Business Technology Services Data Engineer
Position Description

National Operations

Adelaide

	About ONRSR The Office of the National Rail Safety Regulator (ONRSR) plays an integral role in keeping Australians safe across the nation's vast and varied rail networks. Headquartered in Adelaide, and with offices around the country, ONRSR is an independent regulatory authority that encourages safe rail operations, enforces national compliance with the *Rail Safety National Law*, and promotes and improves rail safety throughout Australia. **Our People** At ONRSR we aim to enhance and promote rail safety nationally through effective risk-based regulation. To achieve that, we need people with the vision to contribute to the safety of Australia's railways – people who are professional, whose values align with ONRSRs values of independence, respect, integrity, diligence and excellence. People motivated by the opportunity to improve rail safety and by the benefits this delivers to the Australian community. **Our purpose** Safe railways for Australia
	The Role – Your impact and contribution The **BTS Data Engineer** is responsible for developing and maintaining a comprehensive Data platform to support the organisation create data driven safety insights through advanced data analytics. As the only organisation in Australia with a complete view of national rail safety performance, ONRSR is uniquely placed to provide safety insights. This requires a vastly new capability and new sources of data, the Data Engineer is responsible for ensuring that the wide pools of unstructured data are cleaned and validated, so that they can be presented to the data warehouse as Gold Medallion structured data. This role is at the practical end of the ONRSR data strategy, where the primary responsibility is to ensure a constant pipeline of quality data is available to the data warehouse.
	Key Relationships **Reports to:** Senior Manager, Technology and Service Delivery **Internal:** General Manager, National Operations, Senior Manager, Data Analytics, Principal Data Governance Officer, National Manager, Safety and Assurance, Safety & Assurance team, Risk & Analysis team
	Your Responsibilities The BTS Data Engineering role is considered the engine room of the ONRSR analytics capability. Simply put, this role seeks to harness the skills and capabilities

of a seasoned engineer to ensure they manage the ELT/ETL processes as well as operational management of several ONRSR and Industry Azure instances. In particular, the role:

- Focuses on the supply side and is responsible for ensuring a transformation of unstructured data from a wide range of sources.
- Monitors and maintains the various pipelines of unstructured data.
- Monitors and optimises various Azure assets; supporting the occupational resource request
- Supports the Principal Data Governance Officer in the data governance process
- Undertakes ELT/ETL processes to support the provision of quality data to the data warehouse
- Supports data consumers in understanding the transformation process and the corresponding impact on data quality.

What you Bring – Key Competencies

This role is ideal for the person who is passionate about data quality with demonstrated experience in designing and implementing a data platform in previous roles and a keen understanding that the success of any analytics function is predicated on the continual supply of quality data. Naturally, the role will suit a data capable data engineer or data scientist with robust technical skills. A seasoned DBA who understands the complexities of real data with an understanding of modern ingestion and structuring skills would also be considered.

Key to success in this role is that you are or have:

- Fanatically passionate about data quality, balanced with a willingness to explore new sources of data to support the development of the best models possible
- Pragmatic and practical understanding of data governance, tempered with the need of real data scientists working with imperfect data and imperfect systems
- Strong understanding of Medallion Architectures and specific processes in each phase
- Working understanding of Graph Databases and Geographic information systems
- Practical understanding of data transformation, cleansing and maintenance
- Able to contribute meaningfully on data linage to support data reliability and applicability decisions.
- Robust understanding of data transformation especially using Apache Parquet and Databricks
- Advanced knowledge and experience of SQL, experience in working with heavily normalised data structures
- Ability to prioritise competing demands by understanding the role of data in various analytical models
- Comfortable in working with data scientists to resolve issues relating to modelling and data
- Advanced understanding of Azure services etc

- Experience in managing Azure resources via Azure Resource Manager, especially in optimisation of resources to minimise costs
- Understand governance obligations including sound knowledge of the Privacy Act
- Delivery and outcome focused with a constructive approach to challenges and problem solving
- Excellent interpersonal, verbal and written communication skills and demonstrated experience in communicating analysis and insight to senior audiences to influence action

Helpful qualifications and experience
The successful candidate will hold a tertiary qualification in a relevant field (Mathematics, Computer Science, Statistics, Analytics) and have a minimum of 5 years hands on analytic experience.

Your compliance
As a regulator, it is important that we are all on the same page when it comes to safety and risk management and everyone at ONRSR is responsible to actively supporting this aspect of our role to promote a positive and safe culture. ONRSR has a zero tolerance to the use of alcohol and non-prescription drugs for all workers while undertaking ONRSR work. This includes workers recalled to duty unexpectedly who should decline to work if doing so puts them in breach of the Drug and Alcohol Policy.

Other items of note
On occasions, this role will require you to work outside of normal business hours, on weekends and public holidays. There is a requirement to travel which may include short stays in ONRSR interstate offices. If you would like more information about how ONRSR regulates please read the ONRSR Way 2020.

Privacy Notification
ONRSR requires personal information and documents relevant to your employment. The collection and handling of this information will be consistent with the requirements of relevant privacy laws.

Our Commitment to you and your Commitment to ONRSR
ONRSR is genuinely committed to investing in the capability of its staff and is proud of its structured Regulatory Officer training program that will support Regulatory Officers in learning the *ONRSR Way* to rail safety compliance in a supportive environment. Opportunities to learn key skills in both a classroom and infield setting are made available through the delivery of our training program and advancing your skills and knowledge in these areas is also available within this program. The success of this program also relies on your engagement and willingness to engage with ONRSR staff and potentially coach and mentor staff in areas related to your subject matter expertise.

	ONRSR expects its people to contribute to the efficient and effective functioning of the organisation to meet ONRSR and team strategic goals. This includes actively participating in the Performance Development and Review process; demonstrating appropriate and professional behaviours in accordance with the Code of Conduct and values; providing assistance to team members if required; and undertaking other key responsibilities or activities as directed.
	I have read and understood the requirements of the position and agree to carry out the key responsibilities to the best of my ability.
	I understand that I may be required to perform other duties from time to time to fulfill the position requirements.