

Role Profile and Person Specification

ROLE PROFILE

Role Title:	Data Engineer	Leadership level:	
JRN:	30498	Job family:	
Band:	9	Location:	Agile
Allowances:	As per contract	Politically restricted:	No
Department:	Digital Policing	Vetting level:	RV
Reporting to:	Senior Data Engineer	Date Published:	February 2023
Posts responsible for:	None		

Part A – Job Description

Overall purpose of the role:

To assist in the design, creation, support and monitoring of Force data structures and models to support strategic data management. Inclusive of analysis and reporting needs of the Force, presenting data and information in a consistent, effective and performant manner so as to ensure value can be gained through insight.

Key responsibilities of the role:

1	Under direction of Senior Data Engineer Deliver data integration solutions from Extract Transform Load (ETL) processing into data structures including design and development of reusable metadata.
2	Perform and support Extract Transform Load (ETL) processing for the Force's data interoperability needs. Triage existing ETL processes including, but not limited to, Stored Procedures, Packages, Functions and Cursors, and new ETL process technology.
3	Provide support and advice to ensure effective and sustainable use of data within projects and initiatives. Support assigned data and information projects, ensuring that data and information provision meets the needs of the Force in a responsive and secure manner
4	Assist in Identifying opportunities for innovation through existing or future data capabilities
5	Assist the Senior Data Engineer to raise the standards of data quality & integrity through use of policy and procedure, standards, frameworks, and tools
6	Support the Senior Data Engineer in the definition of data integration requirements, including affiliated business rules, and design then develop data integration solutions
7	Support testing and live running of data products and services and undertake data quality measures to ensure quality of data is consistently maintained. Ensure that the appropriate documentation and activities have been successfully concluded prior to a data change, solution or process transitioning into a live service
8	Monitor, manage and resolve issues affiliated with data structures, models, and interfaces
9	Have an understanding of the security, data and technical constraints affiliated with data management and use the data ethics framework to encourage transparency, accountability, and fairness when processing and analysing data
10	Promote and endorse continual development (CD), and continual integration (CI) practices to ensure data structures remain current and hold meaningful data
11	Provide guidance to operational support in relation to problem management and general best practice

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Part B – Scope of contacts

Internal / External relationships:

Internal: Data End Users, Principal Data Manager, Enterprise Architecture Team, Business Engagement Team, Digital Policing Team Leaders, Force Transformation, Solutions Architects, Business Systems Analysts, Infrastructure Team, DBA (database administrators) Team, DP (Digital Policing) SMT, Information Security Officer, Corporate Development, Information Management Department

External: Third party suppliers, Auditors, External Data End Users, other Police Forces.

Part C – Competencies and Values

Northumbria competencies and values framework (NCVF)

Part D – Continuous Professional Development (CPD) role 6 months

First 6 months

1

2

3

4

12 months and beyond

5

6

7

8

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Part E - PERSON SPECIFICATION

Criteria	Essential	Desirable	How to be assessed
Qualifications, knowledge and experience	<p>A degree, HND or equivalent qualification, and/or have significant relevant experience.</p> <p>Proven data analysis and delivery experience in data integration environments such as a data warehousing, lakes, and enterprise service bus. Experience using Microsoft SQL and PowerShell to deliver ETL solutions</p> <p>Experience of relational and multi-dimensional data models</p> <p>Proven experience of relational data base technologies; e.g. Oracle, SQL Server</p> <p>Experience of handling multiple data types beyond traditional RDMS, CDC and file types.</p> <p>Knowledge of data interoperability and Integration frameworks and ETL best practice</p> <p>Experience of orchestration, logging, monitoring and alerting solutions.</p>	<p>Knowledge of Qlik Replicate, Compose and Sense</p> <p>Knowledge of reference data management</p> <p>Experience of data mining models and statistical techniques</p> <p>Knowledge and experience of at least some areas of NoSQL, JSON, API, Python, Cloud and data lake data integration</p>	Application/interview/CPD

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	<p>Knowledge of master data management</p> <p>Knowledge of data life-cycle management</p> <p>Knowledge of Ethical Standards Framework</p> <p>Experience of data conformity methods in relation to enterprise data management</p> <p>Experience of using an ITSM tool</p>		
Planning and organising	Experience of estimation with an expectation that you will play a role in the planning of the work that you will be delivering.		Application/interview/CPD
Problem solving and initiative	<p>Ability to bridge the gap between technical and business language to create pragmatic, appropriate solutions.</p> <p>Logical approach to troubleshooting and use of appropriate tools.</p>	Experience in leading investigations and resolution into technical issues with the ability to advise on best practice and appropriate tools.	Application/interview/CPD
Management and teamwork	A passion for supporting the development of others by identifying areas for improvements, mentoring, and keeping abreast of latest technology.		Application/interview/CPD
Communicating and influencing	Effectively communicate with officers and staff across the organisation	An ability to proactively build, develop and maintain relationships with internal and external stakeholders,	Application/interview/CPD

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	Communicate complex and challenging technical issues	using your excellent communication skills.	
Other skills and behaviours		Understanding of Policing and/or Public Sector environment.	Application/interview/CPD