Principal Engineer



Key purpose of the role

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



Your responsibilities

- You are a practitioner/team member of the Solution Engineering Capability Community of Practice (CoP).
- Help design and roll out the Operating Model for Cloud across all four of ASX Business units. This will include realignment of existing engineering processes for Design, Build and Deploy.
- Lead delivery of technical documentation, adherence to best practices, and standard application of processes and controls.
- Understand and apply our cloud strategy and vision to ASX's Cloud Foundations program.
- Provide expert technical service and advice for the design and delivery of the Continuous Integration Platform product and service offerings in a hybrid cloud environment.
- Identify, engage and influence stakeholders, including architecture disciplines, asset owners, delivery owners, business stakeholders and SMEs to ensure architecture is optimal, and has the greatest chance of success
- Effectively challenge business leaders to obtain the best technology solutions and fit with our Technology strategy
- Ensure CI/CD design and engineering processes adhere to existing engineering standards, have well defined process controls, and deliver an overall compliance reporting model.
- Provide expert services on contemporary engineering practices including micro service architectures, continuous delivery, continuous integration, multi-cloud usage, and DevSecOps
- Design to Run by ensuring solutions support the operational reliability requirements of critical systems infrastructure.
- Be part of a cross-functional team planning, designing, creating, enhancing, and documenting new and existing system features to deliver agreed value to stakeholders.
- Own your career development path, guide junior team members along their corporate journey
- Be an active member of the Solution Engineering Community of Practice (CoP).



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.
- Experience with running multi cloud environments and a strong understanding of multitenancy and security implications
- 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.
- A strong understanding of software/cloud engineering principles underpinned by design and development experience with one or more cloud environments such GCP, AWS and VMware
- Knowledge and experience with cloud concepts such as Infrastructure as a Service (laaS), Platform as a Service (PaaS), and Software as a Service (SaaS)
- Experience of cloud infrastructure automation
- 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.

Nice to have

- Cloud Engineering, DevOps, or Architecture certifications on AWS or GCP
- 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 CodeBuild
- Experience in developing Data APIs (REST, GraphQL, gRPC)

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- Experience in building and working with Docker container-based services
- Understand challenges and trade-offs building, deploying, and running solutions in different environments.
- Comfortable presenting at Architecture and Design governance forums.

Skills required for the role

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Skill

Skill Indicators & Behaviours

Programming and software development - Developing software components to deliver value to stakeholders.

- Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services.
- Contributes to the selection of the software development methods, tools and techniques.
- Applies agreed standards and tools to achieve well-engineered outcomes.
- Participates in reviews of own work and leads reviews of colleagues' work.

Systems Integration and build -

Planning, implementing and controlling activities to synthesise system components to create operational systems, products or services.

- Provides technical expertise to enable the configuration of system components and equipment for systems testing.
- 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.
- Designs, performs and reports results of tests of the integration build. Identifies and documents system integration components for recording in the configuration management system.
- Recommends and implements improvements to processes and tools.

Systems and software lifecycle deployment - Establishing and deploying an environment for developing, continually improving, and securely operating software and systems products and services.

- Elicits requirements for systems and software life cycle working practices and automation.
- Prepares design options for the working environment of methods, procedures, techniques, tools, and people.
- Selects systems and software life cycle working practices for software components and micro-services.
- Deploys automation to achieve well-engineered and secure outcomes.

Configuration management -

Planning, identifying, controlling, accounting for and auditing of configuration items (CIs) and their interrelationships.

- Proposes and agrees the configuration items (CIs) to be uniquely identified with naming conventions.
- Puts in place operational processes for secure configuration, classification and management of Cls, and for verifying and auditing configuration records.
- Develops, configures and maintains tools (including automation) to identify, track, log and maintain accurate, complete and current information.
- Reports on the status of configuration management. Identifies problems and issues and recommend corrective actions.

Requirements Definition and Management - Managing requirements through the entire delivery and operational life cycle.

- Defines and manages scoping, requirements definition and prioritisation activities for initiatives of medium size and complexity.
- Contributes to selecting the requirements approach.
- Facilitates input from stakeholders, provides constructive challenge and enables effective prioritisation of requirements.
- Establishes requirements base-lines, obtains formal agreement to requirements, and ensures traceability to source.

Resourcing - Acquiring, deploying and onboarding resources.

- Facilitates and supports the execution of resourcing activities in collaboration with managers and teams.
- 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.
- Implements internal resource allocation matching skills to tasks. Contributes to transitioning
 of resources, complying with relevant statutory or external regulations and codes of
 practice.

Performance Management - Improving organisational

- Forms, maintains and leads workgroups and individuals to achieve organisational objectives.
- Determines and delegates objectives and task responsibilities to individuals or teams including people management responsibilities as appropriate. Sets the quality, performance

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performance by developing the performance of individuals and workgroups to meet agreed objectives with measurable results.

- and capability targets in line with organisational goals. Monitors performance and working relationships and provides effective feedback to address individual issues.
- Encourages individual development of skills and capabilities in line with team and personal goals. Facilitates the development of individuals by adjusting workload, targets, and team capacity.
- Plays an active role in formal organisational processes such recruitment, reward, promotion and disciplinary procedures.
- Methods and tools Ensuring methods and tools are adopted and used effectively throughout the organisation.
- Provides advice, guidance and expertise to promote adoption of methods and tools and adherence to policies and standards.
- Evaluates and selects appropriate methods and tools in line with agreed policies and standards. Contributes to organisational policies, standards, and guidelines for methods and tools.
- Implements methods and tools at programme, project and team levels including selection and tailoring in line with agreed standards.
- Manages reviews of the benefits and value of methods and tools. Identifies and recommends improvements.
- Relationship management Influencing stakeholder attitudes, decisions, and actions for mutual benefit.
- Identifies the communications and relationship needs of stakeholder groups. Translates communications/stakeholder engagement strategies into specific activities and deliverables.
- Facilitates open communication and discussion between stakeholders.
- Acts as a single point of contact by developing, maintaining and working to stakeholder engagement strategies and plans. Provides informed feedback to assess and promote understanding.
- Facilitates business decision-making processes. Captures and disseminates technical and business information.

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