

## **ROLE DESCRIPTION**

Role Title:	Solutions Architect	
Classification Code:	ASO7	
LHN/ HN/ SAAS/ DHW:	Department for Health and Wellbeing	
Hospital/ Service/ Cluster:		
Division:	Public health	
Department/Section / Unit/ Ward:	Public Health Planning and Response, Business Support	
Role reports to:	Manager Public Health Intelligence and System Environment	
Role Created/ Reviewed Date:	November 2019, March 2024	
Criminal and Relevant History Screening:	☐ Aged (NPC) ☐ Working With Children's Check (WWCC) (DHS) ☐ Vulnerable (NPC) ☐ General Probity (NPC)	
Immunisation Risk Category Requirements:	<ul> <li>□ Category A (direct contact with blood or body substances)</li> <li>□ Category B (indirect contact with blood or body substances)</li> <li>□ Category C (minimal patient contact)</li> </ul>	

## **ROLE CONTEXT**

#### **Primary Objective(s) of role:**

The Solution Architect within Public Health Division (PHD) is responsible for leading the planning, design, development and maintenance of Information and Communication Technology (ICT) solutions that map business requirements to system's technical requirements whilst ensuring alignment to Digital Health SA (DHSA), ICT architecture standards policies, guidelines and governance frameworks.

This position will drive innovative, best practice technical solutions that ensure secure and reliable system integration that is bound by the DHSA governance framework whilst following industry accepted standards and principles of Systems Development Lifecycle (SDLC) and Solution Architecture Life Cycle (SALC).

Direct Reports:	
> Nil	

## **Key Relationships/ Interactions:**

#### **Internal**

- > Solution Architect
- > Reports to Manager Public Health Intelligence and System Environment
- > Maintains a collaborative working relationship with other sections across the Public Health Division and DHSA

## Challenges associated with Role:

Major challenges currently associated with the role include:

- > Identify system, infrastructure and project interdependencies and balance competing demands to ensure achievement of project deliverables.
- > Design and evaluation of complex technology solutions with specific alignment to DHSA technology infrastructure
- > Liaising with relevant stakeholders and enterprise architects to ensure alignment of technology solutions with the DHSA enterprise and technology roadmaps.
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- > Unifying and upgrading of disparate information systems ensuring alignment of technology solutions with the DHSA enterprise and technology roadmaps

Delegations:	
> Nil	

# **Key Result Area and Responsibilities**

<ul> <li>Lead the development, implementation, monitoring, evaluation and maintenance of specialist solution architecture services and functions which drive innovative, best practice technical solutions, ensure secure and reliable system integration and which aligns to DHSA technology infrastructure.</li> <li>Lead the planning, design and development of ICT solutions that map business requirements to system's technical requirements and ensure alignment to DHSA, ICT architecture standards policies, guidelines and governance frameworks.</li> <li>Deliver technical leadership to the strategic planning and development of systems architectures in specific business or functional areas using contemporary and appropriate tools, including logical models of components and interfaces.</li> <li>Lead the identification, definition, implementation and evaluation all stages of the solution architecture life cycle including the conceptual, logical, physical design, monitoring, update and transition phases, to produce models that define best practice technical solutions.</li> <li>Analyse complex data and information to deliver detailed component specifications, including translating these into detailed designs for the implementation of complex technical solutions, enterprise level system interfaces and data exchanges.</li> <li>Provide expert advice to the preparation of technical plans and guidance to business assurance and project staff within a business change programme to facilitate and ensure the availability of</li> </ul>
change programme to facilitate and ensure the availability of appropriate technical resources.
Provide expert technical advice in relation to system development and integration, including requests for changes and deviations from specifications, and ensure the correct application of technical strategies, policies, standards and practices, including those related to security.

