Digital Preservation Technical Specialist

Preservation, Research and Consultancy, IKS

The primary purpose of the Digital Preservation Technical Specialist is to provide high-level technical services and specialist advice related to digital preservation.

This person is responsible for co-administrating the technical infrastructure, systems and operations of the National Digital Heritage Archive (NDHA) digital preservation programme. This programme supports the development and accessibility of digital collections within the National Library and is responsible for their long-term safekeeping.

This person works very closely with Technology Services and Solutions (TSS), with vendors, and with staff across the Library and at the Archives New Zealand.

- **Reporting to**: Digital Preservation Manager
- **Location:** Wellington
- **Salary range**: Information Management I ($86,866 - $117,525)

What we do matters – our purpose

Our purpose is to serve and connect people, communities and government to build a safe, prosperous and respected nation.

In other words, it's all about helping to make New Zealand better for New Zealanders.

How we do things around here – our principles

We make it easy, we make it work
- Customer centred
- Make things even better

We're stronger together
- Work as a team
- Value each other

We take pride in what we do
- Make a positive difference
- Strive for excellence

Working effectively with Māori

Te Aka Taiwhenua – our Māori Strategic Framework – enables us to work effectively with Māori. Te Aka Taiwhenua is underpinned by our mātāpono – Kotahitanga, Manaakitanga, Whānaungatanga, He Tāngata.

As DIA is an agent of the Crown, Te Tiriti o Waitangi/The Treaty of Waitangi is important to everything we say or do. We recognise it as an enduring document central to New Zealand's past, present and future. Building and maintaining meaningful relationships is important to work effectively with Māori, stakeholders and other agencies. We accept our privileged role and responsibility of holding and protecting the Treaty of Waitangi / Te Tiriti o Waitangi.

What you will do to contribute	As a result we will see
Co-management of Digital Preservation systems and processes • Work closely with the other Digital Preservation Technical Specialist to provide redundancy in all aspects of configuration, business support and system monitoring and resolution for the Library's digital preservation systems. • Contribute to the on-going management and maintenance of the Rosetta system including implementing Rosetta version releases with special responsibility for testing and troubleshooting back-end processes and systems. • Work with all relevant parties within the Library, Archives NZ and DIA to prepare requirements, designs, enhancement plans/roadmaps and documentation for system enhancements including the hardware, software, processes, workflows and interactions with other systems. • Contribute to the NDHA's content processing to validate, virus-check, fixity-check, create access copies, extract metadata, etc. through the administration of tools and writing of scripts. • Develop appropriate documentation and work plans.	• The Library's digital preservation programme will have at its core repository infrastructure, tools and processes that are well-monitored, managed and documented. • Proactive plans for enhancing the NDHA's technical infrastructure and tools • The Library will have fully documented systems and procedures related to the digital preservation programme.
Problem resolution • Identify bottlenecks in the NDHA system (deposit, ingest, storage, delivery, etc.) and work with relevant parties to resolve them. • Provide in-depth technical analysis for resolution of issues with digital preservation systems (applications, hardware and software). • Manage, prioritise and resolve complex technical issues relating to all aspects of the preservation repository including applications and related infrastructure, in conjunction with TSS and vendors where appropriate. • Prioritise issues and provide effective solutions within agreed service levels, following best practice and adhering to international standards. • Use agreed change management procedures to document, gain approval for, schedule and track changes to minimise risk and impact. • Update internal and external clients and colleagues on the status of all issues on a timely basis.	• The NDHA's technical issues are quickly identified and resolved. • Library and Archives NZ staff users of the NDHA are well-informed about the status of NDHA issues, outages, upgrades, etc.

