

Position Description

Job title:	Cloud Engineer
Department:	IT
Work type:	Full time
Reports To:	IT Operations Team Lead
Position Reports:	Nil
Position Contact:	Adam King

About the organisation

.au Domain Administration (auDA) is the administrator of the .au domain name system (DNS), which is Australian critical infrastructure relied on by internet users in Australia and around the world. We are a not-for-profit endorsed by the Federal Government.

Our purpose is to administer a trusted .au domain for the benefit of all Australians and champion an open, free, secure and global internet.

We support the needs of Australian internet users by:

- Delivering a stable, secure and reliable .au DNS
- Implementing .au policy rules that are transparent, responsive and efficient
- Investing in the Australian internet ecosystem to improve the utility of the .au domain.

We also participate in global internet governance processes. Through our work, we strive to uphold the multi-stakeholder model of internet governance and the social and economic benefits that flow from it.

Further information about auDA is available at www.auda.org.au.

Our values

Contribute: locally and globally

We serve all Australians and global internet users.

Better together

We collaborate and work together as one auDA.

Strive for excellence

We deliver value. On time, every time.



Role purpose

The Cloud Engineer will play a crucial role in designing, implementing, and maintaining secure, scalable, and resilient cloud infrastructure on AWS, with a focus on automation and optimization. They will leverage their expertise in AWS cloud technologies, Linux system administration, and database management to support the company's cloudbased solutions, ensure the performance, security, and availability of critical systems and assist with the management of data lakes and data pipelines to facilitate seamless data storage, processing, and analytics. The Cloud Engineer will work closely with crossfunctional teams to automate processes, enhance cloud infrastructure, and drive continuous improvement in line with business needs and industry best practices.

By ensuring effective cloud architecture, robust security measures, and seamless operations, this role will directly contribute to the auDA's ability to provide a stable, secure and reliable operation of the .au domain space for the benefit of all Australians.

The role will actively contribute to the ongoing development of an organisational culture that embodies auDA's values and promotes a positive and safe environment for staff.

Key accountabilities

The primary responsibilities of the Cloud Engineer include:

- **Cloud Infrastructure Management:** Design, implement, and maintain scalable, secure, and highly available cloud infrastructure on AWS using services such as EC2, S3, RDS, Lambda, and IAM.
- Cloud Data Management: Architect and manage data lakes (S3) on AWS to enable scalable and cost-effective data storage and querying. Utilising tools such as Glue, Athena, Lambda, Step functions and data pipelines to ingest, transform and process large data sets.
- Infrastructure as Code (IaC): Develop and manage infrastructure as code using tools like Terraform, Ansible, Packer and CloudFormation to automate deployment processes using CI/CD pipelines.
- **Linux System Administration:** Manage and maintain Linux-based systems (e.g., RHEL, CentOS, Ubuntu), ensuring performance tuning, patching, and securing Linux environments.
- **Database Administration:** Perform administration, tuning, and optimization of cloud-based databases such as AWS RDS, Aurora, as well as PostgreSQL on an Amazon EC2.
- **Automation & Scripting:** Automate routine tasks using scripting languages (e.g., Python, Bash, PowerShell) to enhance system efficiency.
- Cloud Security & Compliance: Implement AWS security best practices, including identity and access management (IAM), encryption, and monitoring to ensure compliance with industry standards and regulations including ISO 27001



- Information Security Management System (ISMS), Center for Internet Security (CIS) Benchmarks and Australian Signals Directorate (ASD) Essential 8.
- **Disaster Recovery & Backup:** Develop and implement disaster recovery and failover strategies, ensuring the integrity and availability of data through regular backup and testing procedures.
- Monitoring & Performance Tuning: Implement and enhance existing monitoring solutions to ensure system reliability and performance. Optimize cloud resources and database configurations to improve efficiency.
- **Collaboration & Documentation:** Collaborate with cross-functional teams, providing technical guidance on cloud solutions. Maintain detailed technical documentation, runbooks, and IT policies.
- **Troubleshooting & Support:** Provide advanced troubleshooting for cloud infrastructure and database-related issues, ensuring minimal downtime and quick resolution.

Key selection criteria

Educational Background:

 Bachelor's degree in Computer Science, Information Technology, or a related field, or equivalent experience.

Experience:

- 5+ years of experience in cloud engineering, with at least 3 years focused on AWS.
- o 5+ years of Linux system administration experience.
- Proven experience as a Database Administrator (DBA), with expertise in relational databases such as PostgreSQL and MySQL.

• Technical Skills:

- Strong expertise in AWS services (e.g., EC2, S3, RDS, VPC, IAM, Lambda, CloudFormation).
- Experience with Infrastructure as Code (IaC) tools Terraform, Ansible,
 Packer, and AWS CloudFormation
- Experience with Version Control Systems (VCS) GitLab, GitHub, Azure DevOps.
- Proficiency in Linux system administration, including shell scripting, performance tuning, and security hardening.
- Experience with database management, performance tuning, and backup strategies for PostgreSQL/MySQL databases.
- Scripting and automation experience using languages such as Python, Bash, and PowerShell.
- Familiarity with cloud monitoring and logging tools (e.g., AWS CloudWatch, ELK Stack, Sumo Logic).
- Knowledge of networking principles, cloud security, and compliance (e.g., CIS, ISO 27001).



Soft Skills:

- Excellent problem-solving and troubleshooting skills with a focus on performance optimization.
- Excellent written and verbal communication skills, with an ability to write concisely for documentation, project specifications and business case
- Strong communication skills to effectively collaborate with cross-functional teams and explain complex technical concepts to non-technical stakeholders.
- Self-motivated and able to work independently, managing multiple priorities in a fast-paced environment, exercise initiative and use discretionary judgement.
- Strong attention to detail with a commitment to producing high-quality work.

Qualifications

- AWS Certified Cloud Practitioner (Foundational)
- AWS Certified SysOps Administrator (Associate)
- o AWS Certified Solutions Architect (Associate)
- Red Hat Certified Engineer (RHCE) Linux Foundation Certified System
 Administrator (LFCS) or similar .Other

Occasional work outside business hours will be required. Occasional domestic travel and potentially international travel may be required.

May be required to obtain Australian Government Security clearance.

Important information

Background checks

A National Police Check, Right to Work and bankruptcy will be conducted as part of the recruitment process. An *AusCheck Critical Infrastructure Background Check* may also need to be conducted. Where applicable, international background checks may also be required.



Privacy collection information

.au Domain Administration Limited ACN 079 009 34 collects your personal information for the purpose of assessing and responding to your application. All personal information is collected in accordance with the *Privacy Act 1998* (Cth) and our <u>Privacy Policy</u>.

We use third party service providers including data storage and cloud services, some of which have servers located overseas, including the USA and you consent to this disclosure. We require that our service providers only use your information for authorised purposes and have appropriate controls to protect your personal information.

If you have any questions or would like to access your personal information held by auDA, please contact us at privacy@auda.org.au.

Occupational Health and Safety

In the context of OHS policies, procedures, training and instruction, as detailed in Section 25 of the *Occupational Health and Safety Act 2004* (Vic), employees are responsible for ensuring they:

- Follow reasonable instruction
- Cooperate with their employer
- At all times, take reasonable care for the safety of themselves and others in the workplace.

Flexible working arrangements

We believe in supporting our employees in balancing their work and life commitments. All roles at auDA can be worked flexibly by mutual agreement. This underpins a diverse, adaptive and high-performing workforce. The nature and scope of flexible options available will depend on the nature of the position. Applicants are encouraged to discuss flexible arrangements with the hiring manager during the recruitment process.

Last Updated

17 October 2024