Role Description
Developer Ops Engineer

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Role Description Fields	Details
Cluster	Education
Department/Agency	NSW Department of Education
Division/Branch/Unit	Information Technology Digital Learning
Role number	255006
Classification/Grade/Band	Clerk Grade 9/10
Senior executive work level standards	Not Applicable
ANZSCO Code	511112
PCAT Code	3126292
Date of Approval	June 2024
Agency Website	www.education.nsw.gov.au

Agency overview

At the NSW Department of Education, we educate and inspire lifelong learners – from early childhood, through schooling to vocational education and training.
We ensure young children get the best start in life by supporting and regulating the early childhood education and care sector. We unlock excellence and unleash the potential of two-thirds of school children in NSW. We're proudly public and the largest education system in Australia. We nurture opportunities for every learner to develop the skills needed for their chosen career path, helping shape the industries of tomorrow.
We respect and value Aboriginal and Torres Strait Islander peoples as First Peoples of Australia.

Primary purpose of the role

The DevOps Engineer provides technical leadership, change, consulting and subject matter expertise across multiple technologies and practices to meet customer requirements for rapid service delivery, reliability and innovation. The role works collaboratively with key stakeholders, vendor representatives, other IT teams / experts to deliver complex and innovative solutions in alignment with ICT strategy and architecture.

Key accountabilities

- Actively contribute to and guide innovation in DevOps practices and incorporate agile delivery approaches and technologies that assist with the development and delivery of high-quality software.
- Collaborate and contribute to develop and deliver efficient/repeatable infrastructure through the latest orchestration tools and Infrastructure as Code practices.
- Collaborate with a variety of stakeholders both internal and external to promote and support the adoption of technologies that will automate, optimize and modernize the delivery of platforms and services.
- Promote and advocate changes to software engineering and operations with the adoption of new technologies that benefit the delivery of automated, highly scalable systems.
- Deliver technical consulting and subject matter expertise to technological solution projects, including pre-project to ensure risks, interdependencies and exceptions are identified, mitigated or escalated and solutions are formulated in alignment with ICT strategy and architecture.

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- Collaborate in the development of high-level options, conceptual approaches, technical recommendations and estimates to support the transition of system designs into operation.
- Support the improvement of services level by assisting with the implementation of performance management strategies, robust configuration management practices and automated processes.
- Draft timely, succinct reports and briefings for the role supervisor, Director and other senior managers as appropriate; ensure accurate records are maintained, and that responses to correspondence are timely and consistent with Departmental protocols.

Key challenges

- Building effective relationships, identifying stakeholder expectations, and collaborating to ensure seamless delivery of ICT infrastructure; whilst ensuring consistent, high quality and timely project delivery in accordance with the IT Directorate's endorsed project management methodology across teams and work sites.
- Sustaining the integrity of current services while implementing new strategic initiatives, especially given the complexity, size and scale of an environment which continually challenges the technical capability boundaries of both internal / external suppliers.
- Effectively support the driving of change within the department, ensuring that the transition to agile delivery practices and 'infrastructure as code' is managed in a way that considers risk, staff well-being, capacity, skills, technology and capability.

Key relationships

Internal

Who	Why
Manager, Digital Student Management	- Discuss business objectives, priorities, projects and issues arising. - Provide specialist technical advice to inform decision making and challenge current thinking.
Department operational and project team staff	- Build and maintain collaborative working relationships to resolve technical / service issues. - Share technical advice and subject matter expertise. - Liaise effectively to ensure effective service / problem resolution. - Share information; provide technical advice and subject matter expertise.

External

Who	Why
Contractors, external suppliers and vendors	- Communicate priorities, expectations, standards and project scope. - Monitor service delivery in accordance with agreed standards; negotiating /resolving / escalating issues arising.

