



IDENTIFICATION

Department	Position Title	
Finance	Network Infrastructure Team Lead	
Position Number	Community	Division/Region
15-11489	Yellowknife	Technology Service Centre (TSC)

PURPOSE OF THE POSITION

The Network Infrastructure Team Lead is responsible for leading a diverse team of specialists to oversee and maintain the Government of the Northwest Territories (GNWT) data network infrastructure to protect this critical resource to meet the demanding performance requirements of all GNWT departments as well as some of its boards and agencies and provide all employees with secure, robust and reliable access to all systems, data and business applications they require to work in an efficient and effective manner.

SCOPE

Located in Yellowknife and reporting to the Manager, Infrastructure Services, the Network Infrastructure Team Lead provides leadership to and oversees the highly skilled professional team responsible for the planning, operation, and maintenance of the GNWT data network Services and its associated administration and management of these enterprise level assets.

The incumbent is the foremost expert in the GNWT on data network services and the associated hardware, software, and systems. The incumbent is responsible for overseeing the planning, designing, creation, amending, verification, testing and documentation of new and amended data network systems and to deliver the agreed upon services to all clients. This role requires the knowledge to manage and understand highly technical concepts such as complex data network architecture design; industry best practices; data assurance; hardware and software lifecycle management; security standards, access controls and privacy requirements.

The Technology Service Centre (TSC) provides leadership and expertise to all departments of the GNWT, as well as some boards and agencies, in all regions and all 33 communities across the NWT, on matters related to the government wide area data network, servers, storage, data center



facilities, all government information technology infrastructure, communication systems and their technical support in order that employees have continual access to the workplace functions they require to do their jobs in an efficient and effective manner. Services are provided in accordance with a framework of operating procedures and guidelines established within the TSC, and with standards developed in conjunction with the Office of the Chief Information Officer (OCIO) and GNWT standards committees.

The Division promotes the efficient and effective use of government technology resources through education and outreach and collaborates with a variety of internal and external partners to maximize the benefits of investments made by the GNWT. The specific technologies, practices and approaches employed in delivering these services are evolving at a rapid pace and the TSC must monitor advances in technology and evaluate options routinely to improve services and provide the policy framework to support the ongoing requirements. Furthermore, as a fee for service model utilizing service level agreements with client departments, the TSC faces significant pressure to keep systems operational, secure, and technologically advanced while also cost effective to successfully meet the objectives of the GNWT departments, boards and agencies it serves.

Local Area Network (LAN), Municipal Area Network (MAN) and Wide Area Network (WAN) services are used 24 hours a day, 365 days a year to transmit critical data that impacts on all areas of the GNWT. Data Network services are delivered to approximately 6,100 employees of the GNWT and its health authorities, education boards, agencies, and schools (clients). These services include, but is not limited to, LAN, MAN, WAN, Internet Services, Network Infrastructure Security, Internet Protocol (IP) Based Phone Services and the delivery of department and program specific business applications. System interruptions, issues and outages can have a highly detrimental, and possibility catastrophic, impact on the ability of GNWT departments, boards, and agencies to deliver programs and services.

RESPONSIBILITIES

1. Lead the planning, design, development, and adoption of appropriate data network infrastructure to provide standardized management and administration of a robust and resilient GNWT data network service.

- Provide the GNWT with strategic advice on data network infrastructure needs to maintain a well-coordinated data network architecture strategy that meet the overall priorities of the TSC and is based on client needs and requirements.
- Plan, lead and evaluate the development and adoption of appropriate data network services infrastructure, tools, techniques, documents, and processes.
- Establish and oversee service delivery and associated documentation standards, processes, and procedures.
- Lead the development and maintenance of complete documentation for all TSC data



network services.

- Provide strategic and technical advice and leadership in data network services administration and maintenance.
- Define and direct the implementation of individualized procedures and processes used by the Network Infrastructure Team.
- Identify and define business requirements and research and determine solutions to sustain/enhance the effective and efficient delivery of data network infrastructure.
- Contribute to the content of Requests for Proposals (RFPs) and Tenders for hardware, software, and services for the data network infrastructure.

2. Lead, investigate, coordinate, and evaluate the resolution of critical and emerging data network services issues and incidents to provide the on-going provision of services.

