

## Principal Software Engineer – EL 2 equivalent

Code: 02666

### Description

Services Australia is at the frontline of government service delivery, supporting millions of Australians, and is front and centre of a vision to be a world leader in government service delivery. It's using cutting-edge technology to build world class platforms and capabilities to help Australians get on with their lives. The services required will enable the agency to supplement its existing ICT and digital workforce to ensure a high quality of technology and digital development with the flexibility to ramp resourcing up and down as needs require. Engaging a flexible ICT workforce will enable to augment its requirements for the major work programs being undertaken.

Provide details (e.g. manager, branch) of candidate's previous worked history either as a contractor or employee including its former agencies.

### Responsibilities

Software Engineers have experience overseeing software development projects, writing optimised code, and provide technical leadership to a team of software engineers. They are responsible for the quality and functionality of the software produced by their team. The agency is seeking an experienced Principal Software Engineer to lead the design, development, and implementation of complex software solutions using Microsoft .NET technologies. This role involves providing technical leadership, ensuring adherence to best practices, and delivering secure and scalable applications that meet government standards.

### Key duties and responsibilities

- Application architecture and design of end-to-end solutions using the Microsoft technology stack, across identity, web/desktop applications, web services, and batch jobs.
- Design and implement secure authentication & authorization solutions using Azure AD, Entra ID, AD FS, and OAuth2/OpenID Connect/SAML.
- Ensure applications comply with OWASP best practices, and ACSC Essential Eight, and IRAP security standards.
- Provide technical guidance to engineering teams, mentoring developers on Identity best practices in .NET and Microsoft platforms.
- Define and implement test automation frameworks using BDD principles, ensuring scalable and maintainable automation through Cucumber, Selenium and API testing tools.
- Work closely with developers, testers, and business analysts to refine acceptance criteria, write Gherkin- based test scenarios, and integrate automated tests into CI/CD pipelines.

### Technical skills

- Microsoft Identity & Active Directory (AD FS, Entra ID, MFA) • Microsoft .NET & Backend Development (ASP.NET, C#) • Cloud & DevOps (Microsoft Azure, CI/CD with Azure DevOps) • Security & Compliance (ACSC Essential Eight, OWASP) • Architecture & Integration (SAP, Dynamics 365, ITSM) • Frontend & Accessibility (WCAG 2.1 compliance, DTA Digital Service Standard) • Degree in Computer

### Hiring organization

Services Australia

### Employment Type

Contractor

### Beginning of employment

1 July 2025

### Duration of employment

Initial contract of 12 months with possible two extensions of 12 months each.

### Job Location

Remote work possible

### Valid through

27.04.2025

Science or Software Engineering.

## **Experience**

You must provide a one page pitch to address all criteria specified. This is equal to 5000 characters.

## **Essential criteria**

### 1. Consultancy: Level 6 (SFIA)

Manages the provision of consultancy services and/or a team of consultants. In own areas of expertise, provides advice and guidance to consultants and/or the client when delivering consultancy services. Engages with clients and maintains client relationships. Establishes consultancy agreements/contracts and manages completion and disengagement.

### 2. Emerging technology monitoring: Level 6 (SFIA)

Plans and leads the identification and assessment of emerging technologies and the evaluation of potential impacts, threats and opportunities. Creates technology roadmaps that align organisational plans with emerging technology solutions. Engages with, and influences, relevant stakeholders to obtain organisational commitment to technology roadmaps. Develops organisational guidelines for monitoring emerging technologies. Collaborates with internal and external parties to facilitate intelligence gathering.

### 3. Methods and tools: Level 6 (SFIA)

Develops organisational policies, standards, and guidelines for methods and tools. Sets direction and leads in the introduction and use of techniques, methodologies and tools, to meet business requirements. Leads the development of organisational capabilities for methods and tools to ensure consistent adoption and adherence to policies and standards.

### 4. Programming/software development: Level 6 (SFIA)

Develops organisational policies, standards, and guidelines for software construction and refactoring. Plans and leads software construction activities for strategic, large and complex development projects. Adapts or develops new methods and organisational capabilities and drives adoption of, and adherence to policies and standards.

### 5. Release and deployment: Level 6 (SFIA)

Sets the release policy for the organisation in the context of both development and production/operations. Implements processes, tools, and resources to ensure that the transition of services, service components and packages are planned and compliant. Ensures that test, validation and configuration management are included in all release and deployment activities. Provides authorisation for critical release activity and point of escalation.

### 6. Software design: Level 6 (SFIA)

Leads the selection and development of software design methods, tools and techniques. Develops organisational policies, standards, and guidelines for software design and software architectures. Ensures adherence to technical strategies and systems architectures (including security).

### 7. Specialist advice: Level 6 (SFIA)

Provides organisational leadership and guidelines to promote the development and exploitation of specialist knowledge in the organisation. Maintains a network of recognised experts (inside and/or outside the organisation) who can deliver expert advice in relevant areas. Provides input into professional development planning

across a significant part of the organisation to further the development of appropriate expertise.

#### 8. Systems design: Level 6 (SFIA)

Develops and drives adoption of and adherence to organisational policies, standards, guidelines, and methods for system design. Champions the importance and value of system design principles and the selection of appropriate systems design life cycle models. Leads system design activities for strategic, large and complex systems development programmes. Develops effective implementation strategies consistent with specified requirements, architectures and constraints of performance and feasibility. Develops system design requiring the introduction of new technologies or new uses for existing technologies.

#### 9. Systems development management: Level 6 (SFIA)

Sets policy and drives adherence to standards for systems development. Leads activities to make security and privacy integral to systems development. Identifies and manages the resources necessary for all stages of systems development projects. Ensures that technical, financial and quality targets are met.

#### 10. Systems integration and build: Level 6 (SFIA)

Leads the development of organisational systems integration and build capabilities including automation and continuous integration. Develops organisational policies, standards, and guidelines for systems integration and build. Provides resources to ensure systems integration and build can operate effectively and ensures adoption and adherence to policies and standards.

### **Desirable criteria**

#### 1. Business process improvement: Level 5 (SFIA)

Manages the execution of business process improvements. Analyses and designs business processes to identify alternative solutions to improve efficiency, effectiveness and exploit new technologies and automation. Develops graphical models of business processes to facilitate understanding and decision-making. Assesses the feasibility of business process changes and recommends alternative approaches. Selects, tailors and implements methods and tools for improving business processes at programme, project or team level. Contributes to the definition of organisational policies, standards, and guidelines for business process improvement.