

ICT SOLUTION ARCHITECT

Position Level: L6

Location: Pilbara

Effective Date: May 2026

Responsibilities

The ICT Solution Architect is responsible for leading the design of secure, supportable, and operationally resilient ICT solutions across Pilbara Ports operations, with a strong focus on communications, network, and associated infrastructure technologies that support corporate, marine, and port operational environments.

Reporting

The Technical Solutions Architect reports to the Technology Operations Manager.

Accountabilities

Result Area	Major Activities
1. Safety and People:	• Further a safe, inclusive, and collaborative workplace, that supports the mental health and wellbeing of self, and others • Identify actions and changes that lead to Pilbara Ports continually improving its safe work environment; both physically and psychologically
2. Integrated Management Systems:	• Develop and oversee the systems that ensure Pilbara Ports complies with all applicable codes, as well as its legal and statutory requirements. • Comply with and demonstrate a positive commitment to organisational processes and ISO Management Systems including Quality, Environment, Safety and Information Security.
3. Technical Solution Architecture:	• Lead scoping, requirements definition, option analysis, and solution design for communications, network, and associated infrastructure technologies across Pilbara Ports operations, ensuring solutions meet operational, safety, security, and resilience requirements. • Develop end-to-end ICT solution architectures covering communications, CCTV, LAN, WAN, WiFi, internet services, structured cabling, routing, switching, firewalls, remote site connectivity, and voice services. • Produce high-level and detailed solution designs, network diagrams, integration designs, interface specifications, and non-functional requirements including availability, capacity, recoverability, cyber security, maintainability, and supportability. • Analyse business and technical requirements and translate them into implementable solution architectures that can be deployed, supported, and sustained in live operational environments. • Provide architectural leadership for technology projects and change initiatives involving communications refresh, network upgrades, CCTV deployments, wireless expansion, internet and carrier services, and structured cabling works. • Review vendor and carrier proposals and validate technical compliance with enterprise architecture standards, cyber security controls, and operational support requirements.
4. Technology Enablers:	• Provide technical standards, governance, and design assurance for communications, network, CCTV, and related connectivity infrastructure solutions across Pilbara Ports.

	- Evaluate requests for change, technical deviations, and design trade-offs relating to connectivity, infrastructure resilience, cyber security, and lifecycle management. - Ensure relevant technical strategies, policies, standards, and practices are applied consistently across solution designs and transitions to operations. - Monitor the external environment and vendor landscape to identify emerging technologies and practical improvement opportunities that strengthen reliability, supportability, and operational performance. - Prepare technical advice and reports for stakeholders, including senior leadership, on solution options, risks, standards alignment, and implementation considerations.
5. Strategic Partnership:	- Provide clear technical advice to business, operational, and project stakeholders on solution options, risks, constraints, and implementation impacts. - Build and maintain effective working relationships with vendors, carriers, integrators, and internal stakeholders to enable effective delivery and operational handover of ICT infrastructure initiatives. - Work collaboratively across infrastructure, cyber security, operational technology, and delivery teams to coordinate implementation, service transition, and support readiness, while contributing to a kind and collaborative working culture.
6. Other Duties:	Other work tasks as requested by the Technology Operations Manager.

Selection Criteria

Qualifications:

A tertiary qualification in Information Technology (or equivalent).

Specialist and advanced industry certifications in networking, communications, cyber security, cloud, or enterprise architecture will be highly regarded.

This may include certifications such as Cisco Certified Network Professional (CCNP), Cisco Certified Internetwork Expert (CCIE), Fortinet Network Security Expert (or equivalent), Palo Alto Networks certifications, Microsoft Azure networking certifications, VMware certifications, or TOGAF.

Personal Attributes:

- Exhibit behaviours that align with Pilbara Ports' values of Safety, Excellence, Teamwork, Integrity, and Care.
- Demonstrated commitment to an inclusive work culture that encourages diversity.
- A team player who can focus on the outcomes of the organisation over their individual success.
- Communicates ideas in a persuasive manner that builds support, agreement, and commitment.
- A collegiate leadership style that influences others to create buy-in, gain trust and motivate action.
- Actively contributes to a kind, respectful, and collaborative culture that supports teamwork, constructive engagement, and shared outcomes.

Work Related Requirements:

- An ability to demonstrate conceptual and analytical skills with close attention to detail.
- An understanding of how to interpret business needs and translate them into technical requirements with innovative solutions.
- Demonstrated experience across the full solution development lifecycle from initiation to operationalisation, including architecting ICT solutions in multi-site operational environments.

- In-depth working knowledge of communications and infrastructure technologies such as CCTV, LAN, WAN, WiFi, internet services, structured cabling, carrier services, network security, cloud platforms, and Microsoft technologies.
- Demonstrated experience designing and assuring multi-site connectivity and infrastructure solutions across offices, operational facilities, remote locations, and field-based environments.
- Demonstrated ability to contribute to the delivery of technology projects within a multidisciplinary organisation.
- Strong verbal, written and interpersonal communication skills including the ability to communicate verbally and visually with technical and non-technical audiences.
- An understanding of architecture frameworks such as TOGAF and design thinking would be advantageous.

Sound computing skills, as well as the ability to gain a Maritime Security Identification Card, and WA Driver's License are prerequisites for positions with Pilbara Ports.