- Define, implement, and monitor the setting of priorities for responding to incidents related to data network services and follow these priorities consistently throughout the GNWT and its agencies.
- Plan tactically as required to address planned and unplanned service outages or to respond to operational or environmental requirements.
- Diagnose overall service delivery issues and recommend actions to maintain or improve levels of service.
- Provide technical expertise and direction for Tier 3 troubleshooting for data network services problems, in collaboration with other TSC staff, as well as department staff as appropriate.
- Resolve complex Tier 3 data network services issues including assigning tasks to other Network Infrastructure Team members.
- Build collaborative relationships with other sections within the TSC and OCIO to facilitate communication response to service issues and that this service issues and incidents and their resolution are communicated to clients.
- Oversee the development of installation checklists, troubleshooting guidelines and documentation.
- Lead the review of complex data network problems with the appropriate TSC managers and with third party suppliers to develop solutions.

3. Lead the design, implementation, and evaluation of enterprise level projects to meet the needs of the client departments and end users.

- Work with client departments to determine and/or clarify project parameters, specifications, and desired outcomes.
- Conduct enterprise level project planning and design including designing the data network services architecture, preparing project implementation and management plans, and identifying required technical, systems and human resources.
- Innovatively apply knowledge to complex technical situations and make sound decisions considering the impact across the TSC and/or on its clients.



- Direct the installation of new hardware and operating systems or other software including allocating and overseeing tasks to Network Infrastructure Team members and/or staff in TSC and from other divisions as required.
 - Oversee the completion of testing and documentation of the hardware and software including allocating tasks as appropriate.
 - Monitor and evaluate the results of the project to meet the required outcomes, seek feedback and adjust as necessary.
- 4. Establish and maintain data network risk management techniques and procedures in support of the TSC infrastructure risk management plan for the protection and security of critical and private information.**
- Plan and lead the implementation and maintenance of risk identification, risk mitigation and risk response activities.
 - Oversee the implementation of security policies and practices to provide a robust and proactive approach to core infrastructure hardware and software.
 - Oversee data network services security activities such that only approved and authorized access to the network occurs.
 - Partner with the OCIO Security Team, TSC colleagues, and contractors to provide GNWT IT infrastructure that is effectively configured and patched against known and emerging security threats.
 - Remain current on emerging security threats, build awareness, and provide clients with timely and relevant security training.
 - Respond promptly to security threats or incidents and work with the OCIO, TSC colleagues, and contractors to resolve and/or mitigate the threats.
 - Participate in the planning and implementation of disaster recovery plans.
- 5. Monitor, evaluate and report on the effectiveness of Server and Storage services hardware, software, and services.**
- Monitor, evaluate and report on usage and capacity.
 - Identify areas for immediate and/or continuous improvement.
 - Develop and implement Quality Assurance models and feedback for continuous improvement.
 - Provide reports on data network services effectiveness, including metrics on response times, availability of key services i.e., application and website hosting, email services, network access and the delivery of program specific applications.
 - Develop data network services utilization and trending reports to proactively forecast necessary data network upgrades or replacements.
 - Maintain consistency and accuracy of appropriate records on data network maintenance and installations.



6. Manage the human and financial resources of the Network Infrastructure Team, including contractors.

- Supervise and manage nine full time positions, plus casual staff, and contractors.
- Supervise the planning and installation of data network services across the GNWT and its agencies.
- Provide leadership to the Network Infrastructure Team.
- Facilitate effective and collaborative working relationships between team members and with client departments, service providers and end users.
- Establish, review, and maintain efficient and effective operational methods, procedures and facilities to support the day-to-day functioning of the team and its infrastructure.
- Develop team's annual work plans and establish short- and long-term objectives to meet operational requirements and priorities.
- Set performance targets and monitor progress against agreed quality and performance criteria.
- Allocate responsibilities and/or packages of work, including supervisory responsibilities.
- Analyse and adjust teamwork plans and workloads as required for continuous improvements and to meet critical and/or emerging issues impacting data network services on a government wide or department specific basis.
- Perform staff appraisals, provide effective feedback, throughout the performance management cycle and participate in team staffing and disciplinary procedures.
- Mentor and develop staff, providing support, guidance, training, and cross training to support professional development and team efficiency and effectiveness.
- Inform staff about governmental, departmental, and divisional priorities and processes.
- Forecast and manage the team's budget.
- Provide staff with access to necessary resources, supplies, equipment, and information.
- Prepare terms of reference and statements of work to direct contractors.

