

JOB DESCRIPTION

# Engineer eResearch Solutions

<b>ROLE TITLE</b>	Engineer eResearch Solutions
<b>SECTION/DIVISION:</b>	eResearch Support, Digital Division
<b>REPORTS TO:</b>	Group Leader eResearch Solutions
<b>DIRECT REPORTS (FTE):</b>	Nil
<b>INDIRECT REPORTS (FTE):</b>	Nil
<b>PRIMARY PURPOSE OF THE ROLE:</b>	<p>Support, implement and maintain domain-specific research IT systems, servers, storage and software technologies that deliver IT Services and enable many research functions.</p> <p>Working across a variety of platforms and technologies, the role ensures that the client portfolio research services and systems operate efficiently and effectively; are sustainable, resilient, secure, available and agile to meet current demands and changing needs. The position actively contributes to the identification and planning for transitioning of any services and systems that can be hosted by central IT infrastructure services; and provides second and third level support, advice and troubleshooting.</p> <p>A client focused orientation providing excellent service delivery is critical to success in this role</p>
<b>ACCOUNTABILITIES:</b>	<p><b>Customer service support, CSMG: Level 3</b> Acts as the routine contact point, receiving and handling requests for support.</p> <p>Responds to a broad range of service requests for support by providing information to fulfil requests or enable resolution.</p> <p>Provides first line investigation and diagnosis and promptly allocates unresolved issues as appropriate.</p> <p>Assists with the development of standards, and applies these to track, monitor, report, resolve or escalate issues. Contributes to creation of support documentation.</p> <p><b>Application support, ASUP: Level 4</b> Maintains application support processes, and checks that all requests for support are dealt with according to agreed procedures.</p> <p>Uses application management software and tools to investigate issues, collect performance statistics and create reports.</p> <p><b>Problem management, PBMG: Level 4</b> Initiates and monitors actions to investigate and resolve problems in systems, processes and services.</p> <p>Determines problem fixes and remedies.</p> <p>Collaborates with others to implemented agreed remedies and preventative measures.</p>

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Supports analysis of patterns and trends to improve problem management processes.

**Incident management, USUP: Level 4**

Ensures that incidents are handled according to agreed procedures.

Prioritises and diagnoses incidents. Investigates causes of incidents and seeks resolution. Escalates unresolved incidents.

Facilitates recovery, following resolution of incidents. Documents and closes resolved incidents.

Contributes to testing and improving incident management procedures.

**IT infrastructure, ITOP: Level 4**

Provides technical expertise to enable the correct application of operational procedures.

Contributes to the planning and implementation of infrastructure maintenance and updates. Implements agreed infrastructure changes and maintenance routines.

Uses infrastructure management tools to determine load and performance statistics. Configures tools and/or creates scripts to automate the provisioning, testing and deployment of new and changed infrastructure. Maintains operational procedures and checks that they are executed following agreed standards.

Investigates and enables the resolution of operational issues. Provides reports and proposals for improvement, to specialists, users and managers.

**Software configuration, PORT: Level 4**

Designs, verifies, documents, amends and refactors complex software configurations for deployment.

Contributes to the selection of the software configuration 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.

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**KEY RELATIONSHIPS:**

Internal

Managers, staff and students, particularly researchers, including postgraduate students and teaching staff  
Digital Division staff

External

University and industry peers  
Vendors, service providers, and contractors

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**QUALIFICATIONS AND EXPERIENCE:**

Essential

Tertiary level qualification in a relevant discipline or recognised qualification(s) appropriate to the role.  
Proven experience in a medium sized environment supporting server operating systems, including installation, configuration, troubleshooting and upgrades.  
Proven experience with and knowledge of infrastructural systems, scripting languages, algorithms and research computing environments.  
Good knowledge of a range of operating systems, their platforms and their network interactions.

Preferred

Tertiary level IT qualification.  
Proven experience supporting multiple platforms and environments.

