

# Senior Engineer



## Key purpose of the role

Develop and govern enterprise continuous delivery platform capabilities aligned with approved Target Architectures

Team	Number of reports
Solution Engineering	Direct – N/A
Manager	Location
Team Lead - Engineering	Bridge Street, Sydney With a hybrid office and work-from-home model
Relationships	Special requirements
You will be working in a cross-functional agile environment that requires collaboration across the line of business, business stakeholders, project team members and broader solution engineering team	Proven results in programming and applications design · Strong experience in Python programming · Strong experience in Core Java and Java related libraries (Spring-boot, JMS, and JPA etc.) · Good knowledge of functional and reactive programming · Proven experience in microservice and API development using event driven architecture · Integration technologies covering streaming technologies such as Apache Kafka, TIBCO ESB or similar. · Experience working in a cloud environment. Preferably in AWS



## Your Team

This is an exciting opportunity for a strong Senior Engineer to work on a project that will integrate with all major systems at the ASX. You will be developing and delivering high quality software solutions that will have a major impact on ASX central systems. You will be directly involved in the design and build out of the new platform where you can apply your contemporary engineering skills and get your hands on some of the latest technologies in the industry.

You are a practitioner/team member of the Solution Engineering Capability Community of Practice (CoP)



## Your responsibilities

- Ensure CI/CD design and engineering processes adhere to existing engineering standards, have well defined process controls, and deliver an overall compliance reporting model.
- Be an active member of the Solution Engineering Community of Practice (CoP).
- Collaborate with engineers across the group to uplift and streamline environment management by implementing automation capabilities such as CI/CD.
- Assist in implementation of accelerated delivery including the uplift and ongoing service management of the CI/CD tools related to environments, writing and integrating standardised configuration management scripts, automate environment provisioning workflows and working with engineering teams in supporting the modernisation strategy for the organisation.
- Become an SME of the overall toolsets/processes used by software engineers across the SDLC including source code management, development tools and engineering practices with the goal of continuous improvement in agility, quality & process/tooling maturity.
- Collaborate with Enterprise Infrastructure teams on driving automation in setup, configuration and the operation of environments across the stack from hardware, OS, virtualization, application servers, storage, database, networking, firewall, load balancers etc.
- Collaborate with the test automation and release management to embed best practices into the CI/CD process.
- Ensuring major software development milestones are aligned to environment strategy.
- Communicate effectively across teams and assist in motivating the broad-based team.
- Be an active member of the Solution Engineering Community of Practice (CoP).

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## Your experience and qualifications

### Must have

- Experience in delivering major programs of work in a complex, agile environment.
- Worked with, and delivered on, enterprise CI/CD capabilities and tools, providing guidance on best practices and helping enable major programs to deliver business value.
- Demonstrated experience working in a Senior Cloud Engineering role in public, private and hybrid cloud environments.
- A strong understanding of cloud engineering principles underpinned by design and development experience with one or more cloud environments such as GCP, AWS and VMware.
- Experience with running multi cloud environments and a strong understanding of multitenancy and security implications.
- Knowledge and experience with cloud concepts such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
- Experience of cloud infrastructure automation.
- Experience in working with cloud deployment and orchestration technologies at scale with strong knowledge of the fundamentals to include service discovery, deployment, monitoring, scheduling, and load balancing.
- Knowledge of containerisation concepts and implementation considerations.
- Experience with complex data structures and semi structured data (JSON, XML).
- Experience with Design Governance, taking responsibility for the end-to-end software design process across a large program of work, collaborating with Architecture, Engineering, Developers, and Suppliers.
- Curiosity and Compassion.

### Nice to have

- Cloud Engineering, DevOps, or Architecture certifications on AWS or GCP.
- Understanding of Cloud Native frame works and landscape.
- Work experience in highly regulated environments with significant compliance and audit activities.
- Working in a cross-functional, agile delivery team.
- Experience working with Java8+.
- Experience with CI/CD tools such as GoCD, GitLab, Cloud Build, or Code Build.
- Experience in developing Data APIs (REST, GraphQL, gRPC).
- Experience in building and working with Docker container-based services or other CRE.
- Understand challenges and trade-offs building, deploying, and running solutions in different environments.
- Comfortable presenting at Architecture and Design governance forums.

