

DevOps Engineer

Cluster	Department of Education
Division/Branch/Unit	Information Technology Directorate
Location	Australian Technology Park, Sydney
Classification/Grade/Band	Clerk Grade 9/10
Kind of Employment	Ongoing
Role Number	219523
ANZSCO Code	511112
PCAT Code	1119192
Date of Approval	November 2019
Agency website	www.dec.nsw.gov.au

Overview

The NSW Department of Education provides, funds and regulates education services for NSW students from early childhood to secondary school, delivering world-class education through its public schools and providing funding support to non-government schools. We employ, develop and support teachers, leaders and other staff to deliver the best outcomes for students and to advance the wellbeing of Aboriginal people.

Primary purpose of the role

The DevOps Engineer provides technical / subject matter expertise to support the effective implementation and operation of middleware components, tools, and utilities, including installation, integration and maintenance, performance tuning and problem management.

Key accountabilities

- Undertake installation, maintenance, integration and upgrade projects in collaboration with key stakeholders, vendor representatives and other IT teams / experts; ensuring effective testing and validation of solutions
- Coordinate the deployment of fixes and changes into the production environment
- Investigate, diagnose and resolve service problems; resolving complex problems in coordination and collaboration with internal and external partners
- Capture and analyse performance metrics and implement corrective / tuning actions as required
- Work with key stakeholders, vendor representatives, other IT teams / experts to ensure technological solutions meet business / user requirements
- Draft and / or contribute to configurations, roadmaps, technical diagrams, standards and procedures
- Report on, and make recommendations for the improvement of technological resources
- 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
- Developing and maintaining knowledge and technical capability across diverse and dynamic hardware, software and technologies and where the complexity, size and scale of the operating environment continually challenges the technical capability boundaries of both internal / external suppliers

Key relationships

Who	Why
Internal	
Manager, Middleware	<ul style="list-style-type: none">• Discuss priorities, current projects and issues arising• Provide advice to inform decision-making
Infrastructure Services Managers and staff	<ul style="list-style-type: none">• Build and maintain strong working relationships to resolve technical issues and transition new services• Act as a 3rd level escalation point for incident resolution; sharing information and subject matter expertise
DoE Managers and staff	<ul style="list-style-type: none">• Liaise effectively to understand business / user requirements• Share information and provide subject matter expertise
External	
Contractors, external suppliers and vendors	<ul style="list-style-type: none">• Liaise and share information to resolve and provide solutions to issues• Obtain industry intelligence on technological developments

Role dimensions

Decision making

The DevOps Engineer:

- Is expected to exercise judgement and initiative in prioritising and resolving day-to-day issues in accordance with Departmental and IT Directorate policies, procedures and operational guidelines
- Contributes to planning activities and the development / modification of standards, procedures and technical documentation
- Is required to collect and analyse complex data / technical information in order to make recommendations regarding technological solutions
- Shares accountability for the quality and accuracy of outputs, analyses, briefings and other forms of advice in final form, though the role supervisor may review prior to release / implementation.

Reporting line

The DevOps Engineer, reports to the Manager, Middleware.

Direct reports

Nil

Budget/Expenditure

Nil

Essential requirements

- Industry certification in relevant technologies or equivalent industry experience.
- Ability to implement an end-to-end deployment pipeline including an understanding of DevOps Principals, CI/CD, Infrastructure as code, container platforms and system monitoring.
- Knowledge of the infrastructure stack used to provide private and public cloud services including network, compute, storage, management systems, databases, middleware and monitoring.
- Knowledge of and commitment to the Department's Aboriginal education policies.