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	<p>Proven experience with server-based applications; and/or enterprise range server and desktop computer hardware and high-performance computing/large scale computing environments.</p> <p>Proven experience and knowledge of system and directory security (e.g. intrusion detection systems); data backup/recovery; and disaster recovery processes.</p> <p>ITIL certification.</p>
<b>TECHNICAL SKILLS AND KNOWLEDGE:</b>	<p><u>Essential</u></p> <p>Knowledge of Server class hardware</p> <p>Knowledge of programming/command scripting languages such as Powershell, Python, PERL, PHP, .NET, shell scripting</p> <p>Configuration and installation of services and software from source code</p> <p><u>Preferred</u></p> <p>Experience in 3 or more of the following:</p> <ul style="list-style-type: none"> <li>• Server OS's: Windows Server &amp; RHEL Linux.</li> <li>• Desktop OS's: Windows, Mac OSX, Fedora and Ubuntu Linux</li> <li>• Web Servers (IIS, Apache)</li> <li>• Network protocols and technologies including DHCP, DNS and firewalls</li> <li>• SAN technologies</li> <li>• Industry training or certification in one or more of the following: Microsoft Certified Solutions Expert (MCSE), Red Hat Certified Engineer (RHCE)</li> <li>• Windows and Linux Server administration in a research/teaching systems environment.</li> <li>• Container technologies (Singularity, Kubernetes, docker, podman etc)</li> <li>• GPU Computing (CUDA, OpenCL)</li> </ul>
<b>SPECIAL REQUIREMENTS:</b>	<p>May work across one or more portfolios / practice areas. Contribute as part of a network of IT Services staff to provide suitable coverage during periods of leave, peak period activities and to cater for university and customer requirements. May need to be available at short notice to participate in the response to unplanned service affecting events. Support of scheduled after hours work may be required on occasion. Provide service and support to the University of Otago satellite campuses as and when required.</p> <p>At the University, we are required to be compliant with the Public Records Act 2005 and Privacy Act 2020. Staff are expected to participate in available training to understand these requirements and effectively manage information accordingly.</p>
<b>DIRECT BUDGET ACCOUNTABILITY:</b>	Nil
<b>MĀORI STRATEGIC FRAMEWORK:</b>	Act in a manner consistent with the principles and implications, as well as the University's commitment to the Treaty as articulated in the Māori Strategic Framework.
<b>PACIFIC STRATEGIC FRAMEWORK:</b>	Act in a manner consistent with the strategies and goals contained in the University's Pacific Strategic Framework, role-modelling and promoting Pacific values, equity and diversity principles and cultural safety practices.
<b>HEALTH AND SAFETY:</b>	Act and work in a manner compliant with current health and safety at work legislation and University procedures, frameworks and guidelines. Role model safe behaviour and practices, share the responsibility to prevent harm and contribute to a safe campus and work environment, including raising workplace health and safety concerns for self, students, visitors and other staff.
<b>SUSTAINABILITY:</b>	Act in a manner consistent with the University's sustainability commitments; role-modelling sustainable practices, with a particular emphasis on minimising the environmental impact of day-to-day activities.

## SKILLS FRAMEWORK FOR THE INFORMATION AGE (SFIA)

### Engineer eResearch Solutions

Role Type: Engineer

#### SFIA Levels of responsibility

Autonomy	4	Influence	4	Complexity	5	Business Skills	5	Knowledge	4
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#### SFIA Skills Profile

Category	Subcategory	Skill	Code	L1	L2	L3	L4	L5	L6	L7
Relationships and engagement	Stakeholder management	Customer service support	CSMG							
Delivery and operation	Technology management	Application support	ASUP							
Delivery and operation	Service management	Problem management	PBMG							
Delivery and operation	Service management	Incident management	USUP							
Delivery and operation	Technology management	IT infrastructure	ITOP							
Development and implementation	Systems development	Software configuration	PORT							

<https://help.sfia.nz/hc/en-nz/sections/4407230514201-Levels-of-responsibility>

<https://sfia-online.org/en/sfia-8/sfia-views/full-framework-view?path=/glance>