

POSITION DESCRIPTION

Position Title:	Network Engineer
Cluster / Business Unit / Division	Information Technology
Section or Unit:	Infrastructure
Classification:	6
Job Family:	ICT & Digital Technology
Position Description Number:	PD-2075
Work Contract Type:	Professional/Technical
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Information Technology

POSITION PURPOSE

The Network Engineer is responsible for the design, ongoing administration, maintenance and support of all IT Network Systems and Services that support ANSTO, including highly sensitive classified networks.

The role also provides an after-hours on call support service for critical incidents across all ANSTO buildings and locations.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries, and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

Information Technology is dedicated to enhancing and maintaining ANSTO's digital facilities for operational reliability and providing a range of customer services to support ANSTO's research, business activities and projects.

The Networks team is comprised of specialists managing the development, delivery and ongoing support of ANSTO's core network infrastructure encompassing firewalls, routers, switches, links, PABX's and all supporting network and telephony infrastructure.

Delivering and maintaining the full spectrum of ANSTO's corporate network and telephony requirements, the team significantly contributes to the development of ANSTO's digital capacity and capability.

The Network team is part of the IT Infrastructure team. The Network Engineer is expected to collaborate with and support the extended IT Infrastructure team covering other infrastructure specialties – Microsoft Systems, UNIX Systems & Cloud.

Other teams within IT - Development & Analytics, Cyber Security & OT, SAP Solutions, Endpoint Systems & Support, Architecture and Travel & Administration.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Responsible for reliable delivery, maintenance and support of all Network Services infrastructure, including after-hours support for incident support and resolution.
- Design, implement, manage and support Campus, WAN, and Data Centre networks for ANSTO. Including but not limited to: All Switching and Routing devices; PDUs; UPS's; CRAC's; VESDA; & PABX systems.
- Creating and maintaining controlled technical documentation, reports and records regarding primarily data, and voice solutions.

- First point of escalation, troubleshooting and fault rectification of technical issues related to network infrastructure and services.
- Required to participate on an on-call roster, leading remote incident triage for IT incidents logged as emergencies outside business hours.
- Participate in the Afterhours IT Support Process P-8013 during emergency scenarios, facilitating service restoration. Note that this necessitates some occasional work outside regular business hours, including return to site.
- Managing the analysis of network traffic data and providing recommendations on performance improvements and capacity planning to voice and data infrastructure.
- Setup and maintain alert management and monitoring of thresholds for business critical network components.
- Lead Network Engineer/Architect for infrastructure and engineering projects across ANSTO ensuring adequate connectivity and redundancy is delivered for the type of facility.
- Providing communications and security design and support for IT & Business projects.
- Proactively identify and report infrastructure risks across ANSTO including OT, Networking, Data Centres and Security.
- Analyse and develop risk management plans for asset maintenance and life cycle management of DC UPS and AC systems and site network UPS systems.
- Supervision of third-party contractors when required for infrastructure and network duties.
- Manage effective design and installation of racking, cooling and power equipment and placement of servers in the ANSTO data centres and disaster recovery centre.
- Be available after-hours to implement scheduled changes, ad hoc incident response and outage resolution, as required.
- Undertake additional duties as required.

Decision Making

- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to the network manager, project managers and clients within ANSTO, and is required to ensure that decisions are based on sound evidence, but at times may be required to make effective judgements under pressure or in the absence of complete information or expert advice.
- The position is fully accountable for technical implementation decisions within the key responsibilities.
- The position contributes expert budgetary advice for network infrastructure components of the IT AMP, and other capital projects, including engineering, safety and physical security projects.
- The position contributes expert technical advice and contributes to setting policies and standards for the provision of network infrastructure within ANSTO, such as network access policies and the relevant sections of the ANSTO Building Code.
- The position is fully accountable for the provision of advice to clients and to decide on network infrastructure solutions for new or refurbish building projects and new or changed business requirements.
- Determine priorities for service restoration to meet ANSTO organisational goals.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

- Prioritising incidents, service requests and tasks to meet the OLA/SLA's
- Balancing the at times competing demands of BAU and projects, working with peers and management to escalate and work through any conflicts.
- Implementing changes to satisfy evolving user requirements.

