



Department of
Water and Environmental
Regulation

Position Description

Position Title: Data Architect

Classification Level: L7

Position Number: 100749

Reports to: 100601 Enterprise Architect, L8

Directorate / Division: Corporate Services/Corporate Services

Supervises: Nil

Branch / Section: Information Services/Enterprise Data and Architecture

Location: Prime House, Joondalup

Role summary

The department's Enterprise Data Assets are at the heart of the organisation's capabilities and functions. Their structure, integration, composition, and integrity are critical to the successful implementation of the department's Environment Online (EO) Program as well as other future transformations. The department requires absolute trust in the veracity of its core operational systems of data and the capability to gain new insights.

The Data Architect role will work with key business stakeholders across the large programs of business change, with external agencies, suppliers and customers, and will be responsible for developing data architectures, enabling data integration and data sharing initiatives, articulating strategies and actionable roadmaps, and implementing and managing overarching data governance processes. The Data Architect will chair the Data and Analytics Advisory Group (DAAG) which is a cross-functional data working group, essential to supporting the department's maturity toward becoming an insights and evidence-based, data-driven regulator in a climate of legislative reform.

Responsible for

Solution Architecture

- Leads the development of architectures for complex data solutions, ensuring consistency with specified requirements agreed with both external, and internal customers.
- Takes full responsibility for the balance between functional, service quality and systems management requirements within the data domain.
- Ensures that appropriate standards (corporate, industry, legislative, governance, privacy, national and international) are adhered to with respect to data architecture and data solutions.
- Within business change programs, manages the target design, policies, and standards, working proactively to ensure long-term strategic benefit is obtained from enterprise data assets.

Data Modelling and Design

- Sets standards for data modelling and design tools and techniques, advises on their application, and ensures compliance.
- Manages the investigation of corporate data requirements, and co-ordinates the application of data analysis, design and modelling techniques, based upon a detailed understanding of the corporate information requirements, in order to establish, modify or maintain data structures and their associated components (entity descriptions, relationship descriptions, attribute definitions).
- Manages the iteration, review and maintenance of data requirements and data models.

Data Management

- Devises and implements data governance frameworks and practices as well as master data management processes, including classification, security, quality, ethical principles, retrieval and retention processes.
- Derives data management structures and metadata to support consistency of information retrieval, combination, analysis, pattern recognition and interpretation, throughout the organisation.

Analytics

- Provides expert oversight and guidance regarding the exploitation of complex data and information from a range of sources (including State and Commonwealth government agencies, external commercial and not for profit stakeholders) and variety of information systems (including internal and external geospatial, business transactional, structured, non-structured systems);
- Provides strategic advice and best practice guidance for the use of analytics to meet overall business requirements, ensuring consistency across all user groups.
- Identifies and establishes the veracity of the external sources of information which are relevant to the operational needs of the enterprise.
- Develops analytics policy, standards, and guidelines.

Specialist Advice

- Maintains a network of recognised experts (inside and/or outside the organisation) who can deliver expert advice in areas relevant to the organisation's current and future needs.
- Actively maintains recognised expert level knowledge in data architecture, data governance and analytics.
- Provides definitive and expert advice in their specialist area(s).
- Represents DWER and ISB on internal and external committees and working groups associated with data governance and information management.

Relationship Management

- Chairs the department's Data and Analytics Advisory Group - key to developing better data governance and a good data practice culture among internal and external data stakeholders;
- Builds long-term, strategic relationships with senior stakeholders (internal and external);
- Negotiates to ensure that stakeholders understand and agree what will meet their needs, and that appropriate agreements are defined;
- Facilitates open communication and discussion between stakeholders, acting as a single point of contact by developing, maintaining, and working to stakeholder engagement strategies and plans.

Strategic Planning

- Contributes to the development of the department's Digital Business Plan, information strategies and associated roadmaps;

Other Duties

- Undertaking additional duties within the skill and scope of position capabilities and departmental needs.

Capabilities

This position operates in accordance with the [WA Public Sector Capability Profile](#): Level 7

The [Skills Framework for the Information Age \(SFIA\)](#) skills which apply to this position are outlined below. Employees are required to demonstrate competence and development toward these, which along with the work-related requirements form the required capabilities of this position. Further information about the SFIA skills can be found at <https://sfia-online.org/en/sfia-7/all-skills-a-z>

SFIA Skill Code	SFIA Skill	SFIA Level
Core Skills		
ARCH	Solution Architecture	6
DTAN	Data Modelling and Design	5
DATM	Data Management	5
INAN	Analytics	6
TECH	Specialist Advice	6
RLMT	Relationship Management	6
Contributing skills		
ITSP	Strategic Planning	5

Work related requirements

Essential

1. Tertiary qualifications or significant relevant experience in senior information technology roles.
2. Experience of several data technology stacks (i.e. not just a single technology stack) including both legacy and current cloud technology platforms.
3. At least five years' experience in data architecture or senior data analyst roles including experience developing information strategy, architecture, artefacts, data models, and roadmaps related to the Data / Information architecture domain, including knowledge of, and experience working with, one or more architecture frameworks.
4. Demonstrated considerable experience in developing and leading the adoption of good data governance practices in enterprise settings.
5. Experience in working with geospatial systems and geospatial data sets.
6. Demonstrated considerable success in leading and mentoring, either in management roles or as a technical lead or subject matter expert during large programs of work.
7. Demonstrably excellent verbal and written communication skills including successful delivery of presentations to senior stakeholders on complex data architecture and data governance topics.

Desirable

8. Certification in TOGAF 9
9. A background in database administration, data analytics or data science with exposure to Data Warehouse design, Data Migration design, MDM, and data governance initiatives
10. Advanced knowledge and experience in the delivery of advanced data analytics using Microsoft Azure and other advanced analytics tools
11. Practical knowledge and application of State Government supply and contract management procedures and regulations

Our Values



Our values underpin everything we do, they guide the way we conduct our work, how we engage with each other and deliver services to our customers. The ability to demonstrate how you will apply our values is important to us.

Special Equipment/Requirements

Nil
