐** | **☐** | **☐** |
| 6. Concentrating amid distractions | **☐** | **☐** | **☐** | **☐** | **☒** | 6. Hot | **☐** | **☒** | **☐** | **☐** | **☐** |
| 7. Remembering names | **☐** | **☐** | **☐** | **☐** | **☒** | 7. Cold | **☐** | **☒** | **☐** | **☐** | **☐** |
| 8. Remembering details | **☐** | **☐** | **☐** | **☐** | **☒** | 8. Dry | **☒** | **☐** | **☐** | **☐** | **☐** |
| 9. Making decisions | **☐** | **☐** | **☐** | **☐** | **☒** | 9. Wet | **☒** | **☐** | **☐** | **☐** | **☐** |
| 10. Working rapidly | **☐** | **☐** | **☐** | **☐** | **☒** | 10. Change of temp | **☒** | **☐** | **☐** | **☐** | **☐** |
| 11. Examining/observing details | **☐** | **☐** | **☐** | **☐** | **☒** | 11. Dirty | **☒** | **☐** | **☐** | **☐** | **☐** |
| 12. Discriminating colors | **☐** | **☐** | **☐** | **☒** | **☐** | 12. Dusty | **☒** | **☐** | **☐** | **☐** | **☐** |
|  |  |  |  |  |  | 13. Odors | **☒** | **☐** | **☐** | **☐** | **☐** |
|  |  |  |  |  |  | 14. Noisy | **☐** | **☐** | **☐** | **☐** | **☒** |
|  |  |  |  |  |  | 15. Working With others | **☐** | **☐** | **☐** | **☐** | **☒** |
|  |  |  |  |  |  | 16. Working around others | **☐** | **☐** | **☐** | **☐** | **☒** |
|  |  |  |  |  |  | 17. Working alone | **☐** | **☒** | **☐** | **☐** | **☐** |

This position description is not an employment agreement or contract. Management has the exclusive right to alter this Position Description. Notification of changes will be