JOB DESCRIPTION

Job Title: Network Engineer

Job Grade/Level: MIS/IT 5

1. STRATEGIC OBJECTIVE:

The Information and Technology Division is responsible for providing support to the Treasury in all areas of operations, facilitating the modernization of fiscal processes through the use of better methods and techniques, and cutting edge information technology. The work of this division improves the acquisition, allocation, utilisation and conservation of public financial resources using automated, integrated, effective, efficient and cost effective information systems.

The Division is responsible for the development and maintenance of the Government Financial Management System GFMS. It is also responsible for training the AGD's staff as well as staff of the MOFPS and other MDAs in the use and functions of the relevant IT systems, guided by recognized standards and formal policy.

The Division is also responsible for the implementation and maintenance of the AGD's Records Management System (RMS) as part of the overall management system, based on records management principles, to facilitate the management of the AGD's records to meet the AGD's information needs, stakeholders' information expectations, and statutory and fiscal requirements regarding records.

2. JOB PURPOSE:

Reporting to the Manager Infrastructure Operations, the Network Engineer is responsible for designing, developing, implementing, maintaining and supporting scalable and highly available network architectures/communication networks that support the operations of the AGD.

The incumbent monitors and maintains network performance as well as configures switches and network appliances for optimal performance and troubleshooting network problems. The incumbent will also be responsible for maintaining all Voice Over IP (VOIP) infrastructure, identifying and defining network related requirements to ensure consistency in the reliability, performance and quality of network systems.

Summary of the broad purpose of the position in relation to Government's goals and strategies:

- To establish a reliable networking environment by ensuring that connecting nodes within the network are performing optimally.

- To maximize network efficiency by monitoring performance; troubleshooting network problems and outages; scheduling upgrades; collaborating with Network Architects on network optimization.
- To secure network systems by establishing and enforcing policies, and defining and monitoring access.
- To report network operational status.

3. KEY OUTPUTS

- Relevant technical advice provided
- Effective technical analysis performed on network requirements
- Communication networks designed, developed, implemented and maintained
- Reports developed based on analysis of network performance and security
- Network resources captured and monitored
- Participation in negotiations with vendors for replacement/new IT solutions
- Bid evaluation reports provided
- Periodic reports provided
- Network systems secured from intrusions, cyber -attacks and virus/malwares.

4. KEY RESPONSIBILITIES

Technical

- Configures and installs network devices (e.g., routers, switches, firewalls, load balancers).
- Assesses system requirements and designs Local & Wide Area Network infrastructure.
- Designs, develops and implements safe, effective and reliable communication networks.
- Ensures network connectivity of all servers, workstations, telephony equipment, and other network equipment.
- Ensures bandwidth availability for application systems.
- Selects and implements security tools, policies, and procedures in conjunction with the company's security team.
- Ensures that security levels are adhered to based on security policy and guidelines.
- Performs network maintenance and system upgrades including service packs, patches, hot fixes and security configurations.
- Monitors network performance and troubleshoots problem areas as needed.
- Monitors and tests network performance and provides and analyses network performance statistics and reports to ensure system availability and reliability.
- Provides Level-2/3 support and troubleshoots to resolve issues.
- Liaises with vendors and other IT personnel for problem resolution.
- Liaises with vendors of various information technology systems in determining relevant technologies and their suitability.

- Assists in the technical evaluation of bids from vendors/contractors for the supply and/or installation of products and/or services.
- Liaises with contractors for the proper installation and servicing of communication networks.
- Monitors and manages the implementation activities of vendors/suppliers.
- Tests network systems to ensure that a quality solution is accepted.
- Conducts research on technology trends and submits reports and recommendations on significant findings for follow-up evaluation.
- Monitors and captures relevant network statistics and resource utilisation using available tools.
- Monitors network utilisation trends.
- Prepares capacity plans based on network trends.
- Builds and maintains relationships with all internal units.
- Works together with other units and divisions within the organization to identify any process improvements and improve standards, efficiency and effectiveness.
- Ensures awareness, approval and success of changes made to the network infrastructure, to include documentation and training.
- Prepares periodic reports as required.
- Signs job description and individual work plans.
- Any other related duty that may be assigned from time to time.

5. KEY PERFORMANCE INDICATORS

The job is successfully performed when:

- Accurate and timely technical advice is provided.
- Network infrastructure platforms designed and implemented.
- Support network infrastructure for all systems.
- Comprehensive training prepared and delivered within required timeframe.
- Technical end user documentation prepared and delivered within required timeframe.
- Networking policies, standards and configuration parameters are reliable, accurate and conforms to applicable standards and best practices.
- Specification documents and changes/updates to the production environment are accurate and reliable.
- Communication networks are reliable and conform to applicable standards and best practices.
- Work of external parties conforms and meets design requirements and complies with terms of reference.
- Reports provided as required within stipulated timelines.
- Recommendations and configuration changes made are in conformance with the company's guidelines and methodologies.
- Best prices negotiated with vendors for best value.
- Tender/bid evaluation reports are submitted within required timelines.

6. REQUIREMENTS FOR THIS JOB:

a. Qualification and Training

Essential:
- Bachelor of Science degree in Computer Science OR equivalent from a recognized tertiary institution
- Training in Network and Systems Management

Desirable:
- Cisco Certified Network Associate (CCNA) or equivalent certification in Network design and troubleshooting

b. Essential Experience and Knowledge

- At least 2 years' experience, in Network Engineering or a related technical IT position.
- Demonstrated ability to apply technology solutions to business problems.
- Proven experience in technology enhancement, and vendor management.
- Experience in WAN/LAN design, configuration and maintenance.
- Deep understanding of networking protocols.
- Hands-on experience with monitoring, network diagnostic and network analytics tools.
- Experience in Data Centre Operations, telecommunications, network engineering, client/server computing, and production operations support.
- Experience in related IT disciplines such as data management, network administration and outsourced systems.
- A deep understanding of the interdependent relationship between infrastructure, information security and the applications/services they enable as well as the criticality of maintaining strong connections between the respective teams within IT.
- Excellent understanding of multi-disciplinary nature of IT solutions.
- Ability to see the "big picture" across such areas as private and public hosted infrastructure and services, identity management, security, telecommunications, enterprise storage, end user experience, and training/education.
- Sound understanding of project management principles and their application to Infrastructure projects and teams.

c. Competencies

The following competencies are required for the effective performance of this job:

Core Competencies
- Good Oral and Written Communication Skills
- Good Problem Solving and Analytical Skills
- Good Customer Focus Skills

- Results Focus
- Integrity

Technical Competencies
- Good knowledge of Information Technology Principles
- Good knowledge of Legislations, Policies and Procedures

7. SPECIAL CONDITIONS ASSOCIATED WITH THE JOB

Physical Demands - Pressured working conditions with numerous critical deadlines.

Work Environment - Normal office conditions