Position Description

Title: Data Modeller
HEW Level: HEW 9
Faculty/Office: Information Technology
Position number:
Department/team: Applications Services
Date: May 2016

Position purpose: Responsible for operational performance of databases and work with other technical teams to provision new databases or provide information from databases as well as maintain, develop and implement policies and procedures for ensuring the security and integrity of the company database.

ORGANISATIONAL CONTEXT

Macquarie University Information Technology embraces the university mission to be bold, distinctive, progressive and transformational.

Information Technology is a trusted business partner with an ethos of service but not subservience, and we pride ourselves in the application of a strong collaborative partnership approach to transformation across the University.

We strive for the efficient provision of commoditised services in order to better support the areas where we should be unique across the education, research and health portfolios within the University.

The Application Services team is responsible for supporting, maintaining, rationalising and retiring Applications used to support the University and its associated entities.

The Systems Support team is responsible for providing senior administrative support to Finance, Student and other enterprise business teams. The Systems Support Manager is responsible for managing the day to day activities of the Systems Support team to provide level 2 and 3 technical support, maintenance and administration of existing and new corporate systems.

The Data Modeller is responsible for the design, model and implementation of data solutions to meet the business needs of the University.

ORGANISATION CHART
**KEY ACCOUNTABILITIES**

- Design, model and implement data solutions to meet the business needs and risk tolerance criteria of the enterprise
- Enforce data architectural standards in the exchange of data and information between systems.
- Design and document data models for existing and new data systems, both in-house and externally managed.
- Perform analysis of data requirements, data profiling, and develop source to target mappings.
- Work with multiple teams to advise on the management of data and how to integrate data between systems.
- Ensure that data models support the needs of analytics
- Define standards for data model representation and perform duties of SME for matters related to data models, data exchange with databases
- Comply with relevant EEO and WHS regulations.
- Perform any other duties as required and as appropriate for the incumbent’s HEW level.

**POSITION SCOPE**

| Reports to: | Applications Support Manager |
| Positions Reporting to: | Direct: nil | Indirect: nil |
| Key Direct Clients: | Particular staff members in other offices or departments | Other staff members in own office or department | Immediate team members | MQ staff in general | MQ students | Other external contacts |
| Other Key Relationships: | Senior Managers | Research staff |
| Budget Accountability: | N/A |
| Role-specific Conditions: | Criminal history check | Ready-A and/or out of core hours for management of application specific upgrades/maintenance. |
| Scope and Autonomy: | Develops and/or modifies programs, processes, systems and/or policies that may impact University-wide projects, process improvements and/or initiatives |
| Problem Solving: | Draws on own knowledge, experience and expertise to identify, develop and implement new initiatives, processes and programs. |
## Capability Framework

Capability frameworks describe the behaviours, skills, attributes and experience required to successfully perform a position or group of similar positions.

<table>
<thead>
<tr>
<th><strong>COMPETENCIES:</strong> Clusters of behaviours required for successful performance.</th>
<th><strong>ATTRIBUTES:</strong> Personal qualities related to successful performance.</th>
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<tbody>
<tr>
<td>• Planning and Execution: Managing time and resources to complete tasks and achieve objectives.</td>
<td>• Perseverance: Persevering despite obstacles to ensure tasks are completed.</td>
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<td>• Quality Focus: Ensuring accuracy and quality when completing tasks.</td>
<td>• Flexibility: Responding effectively to unexpected or changing circumstances.</td>
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<td>• Communication: Effectively articulates key messages, both verbally and in writing, adapting to suit context and audience.</td>
<td>• Reliability: Meeting commitments and responsibilities.</td>
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<td>• Service Focus: Making students, staff, alumni and other key contacts and their needs a priority.</td>
<td>• Interpersonal Impact: Making a positive impression on others in a range of interpersonal contexts.</td>
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<td>• Relationship Management: Establishing effective working relationships with others.</td>
<td>• Resilience: Dealing effectively with and recovering quickly from setbacks or pressure.</td>
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<td>• Teamwork: Working in collaboration with others to achieve shared goals.</td>
<td>• Accountability: Assuming responsibility for making decisions and delivering agreed outcomes.</td>
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<td>• Integrity: Maintaining confidentiality, discretion and professionalism.</td>
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### REQUIRED KNOWLEDGE:
Qualifications, technical and/or professional skills and information needed from day one for successful performance.

- Computer Science degree or equivalent business experience.
- Strong knowledge of Database normalization and performance tuning/monitoring.
- Understands ITIL Service management.
- Strong knowledge of Database normalization and performance tuning/monitoring.
- Strong knowledge of T-SQL or SQL/SQL*Plus, PL/SQL, and stored procedures.
- Proficiency in database table creation, maintenance and troubleshooting.
- Thorough knowledge of and demonstrated competency with techniques of data modelling resulting in an Entity Relationship Diagram deliverable.
- Hands on experience of data modelling tools to produce physical and logical data models.
- Knowledge of software configuration management tools, including but not limited to Git, Mercurial.
- Forward engineering modelling / design of Logical and Physical Data Models, with creation of first cut DDL.

### KEY EXPERIENCE:
Practical experiences and exposure to specific environment or activities related to successful performance.

- 5 years’ experience in advanced database modelling and optimization.
- Bachelor’s degree or equivalent in related field.
- Experience with Oracle, MSSQL environments in a hybrid cloud hosting environment.
- Experience in mapping / modelling data from a variety of ETL tools and raw feeds.
- Proven ability to complete tasks in a timely and efficient manner with minimal supervision.
- Experience designing and developing both logical and physical data models.
- Experience with data integration tools sets including but not limited to Oracle ODI, GoldenGate.
- Experience deploying and supporting large, complex data warehouse/business intelligence solutions.

### ACQUIRED KNOWLEDGE:
Organisational and/or professional skills and information to be developed within the first 3 to 6 months for successful performance.

Knowledge of the Information Technology functions and structure.
Knowledge of the Information Technology policies, systems, processes and procedures.
Knowledge of how the University works and how relevant functions across the University interrelate.