

Job Description Form	Technical Database Architect (Mappa)
Work Group:	Health, Corporate & Business Development
Work Unit:	Mappa
Reports To:	Mappa Project Manager
Direct Reports:	Nil
Award / Agreement:	<i>Aboriginal Community Controlled Health Services Award 2010 (Cth)</i>
Classification:	Administrative Grade 4
Approved by CEO:	23 August 2019 (Des Martin)

VISION STATEMENT

Aboriginal people in Western Australia enjoy the same level of health and wellbeing as all Western Australians.

MISSION STATEMENT

As the leading authority for Aboriginal health in Western Australia, we strive to strengthen and promote the Aboriginal Community Controlled Health Services' model of care, empowering Aboriginal people to achieve health equality in their communities.

ORGANISATIONAL VALUES

The organisation operates on the foundational pillars of Aboriginal leadership, self-determination and cultural diversity that underpin and shape the way the organisation conducts its business.

These values are designed to guide and promote a strong, high performing organisational culture that is responsive to the state-wide needs of our Members and assist us in delivering our vision.

Culture | Resilience | Accountability | Collaboration | Passion | Integrity

POSITION PURPOSE

The Technical Database Architect (Mappa) reports to the Mappa Project Manager, and is responsible for developing a structured, high quality and production-ready database for the Mappa Platform Project.

The occupant of this position will be expected to comply with and demonstrate a positive commitment to the highest level of achievement in Equal Employment Opportunity, Work Health & Safety, Code of Conduct, Quality Improvement, Performance Management, Client Focus and Confidentiality throughout the course of their duties.

KEY CLIENT AND STAKEHOLDER RELATIONSHIPS

EXTERNAL

- Given the range of tasks, this position will liaise with a variety of stakeholder representative groups.

INTERNAL

- Maintains close working relationships with the Mappa team, including Mappa Project Manager, other officers, team members and employees of the Aboriginal Health Council of Western Australia.

RESPONSIBILITIES OF THIS POSITION

KEY RESULT AREA	POSITION RESPONSIBILITIES
MAPPA DATABASE DEVELOPMENT	<ul style="list-style-type: none"> In collaboration with the Mappa Project Team, design and develop the backend architecture to the required specifications and to the highest standards including writing and documenting code. Develop the appropriate database solutions for the Mappa Platform by designing the proposed system; defining and creating the database physical structure, functional capabilities and user specifications. Determine database structural requirements by analysing existing operations and mockups, applications, and programming; reviewing objectives with stakeholders; evaluating current systems; and use this to build/enhance effective database structures suitable to all stakeholder needs. Define, design and maintain accurate and comprehensive database schema, data, metadata and relationships. Create procedures and flowcharts documenting the database interactions for users/organisations. Document the process on how the code files and folders are set up. (these must be kept up-to-date weekly).



	<ul style="list-style-type: none">– Design conceptual and logical data models applying optimum access techniques; coordinating installation actions and document actions.– Lead / contribute to the Code-Build-Test phases of the DevOps cycle.– Undertake unit, integration and performance testing of all database components developed. All issues identified through testing need to be rectified prior to system release.– Maintain and improve system performance by identifying and resolving production and application development problems; evaluating, conducting tests, troubleshooting, integrating new elements and installing new releases, performing data integrity checks and undertaking regular maintenance.– Provide database support to users and colleagues by creating solutions, responding to user questions, and resolving problems.– Contribute towards the delivery of regular, high-quality software releases in alignment with the delivery schedule and established software development processes.– Manage / participate in architectural design sessions and code reviews that focus on code reusability, efficiency, security and performance.– Develop software testing documentation for users to test and complete.– Undertake quality assurance of the system and data processing /reporting. This includes overseeing all testing and complete all items identified requiring work to be resolved.– Write specifications for the development and modification of the database structure to address changing requirements.– Assist in determining the effectiveness of relevant processes in relation to the data architecture, identifying gaps and developing approaches and plans to implement new solutions as required.– Ensure that all materials produced have a high degree of quality, accuracy, and timeliness and complies with Mappa requirements.– Migrate data from legacy systems to new solutions.– Liaise with internal and external stakeholders on matters relevant to the Mappa project as directed.– Assist in evaluating the effectiveness and currency of the Mappa database and make enhancements as necessary.
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	<ul style="list-style-type: none"> – Provide detailed and timely progress updates, including: <ol style="list-style-type: none"> 1. Weekly to the Mappa Project Manager; 2. The Mappa Steering Committee (as requested); and 3. As requested by management. – Contribute to team priorities where appropriate. – Undertake other duties as directed by management
QUALITY MANAGEMENT SYSTEM (QMS)	<ul style="list-style-type: none"> – Actively participate in the organisation's QMS (LOGIQC). – Identify and participate in continuous quality improvement activities and apply quality improvement principles to all duties performed.
OTHER	<ul style="list-style-type: none"> – Demonstrate a strong commitment to uphold and contribute to the organisation's mission, objectives and values. – Support and promote teamwork through open communication, collaboration and contribute to a positive workplace culture. – Participate and comply with all Work Health & Safety responsibilities as per the <i>Occupational Health and Safety Act (WA) 1984</i>. – Identify and assist to reduce Work Health & Safety hazards and risks. – Follow the reasonable direction of Work Health & Safety representatives.

