Role Description
Data Engineer

Cluster	**Department of Regional NSW**
Agency	**Local Land Services**
Location	**Negotiable**
Classification/Grade/Band	**Advisory and Technical Stream, LLS Level 6**
ANZSCO Code	**261313**
PCAT Code	**1126392**
Date of Approval	**May 2024**
Agency Website	**www.lls.nsw.gov.au**

Agency Overview

The Department of Regional NSW (DRNSW) is the department focussed on protecting and growing primary industries, supporting sustainable land management, overseeing the state's mineral and mining resources and ensuring that government investment supports strong regional communities and economies.

DRNSW brings together the Department of Primary Industries; Local Land Services; Mining, Exploration and Geoscience; Regional Development; the Regional Growth NSW Development Corporation; NSW Public Works and Soil Conservation Service.

We have nearly 5,000 employees, with almost 80 per cent of us living and working in regional NSW.

Local Land Services (LLS) is an Executive Agency related to the cluster. It provides quality, customer-focused services to landholders and the community across New South Wales. This regionally-based organisation brings together a wide range of service and advisory functions including agriculture, biosecurity, natural resource management, land management, biodiversity, emergency services, private native forestry and the Soil Conservation Services.

Primary purpose of the role

The Data Engineer is responsible for administering LLS data pipelines, databases, and data stores. This includes overseeing data ETL processes to maintain LLS systems and data warehouses. The role also plays a key role in facilitating data transfers between LLS and other NSW Government agencies and assisting in administering LLS virtual machines and software systems deployed on them, including spatial databases like Microsoft SDE, and infrastructure software such as web servers.

Key accountabilities

- Build and support the ELT (extract, load, transform) of data in the data warehouse to support operational, management and strategic reporting.
- Manage and operate databases and other data stores (including data warehouses) to support business delivery outcomes.
- Collaborate with corporate IT teams to create and maintain the implementation of optimal data pipelines from a wide variety of internal and external sources.
- Revise, design, and implement best-fit internal process improvements including automating manual processes, streamlining data delivery.
- Assist in managing LLS virtual machines hosting data ETL software and spatial databases/servers, including ArcGIS enterprise and Geocortex applications.

Key challenges

- Working with legacy systems and databases to accept datasets that are larger and more sophisticated than they were designed to accommodate.
- Managing competing priorities within tight timeframes.
- Working with a wide range of technologies, including Microsoft Azure; Amazon Web Services, Microsoft SQL, Microsoft SQL SDE/Esri configured databases, ArcGIS Enterprise, Geocortex, FME.

Key relationships

Who	Why
Internal	
Team Leader and Senior Management Staff	• Receives direction and support in the management and use of spatial data systems and provides spatial analysis support for strategic and organisational strategic planning.
LLS staff	• Provides staff support, training and advice in relation to spatial data management and analysis.
External	
Industry partners and State/local agencies	• Coordinates and administers data sharing arrangements and provides information on spatial data systems.

Role dimensions

Decision making

Together with the supervisor they are responsible for making daily decisions in order to meet the requirements of the role.

Reporting line

Manager Data Analytics

Direct reports

Nil

Budget/expenditure

TBC

Key knowledge and experience

- Professional experience with data architectures, database administration and experience with data ETL software.
- Extensive Experience with Microsoft SQL Server.
- Experience with data ETL tools such as Microsoft Azure Data Factory, or Safe Software Feature Manipulation Engine (FME).
- Experience with programming languages such as Python, R and Transact-SQL.
- Experience with Microsoft Azure, Amazon Web Services, Databricks, and GIS software and architecture including FME, Microsoft SQL SDE and ArcGIS Enterprise is preferable.

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
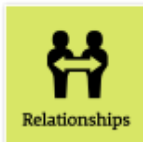
responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

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	**Act with Integrity** Be ethical and professional, and uphold and promote the public sector values	• Represent the organisation in an honest, ethical and professional way • Support a culture of integrity and professionalism • Understand and help others to recognise their obligations to comply with legislation, policies, guidelines and codes of conduct • Recognise and report misconduct and illegal and inappropriate behaviour • Report and manage apparent conflicts of interest and encourage others to do so	Intermediate
Relationships	**Commit to Customer Service** Provide customer-focused services in line with public sector and organisational objectives	• Focus on providing a positive customer experience • Support a customer-focused culture in the organisation • Demonstrate a thorough knowledge of the services provided and relay this knowledge to customers • Identify and respond quickly to customer needs • Consider customer service requirements and develop solutions to meet needs • Resolve complex customer issues and needs • Cooperate across work areas to improve outcomes for customers	Intermediate
Relationships	**Work Collaboratively** Collaborate with others and value their contribution	• Build a supportive and cooperative team environment • Share information and learning across teams • Acknowledge outcomes that were achieved by effective collaboration • Engage other teams and units to share information and jointly solve issues and problems • Support others in challenging situations • Use collaboration tools, including digital technologies, to work with others	Intermediate

|			
	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
	Technology Understand and use available technologies to maximise efficiencies and effectiveness	• Identify opportunities to use a broad range of technologies to collaborate • Monitor compliance with cyber security and the use of technology policies • Identify ways to maximise the value of available technology to achieve business strategies and outcomes • Monitor compliance with the organisation's records, information and knowledge management requirements	Adept
	Project Management Understand and apply effective planning, coordination and control methods	• Perform basic research and analysis to inform and support the achievement of project deliverables • Contribute to developing project documentation and resource estimates • Contribute to reviews of progress, outcomes and future improvements • Identify and escalate possible variances from project plans	Intermediate

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	Intermediate

Personal Attributes	Manage Self	Show drive and motivation, an ability to self-reflect and a commitment to learning	Intermediate
Personal Attributes	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Foundational
Relationships	Communicate Effectively	Communicate clearly, actively listen to others, and respond with understanding and respect	Intermediate
Relationships	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Intermediate
Results	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Intermediate
Results	Think and Solve Problems	Think, analyse and consider the broader context to develop practical solutions	Intermediate
Results	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Intermediate
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Foundational
Business Enablers	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Intermediate