The University of Waikato
Te Whare Wānanga o Waikato

POSITION DESCRIPTION

Principal Infrastructure Engineer

Reports to:	Head of Digital Technology and Cloud Infrastructure
Division:	Information Technology Services (ITS)
Tenure:	Permanent
Location:	Hamilton Campus
Date:	June 2026

Vision

Ko te tangata

A research-intensive university providing a globally connected, innovative and inclusive studenty experience in an environment characterised by a commitment to diversity, respect for Indigenous knowledge, and high levels of community engagement.

Values

Ko te mana o Te Whare Wānanga o Waikato ka herea ki tō tātou:
- Tū ngātahi me te Māori
- Mahi pono
- Whakanui i ngā huarahi hou
- Whakarewa i te hiringa i te mahara

The University of Waikato places a high value on:
- Partnership with Māori
- Acting with integrity
- Celebrating diversity
- Promoting creativity

1. GENERAL

The Information Technology Services (ITS) Division is responsible for the coordination of information and communications technology (ICT) planning for the University, the delivery of robust, reliable core ICT infrastructure and enterprise systems, and the provision of professional ICT consultancy and customer focused support services.

The ICT vision is “To engage, enable, innovate and protect our ICT services, and empower the University of Waikato to leverage the value of ICT to achieve its strategic goals.”

2. POSITION PURPOSE

This role provides **technical leadership for End User Computing (EUC)** platforms across the University.

The Principal Infrastructure Engineer is responsible for:

- Designing, implementing, and operating a secure and highly available fleet of desktop environments (Windows, Linux, and macOS)
- Leading automation, configuration management, and modern device management practices
- Ensuring consistent, scalable, and supportable end user platforms
- Supporting integration with cloud identity, security, and infrastructure services

A key aspect of the role is acting as a **technical team leader**, providing direction, standards, and engineering oversight for the EUC team.
This extends to **secondary support of infrastructure platforms**, including Windows and Linux servers, Nutanix environments, and cloud services.

3. FUNCTIONAL RELATIONSHIPS

Internal: ITS Associate Directors, managers, and teams
Chief Information Officer
Vice Chancellors office, Pro-Vice Chancellor (PVC) and Directors
University staff and students

External: External customers utilising University ICT services
Systems vendors and support partners

4. KEY RESPONSIBILITIES

End User Computing Platform Engineering

- Design, implement, and maintain end user computing platforms across Windows, Linux, and macOS environments
- Manage and operate modern device management platforms, including Microsoft Intune, Jamf, and configuration management tools such as Ansible
- Develop and maintain standardised device builds, configuration, and lifecycle management practices
- Ensure endpoint platforms are secure, compliant, and aligned with University standards, including patching, hardening, and policy enforcement
- Monitor endpoint performance, compliance, and user experience, ensuring service levels are met
- Continuously improve end user computing platforms to enhance usability, security, and operational efficiency

Automation and Platform Engineering

- Lead the development and use of automation and scripting (for example PowerShell, Bash, Python) to support endpoint and infrastructure platforms

- Automate provisioning, compliance, and operational processes across end user computing and infrastructure services
- Identify and implement improvements to systems, platforms, and operational practices

Identity, Security, and Endpoint Protection

- Implement and support identity and access integration using Microsoft Entra ID, including authentication, authorisation, MFA, and SSO
- Ensure endpoint platforms are configured and operated in accordance with security standards and industry best practices
- Apply system and endpoint hardening practices aligned to recognised frameworks
- Ensure platforms are patched, secured, and maintained to protect against cyber security threats
- Contribute to the integration and operation of Microsoft security services, including endpoint protection and management tooling

Infrastructure and Cloud Platforms

- Support and maintain infrastructure platforms across virtualised, on-premises, and cloud environments
- Contribute to the design and operation of hybrid cloud environments, including Microsoft Azure and Microsoft 365 services
- Support Windows and Linux server platforms where required
- Contribute to the operation and optimisation of virtualisation platforms, including Nutanix and related technologies
- Provide support across platform boundaries where services interact with end user computing environments

Incident, Problem, and Operational Support

- Respond to service requests and incidents in a timely and professional manner
- Troubleshoot and resolve complex issues across end user computing, infrastructure, and cloud environments
- Perform problem management to identify root causes and implement sustainable fixes
- Ensure ITS and Service Desk are informed of service status, incidents, and major issues

Lifecycle Management and Delivery

- Perform system upgrades, migrations, and platform enhancements across end user computing and infrastructure environments
- Actively manage platform lifecycle to maintain vendor support, reduce technical debt, and optimise cost
- Lead or contribute to project delivery, including technical design, planning, and implementation
- Contribute to solution design, including evaluation of options, cost considerations, and technical trade-offs
- Ensure all changes follow ITS change management processes

Team Contribution and Leadership

- Provide technical leadership, mentoring, and guidance to team members
- Establish and maintain end user computing standards, patterns, and best practices
- Participate in technical design reviews and peer review processes

- Build strong working relationships across ITS and with key stakeholders
- Contribute to solution design, technical consulting, and project scoping

On Call

- Provide 24-hour on-call support for the University's infrastructure and associated support systems
- On-call duty will be rostered amongst the members of the team (approximately 8 times per year)
- When rostered on-call to promptly respond to calls and alerts received via the on-call phone, and triage and problem manage critical after-hours incidents through to resolution

Any other duties as required that are consistent with the position held, other than in exceptional circumstances such as rehabilitation after injury or sickness.

