Lead Cloud Platform Engineer

Basic information

Scale: 3
Job family: Digital Data and Technology Services
Terms: Permanent
Location: Cheltenham

Reports to: Head of Platform Engineering
Direct reports: Yes
Team: Cloud Platform Team
Business unit: Technology

Date reviewed: April 2020

Job purpose:

The Lead Cloud Platform Engineer will lead a team of Cloud Platform Engineers who will work alongside the Development, Architecture and Site Reliability Engineer (SRE) Team. They will ensure technical solutions are aligned to UCAS' architectural principles, designs, and NFRs, that deliver value quickly to our customers, ensuring consistent, secure environments are created and aligned to our security and audit requirements.

The Lead Cloud Platform Engineer will also manage the team to proactively ensure the repeatability, stability, resilience, and scale of all cloud services across the organisation, and make sure our services are available, cost-optimised and fit for purpose early in the development lifecycle.

Key accountabilities:

- Provide leadership and guidance across the Cloud Platform team, acting as a subject matter expert and leading best practice techniques.
- To lead the Cloud Platform team in ensuring top level security around the cloud platforms and accounts.
- Provide coaching and mentoring to the Cloud Platform team to improve their skillset and increase knowledge and set the benchmark of quality.
- Aid in migrating services from Beanstalk to Windows Containers.
- AWS hosted Kubernetes container platforms to support the entire delivery lifecycle.
- Provision of test automation services to assist with software quality assurance.
- Manage all cloud accounts and ensure billing and tagging of artefacts are clearly defined and centrally managed through the latest best practices in security management.
- Ensure security, safety, predictability, repeatability, and auditability of all build and deploy processes in platforms.

- Proactively ensure all legacy and digital landscapes follow the same processes, patterns, and approaches to remove the notion of 'legacy'.
- Produce and maintain documentation relating to platform services, integration processes, and deployment approach, as well as creating operational run and playbooks.
- Work with stakeholders in the Enterprise, Solution and Development teams to produce and maintain standards, guidelines, and pattern catalogues.
- Lead the team in showcasing innovation internally and externally of UCAS.
- Accountable for continually improving efficiencies and costs of cloud platforms, through reduction of technical drag and standardisation of patterns.
- Work with the SRE Team to ensure efficient CI/CD tools and platform.
- Lead the platform engineering team to eliminate TOIL, monitor applications, reduce rework, simplify work practices, define metrics, and ensure operational quality of applications.
- Own and maintain the AD and network configurations within the cloud platform.
- Create and maintain up-to-date diagrams of the system landscape.
- Streamline the software delivery process by defining the dev-ops toolchain, continuous integration, and a continuous deployment model. Work to define common, reusable practices that can be applied to multiple delivery streams.
- Drive adoption and implementation of strategic UCAS technologies and architectural principles.
- Ensure consistent monitoring and logging across UCAS (working with SREs).
- Accountable for proactively managing delivery of service level objectives and NFRs.
- Enable ownership by platform and application engineers of tech-specific build plans.
- Create, maintain, and test for recovery (back-up and restore, infra-automation etc.).
- Demand forecasting and capacity management (with SRE team).
- Provide proof of reaching ISO certifications through infrastructure patterns.

Skills, qualifications, and experience:

- Experience working with Windows and Linux containers (focus currently on Windows).
- High understanding in NF testing (performance, security, cost-optimisation etc.).
- Highly proficient in Kubernetes, Terraform, AWS, and Azure.
- Ability to get up to speed with domain knowledge.
- Competent in Windows C# build tools and practices, including MS Build.
- Expert in Git and GitOps philosophy.
- Expert in logging and monitoring tools (Splunk, ELK, Prometheus, Grafana), incorporating frameworks and instrumentations into C# code.
- Operational experience in maintaining applications.
- Ability to showcase and explain new innovations and shared outcomes.
- Experience in using ServiceNow, Jira, Bamboo, and other Atlassian products.
- Experience in Chaos Engineering is desirable.
- Strong leadership skills to coach and mentor the team.

This role profile sets out the scope and main duties of the post at the date when it was drawn up. Such details may vary from time to time without changing the general character of the post or the level of responsibility entailed. Such variations are a common occurrence and cannot of themselves justify a reconsideration of the level of the post. All UCAS employees are expected to be flexible in undertaking the duties and responsibilities attached to their role and may be asked to perform other duties, which reasonably correspond to the general character of their role and their level of responsibility.

Our values in action:
Customer-focused – We understand what our customers want, and we act on their changing needs.
Collaborative – We collectively create an engaging and positive work environment.
Accountable – We take ownership of our individual and organisational performance.
Service excellence – We realise, grow, and maximise our potential.
Trusted – Individuals are trusted to make informed decisions and take appropriate risks.