Identify appropriate technical solutions and translate these into implementable strategies and designs	<ul> <li>Provide technical guidance to the identification, development and management of technical solutions strategies, initiatives, projects and programs,</li> <li>Lead and undertake the development of complex technical solution design documentation including selecting appropriate design standards, methods and tools, consistent with agreed enterprise and solution architectures and ensure their effective application.</li> <li>Review and evaluate systems designs to ensure the balance of functional, service quality, security and systems management requirements, the selection of appropriate technology, efficient use of resources, and the integration of multiple systems and technology.</li> <li>Deliver expert advice and consultancy to inform the appropriate selection of architecture components and the application of relevant policy and procedures in relation to enterprise ICT infrastructure, systems, functionality and implementation approaches.</li> <li>Evaluate and undertake impact analysis of major design options including assessing and providing specialist advice to the mitigation and management of associated issues and risks.</li> </ul>
Web and BI Solution Design, Analysis and Analytics	<ul> <li>Develop and maintain processes and standards for web, API and BI solution development, migration and maintenance that is compliant with SA Health's SDLC standards and ensure that all staff and development activities adhere with those standards.</li> <li>Extend the analytics capability of PHD by documenting requirements and solutions, designing new and extended data sets and developing the ETL capabilities necessary to support.</li> <li>Support the development of contemporary HTML5 web-based dashboards and analytics.</li> <li>Build and maintain the web API and application solutions and products.</li> <li>Ensure the successful ongoing operation of web and BI solutions.</li> </ul>
Engagement, Communication and Advice	<ul> <li>Manage and maintain positive and professional working relationships with the PHD management and staff, directors and teams, consultants and service providers to facilitate and support best practice outcomes for ICT solutions.</li> <li>Provide expert advice to facilitate the development, implementation and evaluation of policies, frameworks, standards, tools, methods and processes used in development of solution architectures.</li> <li>Develop and maintain collaborative working relationships with relevant stakeholders and enterprise architects to ensure alignment of technology solutions with the DHSA enterprise and technology roadmaps.</li> <li>Manage the preparation and dissemination of regular and adhoc reports to management and key stakeholders to inform decision-making and highlighting project progress, issues and risks.</li> <li>Work with the project manager to represent PHD on relevant projects, committees, forums and working parties to facilitate technical strategy and solution architecture planning and negotiating, and providing expert advice to, the resolve of significant issues.</li> </ul>

# Knowledge, Skills and Experience

# **ESSENTIAL MINIMUM**

# **Educational/Vocational Qualifications:**

> Nil

## Personal Abilities/Aptitudes/Skills:

- > Exceptional written and verbal communication skills, including the ability to articulate and present complex concepts clearly and concisely to a diverse stakeholder's base.
- Highly effective interpersonal skills, with proven ability to respond effectively to the requirements of a diverse range of customers, identify and resolve conflict and successfully negotiate issues in a professional, competent and ethical manner.
- > Proven ability to analyse technically complex concepts and processes and provide expert advice.

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- Proven extensive ability to work independently, as well as collaboratively in a team, under limited direction, make well informed and timely technical decisions, be flexible and operate effectively in an environment of complexity, pressure and change and ensure that the required standards of accuracy and quality are met within tight timeframes.
- > An ability to manage to the spirit and principles of the premier's safety Commitment and the legislative requirements of the Work Health and Safety Act 2012 (SA), utilising AS/NZS ISO 31000:2009 Risk Management- Principles and Guidelines, or to an equivalent set of standards.

### **Experience:**

- > Extensive experience leading the development, implementation, monitoring and evaluation of specialist Solution Architect / Analyst services and functions which support the development and implementation and support of ICT systems in a large, complex, enterprise ICT environment. Possess advanced issue analysis and resolution experience.
- > Extensive experience developing and maintaining processes and standards for web, API and BI solution development, migration and maintenance that is compliant with SA Health's SDLC standards and ensure that all staff and development activities adhere with those standards.
- Significant experience in custom web and API solution development with .NET, javascript (Angular) and HTLM/CSS.
- > Extensive experience in all stages of the solution architecture life cycle (SALC), including the conceptual, logical, physical design, monitor, update and transition phases, to produce models that define the project solution and developing, implementing and evaluating policies, standards and procedures.
- > Proven experience in all stages of the Systems Development Lifecycle (SDLC) methodology including high-level solution design and costing activities for application, infrastructure and systems integration and developing complex technical solution design documentation.
- > Proven experience documenting complex technical solutions including technical specifications, software requirement specifications, API docs and coding style guides.
- > Experience mentoring and training developers and analysts including performing code reviews sessions.
- > Demonstrated experience leading stakeholder engagement

## Knowledge:

- > Extensive knowledge of solution architectures within large, complex organisations, including the frameworks, standards, tools, methods and processes used in development of solution architectures.
- > Extensive knowledge of modern development languages, frameworks and tools including .NET, Angular, SQL. Azure DevOps and Git.Contemporary knowledge of technology solution design, particularly as it relates to the design of complex, enterprise level, system interfaces and data exchanges.
- > Detailed knowledge and understanding of the Systems Development Lifecycle (SDLC) and Solution Architecture Life Cycle (SALC) and related principles and methodologies.
- Detailed knowledge of relevant government policy and Agency procedures and their application in relation to operations and enterprise ICT infrastructure, systems, functionality and implementation approaches.

## **DESIRABLE CHARACTERISTICS**

#### Educational/Vocational Qualifications: (considered to be useful in carrying out the responsibilities of the role)

> An appropriate qualification in management information systems, computer science or information technology

## Personal Abilities/Aptitudes/Skills:

## **Experience:**

- > Proven experience in integrating enterprise architecture services with service planning, project delivery and operations within a large, complex organisation.
- > Proven experience in leading the planning, development and adoption of architectural standards and processes within a large, complex organisation.
- > Experience developing and maintaining native PHP/Apache applications.
- > Experience working in the health sector of government.
- > Experience in designing solutions involving integration of distinct health systems.

