**P O S I T I O N D E S C R I P T I O N**

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| Department: | ITS- Infrastructure Engineering |
| Classification Title: | Operating Systems Analyst – Career |
| Working Title: | Systems Administrator |
| FLSA Status:  | [ ]  Non-Exempt [x]  Exempt |
| Incumbent: |  |

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| **Position Summary** |

Under general supervision of the Infrastructure Engineering Manager, this position supports the ITS-Infrastructure Engineering group and their interface with other campus systems and services; provides AWS, Nutanix, VMware and Workstation platforms and associated services analysis, modification, maintenance, installation and design which supports internal ITS support staff and the user community on the use of these services. This position also maintains and supports assigned systems and services to ensure system availability, integrity and reliability.

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| **Duties and Responsibilities** |

The following examples illustrate typical work activities and are not meant to be all inclusive or restrictive:

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| **Essential Job Functions** | **Daily 90%** |
| 1. Analyzes, designs and deploys complex platforms and services.
2. As a member of a DevOps team, works collaboratively with service owners to deliver compelling technical service offerings to a variety of campus customers.
3. Engineers and deploys comprehensive service offerings to be handed off to operations and client service teams including detailed documentation regarding support, monitoring, access control, logging, maintenance and continuity.
4. Scopes, designs, installs, configures and upgrades cloud/on-premise platforms and associated services including AWS, Nutanix, VMware as well as operating system platforms including Windows, Linux and macOS.
5. Leverages skillsets in a variety of domains including source control, scripting, continuous integration, configuration management and other automation technologies to develop and curate an infrastructure as code platform for use with AWS, Nutanix, VMWare and other client platforms.
6. Scopes, develops and implements comprehensive automation and scripting toolsets to simplify and improve customer deployments, gather metrics, enhance service integrations and reduce human error.
7. Leverages technical writing skills to develop and maintain detailed process and procedural documentation utilized in a technical operations runbook (internal) or service catalog (customer facing) for campus supported IT service offerings.
8. Analyzes security requirements to apply to AWS, Nutanix, VMWare and associated services as well as deliver administration policies, processes and practices to meet these requirements.
9. Regularly reviews platforms and associated services to identify security risks and escalate security issues as appropriate.
10. Consults with IT leadership to ensure design and technical execution is meeting expectations.
11. Takes ownership of developing and implementing a personal-improvement plan to acquire skill sets and knowledge of current and future technologies used within the assigned area.
12. Develops and implements maintenance and project plans for complex platforms and associated services.
13. As a knowledge area specialist, researches and identifies new platforms and associated services and their ability to meet anticipated future workloads; recommends direction changes to management.
14. Consults and reviews team recommendations for upgrades on AWS, Nutanix, VMWare, Server/Workstation platforms and associated services in order to maintain optimal performance, accommodate growth and incorporate new technology.
15. Assesses, plans, designs and deploys complex platforms and associated services to address security, system performance, capacity, cross-functional technology and resource requirements.
16. Designs, develops, customizes, programs and implements tools and solutions for automated services, user interfaces and tools.
17. Plans the implementation and configuration of metrics and reporting tools for platforms and associated services.
18. Consults and collaborates with customers to identify and document requirements to design and resolve issues with deployed platforms and associated services.
19. Collaborates with stake holders to identify and implement procedures that facilitate a smooth deployment of new services or enhancements to existing services.
20. Assesses vendor proposals and provides technical recommendations.
21. Provides escalated tier 2 and tier 3 support to both technical and non-technical staff.
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| **Related Job Functions**  | **As Needed 10%** |

1. Documents assignment status as required by managers or leads. Escalates problems or unexpected resource requirements.
2. Applies knowledge of requirements for accessibility compliance where appropriate.
3. Identifies opportunities to enhance customer experience and improve service offerings.
4. Supports continuous improvement initiatives.
5. Provides training to other employees as needed and provides lead work direction on projects and/or to student assistants.
6. Uses available resources to maintain and enhance technical currency. Maintains and develops interpersonal skills.
7. Performs other job-related duties and special projects as assigned.

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| **Required Education, Experience and Credentials** |

Education and Experience:

* Bachelor’s degree and two years of relevant experience.
* Additional qualifying experience may be substituted for up to two years of the required education on a year-for-year basis.

