

Site Reliability Engineer Lead

Basic information

Scale: 3

Job family: Digital Data and Technology Services

Terms: Secondment / Permanent

Location: Cheltenham

Reports to: Head of Platform Engineering

Direct reports: Yes

Team: Site Reliability

Business unit: Technology

Date reviewed: March 2020



Job purpose:

The Site Reliability Engineer Lead (SRE Lead) will manage a team of SRE's to proactively ensure the stability, resilience and scale of our services by automation, testing and engineering. To build on expertise from Product teams' systems/operations, cloud infrastructure (AWS), build and release engineering, software development and stress/load testing to make sure our services are available, cost optimised and fit for purpose early in the development lifecycle.

The SRE Lead will also work alongside the development, architecture and service management teams, to ensure technical solutions are aligned to the UCAS' architectural principles, designs and NFRs, that deliver value to our customers as well as ensuring consistent monitoring, logging and alerting.

The SRE Lead reports into the Head of Platform Engineering and is responsible for building capability and maturing operational ways of working across multiple cross-function delivery teams, with focus on technical excellence and a high-performance culture.

Key accountabilities:

- Provide leadership and guidance across the SRE team, acting as a subject matter expert and leading best practice techniques.
- To lead the SRE team in ensuring technical assurance in significant projects, for the delivery of quality technical deliverables, which may involve several teams or technologies.
- To oversee the SRE team to ensure they are involved in every step of the application software development lifecycle, including product design, development, testing, and transition into operation.
- Provide coaching and mentoring to the SRE team to improve their skillset, increase knowledge and set the benchmark of quality and precision engineering.

- Working with the TSM team, oversee the implementation of service transition and change and release process changes, ensuring that processes are reviewed and improved with onus on optimisation.
- Contribute to the documentation of strategic DevOps operating model changes and to the definition of future/new 3rd party technical partnerships and subsequent onboarding/integration into the organisation.
- Draw upon in-depth understanding of the organisation and ability to leverage existing relationships, provide implementation support to the Heads of Platform and Product Engineering during the stages of transition to new strategic operating models.
- Knowledge sharing and education of team members to enable them to contribute to backlog items related to infrastructure provisioning, monitoring and best practice
- Evaluate risks and defects, analysing specifications, and customising applications for specific customer needs.
- Across Technology teams promote a culture of service support, identifying new ways of working e.g. out of hours/critical event support and any potential impact this may have on the workforce.
- Act as the 'change lead' for DevOps, quality assurance practice implementation and project initiatives.
- Continuously review capabilities and roles critical to evolving DevOps and quality assurance practices and be responsible for the acquisition, development and maturity of these.
- Lead on processes and projects as directed by the Heads of Platform and Product Engineering, related to integrating new DevOps and Product Engineering ways of working and initiatives within the wider organisation.
- With a focus on agile methodologies, test automation, test data management, and continuous integration, the SRE Lead will oversee the improvements and enhancements of the delivery and deployment process.
- Accountable for halting or stopping a project/product if the solution is not technically acceptable.
- Responsible for producing and maintaining documentation relating to application design, integration processes, testing procedures, and deployment approach as well as working with teams to create operational run and playbooks.
- To work with stakeholders in the Enterprise, Solution and Development teams to produce and maintain standards, guidelines, and pattern catalogue.
- Accountable for ensuring early in product lifecycles that designs and NRFs are part of the foundations of teams.
- Work with technical roles across the department to drive evolution of the dev-ops toolchain, promoting improvements to streamline the software delivery process and showing improvements through metrics.
- Build innovative prototypes and lead development teams to develop quality solutions, by translating architectural designs into lower level implementation details, helping implement user stories if required.
- To take highly complex and manual processes and work to simplify and automate them.
- To lead and influence teams to ensure quality and operational excellence, and to ensure teams are aligned to design patterns and design collateral.

Skills, qualifications, and experience:

- Has significant experience in DevOps implementation and in evolving practices and ways of working through multi-disciplinary teams, business frameworks and culture.
- Has strong project management background and experience in leading technology change programmes.
- An individual who can perform highly in a multi-faceted role – facets that include a very strong technical knowledge, and awareness of emergent trends.
- Strong leadership skills to ensure scrum teams and co-workers are motivated and engaged to deliver against a roadmap.
- A very strong communicator, able to lead and facilitate discussions across many tiers at UCAS, including functions like architecture, technical specialists, business analysis, team leaders, senior management group, and executives.

- Experience working with Windows and Linux Containers (focus currently on Windows).
- High understanding in NF testing (Performance, Security, Cost Optimisation etc).
- Highly proficient with Kubernetes, Terraform and AWS.
- Ability to get up to speed with domain knowledge.
- Experience in administration of ServiceNow, Jira, Bamboo and other Atlassian products.
- 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.

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.