## Knowledge:

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- > Knowledge of Digital Health strategies and their application to deliver safer, better quality healthcare.
- > Knowledge of healthcare software applications with particular emphasis on the challenges associated with integration of systems and data in a large, complex health organisation.

## **Special Conditions:**

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- > It is mandatory that no person, whether or not already working in SA Health, may be appointed to a position in SA Health unless they have provided the a satisfactory current Criminal and Relevant History Screening, as required by the SA Health Criminal and Relevant History Screening Policy Directive.
- > For appointment in a Prescribed Position under the Child Safety (Prohibited Persons) Act (2016), a current Working with Children Check (WWCC) is required from the Department for Human Services Screening Unit. For other positions, a satisfactory National Police Certificate (NPC) assessment is required.
- > For 'Prescribed Positions' under the Child Safety (Prohibited Persons) Act (2016), the individual's WWCCs must be renewed every 5 years from the date of issue; and for 'Approved Aged Care Provider Positions' every 3 years from date of issue as required by the Accountability Principles 2014 issued pursuant to the Aged Care Act 1997 (Cth).
- > Appointment is subject to immunisation risk category requirements. There may be ongoing immunisation requirements that must be met.
- > Depending on work requirements the incumbent may be transferred to other locations across SA Health to perform work appropriate to classification, skills and capabilities either on a permanent or temporary basis subject to relevant provisions of the *Public Sector Act 2009* for Public Sector employees or the *SA Health (Health Care Act) Human Resources Manual* for Health Care Act employees.
- > The incumbent may be required to participate in Counter Disaster activities including attendance, as required, at training programs and exercises to develop the necessary skills required to participate in responses in the event of a disaster and/or major incident.

#### **General Requirements:**

Managers and staff are required to work in accordance with the Code of Ethics for South Australian Public Sector, Directives, Determinations and Guidelines, and legislative requirements including but not limited to:

- > Work Health and Safety Act 2012 (SA) maintaining your own health and safety and not place others at risk and comply with any reasonable instruction that is given to allow SA Health to comply with the WHS Act, and when relevant WHS Defined Officers must meet due diligence requirements.
- > Return to Work Act 2014 (SA), facilitating the recovery, maintenance or early return to work of employees with work related injury / illness.
- > Meet immunisation requirements as outlined by the *Immunisation for Health Care Workers in South Australia Policy Directive.*
- > Equal Employment Opportunities (including prevention of bullying, harassment and intimidation).
- > Children and Young People (Safety) Act 2017 (SA) 'Notification of Abuse or Neglect'.
- > Disability Discrimination.
- > Independent Commissioner Against Corruption Act 2012 (SA).
- > Information Privacy Principles Instruction.
- > Relevant Awards, Enterprise Agreements, *Public Sector Act 2009, Health Care Act 2008* and the *SA Health (Health Care Act) Human Resources Manual.*
- > Relevant Australian Standards.
- > Duty to maintain confidentiality.
- > Smoke Free Workplace.
- > To value and respect the needs and contributions of SA Health Aboriginal staff and clients, and commit to the development of Aboriginal cultural competence across all SA Health practice and service delivery.
- > Applying the principles of the South Australian Government's Risk Management Policy to work as appropriate.

The SA Health workforce contributes to the safety and quality of patient care by adhering to the South Australian Charter of Health Care Rights, understanding the intent of the National Safety and Quality Health Service Standards and participating in quality improvement activities as necessary.

## **Performance Development:**

The incumbent will be required to participate in the organisation's Performance Review and Development Program which will include a regular review of the incumbent's performance against the responsibilities and key result areas associated with their position and a requirement to demonstrate appropriate behaviours which reflect a commitment to SA Health values and strategic directions.

#### **Handling of Official Information:**

By virtue of their duties, SA Health employees frequently access, otherwise deal with, and/or are aware of, information that needs to be treated as confidential.

SA Health employees will not access or attempt to access official information, including confidential patient information other than in connection with the performance by them of their duties and/or as authorised.

SA Health employees will not misuse information gained in their official capacity.

SA Health employees will maintain the integrity and security of official or confidential information for which they are responsible. Employees will also ensure that the privacy of individuals is maintained and will only release or disclose information in accordance with relevant legislation, industrial instruments, policy, or lawful and reasonable direction.

#### White Ribbon:

SA Health has a position of zero tolerance towards men's violence against women in the workplace and the broader community. In accordance with this, the incumbent must at all times act in a manner that is non-threatening, courteous, and respectful and will comply with any instructions, policies, procedures or guidelines issued by SA Health regarding acceptable workplace behaviour.