Licenses, Certificates, Credentials:

* N/A

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| **Required Skills, Knowledge and Abilities** |

1. Knowledge of enterprise level infrastructure and platform services such as monitoring, configuration management (e.g. MS SCCM, Ansible), and identity and access management (IAM).
2. Proficiency in at least one cloud provider, such as Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP), or IBM Cloud.
3. Thorough knowledge of and demonstrated skill with automation programming languages (e.g. Bash, Python, Ruby, PowerShell).
4. Demonstrated ability with designing and deploying systems using CI/CD tools in a large-scale enterprise DevOps environment (e.g. Jenkins, GitHub Actions, AWS CodePipeline).
5. Experience with Infrastructure as Code (IaC) tools (e.g. Terraform, CloudFormation, AWS CDK, Azure Resource Manager (ARM)).
6. Demonstrated ability to lead and plan upgrades to platform and system configuration that improve utilization and reliability based on analysis of platform, system, application and production requirements.
7. Advanced ability to interface and integrate complex campus systems within multiple operating environments and platforms.
8. Demonstrated knowledge of software application packages and tools for performance monitoring and issues tracking.
9. Comprehensive experience with Windows, Mac and Linux operating systems and demonstrated experience using current design and deployment practices, including integrating backup/restore, system maintenance, configuration management, network optimization and security.
10. Ability to research and evaluate new technologies and vendor software to meet user needs.
11. Demonstrated ability to work with technical and non-technical staff to identify user requirements and translate them into technology-based solutions and project plans.
12. Demonstrated history of using creative problem-solving skills to design and deploy effective technical solutions.
13. Ability to apply campus information security policy and standards to develop specific security requirements.
14. Ability to apply security models and frameworks to ensure appropriate security is maintained.
15. Excellent verbal and written communication skills, including preparing and delivering formal and informal documentation, presentations, and training to various end users.
16. Excellent organizational and time management skills with the ability to set own priorities and coordinate multiple assignments with fluctuating and time-sensitive deadlines.
17. Ability to foster and maintain positive and professional working relationships; ability to effectively handle interpersonal interactions at all levels and respond appropriately to conflicts and problems.
18. Ability to provide lead work direction and train others.
19. Interest and ability to maintain and enhance technical currency.
20. General knowledge of requirements for accessibility compliance.

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| **Preferred Skills and Experience** |

* Certifications
	+ Azure Administrator Associate or higher
	+ Associate AWS Solutions Architect / Associate AWS SysOps Administrator or higher
	+ VMware Certified Professional
	+ Jamf Certified Admin
* Working knowledge of and experience with change management and lean principles.
* Experience with AWS IAM design and management.
* Experience with Mobile Device Management.

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| **Special Conditions** |

* Ability to safely move equipment up to 50 pounds, with or without assistance.
* Must be able to successfully pass a pre-employment background/fingerprint check.
* Must be able to adjust working hours to meet special jobs. Must be able to work overtime or holidays on an as-needed basis.
* May be called back periodically to perform work as needed on an emergency basis.
* Must be able to rotate evening, weekend and holiday “on-call” hours and be reached in support of production processing.
* Must be willing to travel and attend training programs off-site.
* The person holding this position is considered a ‘mandated reporter’ under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 as a condition of employment.
* This position classification has been defined as "Exempt" and is not subject to the overtime provisions of the Fair Labor Standards Act (FLSA).

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| **INCUMBENT:** I have read this position description and understand its contents. |
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| INCUMBENT NAME | SIGNATURE | DATE |

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| **SUPERVISOR:** I certify that all statements on this form are complete and accurate. |
|  |  |  |  |
| Immediate Supervisor name and title | Signature | Date |
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| **DEPARTMENT HEAD:** I certify that all statements on this form are complete and accurate. |
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| department HEAD name and title | Signature | Date |

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| **HUMAN RESOURCES USE ONLY** |
| Employee ID#: |  | REQUEST FOR: | CLASSIFICATION INFORMATION |
| Position Number:  |  |  [ ]  Update Review for File | Classification Title:  |  |
| FTE:  |  |  [ ]  Classification Review | Class Code/Range: |  |
| [ ]  Permanent |  |  [ ]  New Position Recruitment | CBID: |  |
| [ ]  Temporary |  |  [ ]  Replacement Recruitment | MPP Job Code:  |  |
| [ ]  COI Position |  |  | Classifier Initials: |  |
| Recruitment Number:  |  |  | Date:  |  |