NOTE: Staff have an annual Objectives, Development and Reflection (ODR) meeting with their manager.

5. PERFORMANCE STANDARDS

The Principal Infrastructure Engineer will be performing satisfactorily when:

- End user computing platforms deliver a consistent, secure, and high-quality user experience across supported devices.
- Technical leadership is clearly demonstrated through effective communication, guidance, and collaboration across ITS and the wider University.
- Platform solutions, including end user computing and infrastructure systems, are designed and operated in alignment with ITS architecture, principles, standards, and solution patterns.
- Platforms are managed in accordance with University cyber security standards, with appropriate controls in place to protect systems and data.
- Endpoint and infrastructure platforms are secure, compliant, and consistently maintained, including patching, hardening, and configuration management.
- Availability and performance of platforms meet agreed service levels, with proactive monitoring and timely resolution of issues.
- Incidents and service requests are managed effectively, with services restored within agreed timeframes and complex issues proactively problem managed to resolution.
- Strong problem-solving practices are applied, with root causes identified and addressed to prevent recurrence.
- Platform lifecycle is actively managed to maintain vendor support, reduce technical debt, and ensure long-term sustainability.
- Systems and services are resilient, with appropriate backup, recovery, and continuity capabilities in place.
- Stakeholders, including ITS and Service Desk, are kept informed of service status, incidents, and risks.
- Documentation, system records, and operational procedures are accurate, current, and accessible.
- Changes are implemented in accordance with ITS change management processes and standards.
- Automation and efficient operational practices are adopted to improve consistency, reliability, and team productivity.

- Knowledge is actively shared across the team, contributing to a high-performing and collaborative environment.
- Strategic and critical thinking is demonstrated in both operational and project contexts, including complex problem resolution and platform improvement.
- Positive feedback is received from stakeholders and colleagues, reflecting high-quality service delivery.
- Safe and healthy work practices are consistently followed in line with University policies and statutory requirements.

PERSON SPECIFICATION

EDUCATIONAL QUALIFICATIONS

Essential

- Bachelor's degree or higher in Computer Science or related field, be studying for such qualification, or equivalent relevant work experience.
- Relevant industry certifications of relevance to the role.

Desirable

- Current Microsoft Azure or AWS Certifications.
- RHCSA certification, or similar vendor certification.

SKILLS, KNOWLEDGE and EXPERIENCE

Essential

- Significant experience (typically 5–8+ years) in engineering, supporting, and operating enterprise technology platforms within a complex organisation.
- Strong experience managing end user computing environments, including Windows, Linux, and macOS platforms.
- Hands-on experience with modern device management and endpoint platforms such as Microsoft Intune, Jamf, or equivalent tools
- Strong experience working with Microsoft technologies, including Microsoft 365, Azure, and Microsoft Entra ID.
- Proven capability in implementing and supporting identity and access management, including authentication, authorisation, MFA, and SSO.
- Highly proficient in scripting and automation (for example PowerShell, Bash, Python) to support platform management and operational efficiency.
- Solid understanding of virtualisation and hybrid infrastructure platforms, ideally including Nutanix or similar technologies.
- Experience supporting both endpoint and server platforms, including Windows and Linux systems.
- Strong understanding of platform security, patching, and hardening practices, aligned to recognised standards.
- Experience designing and operating highly available, resilient, and scalable systems.
- Strong analytical and problem-solving skills, with the ability to troubleshoot complex technical issues.
- Effective communication and documentation skills, with the ability to engage both technical and non-technical stakeholders.

Preferred

- Experience with configuration management and automation tools such as Ansible, or similar.
- Experience with backup, recovery, and resilience solutions across on-premises and cloud platforms.
- Familiarity with additional cloud platforms such as AWS or GCP.
- Experience working with enterprise hardware platforms (for example HPE, Dell, or similar infrastructure).
- Experience with database platforms such as Microsoft SQL, MySQL, or PostgreSQL.

- Experience contributing to solution design, project delivery, or technical leadership activities.
- Experience working in a large or complex organisation, ideally within the tertiary sector.

PERSONAL QUALITIES

- Good communication skills, oral and written; ability to communicate with end users as well as technical staff.
- Client focussed and user centred approach.
- Strong problem identification and solving skills.
- Ability to identify improvements, innovate, and implement change.
- Ability to work independently and with the minimum supervision and equally well in a team/project environment.
- Ability to work under pressure for specific periods and maintain performance and meet tight deadlines.
- Attention to detail and thoroughness.
- The capacity to show initiative and judgment.
- Discretion and respect for confidentiality.
- A commitment to a culture of openness, flexibility, and co-operation to achieve excellence
- A commitment to equal opportunity and to the University's partnership with Māori as intended by the Treaty of Waitangi.