



IDENTIFICATION

Department	Position Title	
Finance	Senior Telecom Infrastructure Analyst	
Position Number	Community	Division/Region
15-16858	Yellowknife	Technology Service Centre (TSC)

PURPOSE OF THE POSITION

The Senior Telecom Infrastructure Analyst plays a key role in solution analysis and decision-making regarding implementation, performance, management, design of the Government of the Northwest Territories (GNWT) telecommunications IP-PBX system, as well as the mobile device management and security infrastructure. This position also provides critical operational support services by monitoring and managing this infrastructure to provide secure, robust, and reliable telecommunications service to the GNWT, as well as certain boards and agencies.

SCOPE

Located in Yellowknife and reporting to the Manager, Corporate IT Projects and Planning, the Senior Telecom Infrastructure Analyst undertakes the analysis, planning, maintenance, administration, improvement, and management of all aspects of the GNWT telecommunications IP-PBX system, as well as the mobile device management infrastructure, and is a key resource for highly complex IP Telecommunications and mobile device management infrastructure design and troubleshooting.

The position is responsible for solution analysis, decision making related to the performance and maintenance of all IP telecommunication services, and mobile device management and its associated hardware and software. The Senior Telecom Infrastructure Analyst is also the senior expert with an understanding of and ability to work within multiple technology domains including server security, server virtualization, storage systems, cellular device security, network protocols and disaster recovery processes. The position supports the entire GNWT telecommunications IP-PBX infrastructure, which is a complex environment comprised of multiple data centre locations distributed across the regional centres in the Northwest Territories (NWT). In this role, the position is often required to make complex implementation



and operational decisions in a high-pressure environment.

The Department of Finance (Department) is highly decentralized in the delivery of its programs and services and is responsible for territory-wide government programs such as: the operation and maintenance of public buildings and transportation infrastructure and systems; project management; facilities planning; design and technical support services; environmental assessment and remediation; property management; information technology; information management; disposal of surplus property and goods; motor vehicle and mechanical/electrical regulatory services; and, fleet management.

The Department is also responsible for programming aimed at increasing the use of domestic energy resources and reducing energy costs in the NWT, delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

On behalf of the GNWT, the Department also carries the responsibility for strategic planning for the GNWT's long term investment in the development of public transportation and energy production and distribution systems for the NWT, as well as the continuity of marine transportation services for the provision of fuel and dry goods to northern destinations.

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 TSC 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 while also minimizing costs to successfully meet the objectives of the GNWT departments and agencies it serves.

Telecommunication services are used by GNWT employees and the residents of NWT 24 hours a day, 365 days a year, including emergency services to provide critical care and assistance to members of the public across the NWT. Service interruptions, issues and outages can have a



highly detrimental, and possibly catastrophic, impact on the ability of GNWT departments and agencies to deliver programs and services. The incumbent is required to be on call on a rotational basis.

RESPONSIBILITIES

1. Provides leadership to support the planning, design, development, and adoption of appropriate IP-PBX and/or mobile telecom infrastructure to provide standardized telecom services and administration of a robust and resilient GNWT telecommunications service.

- Research, design, test, implement, and support the applications hosting infrastructure, which encompasses Avaya CM, AAM, AWFOS, CMS and associated software products.
- Plan, design, and implement processes with the TSC network team for monitoring performance of the application servers.
- Plan the application deployment testing and production roll-out process.
- Provide server and application support including diagnosis, repair, set-up, and configuration.
- Manage the second tier of troubleshooting for technical problems, in collaboration with infrastructure services and end user support staff, as well as other GNWT IT staff along with third-party contractors as appropriate.
- Plan, design, and implement non-standard solutions and workarounds as required to mitigate the impact of outages, and to prevent them where possible.
- Determine priorities for problem resolution, and escalate problems as required.
- Manage telecommunication system projects including engaging with stakeholders, requirements definition, recommended solution, planning, delivery, scheduling, risk management, budget control and tracking so that the projects are completed on time, on budget, to quality standards and within agreed upon scope.
- Develop project teams, allocate tasks and provide the necessary direction, support and guidance to team members to deliver projects and facilitate effective working relationships amongst team members.
- Plan, design, and implement disaster recovery and business continuity testing to meet critical business operations.
- Monitors telecommunication infrastructure logs to report on traffic and usage patterns.

2. Implements and maintains compliance with security administration procedures to secure the GNWT Telecommunication and Mobile Device Management systems.

- Define and implement standards for the application of IP telecommunications and mobile device security controls, maintenance, access, and security procedures.
- Design, manage, and maintain security processes and protocols.



- Keep abreast of technological advances in IP telecommunications and mobile device management and contribute to decisions about how best to apply these to the GNWT telecom infrastructure, to enhance security, performance, stability, and supportability.
- Develop standards and guidelines for the maintenance of the GNWT telecom infrastructure.
- Lead the investigation of security breaches.
- Perform standard and non-standard security administration tasks and resolve security administration issues.
- Consult with and assists TSC networking staff and the Chief Security Officer to implement and support GNWT Telecom Infrastructure security procedures.

3. Develops the standards, procedures and guidelines for Mobile Device Management and the IP-PBX application, server and network system architecture including administration, security, configuration, and hardware.

- Understand, create, and follow processes implemented by applying the Information Technology Infrastructure Library (ITIL), the industry best practices for an IT infrastructure and support organization.
- Lead the participation in incident management, change management, configuration management, release management, and problem management processes.
- Investigate problems, collect performance statistics, and create reports using telecommunications, server, and storage management system software, tools and knowledge of IP telecommunication architecture.
- Develop and maintain complete documentation for the TSC IP telecommunication and mobile device management infrastructure; and,
- Provide plain-language explanations and guidance to staff in other areas of the TSC and to GNWT staff.

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

No unusual demands.

Sensory Demands

No unusual demands.



Mental Demands

Duty travel Is required to perform the duties of this job.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of setup, operations, and lifecycle management of IP-PBX systems.
- Knowledge of mobile device management technologies and their deployment, administration, tuning, securing and optimization.
- Ability to plan and implement the rollout of IP-PBX services.
- Knowledge of security controls as they relate to telecommunication services.
- Knowledge of risk analysis, disaster recovery, planning and an ability to design and lead effective event simulations.
- Knowledge of capacity planning as it relates to telecommunication services.
- Knowledge of client service best practices and IT infrastructure operations and support.
- Knowledge of server and network communications principles, hardware, software, and best practices.
- 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 telecommunication system problems.
- Knowledge of and ability to implement processes in accordance with the ITIL.
- Knowledge of project management practices and how to apply them effectively.
- Communication and interpersonal skills (oral, written and presentation skills).
- Ability to ask a series of probing questions to get to the root of a situation or problem.
- Ability to apply incident management, change management, configuration management, release management and problem management practices.
- 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 equal share of the work, including sharing all relevant and useful information with the team.
- Ability to answer technical questions, which includes explaining technical issues using appropriate terminology based on the audience.
- 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.
- Knowledge of the evergreening process and procedures and an ability to carry out the evergreening program in the GNWT.
- Ability to communicate end-user support priorities to staff in other TSC groups and to third party service providers.
- Ability to troubleshoot/resolve clients' operational problems in an efficient manner and either resolve the problem or identify the nature of the problem and forward it to the appropriate place for resolution.



- 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.
- Ability to break down complex technical problems into pieces and link the pieces together in logical order (i.e., A leads to B).
- Ability to produce written documents that are clear, easy to understand, and which follow the rules of correct grammar, punctuation and spelling.
- 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 degree in a relevant field with 3 years of relevant 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