#### Resilience:

SA Health employees persevere to achieve goals, stay calm under pressure and are open to feedback.

# **Organisational Context**

#### **Organisational Overview:**

Our mission at SA Health is to lead and deliver a comprehensive and sustainable health system that aims to ensure healthier, longer and better lives for all South Australians. We will achieve our objectives by strengthening primary health care, enhancing hospital care, reforming mental health care and improving the health of Aboriginal people.

SA Health is committed to a health system that produces positive health outcomes by focusing on health promotion, illness prevention and early intervention. We will work with other government agencies and the community to address the environmental, socioeconomic, biological and behavioural determinants of health, and to achieve equitable health outcomes for all South Australians.

#### **Our Legal Entities:**

SA Health is the brand name for the health portfolio of services and agencies responsible to the Minister for Health and Wellbeing. The Department for Health and Wellbeing is an administrative unit under the Public Sector Act 2009.

The legal entities include but are not limited to the Central Adelaide Local Health Network Inc., Northern Adelaide Local Health Network Inc., Southern Adelaide Local Health Network Inc., Women's and Children's Health Network Inc., Barossa Hills Fleurieu Local Health Network Inc., Eyre and Far North Local Health Network Inc., Flinders and Upper North Local Health Network Inc., Limestone Coast Local Health Network Inc., Riverland Mallee Coorong Local Health Network Inc., Yorke and Northern Local Health Network Inc. and SA Ambulance Service Inc.

## SA Health Challenges:

The health system is facing the challenges of an ageing population, increased incidence of chronic disease, workforce shortages, and ageing infrastructure. The SA Health Care Plan has been developed to meet these challenges and ensure South Australian's have access to the best available health care in hospitals, health care centres and through GPs and other providers.

#### **Health Network/ Division/ Department:**

The Public Health Division works with and for the South Australian community to improve public health and clinical care. This encompasses providing services, advice, education, support, policy, leadership and advocacy, administering legislation and partnering with service providers, government agencies and the non-government sector to identify and respond to current and emerging public health and clinical issues and opportunities. The Public Health Division comprises of the following Branches:

The Public Health Division comprises of the following Branches:

- > Office of the Chief Public Health Officer
- > Communicable Disease Control Branch
- > Health Protection and Regulation
- > Public Health Planning and Response

#### **Values**

#### **SA Health Values**

The values of SA Health are used to indicate the type of conduct required by our employees and the conduct that our customers can expect from our health service:

- > We are committed to the values of integrity, respect and accountability.
- We value care, excellence, innovation, creativity, leadership and equity in health care provision and health outcomes.
- > We demonstrate our values in our interactions with others in SA Health, the community, and those for whom we care.

#### **Code of Ethics**

The Code of Ethics for the South Australian Public Sector provides an ethical framework for the public sector and applies to all public service employees.

> Democratic Values - Helping the government, under the law to serve the people of South Australia.

- > Service, Respect and Courtesy Serving the people of South Australia.
- > Honesty and Integrity- Acting at all times in such a way as to uphold the public trust.
- > Accountability- Holding ourselves accountable for everything we do.
- > Professional Conduct Standards- Exhibiting the highest standards of professional conduct.

As a public sector employee, you have a responsibility to maintain ethical behaviour and professional integrity standards. It is expected that you act in accordance with the Code of Ethics, and contribute to a culture of integrity within SA Health.

The Code recognises that some public sector employees are also bound by codes of conduct relevant to their profession.

## **Approvals**

#### **Role Description Approval**

acknowledge that the role I currentl	v occupy has	the delegated authori	tv to authorise this document

Name:	Role Title:
Signature:	Date:

# **Role Acceptance**

#### **Incumbent Acceptance**

I have read and understood the responsibilities associated with role, the organisational context and the values of SA Health as outlined within this document.

Name: Signature: Date:

## Version control and change history

Version	Date from	Date to	Amendment
V1	10/02/17	09/04/17	Original version.
V2	10/04/17	04/07/17	Safety & Quality statement in General Requirements.
V3	04/07/17	10/07/18	Minor formatting with order of information amended.
V4	11/07/18	26/03/19	Updated legal entities for Minister and Department title on Page 7. Updated Immunisation Guidelines to Policy Directive under general requirements.
V5	27/03/19	04/06/19	Added categories for immunisation requirements on front page.
V6	05/06/19	25/06/19	Updated changes to the Criminal Relevant History and Screening.
V7	26/09/19	09/06/20	Updated legal entities to include new regional LHN's.
V8	10/06/2020	03/05/2021	Update Risk Management Statement
V9	04/05/21		Inclusion of integrity statement under Code of Ethics on Page 6
V10	08/12/2023		