Role dimensions

Decision making

Exercises high-level, independent judgement and initiative in prioritising activities within the broad framework set with the role supervisor, as well as Departmental policies, procedures and operational guidelines.
Is frequently required to resolve highly complex technological issues / problems in a wide and diverse range of contexts, requiring the application of fundamental principles and technical expertise Makes decisions

which impact on the success of assigned projects i.e. results, deadlines and budget Is accountable for meeting technical and project objectives and for the quality, integrity, accuracy and content of advice provided.

Reporting line

Manager, Digital Student Management or a nominated manager or team lead

Direct reports

The role may also be required to guide other project contributors, including contractors, on discretionary projects.

Budget/Expenditure

As per financial delegations.

Key knowledge and experience

- A thought DevOps Engineer, having proven experience in fostering DevOps culture within your previous roles, advocating its best practice and benefits to all stakeholders.
- Have a passion for automating everything with a deep understanding of configuration management, continuous integration pipelines, and the practical application of agile methodologies.
- Experience in AWS Services such as: CloudFormation, Route53, CloudFront, API Gateway, SQS, S3, DynamoDB, Lambda, Cognito, AWS SDK
- Experience in OpenShift Platform: Docker Containers and Kubernetes
- Experience in DevOps tools such as: CloudFormation, Serverless Framework, Maven, GIT, Terraforms, Jenkins/Bamboo, Tekton, ArgoCD, OpenShift
- Knowledge of and commitment to implementing the Department's Aboriginal Education Policy and upholding the Department's Partnership Agreement with the NSW AECG and to ensure quality outcomes for Aboriginal people.

Essential requirements

- Degree in computer science or related degree or equivalent work experience in information technology.
- Demonstrated understanding of and commitment to the value of public education.
- Sound knowledge of technical stacks used to provision and manage public cloud services.
- Must be fluent in at least one programming language with a focus on automating processes and workflows.
- High level technical experience leveraging cloud and/or container orchestration technologies to build secure and resilient platforms enabling development teams to self-service and accelerate the delivery of applications.
- Demonstrated understanding of and commitment to the value of public education.
- Valid Working with Children Check (WWCC) for paid employment.

Capabilities for the role

The NSW public sector capability framework describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into focus capabilities and complementary capabilities

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

Focus capabilities

Capability group/sets	Capability name	Behavioural indicators	Level
Personal Attributes	**Manage Self** Show drive and motivation, an ability to self-reflect and a commitment to learning	• Keep up to date with relevant contemporary knowledge and practices • Look for and take advantage of opportunities to learn new skills and develop strengths • Show commitment to achieving challenging goals • Examine and reflect on own performance • Seek and respond positively to constructive feedback and guidance • Demonstrate and maintain a high level of personal motivation	Adept
Relationships	**Communicate Effectively** Communicate clearly, actively listen to others, and respond with understanding and respect	• Focus on key points and speak in plain English • Clearly explain and present ideas and arguments • Listen to others to gain an understanding and ask appropriate, respectful questions • Promote the use of inclusive language and assist others to adjust where necessary • Monitor own and others' non-verbal cues and adapt where necessary • Write and prepare material that is well structured and easy to follow • Communicate routine technical information clearly	Intermediate
Relationships	**Commit to Customer Service** Provide customer-focused services in line with public sector and organisational objectives	• Take responsibility for delivering high-quality customer-focused services • Design processes and policies based on the customer's point of view and needs • Understand and measure what is important to customers • Use data and information to monitor and improve customer service delivery • Find opportunities to cooperate with internal and external stakeholders to improve outcomes for customers • Maintain relationships with key customers in area of expertise • Connect and collaborate with relevant customers within the community	Adept