What you will do to contribute	As a result we will see
Continuous improvement • Ensure that a process of continuous review and improvement is inherent throughout all elements of the digital preservation programme. • Draw on knowledge of best practice, advances in technology, and relevant research to develop an informed view of technical trends, opportunities and challenges in digital preservation.	• The Library's digital preservation programme remains viable, relevant and up-to-date with best practices.
Liaison and collaboration • Liaise with Archives New Zealand staff to support the long-term preservation of the public record. • Liaise with TSS, vendors and third parties to acquire and maintain technical infrastructure and tools. • Work with other digital preservation staff and related roles in the Library and Archives New Zealand to identify and resolve technical challenges in the digital preservation domain and to ensure the organisation is maximising use of the systems and tools available. • Contribute to a collaborative environment (including national and international fora/projects) which enables effective engagement in shared investigations, pilots, trials and research projects in digital preservation. • Collaborate with and participate in national and global digital preservation forums on technical matters, including other Rosetta users (e.g. system capabilities, performance, indexing etc). • Proactively share knowledge, experience and ideas. • Model behaviours that encourage collaboration and learning to increase awareness and practice of digital preservation and maximise effectiveness.	• The PRC has good working relationships with Archives NZ, TSS, vendors, relevant third parties and throughout the Library. • The Library contributes to and learns from the national and global digital preservation community. • The Library participates within the Rosetta User Group, a network of Rosetta users sharing knowledge and tools.
Health and safety (for self) • Work safely and take responsibility for keeping self and colleagues free from harm • Report all incidents and hazards promptly • Know what to do in the event of an emergency • Cooperate in implementing return to work plans	• A safe and healthy workplace for all people using our sites as a place of work • Health and safety guidelines are followed

Who you will work with to get the job done		Advise	Collaborate with	Influence	Inform	Manage/ lead	Deliver to
Internal	Managers and staff involved in digital acquisition, content management and description, access restriction, access provision	✓	✓	✓	✓		✓
	Managers, staff and specialists involved in digital preservation at the Library and Archives NZ	✓	✓	✓	✓		✓
	Library and Archives NZ staff involved in depositing to the NDHA	✓	✓	✓	✓		✓
	Technical staff in DIA	✓	✓	✓	✓		
External	Technical service providers and vendors	✓	✓	✓	✓		
	Organisations requiring digital preservation services or advice	✓	✓	✓	✓		✓
	International peers	✓	✓	✓	✓		✓

Your delegations

Human Resources and financial delegations	Nil
Direct reports	Nil

Your success profile for this role

At DIA, we have a Capability Framework to help guide our people towards the behaviours and skills needed to be successful. The core success profile for this role is Specialist.

Keys to Success:
- Problem solving
- Critical thinking
- Interpersonal savvy
- Navigating complexity
- Communicating with influence
- Technical and specialist learning

What you will bring specifically

Experience:
- Experience administrating complex technical applications
- Experience with digital preservation systems or similar (e.g. digital asset management systems, data repositories)
- Experience with managing system performance and scalability
- Experience writing shell or other scripts (Python an advantage)
- Experience with Unix/Linux systems and command line
- The following experience would be an advantage:
  - Querying databases, especially Oracle
  - Large-scale indexing, data warehousing
  - Project planning and project management

Knowledge:

Your success profile for this role	What you will bring specifically
	• Basic concepts, processes and tools of digital preservation
	• XML and XML schemas
	• An understanding of the strategies for encoding preservation metadata in digital preservation systems (e.g. PREMIS)
	• An understanding of storage and network technologies
	• The following knowledge would be an advantage:
	◦ Understanding of multiple formats, e.g. text, image, sound, software, multimedia, database, geographical information system, video
	◦ Familiarity with Java programming
	Skills:
	• Troubleshooting technical problems using a variety of resources and tools
	• Ability to communicate complex technical ideas in simple language
	• Ability to create high-quality documentation
	• Ability to work across multiple teams and disciplines.
	• Excellent written and oral communication skills
	• Proven ability to develop and deliver effective solutions and achieve results
	Other requirements:
	• Tertiary qualification in information technology / computer science / information science or equivalent including at least 3 years relevant work experience.