



#### **POSITION DESCRIPTION**

Position Title: IT Systems Engineer
Cluster / Business Unit / Division Information Technology

Section or Unit: IT Infrastructure

Classification: Band 5/6 Linked Role

Job Family: ICT & Digital Solutions

Position Description Number: PD-1899
Work Contract Type: Professional
STEMM/NON-STEMM: STEMM
STEMM CATEGORY: Technology

#### **POSITION PURPOSE**

The IT Systems engineer is responsible for the design, ongoing operation and upkeep of various core IT systems/services that support ANSTO.

The role also provides system administration support for the various Scientific pursuits across the ANSTO Scientific Community.

#### 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 IT Infrastructure Team is comprised of multi – disciplinary specialists managing the development, delivery and ongoing support of ANSTO's core digital infrastructure encompassing data centres, storage and compute facilities along with the support of business technology solutions encompassing the end point fleet and productivity tools and services including remote access, email, file management and related activities.

Delivering and maintaining the full spectrum of ANSTO's corporate, scientific and end user compute facilities, the team significantly contributes to the development of ANSTO's digital capacity and capability.

#### **ACCOUNTABILITIES & RESPONSIBILITIES**

#### **Key Accountabilities – Band 5**

The key accountabilities for this position include:

- Actively engage in the ongoing administration of ANSTO's core systems/ services to ensure availability and efficient operation.
- Undertake day to day systems administration functions relevant to the systems you are responsible for, such as account creation and backup management.
- Provide Level Three technical support to ANSTO's user community by prioritising and resolving incidents/ requests raised by the IT Service Desk.
- Undertake detailed troubleshooting to resolve issues within a short timeframe including analysing diagnostic reports, knowledge searches and system logs.
- Contribute to various ANSTO/ IT projects by providing various system administration skills and expertise on an as needs basis.

- Assist in the design of complex IT systems within the Platforms Team which have a significant impact across the organisation.
- Actively engage in routine maintenance and monitoring of IT systems to identify/ resolve problems.
- Act as a single point of contact for crucial administration functions supporting various significant
  areas of ANSTO's Computing Infrastructure. This may include modifying system configuration files,
  installing software packages, managing storage, writing scripts and compiling applications to list a
  few.
- Develop and document standard operating procedures for work within the Infrastructure Group to maintain records of system design, processes and changes to systems in accordance with IT policy and consistent with ANSTO's quality management system.
- Co-ordinate and plan the implementation of any new hardware or software upgrades.
- Maintain working relationships with internal and external stakeholders to determine operational requirements, problem determination and resolution.
- Determine the impact of changes to systems that affect critical operations and refer decisions upwards where proposed changes are unproven or may have a significant impact on critical operational systems.
- Actively maintain up-to-date knowledge on technological developments and trends including releases and technology no longer supported.
- Undertake additional duties as required and during period of leave of other staff.

In addition to performing all Band 5 key accountabilities, the key accountabilities for the Band 6 position include:

- Making recommendations to improve current systems.
- Undertake crucial systems administration tasks relevant to the systems you are responsible for.
- Manage a number of Core Services essential to operations here at ANSTO e.g. DNS, Web etc.
- Provide specialists advice on systems, authentication, virtualisation and storage infrastructures.
- Provide technical leadership and management to specific ongoing IT projects relating to DevOps, storage and virtualisations.
- Develop and maintain automation platforms using DevOps technologies and bespoke internal applications.
- Work with external entities to better understand requirements and then design and implement appropriate systems.
- Where appropriate provide mentorship and training to junior staff in areas of specialist knowledge.
- Develop and document standard operating procedures for work within the Systems environment. All
  documentation should be done in accordance with IT policy and consistent with ANSTO's quality
  management system.
- Act as an intermediary between IT and various external entities i.e. vendors.

### **Decision Making**

- The position is fully accountable for the accuracy, integrity and quality of the content of advice
  provided, 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.
- Determine key work priorities within the context of agreed work plans and will consult with the General Manager IT Infrastructure on complex, sensitive and major issues that have a significant impact.
- 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**

Band 5 position include:

- Progressively undertaking system administration duties to ensure continued upkeep and integration of Core Information Technology Systems and Services.
- Assisting in the design and implementation of complex IT systems to supports ANSTO's current and future requirements.
- Identifying trends and opportunities for ANSTO's core IT systems/ services.
- Prioritising work on the systems you are responsible for given constant user demand.
- Translating Scientific Community requirements into functional systems services and usable systems.
- Keeping abreast of changing technology given the amount and scope of technology change.

In addition to Band 5 key challenges, the major Band 6 challenges include:

- Working with external entities to design systems given evolving user requirements.
- Implementing changes to satisfy evolving user requirements.
- Providing technical leadership and advice to crucial IT projects.

