



Position Description DNS SYSTEMS SPECIALIST

Background

New Zealand Domain Name Registry, trading as NZ Registry Services (NZRS) operates the registry and Domain Name Service (DNS) for the .nz domain name space.

NZRS's Vision Statement "Excellence in registry management through superior service and the innovative application of technology" and its Mission Statement "To provide a robust, reliable registry enabling people, entities and communities to access the internet" are cornerstones to the culture and the aims of NZRS.

NZRS supports the aims of its shareholder (InternetNZ) to foster co-ordinated and co-operative development of the Internet in New Zealand. The Society works to safeguard the Internet's philosophy of open and uncensored exchange of information. InternetNZ is responsible for the management of the New Zealand (.nz) domain name space.

Purpose

The role of the DNS Systems Specialist will range from the day to day support and management of NZRS's DNS infrastructure to the research, planning and implementing of upgrades/additions to the DNS system. The DNS Systems Specialist will also initiate and undertake new projects related to improving and enhancing the DNS systems or introducing new DNS related technologies. This position will require a thorough understanding of DNS (including DNSSEC), particularly with respect to the BIND nameserver software.

Key Responsibilities

The DNS Systems Specialist will take day to day operational direction from the Chief Technical Officer, and will report to the Chief Technical Officer on personnel issues.

Responsibilities include but are not limited to:

- Undertake new projects - design, development and project management of DNS technology projects
- Research, investigate, evaluate and report on DNS related equipment, systems, software, processes and standards
- The integrity/quality of the DNS data
- The reliability and performance of the DNS infrastructure
- Investigation and analysis of issues, problems, quality and process improvement

- Definition and Testing of modifications to the DNS systems
- Supporting the operating of the DNS in line with industry best practice and the agreed service level agreements
- Monitoring the activity on the DNS (regular and irregular activity)
- Providing reports for the Chief Technical Officer including ad hoc and regular requirements
- Adhering to and implementing company decisions and policies as set from time to time
- Assist the Chief Technical Officer with the overseeing of the registry systems, including networking
- Other Duties as reasonably specified from time to time

DNS Systems Specialist - Dimensions

Relationships

- Successful management of the DNS will depend in part on the ability of the DNS Systems Specialist to have relationships primarily with the outsourcing supplier partner.

Risk Management

The DNS Systems Specialist will bring to the attention of the Chief Technical Officer, any Risks that have been identified in relation to the DNS and assist in the development of a range of risk management and mitigation strategies to address these.

Other

Given the small size of the registry, the DNS Systems Specialist will be required to devote as much time as necessary to fulfill the requirements of the position in an outstanding way. The DNS Systems Specialist will be required to provide back up support to the Shared Registry Systems (SRS). This will include being accessible outside core office hours.

Key Competencies

The DNS Systems Specialist will be expected to demonstrate the following competencies:

Technical Knowledge and Skills

Essential

- Operational knowledge of the DNS protocol

- Experience with BIND and related tools
- UNIX and networking experience preferably, Debian and Ubuntu Linux Servers
- 3+ years experience in system administrator roles
- Database set-up/admin experience, preferably PostgreSQL
- Monitoring systems - Cacti, Nagios
- Network Architecture ipv4 and ipv6
- Routing protocols and router configuration (Juniper, Cisco)
- Network security including, firewalls, intrusion detection, anti-spam and vulnerability testing
- Good knowledge of system security issues/solutions

Useful

- Web application development
- HTML/XML/ JavaScript/ JSON
- Scripting skills in Shell, Perl, Awk, Python or Ruby
- Experience with revision control systems such as CVS and GIT
- Linux/Apache web server set-up/admin experience
- OpenVPN
- Experience with other DNS software such as NSD, Unbound, and PowerDNS
- Experience with networking equipment like switches and access points

Analysis and Judgement

Is able to understand a problem, identify and use relevant information in analysis of the issues and apply reason to reach conclusions from which practical solutions are derived.

Managing Relationships

Is able to develop and maintain credible and effective working relationships with others.

Managing Customers

Is able to identify and manage the needs and expectations of customers. Is focused on improving service quality.

Communication

Is able to effectively communicate, both orally and in writing, and present to different audiences. An open and honest communicator who is able to present effective arguments to influence others.

Managing Resources

Works with the Chief Technical Officer to plan, schedule, organise and make effective use of resources to achieve objectives and meet deadlines consistently. This includes time-management, consistently demonstrating personal effectiveness in work attitude and self-management.

Quantitative Analysis

Is able to understand and evaluate numerical and statistical data, and identify trends and patterns.

The personal attributes for this role are:

- A willingness to learn
- Maturity
- Initiative
- A Structured approach to their work

This DNS Systems Specialist Position Description should be read in conjunction with NZRS Staff Policy as set down by NZRS from time to time.