WORKING CONDITIONS

Physical Demands

Consistent with the typical GNWT office environment while working in the office.

Environmental Conditions

Consistent with the typical GNWT office environment while working in the office. On average, 10-20% of the incumbent's work time is spent in the data centre. When working in the server room, the incumbent is exposed to background noise and to temperatures that are cooler than the normal office environment.



Sensory Demands

The incumbent typically spends long periods of time looking at computer screens during work hours and will often be required to use the combined senses of sight and touch while installing hardware components into network infrastructure. This combined use of senses may cause moderate levels of sensory demands on the incumbent for short periods of time.

Mental Demands

The incumbent is required to address service incidents that may heavily impact the operation of the GNWT, and therefore may require rapid response and resumption of service. These incidents may occur any time, 24 hours a day, 365 days a year.

Mental fatigue is common because of the heavy workload, balancing competing priorities, sorting through conflicting information, the periodic need for intense analytical work and the pressures of complex projects often impacted by tight deadlines. Unexpected demands, competing demands and ambiguity frequently add to the stress and mental fatigue.

The incumbent may be required to be on-call for extended periods or on a rotational basis 24/7 to fulfill the above requirements.

KNOWLEDGE, SKILLS, AND ABILITIES

- Technical knowledge that enables the incumbent to participate effectively in the troubleshooting of problems involving hardware and software, including performance issues; skilled in troubleshooting and diagnosing complex network problems.
- Technical knowledge of technologies found in either Windows or Unix based servers and their tuning, securing and optimization.
- Technical knowledge of network hardware and software technologies and their tuning, securing and optimization.
- Technical knowledge of security and privacy controls as they relate to networks, and the ability to recognize and mitigate risk.
- Technical knowledge of risk analysis, disaster recovery, planning and an ability to design and lead effective event simulations.
- Technical knowledge of capacity planning as it relates to networks and supporting infrastructure.
- Technical knowledge of data communications principles, hardware, software, and best practices.
- Knowledge of and ability to implement processes in accordance with the Information Technology Infrastructure Library (ITIL).
- Ability to apply Incident Management, Change Management, Configuration Management, Release Management and Problem Management practices.
- Knowledge of Project Management practices and how to apply them effectively.



- Communication and interpersonal skills (oral, written and presentation skills) and an ability to explain technical issues using appropriate terminology based on audience.
- Ability to effectively facilitate collaboration between stakeholders, IT professional and business units to design solutions that address their business needs.
- Ability to adapt tactics to fit different situations or clients.
- Proficiency in asking a series of probing questions to get at the root of a situation or problem, below the surface of issues presented.
- Proficiency in breaking complex technical problems into pieces and link the pieces together in logical order (i.e., A leads to B).
- Ability to use knowledge of IT theory or of past trends or situations to look at new problems, including applying and modifying complex learned concepts or methods appropriately.
- Ability to participate willingly and support team decisions and do an equitable share of the work; including sharing all relevant and useful information obtained with the team.
- Ability to promote buy-in by team members to a group's mission, goals, agenda, climate, tone, and policies.
- Ability to give specific positive and constructive feedback for developmental purposes, including giving constructive feedback in behavioral rather than personal terms, and expressing positive expectations for future performance.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion, and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

A bachelor's degree in computer science, information systems or a related field and three years of experience in the IT industry with one year of supervisory or leadership experience.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

A valid Canadian Driver's License, equivalent to NWT Class 5 or better.

Position Security (check one)

- No criminal records check required
- Position of Trust – criminal records check required
- Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applicable)

- French required (must identify required level below)
Level required for this Designated Position is:



ORAL EXPRESSION AND COMPREHENSION

Basic (B) Intermediate (I) Advanced (A)

READING COMPREHENSION:

Basic (B) Intermediate (I) Advanced (A)

WRITING SKILLS:

Basic (B) Intermediate (I) Advanced (A)

French preferred

Indigenous language: Select language

Required

Preferred