#### **KEY RELATIONSHIPS**

Who	Purpose		
Internal			
Team Leader	<ul> <li>Actively contribute to the direction and strategy for IT Systems.</li> </ul>		
	<ul> <li>Provide expert and technical advice on systems management and enhancements and for relevant IT projects.</li> </ul>		
	<ul> <li>Recommend and gain endorsement for improvements to systems development and administration.</li> </ul>		
Work area team members	<ul> <li>Contribute to group decision making processes, planning and goals</li> </ul>		
	<ul> <li>Provide expert advice, technical and otherwise on a range of matters.</li> </ul>		
	Collaborate and share accountability		
ANSTO Clusters	<ul> <li>Actively engage, consult regularly to collaborate on IT project development, delivery and support.</li> </ul>		
	<ul><li>Provide expert advice and exchange information</li><li>Collaborate on cross cluster/organisation projects</li></ul>		
External			
Stakeholders/Vendors	<ul> <li>Develop and manage effective relationships to collaborate on IT initiatives, projects and delivery</li> </ul>		
	<ul> <li>Effectively exchange information with external stakeholders and vendors</li> </ul>		

## **POSITION DIMENSIONS**

Staff Data	
Reporting Line	Reports to the Manager IT Platforms
Direct Reports	Nil
Indirect Reports	Nil

Location:	Lucas Heights or Clayton	
	Working in different areas of designated site/campus as needed	
Travel:	May be required travel to ANSTO sites from time to time	
	Very occasional travel both nationally and internationally.	
Physical:	Office based physical requirements (sitting, standing, minimal manual	
	handling, movement around office and site, extended hours working at computer)	
	Presentations/Public speaking	
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions	
	Perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions	
Hours:	Willingness to work extended and varied hours based on operational requirements	
	After hours work may be required for short and infrequent periods	
	May be asked to participate in an on-call roster under a separate on- call local agreement	
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements	
	Must obtain and maintain appropriate federal government clearance	
Linked Role:	The Transition from Band 5 to Band 6 is not automatic and requires a	
	full written submission, in addition to the attached checklist, to	
	demonstrate how the employee meets the requirements.	
	Transition will only occur following approval from General Manager IT Infrastructure.	

Workplace Health & Safety				
Specific role/s as specified in AP- All Workers				
2362 of the ANSTO WHS	Other specialised roles identified within the guideline a position			
Management System	holder may be allocated to in the course of their duties			

## **ORGANISATIONAL CHART**

On file

# KNOWLEDGE, SKILLS AND EXPERIENCE

#### Band 5

- 1. Degree in Computer Science or Information Technology or equivalent experience.
- 2. Industry certification or equivalent experience in respect to Unix/ Windows System Administration activities.
- 3. Experience of the following areas:
  - Unix/Linux/Windows Systems administration using a variety of operating systems.
  - Administration of Unix and Windows services such as Mail and Web.
  - Experience with storage systems and protocols e.g. NFS & CIFS.
  - Ability to develop scripts/ programs in a variety of languages that facilitate various system administration functions.
  - Windows System administration with focus on Active Directory and Integration in heterogeneous computing environments.
- 4. Experience in one or more of the following

- Administering a High Performance Computing environment specifically on a Linux platform and services such as MPI (Message Passing Interface), PBS (Portable Batch Scheduler).
- Administering a Microsoft Exchange environment
- Administering a Virtual Server environment
- Administering a Virtual Desktop environment
- 5. Strong customer service focus.
- 6. Demonstrated ability to plan and organise work, including setting clearly define objectives and priorities work/ tasks.
- 7. Ability to solve complex technical problems.
- 8. Strong verbal and written communication skills.
- 9. Willingness and ability to work as part of a team.

## In addition to the above requirements Band 6 requirements are:

- 1. Demonstrated experience with Enterprise Class hardware and operating systems.
- 2. Experience with Windows Server technologies and the integration of Windows and Unix computing environments.
- 3. Experience in the design, implementation and ongoing maintenance of enterprise wide storage platforms.
- 4. Demonstrated experience in the application of Virtualisation technologies.
- 5. An understanding of cloud-related technologies and terminology such as SaaS and laaS.
- 6. Experience with enterprise identity management.
- 7. Ability to develop scripts to automate system administration tasks in languages similar to Bash, Perl, Powershell and Python.
- 8. Experience in the administration of large computing systems using ITIL service support processes
- 9. Demonstrated high level technical leadership and project management skills and abilities
- 10. Demonstrated personal qualities including experience training and mentoring that will add value to the Information Management team.
- 11. Continuous Improvement and Change Management

# **VERIFICATION**

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position.

Line Manager		Delegated Authority	
Name:	Alison Gould	Name:	Marianne Morton
Title:	General Manager IT Infrastructure	Title:	Chief Information & Digital Officer
Signature:		Signature:	
Date:		Date:	