Capabilities for the role


The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

This role also utilises an occupation specific capability set which contains information from the Skills Framework for the Information Age (SFIA). The capability set is available at <http://www.sfia-online.org/en>

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework		
Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Adept
	Act with Integrity	Intermediate
	Manage Self	Intermediate
	Value Diversity	Intermediate
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Adept
	Work Collaboratively	Adept
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Intermediate
	Plan and Prioritise	Adept
	Think and Solve Problems	Advanced
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Intermediate
	Technology	Adept
	Procurement and Contract Management	Intermediate
	Project Management	Adept

Occupation / profession specific capabilities		
Capability Set	Category, Sub-category and Skill	Level and Code
	Development and Implementation, Installation and Integration, Systems Installation/Decommissioning	Level 4 - HSIN
	Delivery and Operation, Service Operation, System Software	Level 4 – SYSP
	Service Management, Service Operation, Service Desk and Incident Management	Level 4 - USUP

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Manage Self	Intermediate	<ul style="list-style-type: none"> Adapt existing skills to new situations Show commitment to achieving work goals Show awareness of own strengths and areas for growth and develop and apply new skills Seek feedback from colleagues and stakeholders Maintain own motivation when tasks become difficult
Relationships Commit to Customer Service	Adept	<ul style="list-style-type: none"> Take responsibility for delivering high quality customer-focused services Understand customer perspectives and ensure responsiveness to their needs Identify customer service needs and implement solutions Find opportunities to co-operate with internal and external parties to improve outcomes for customers Maintain relationships with key customers in area of expertise Connect and collaborate with relevant stakeholders within the community
Relationships Work Collaboratively	Adept	<ul style="list-style-type: none"> Encourage a culture of recognising the value of collaboration Build co-operation and overcome barriers to information sharing and communication across teams/units Share lessons learned across teams/units Identify opportunities to work collaboratively with other teams/units to solve issues and develop better processes and approaches to work
Results Think and Solve Problems	Advanced	<ul style="list-style-type: none"> Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues Work through issues, weigh up alternatives and identify the most effective solutions Take account of the wider business context when considering options to resolve issues Explore a range of possibilities and creative alternatives to contribute to systems, process and business improvements Implement systems and processes that underpin high quality research and analysis
Business Enablers Technology	Adept	<ul style="list-style-type: none"> Demonstrate a sound understanding of technology relevant to the work unit, and identify and select the most appropriate technology for assigned tasks Identify opportunities to use a broad range of communications technologies to deliver effective messages Understand, act on and monitor compliance with information and communications security and use policies Identify ways to leverage the value of technology to achieve team/unit outcomes, using the existing technology of the business Support compliance with the records, information and knowledge management requirements of the organisation

Occupation specific capability set (Skills Framework for the Information Age – SFIA)

Category, Sub-category	Level and Code	Skill and Level Description
Development and Implementation, Installation and Integration	Level 4 HSIN	SYSTEM INSTALLATION/DECOMMISSIONING (HSIN) Undertakes routine installations and de-installations of items of hardware and/or software. Takes action to ensure targets are met within established safety and quality procedures, including, where appropriate, handover to the client. Conducts tests of hardware and/or software using supplied test procedures and diagnostic tools. Corrects malfunctions, calling on other experienced colleagues and external resources if required. Documents details of all hardware/software items that have been installed and removed so that configuration management records can be updated. Develops installation procedures and standards, and schedules installation work. Provides specialist guidance and advice to less experienced colleagues to ensure best use is made of available assets, and to maintain or improve the installation service.
Delivery and Operation, Service Operation	Level 4 SYSP	SYSTEM SOFTWARE (SYSP) Reviews system software updates and identifies those that merit action. Tailors system software to maximise hardware functionality. Installs and tests new versions of system software. Investigates and coordinates the resolution of potential and actual service problems. Prepares and maintains operational documentation for system software. Advises on the correct and effective use of system software.
Service Management, Service Operation	Level 4 USUP	SERVICE DESK AND INCIDENT MANAGEMENT (USUP) Prioritises and diagnoses incidents according to agreed procedures. Investigates causes of incidents and seeks resolution. Escalates unresolved incidents. Facilitates recovery, following resolution of incidents. Documents and closes resolved incidents according to agreed procedures.