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## Skills required for the role

Skill	Skill Indicators & Behaviours
<p><b>Programming and software development -</b> Developing software components to deliver value to stakeholders.</p>	<ul style="list-style-type: none"> <li>• Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services.</li> <li>• Contributes to the selection of the software development methods, tools and techniques.</li> <li>• Applies agreed standards and tools to achieve well-engineered outcomes.</li> <li>• Participates in reviews of own work and leads reviews of colleagues' work.</li> </ul>
<p><b>Systems Integration and build -</b> Planning, implementing and controlling activities to synthesise system components to create operational systems, products or services.</p>	<ul style="list-style-type: none"> <li>• Provides technical expertise to enable the configuration of system components and equipment for systems testing.</li> <li>• Collaborates with technical teams to develop and agree system integration plans and report on progress. Defines complex/new integration builds. Ensures that integration test environments are correctly configured.</li> <li>• Designs, performs and reports results of tests of the integration build. Identifies and documents system integration components for recording in the configuration management system.</li> <li>• Recommends and implements improvements to processes and tools.</li> </ul>
<p><b>Systems and software lifecycle deployment -</b> Establishing and deploying an environment for developing, continually improving, and securely operating software and systems products and services.</p>	<ul style="list-style-type: none"> <li>• Elicits requirements for systems and software life cycle working practices and automation.</li> <li>• Prepares design options for the working environment of methods, procedures, techniques, tools, and people.</li> <li>• Selects systems and software life cycle working practices for software components and micro-services.</li> <li>• Deploys automation to achieve well-engineered and secure outcomes.</li> </ul>
<p><b>Configuration management -</b> Planning, identifying, controlling, accounting for and auditing of configuration items (CIs) and their interrelationships.</p>	<ul style="list-style-type: none"> <li>• Proposes and agrees the configuration items (CIs) to be uniquely identified with naming conventions.</li> <li>• Puts in place operational processes for secure configuration, classification and management of CIs, and for verifying and auditing configuration records.</li> <li>• Develops, configures and maintains tools (including automation) to identify, track, log and maintain accurate, complete and current information.</li> <li>• Reports on the status of configuration management. Identifies problems and issues and recommend corrective actions.</li> </ul>
<p><b>Requirements Definition and Management -</b> Managing requirements through the entire delivery and operational life cycle.</p>	<ul style="list-style-type: none"> <li>• Defines and manages scoping, requirements definition and prioritisation activities for initiatives of medium size and complexity.</li> <li>• Contributes to selecting the requirements approach.</li> <li>• Facilitates input from stakeholders, provides constructive challenge and enables effective prioritisation of requirements.</li> <li>• Establishes requirements base-lines, obtains formal agreement to requirements, and ensures traceability to source.</li> </ul>
<p><b>Resourcing -</b> Acquiring, deploying and onboarding resources.</p>	<ul style="list-style-type: none"> <li>• Facilitates and supports the execution of resourcing activities in collaboration with managers and teams.</li> <li>• Analyses resource requests to determine tasks, skills and effort required. Creates and communicates open positions internally and externally. Conducts interviews and assessments using a planned format and structure.</li> <li>• Implements internal resource allocation matching skills to tasks. Contributes to transitioning of resources, complying with relevant statutory or external regulations and codes of practice.</li> </ul>

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<p><b>Performance Management</b> - Improving organisational performance by developing the performance of individuals and workgroups to meet agreed objectives with measurable results.</p>	<ul style="list-style-type: none"> <li>• Provides operational direction, support and guidance to assigned colleagues.</li> <li>• Allocates routine tasks or project work, in line with team objectives and individual capabilities. Monitors quality and performance against agreed criteria to make learning recommendations or to escalate concerns.</li> <li>• Coaches colleagues in developing target skills and capabilities in line with team and personal goals.</li> <li>• Facilitates effective working relationships between team members.</li> </ul>
<p><b>Methods and tools</b> - Ensuring methods and tools are adopted and used effectively throughout the organisation.</p>	<ul style="list-style-type: none"> <li>• Provides advice and guidance to support the adoption of methods and tools and adherence to policies and standards.</li> <li>• Tailors processes in line with agreed standards and evaluation of methods and tools.</li> <li>• Reviews and improves usage and application of methods and tools.</li> </ul>
<p><b>Relationship management</b> - Influencing stakeholder attitudes, decisions, and actions for mutual benefit.</p>	<ul style="list-style-type: none"> <li>• Deals with problems and issues, managing resolutions, corrective actions, lessons learned, and the collection and dissemination of relevant information.</li> <li>• Implements stakeholder engagement/communications plan. Collects and uses feedback from customers and stakeholders to help measure the effectiveness of stakeholder management.</li> </ul>
<p><b>Specialist Advice</b> - Providing authoritative advice and direction in a specialist area.</p>	<ul style="list-style-type: none"> <li>• Provides detailed and specific advice regarding the application of their specialism to the organisation's planning and operations.</li> <li>• Actively maintains knowledge in one or more identifiable specialisms.</li> <li>• Recognises and identifies the boundaries of their own specialist knowledge.</li> <li>• Where appropriate, collaborates with other specialists to ensure advice given is appropriate to the organisation's needs.</li> </ul>

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