	Work Collaboratively Collaborate with others and value their contribution	• Encourage a culture that recognises the value of collaboration • Build cooperation and overcome barriers to information sharing and communication across teams and units • Share lessons learned across teams and units • Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work • Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services	Adept
	Deliver Results Achieve results through the efficient use of resources and a commitment to quality outcomes	• Use own and others' expertise to achieve outcomes, and take responsibility for delivering intended outcomes • Make sure staff understand expected goals and acknowledge staff success in achieving these • Identify resource needs and ensure goals are achieved within set budgets and deadlines • Use business data to evaluate outcomes and inform continuous improvement • Identify priorities that need to change and ensure the allocation of resources meets new business needs • Ensure that the financial implications of changed priorities are explicit and budgeted for	Adept
	Plan and Prioritise Plan to achieve priority outcomes and respond flexibly to changing circumstances	• Understand the team and unit objectives and align operational activities accordingly • Initiate and develop team goals and plans, and use feedback to inform future planning • Respond proactively to changing circumstances and adjust plans and schedules when necessary • Consider the implications of immediate and longer-term organisational issues and how these might affect the achievement of team and unit goals • Accommodate and respond with initiative to changing priorities and operating environments	Intermediate

Capability group/sets	Capability name	Behavioural indicators	Level
Think and Solve Problems Think, analyse and consider the broader context to develop practical solutions		• Research and apply critical-thinking techniques in analysing information, identify interrelationships and make recommendations based on relevant evidence • Anticipate, identify and address issues and potential problems that may have an impact on organisational objectives and the user experience • Apply creative-thinking techniques to generate new ideas and options to address issues and improve the user experience • Seek contributions and ideas from people with diverse backgrounds and experience • Participate in and contribute to team or unit initiatives to resolve common issues or barriers to effectiveness • Identify and share business process improvements to enhance effectiveness	Adept
Demonstrate Accountability Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines		• Be proactive in taking responsibility and being accountable for own actions • Understand delegations and act within authority levels • Identify and follow safe work practices, and be vigilant about own and others' application of these practices • Be aware of risks and act on or escalate risks, as appropriate • Use financial and other resources responsibly	Intermediate
Technology Understand and use available technologies to maximise efficiencies and effectiveness		• Champion the use of innovative technologies in the workplace • Actively manage risk to ensure compliance with cyber security and acceptable use of technology policies • Keep up to date with emerging technologies and technology trends to understand how their application can support business outcomes • Seek advice from appropriate subject-matter experts on using technologies to achieve business strategies and outcomes • Actively manage risk of breaches to appropriate records, information and knowledge management systems, protocols and policies	Advanced

Occupational Specific Focus Capabilities

Capability group/sets	Capability name	Behavioural indicators	Level

	Configuration management	Proposes and agrees the configuration items (CIs) to be uniquely identified with naming conventions. Ensures that operational processes are in place to maintain secure configuration, consistent classification and management of CIs, and for the verification and audit of configuration records. Develops, configures and maintains tools (including automation) to identify, track, log and maintain accurate, complete and current information. Reports on the status of configuration management. Identifies problems and issues and recommend corrective actions.	Level 4 - CFMG
SFIA	Systems integration and build	Provides technical expertise to enable the configuration of software, other system components and equipment for systems testing. Collaborates with technical teams to develop and agree system integration plans and report on progress. Defines complex/new integration builds. Ensures that integration test environments are correctly configured. Designs, performs and reports results of tests of the integration build. Identifies and documents system integration components for recording in the configuration management system. Recommends and implements improvements to processes and tools.	Level 4 - SINT
	Release and deployment	Leads the assessment, analysis, planning and design of release packages, including assessment of risk. Liaises with business and technology teams on release scheduling and communication of progress. Conducts post-release reviews. Ensures that release processes and procedures are applied and that releases can be rolled back as needed. Identifies, evaluates and manages the adoption of appropriate release and deployment techniques, processes and automation tools.	Level 5 - RELM

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

Capability group/sets	Capability name	Description	Level
Personal Attributes	Display Resilience and Courage	Be open and honest, prepared to express your views, and willing to accept and commit to change	Intermediate
Personal Attributes	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Intermediate
Personal Attributes	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Intermediate
Relationships	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Intermediate
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
Business Enablers	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Intermediate
Business Enablers	Project Management	Understand and apply effective planning, coordination and control methods	Intermediate

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