POSITION KEY PERFORMANCE INDICATORS

The below Key Performance Indicators (KPI's) are used to assess, measure, evaluate, manage and reward performance within each key result area of this position.

The below KPI's are to be assessed in line with the organisations performance development framework.

KEY RESULT AREA	KEY PERFORMANCE INDICATORS
MAPPA DATABASE DEVELOPMENT	<ul style="list-style-type: none"> – Ensure a timely and effective delivery of data base solution in accordance with stakeholder expectations.

COMPETENCY PROFILE FOR THIS POSITION

Competencies are the specific knowledge, skills and attributes needed to successfully undertake the role. The profile is used for recruitment, performance review, planning, and training and development activities.

JOB SPECIFIC COMPETENCIES

QUALIFICATIONS, SKILLS, EXPERIENCE AND KNOWLEDGE

ESSENTIAL:

- 5+ years' experience designing and developing database architecture for complex relational database systems.
- Proven work experience as a Technical Database Architect or similar role.
- Database management experience, including creating databases and maintaining them. Ability to develop database solutions by designing the proposed system; defining database physical structure and functional capabilities, user specifications.
- Large scale database experience including building functional requirements, technical design (database schema) and the integration of new data and implement application features.
- Ability to lead / contribute to the Code-Build-Test phases of the DevOps cycle. Unit, integration and performance testing of all database components developed.
- Experience in determining database structural requirements by analysing existing operations, applications, and programming; reviewing objectives with stakeholders; evaluating current systems and building/enhancing effective database structures suitable to stakeholder needs.
- Exceptional attention to detail and a high level of accuracy.
- Ability to write technical data management documentation (procedures, reports, guidelines) including data definitions, data classifications, scripts, transformations and processes.
- Good interpersonal skills, with the ability to communicate with a variety of internal and external stakeholders.
- An ability to work on projects as part of a team and independently as required.
- Demonstrated problem solving skills with the ability to analyse, identify options and select appropriate solutions.
- Strong organisational and time management skills, including the ability successfully manage competing priorities and meet deadlines.
- Ability to work in a dynamic and evolving environment with an ability to adapt to changing needs.

DESIRABLE:

- A tertiary qualification in Information Technology, Computer Science or a related field.
- Experience with PostgreSQL databases, Postgres, PostGIS and PGAdmin4.

- Demonstrable experience using HTML(5), CSS(3), PHP and Javascript (no CMS).
- Experience using distributed version control systems (Git preferred).
- Experience or understanding of UI design principles and User Experience.
- Experience or understanding of deploying systems using automated code.
- Experience working within Linux based environments.
- Ability to deploy database solutions across nonproduction and production environments.
- Experience building and modifying API's to enable system integration.
- Experience in developing and deploying software to cloud-hosted environments (AWS preferred).
- Linking databases with user-facing elements developed by the Website Developers, with Server-Side logic.

ACKNOWLEDGMENT AND ACCEPTANCE BY APPOINTED EMPLOYEE

I certify that I have read and understand the responsibilities assigned to this position.

Employee Name	
Signature	
Date	