

Role Description

Senior Site Reliability Engineer

Role Description Fields	Details
Cluster	Education
Department/Agency	Department of Education
Division/Branch/Unit	Information Technology Directorate
Role number	207381, 207382, 207383, 207390, 207389, 207388, 207387, 207386, 207385, 207384
Classification/Grade/Band	Clerk Grade 11/12
Senior executive work level standards	Not Applicable
ANZSCO Code	511112
PCAT Code	1226392
Date of Approval	July 2022
Agency Website	https://education.nsw.gov.au/

Agency overview

The NSW Department of Education serves the community by leading the provision of world-class education. The department protects young children by regulating preschool and long day care providers. Once children move into school, we provide them with a world-class primary and secondary education. We also work to advance the wellbeing of Aboriginal people.

Primary purpose of the role

The Senior Site Reliability Engineer provides technical leadership and consultation on engineering large-scale fault tolerant systems. The focus of the role is on delivering efficiency to deployment solutions and operational tasks via automation; and leveraging software to gain the utmost efficiency for the infrastructure, whilst bringing high levels of consistency and reliability to all workloads/tasks.

Key accountabilities

- Evaluate, test and build stable and scalable technological solutions to address a variety of business problems; applying relevant policies, standards, best practice and architectural strategy to ensure the resilience and longevity of systems and solutions
- Engage in and improve the lifecycle of services—from inception and design, through deployment, operation and refinement.
- Identify emergent issues that indicate scalability and reliability problems, working with development teams to help drive solutions.
- Engineer system upgrades and large-scale system integrations to documented standards
- Develop written procedures, engineering drawings, and other technical documentation to support effective implementation
- 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
- Develop high level options, conceptual approaches, technical recommendations and estimates to support the transition of system designs into operation

- Draft timely, succinct reports and briefings for the role supervisor, Executive Director and other Directors as appropriate; and 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
- Rapidly designing and deploying cloud and virtualised server solutions in a large scale, complex, multi-platform, geographically dispersed and constantly changing environment

Key relationships

Internal

Who	Why
Supervisor	<ul style="list-style-type: none"> • Discuss business objectives, priorities, projects and issues arising • Provide specialist advice to inform decision-making and challenge current thinking
Infrastructure Services managers and staff	<ul style="list-style-type: none"> • Build and maintain collaborative working relationships to resolve technical and/or service delivery issues • Share technical advice and subject matter expertise
Departmental managers and staff	<ul style="list-style-type: none"> • Share information and liaise effectively to ensure effective customer service / problem resolution • Provide technical advice and subject matter expertise

External

Who	Why
Contractors, external suppliers and vendors	<ul style="list-style-type: none"> • Communicate priorities, expectations, standards and project scope • Monitor service delivery in accordance with agreed standards; negotiating / resolving / escalating issues arising

Role dimensions

Decision making

The Senior Site Reliability Engineer:

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

Each Senior Site Reliability Engineer reports to the Director, Infrastructure Platforms or a nominated manager

Direct reports

Nil

Budget/Expenditure

Refer to ICT Budget and financial delegation documentation.

Key knowledge and experience

- 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

- Demonstrated experience in the maintenance and operation of enterprise scale server platforms; development and maintenance of automated deployment solutions; and engineering automated solutions to resolve operational issues
- Industry certification in relevant technologies or equivalent industry experience

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

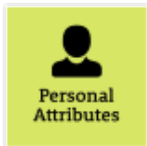
Focus capabilities

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
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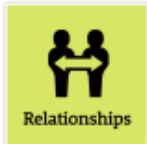


Manage Self

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

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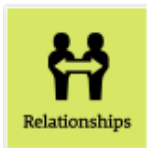


Commit to Customer Service

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

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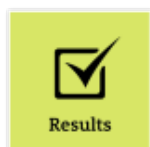


Work Collaboratively

Collaborate with others and value their contribution

- Recognise outcomes achieved through effective collaboration between teams
- Build cooperation and overcome barriers to information sharing, communication and collaboration across the organisation and across government
- Facilitate opportunities to engage and collaborate with stakeholders to develop joint solutions
- Network extensively across government and organisations to increase collaboration
- Encourage others to use appropriate collaboration approaches and tools, including digital technologies

Advanced

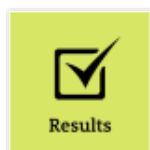


Deliver Results

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

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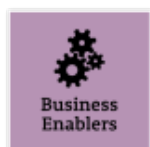


Think and Solve Problems

Think, analyse and consider the broader context to develop practical solutions

- 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 in collaboration with others
- Take account of the wider business context when considering options to resolve issues
- Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements
- Implement systems and processes that are underpinned by high-quality research and analysis
- Look for opportunities to design innovative solutions to meet user needs and service demands
- Evaluate the performance and effectiveness of services, policies and programs against clear criteria

Advanced




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











Occupation / profession specific capabilities

Capability Set	Category, Sub-category and Skill	Level and Code
	Strategy and Architecture - Advice and Guidance - Technical Specialism	Level 5 - TECH
	Strategy and Architecture - Advice and Guidance - Consultancy	Level 5 - CNSL
	Development and Implementation - System Development - Systems Design	Level 5 - DESN

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
	Display Resilience and Courage	Be open and honest, prepared to express your views, and willing to accept and commit to change	Adept
	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Adept
	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Intermediate
	Communicate Effectively	Communicate clearly, actively listen to others, and respond with understanding and respect	Advanced
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Adept
	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Adept
	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Adept
	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Adept
	Project Management	Understand and apply effective planning, coordination and control methods	Adept

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

Category, Sub-category	Level and Code	Skill and Level Description
Strategy and Architecture Advice and Guidance	Level 5 TECH	TECHNICAL SPECIALISM (TECH) - Maintains an in-depth knowledge of specific specialisms and provides expert advice regarding their application. Can supervise specialist consultancy. The specialism can be any aspect of information or communication technology, technique, method and product or application area.
Strategy and Architecture Advice and Guidance	Level 5 CNSL	CONSULTANCY (CNSL) - Takes responsibility for understanding client requirements, collecting data, delivering analysis and problem resolution. Identifies, evaluates and recommends options, implementing if required. Collaborates with, and facilitates stakeholder groups, as part of formal or informal consultancy agreements. Seeks to fully address client needs, enhancing the capabilities and effectiveness of client personnel, by ensuring that proposed solutions are properly understood and appropriately exploited.
Development and Implementation System Development	Level 5 DESN	SYSTEMS DESIGN (DESN) - Specifies and designs large or complex systems. Selects appropriate design standards, methods and tools, consistent with agreed enterprise and solution architectures and ensures they are applied effectively. Reviews others' systems designs to ensure selection of appropriate technology, efficient use of resources, and integration of multiple systems and technology. Contributes to policy for selection of architecture components. Evaluates and undertakes impact analysis on major design options and assesses and manages associated risks. Ensures that the system design balances functional, service quality, security and systems management requirements.