- Manage time across multiple projects including, interaction and reporting within scope and budget.
- Ensure network operations knowledge is transferred and documented.
- Staying current with new and evolving network technology, trends and security threats.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager Network Infrastructure & GM IT Infrastructure	<ul style="list-style-type: none"> • Actively contribute to the direction and strategy for Network Infrastructure. • Provide expert and technical advice on systems management and enhancements. • Recommend and gain endorsement for improvements to systems development and administration. • Receive guidance and direction. • Provide expert, authoritative and evidence-based advice.
Network team and extended IT teams members	<ul style="list-style-type: none"> • Contribute to group decision making processes, planning and goals. • Provide leadership, guidance and support. • Set performance requirements and manage performance and development. • Engage to monitor trends, performance and progress against the strategic plan and evaluate further support which may be required to ensure delivery against the plan
IT Project Management Office	<ul style="list-style-type: none"> • Provide expert and technical advice on enhancements for relevant IT cloud migration and design projects. • Work with and / or embed as part of project team to deliver agreed scope for Cloud Design and Migration Projects & Programmes. • Input into overall infrastructure and business application hosting strategy through the lens of Cloud hosting and leveraging cloud services to provide overall solutions across the IT environment.
Internal Customer Stakeholder Groups	<ul style="list-style-type: none"> • Understand and contextualise internal customer/stakeholder demands for network changes and new technologies. • Develop and assist developing solutions to support demand and in turn business capability.
External	
SME consultants, vendors, suppliers and partners.	<ul style="list-style-type: none"> • Provide supervision, guidance and direction. • Engage to monitor performance and progress. • Set performance requirements and required outcomes
Trade Contractors	<ul style="list-style-type: none"> • CS1 supervision • Provide leadership, guidance and direction. • Engage to monitor performance and progress. • Set performance requirements and required standards

POSITION DIMENSIONS

Staff Data	
Reporting Line	Manager Networks, IT Infrastructure
Direct Reports	NIL
Indirect Reports	NIL

Special / Physical Requirements

Location:	Lucas Heights, Clayton Working in different areas of designated site/campus as needed
Travel:	Occasional travel to Clayton, VIC and other sites/campuses
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer)
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions
Hours:	Willingness to work extended and varied hours based on operational requirements After-hours work may be required for short and infrequent periods, including return to site . Required to participate on an on-call roster
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements. Obtain and maintain appropriate federal government NV1/NV2 clearance

Workplace Health & Safety

Specific role/s as specified in [AP- All Workers 2362](#) of the ANSTO WHS Management System

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in Information Technology or CCNA/ CCNP or 5 years industry relevant equivalent experience.
2. Experience in maintaining and configuring switches, routers and enterprise class network systems and Data Centre environments.
3. Experience with Cisco network technologies and the integration of Cisco and Palo Alto Network technologies
4. Demonstrated operational and design experience of layered enterprise firewalls and virtualised networks.
5. Experience in working with ITIL framework service operations processes.
6. Experience in diagnosing and rectifying network faults (Layers 1 – 7).
7. Demonstrated ability to use network-monitoring tools to identify patterns/ trends and report where appropriate.
8. Experience in systems and networking services e.g. DNS (Domain Name Service) & DHCP (Dynamic Host Configuration Protocol).
9. Experience operating in a heavily regulated environment.
10. Demonstrated ability to initiate, manage and present changes, allocate resources effectively and identify and manage risks.
11. Demonstrated high level technical leadership and project management skills and abilities.
12. Demonstrated experience in the design, implementation and administration of software defined networking.

13. Demonstrated experience in managing effective relationships with key stakeholders.
14. Demonstrated experience in threshold alerting, event management and monitoring strategies across Data Centres and Campus networks.
15. Demonstrated experience in the supervision of contractors supporting network team activities.
16. Experience with advanced network technologies such as VPN, 802.1X, Wireless and firewall technologies including the definition of ACL's (Access Control Lists).
17. Experience in maintaining network support infrastructure such as cabling, UPS's and basic knowledge of Mobile, Windows and Unix based operating systems, including ITIL foundations knowledge.
18. Demonstrated personal qualities including experience training and mentoring of junior/helpdesk staff as part of the IT talent development.

VERIFICATION

Line Manager	Delegated Authority
Name: John Maggiore	Name: Alison Gould
Title: Manager Networks	Title: General Manager, IT Infrastructure
Signature:	Signature:
Date:	Date: