New

Ministry

Technology and Innovation

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Geospatial Service Manager

Requested Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

☐ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

The Manager is critical to ensuring and integrating effective solution and service delivery of all IMT functions across the allocated portfolio of ministries in the Business Technology Operations.

The Geospatial Integrations Service Manager owns end-to-end delivery and production service performance for the geospatial integration portfolio including planning, build, release, operations, vendor execution, and budget reporting to the Service Owner for Geospatial Platform and Geospatial Integration Services.

Success is measured by reliable production performance, growing internal technical capability, a defensible security and governance posture, and predictable financial performance against the approved budget. The role is hands-on: the manager personally chairs design reviews, leads major incident bridges, approves releases, and is technically credible enough to challenge vendor designs and code.

• Lead end-to-end delivery of complex, multi-stream geospatial integration programs spanning Esri enterprise Geographic Information System (GIS) platforms, data integration tooling, consuming applications, and supporting cloud and on-prem infrastructure.
• Coordinate execution across multiple technology teams — platform, data, application, security, network, identity, and database — to keep integration dependencies, sequencing, and release windows aligned.
• Own program-level scheduling and capacity planning for the integration portfolio, sequencing modernization, legacy

stabilization, and new ministry demand into a single delivery plan.
• Bring the integration portfolio under unified technical governance covering design standards, software engineering practice, security controls, release management, and operability acceptance.
• Shift the operating model from vendor-led delivery to internally-governed delivery by building permanent depth in geospatial integration engineering, software development practice, and GIS platform administration.
• Direct hands-on technical leadership across the full software development lifecycle for integrations — design review, build oversight, test rigor, release approval, and production support.
• Run production operations for the integration estate, including direct command of major incidents affecting ministry and citizen-facing geospatial services.
• Embed approved artificial intelligence (AI) tooling into integration delivery and operations as a working capability across code review, test generation, log and incident triage, and documentation.
• Manage vendor execution and contract performance for integration work so that deliverables, documentation, and knowledge transfer are accepted on evidence rather than promise.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1. Deliver concurrent geospatial integration projects through the full Software Development Lifecycle (SDLC) — design, build, test, release, operate — with sustained business client engagement, AI-assisted code review and test generation, and traceable acceptance criteria from requirements through release.

• Run design reviews and sign-off gates at each SDLC phase across the active project portfolio.
• Chair regular working sessions with ministry product owners to validate requirements, demo increments, and confirm acceptance criteria.
• Operate AI-assisted code review and automated test generation inside the build pipeline with developer validation before merge.
• Maintain end-to-end requirements traceability from business need through user story, test case, and release evidence.

2. Run production operations for the integration portfolio across Incident, Problem, Change, and Release management — including the annual Disaster Recovery (DR) planning and exercise cycle — using AI-assisted log and anomaly triage to sustain availability, performance, and recovery commitments.

• Operate the integration estate's Incident and Problem management practice with documented escalation and root cause processes.
• Lead major incident bridges, drive resolution to service restoration, and own post-incident review actions to closure.
• Plan, schedule, and execute the annual DR exercise calendar and capture lessons learned into runbooks and recovery plans.
• Tune AI-assisted log and anomaly triage to surface emerging issues before user impact and reduce alert noise.

3. Operate a single demand intake and prioritization model for new integration requests across ministries, with AI-assisted classification, effort estimation, and duplicate detection to produce evidence-based prioritization decisions.

• Receive, triage, and log new integration demand through a single intake channel with documented criteria.
• Apply AI-assisted classification, duplicate detection, and rough-order effort estimation on each new request.
• Run a regular portfolio prioritization forum with ministry stakeholders to sequence work against capacity.
• Publish backlog, capacity, and commitment status to ministries on a fixed cadence.

4. Define and continuously improve engineering methods across the integration estate — agile cadence, DevSecOps pipelines, automated testing, continuous integration and deployment (CI/CD), and reuse-first and cloud-smart design — with measurable adoption of AI-assisted accelerators across the team.

• Maintain and version the team's engineering standards — coding, branching, testing, pipeline, and release practices.
• Sponsor improvements to CI/CD pipelines, automated test coverage, and infrastructure-as-code practice on a regular release train.
• Run retrospectives and engineering metrics reviews (cycle time, change failure rate, deployment frequency) to drive continuous improvement.

• Onboard, train, and measure adoption of approved AI-assisted accelerators across the team.

5. Manage the lifecycle of the application and integration estate — software currency, capacity planning, technical-debt reduction, and decommissioning of obsolete components — to keep the portfolio on supported and secure technology baselines.

• Maintain the inventory of integrations, applications, and dependencies with current version, support status, and end-of-life dates.
• Plan and schedule software currency upgrades against vendor support windows and security baselines.
• Run regular capacity reviews and forward forecasts against expected demand growth.
• Decide decommissioning candidates and execute sunset plans for obsolete or duplicative components.

6. Manage the service area operating costs through monthly forecasting, variance explanation, and reallocation decisions to keep annual spend within the approved envelope.

• Maintain the monthly financial forecast and the running view of actuals versus budget.
• Investigate, document, and report variances against forecast with corrective actions where required.
• Decide in-year reallocations between projects and operational lines.
• Prepare and present budget submissions, in-year adjustments, and year-end reconciliation to the Service Owner.

7. Lead direct reports and matrixed consulting resources, including objective-setting, formal performance reviews, coaching, and capability planning.

• Hold regular one-on-ones with each direct report to set objectives, coach delivery, and unblock issues.
• Conduct formal performance reviews and manage underperformance to documented resolution.
• Plan capability and succession needs against the portfolio's forward roadmap.
• Assign work to matrixed consulting resources and inspect deliverables against clear acceptance criteria.

8. Source and manage vendor and contractor delivery across procurement, Statements of Work (SOWs), acceptance criteria, and service credits to secure qualified resources, drive first-submission acceptance of deliverables, and complete knowledge transfer.

• Author SOWs, acceptance criteria, and service-credit terms for new integration work in partnership with procurement.
• Evaluate, interview, and select vendor and contractor resources against role-based skills criteria.
• Inspect vendor deliverables against acceptance criteria and exercise contract levers when standards are not met.
• Enforce documented knowledge-transfer milestones and confirm internal capability before contract closeout.

9. Drive secure-by-design integration delivery — identity, access, secrets, data classification, logging, and remediation of static and dynamic security findings — to prevent high-severity security defects from reaching production.

• Approve integration designs against security architecture standards and clear security exceptions through formal channels.
• Triage security findings, assign remediation owners, and track to time-bound closure.
• Conduct or commission threat modelling on material design changes and high-risk integrations.

10. Approve releases, risk acceptances, and change windows for the integration estate, and enforce operability acceptance at production transition — monitoring, alerting, AI-assisted runbook authoring, DR procedures, and named on-call ownership — with documented rationale and rollback positions for every production change.

• Run the release approval forum for the integration estate with documented rationale and rollback plan for every production change.
• Schedule change windows in coordination with dependent technology teams and ministry stakeholders.
• Validate operability acceptance at production transition — monitoring, alerting, runbooks, DR coverage, on-call ownership — before signing off.

• Sponsor AI-assisted runbook generation and validation from telemetry and code as part of release readiness.

Problem Solving

Typical problems solved:

The challenges faced by the role require superior analysis, reasoning, evaluation, judgment, and problem solving skills. Significant interpretive, evaluative, and developmental thinking is required, along with the ability to understand complex relationships and facilitate decision-making processes involving stakeholders and senior decision-makers. Situations faced are unstructured and approaches to solving problems are not determined. The role is expected to remain focused at the strategic level when leading and/or providing advice on the development and implementation of plans, initiatives, standards, frameworks, and best practices at business, technical and operational levels. In addition, this position faces the challenge of balancing and aligning multiple ministry objectives and directions with those of the Government.

• Reconcile competing ministry priorities against fixed delivery capacity when more demand arrives than the team can absorb in a quarter.
• Stabilize a production integration that is failing intermittently when telemetry is partial, vendor knowledge is gated, and root cause is contested between platform, network, and application teams.
• Decide whether to accept, mitigate, or block a security finding on a legacy integration where remediation would break a downstream ministry workflow.
• Diagnose integration failures across hybrid on-prem and cloud boundaries — authentication, network egress, message schemas, rate limits, data-quality drift — under active incident pressure.
• Modernize a legacy geospatial integration without disrupting a citizen-facing or ministry-facing service that depends on it.
• Resolve vendor quality gaps — under-tested releases, missing documentation, scope drift — through contract levers rather than informal escalation.
• Make roadmap tradeoffs between modernization investment, security remediation, and net-new ministry demand inside a fixed budget envelope.
• Recover service during a major incident affecting multiple ministries, coordinating across platform, security, vendor, and communications channels until restoration.

Types of guidance available for problem solving:

The position requires an understanding of problem solving tools and techniques, including risk based decision-making processes, consultation, collaboration and consensus-seeking processes. Solving problems requires a strategic approach and needs to draw on a wide network of contacts and subject matter experts. The position also needs a strong understanding of stakeholder interests as well as the perspectives of ministries and stakeholders.

The position provides strategic and business advice relating to the initiative and must have a thorough knowledge of issues and initiatives relating to business and information and communication technology. The position models a highly collaborative approach when reaching decisions and achieving outcomes, within the Branch, the Sector, and across Government and when consulting, negotiating, and communicating with senior client and stakeholder representatives.

Direct or indirect impacts of decisions:

The role will provide timely decision-making and recommendations, be in a position to refocus resources within the division for work related to initiatives, and to influence direction and decisions of senior management.

The role provides advice and recommendations to senior Government levels that have considerable impact and influence on decisions relating to the Government of Alberta IMT goals, directions, accountabilities, structure, resource allocation, and financial commitments. In addition, this position maximizes the effectiveness of business and IMT strategies by facilitating partnerships with government ministries and stakeholders to gain support for enterprise projects and initiatives, facilitate, and promote initiatives that deliver measurable business value and outcomes.

The role will oversee successful delivery and support of many highly complex systems and services for many business areas within the three ministries to ensure fulfillment of business needs and continuous business operations.

Risk acceptance decisions on security findings shape the province's exposure profile and the durability of the

integration estate against audit and threat actors.

Vendor performance actions. Accept, withhold, credit, terminate, Set the cost trajectory of the portfolio and the realism of future delivery commitment

Architectural tradeoffs between modernization and stabilization determine maintainability cost and incident frequency across the operating life of each integration.

Hiring, performance, and coaching decisions determine the pace at which the service moves from vendor-dependent to internally-capable.

AI tooling and data-handling decisions shape compliance posture, vendor terms, and the credibility of AI productivity claims to executive sponsors.

Key Relationships

Major stakeholders and purpose of interactions:

- Director - Information sharing, receive direction, give advice, resolve issues, develop strategic solutions, status reporting - two way exchange.
- Service Owner, Geospatial Platform and Geospatial Integration Services — to escalate cross-service risks, agree investment priorities, and obtain risk acceptance above delegated authority.
- Fellow team staff - Provide leadership and expertise; enhance understanding of strategic initiatives and business opportunities; contribute to planning and managing resources to meet requirements of initiatives; support development of skills and capacity; provide oversight of day-to-day activities and issue management.
- Other ministries - collaborate on common initiatives
- Ministry Business Units - provide advice and guidance on IT services; liaise to understand business needs and issues to be addressed related to IT services.
- Ministry Executive Teams (Directors, Executive Directors, ADM and CIO levels) - Exchange information, receive guidance/direction, and collaborate on strategic and tactical solutions to develop an applications management framework; develop investment plans; present strategy, explain importance and benefits.
- Enterprise architecture and security functions — to clear design reviews, resolve security exceptions, and approve identity and data-handling patterns.
- Platform, network, identity, and database operations teams — to coordinate dependent changes, joint incident response, and shared on-call arrangements.
- Procurement and vendor management — to negotiate SOW deliverables, exercise contract levers, and re-baseline pricing or scope on underperforming engagements.
- Vendors, system integrators, and consulting partners — to direct execution, accept deliverables against criteria, and enforce knowledge transfer obligations.
- Privacy, audit, and records functions — to clear information-sharing arrangements, respond to audit findings, and document retention and access controls.
- Direct reports and matrixed delivery staff — to set objectives, review performance, coach technical and delivery practice, and plan capability uplift.
- Industry stakeholders and partner agencies consuming or contributing geospatial data — to align integration interfaces, scheduled releases, and data exchange commitments.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Other		

If other, specify:

Information Technology

Job-specific experience, technical competencies, certification and/or training:

Mandatory Experience:

Each item must be demonstrated through direct experience in the last 1–2 years.

• Led at least two direct reports as their people manager, including objective-setting, formal performance reviews, and managing underperformance to resolution.
• Held ownership of a project or service budget, including monthly forecasting, variance explanation, and reallocation decisions.
• Delivered multiple integration projects concurrently while operating an application or service portfolio in production.
• Operated across multiple business units or ministries with competing priorities, including running an evidence-based prioritization or intake model.
• Led a large, complex initiative end-to-end from design through production transition, including operability acceptance and post-go-live stabilization.
• Managed vendor or system integrator delivery hands-on against SOWs, including acceptance, withholding, and contract-lever decisions.
• Held accountability for production service performance against published Service Level Agreements (SLAs), including major incident command and post-incident review ownership.

Other Experience:

• Adopted AI-assisted delivery and operations tooling with measurable productivity outcomes.
• Led geospatial integration delivery on an Esri enterprise GIS platform or an equivalent provincial geospatial platform.
• Transitioned a portfolio from vendor-led delivery to internally-governed delivery, including formal knowledge-transfer instruments.
• Lead and empower diverse teams.
• Excellent communication skills, both verbal and written, including very good consultation, facilitation and presentation skills.
• Effective facilitation, negotiation, influencing and conflict resolution skills and the ability to communicate effectively with technical and non-technical personnel.
• Government business plans, goals, strategies and priorities, particular in relation to the mandates of GoA.
• Ministry mandates and business and operational plans.
• Commissioned or led DR exercises across hybrid on-prem and cloud estates.
• Demonstrated ability to encourage innovative approaches and question existing ones to ensure the most effective and efficient outcomes delivered.
• In-depth knowledge of business planning and accountability processes and performance management systems.
• Experience with IMT framework, system delivery lifecycle, and business process re-engineering.
• Extensive related experience in a leadership role with proven success collaboratively working with multiple stakeholders in the development and implementation of frameworks, strategies, policies, and processes.
• Demonstrated ability to develop and maintain collaborative working relationships within the organization, across government and with stakeholders including the ability to balance the needs and interests of these diverse groups and facilitate the delivery of coordinated technology.
• Ability to analyze, evaluate, identify problem areas and create innovative solutions to address issues identifies.
• Knowledge of privacy and security related legislation.
• Apply original and innovative thinking when developing strategies and actions to complex organizational issues.
• Balance needs of business areas with corporate and enterprise policies and objectives.
• Able to convey complex concepts, issues and options for resolution to key decision makers.
• Create a work environment that develops and engages staff while increasing capacity.
• Advanced critical thinking, problem-solving and decision-making skills.
• Facilitate changes to business policy and processes to meet future demands.

Technical Competencies:

• Read, evaluate, and challenge integration designs across common patterns — synchronous request-response, event-driven and streaming, and batch or replication — to select the right approach for each business case.
• Govern Application Programming Interface (API) design, versioning, and data exchange contracts for production interfaces, enforcing data quality, schema discipline, and lineage across integrations.
• Apply secure-by-design principles to identity, authentication, secrets management, encryption, and data classification, aligned with current public-sector security standards.

• Direct AI-driven development across the team — code generation, code review, refactoring, technical documentation, and design exploration — with clear guardrails for human review, attribution, and approved data-classification boundaries.
• Embed AI-driven testing into the quality engineering practice — automated test generation, test data synthesis, defect-pattern detection, and self-maintaining test suites — to expand coverage and reduce regression risk.
• Apply approved AI tooling to code review, automated testing, log triage, incident correlation, and documentation within enterprise data-classification and approval boundaries.
• Operate services across cloud and on-prem environments, including containerized workloads, automation, networking, identity federation, and data residency requirements.
• Lead the team's continuous integration and continuous delivery (CI/CD), infrastructure-as-code, source control, and automated testing practice.
• Enforce quality gates across automated testing, code review, security scanning, and release readiness, including AI-assisted code review and test generation where approved.
• Establish service-level objectives, alerting, dashboards, and structured logging sufficient to detect, diagnose, and lead resolution of production incidents without translation.
• Work hands-on with Esri enterprise GIS and open-source geospatial components, including spatial data formats, services, and analytical workloads.
• Design and exercise recovery plans for integrations against documented Recovery Time Objective (RTO) and Recovery Point Objective (RPO) commitments, including scheduled failover testing.

Certifications:

• Preferred: ITIL 4 Foundation, or an equivalent recognized service management certification.
• Preferred: A practitioner-level project or program management credential (e.g., Project Management Professional — PMP, PRINCE2 Practitioner, or equivalent)
• An enterprise architecture credential (e.g., TOGAF certified or equivalent)
• An agile delivery credential (e.g., Scaled Agile Framework — SAFe — Program Consultant or equivalent)
• A recognized security credential (e.g., Certified Information Systems Security Professional — CISSP, or Certified Information Security Manager — CISM)

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Systems Thinking	○ ○ ○ ◉ ○	Integrates broader context into planning: • Plans for how current situation is affected by broader trends • Integrates issues, political environment and risks when considering possible actions • Supports organization vision and goals through strategy • Addresses behaviours that challenge progress	When designing services, an understanding of the client perspective and impact on GoA operations/efficiency is required. When making operational decision, this position will need to consider the broader perspective of how business would be impacted. Regular retrospective session to look for continuous improvement.

Creative Problem Solving	○ ○ ○ ◉ ○	Works in open teams to share ideas and process issues: • Uses wide range of techniques to break down problems • Allows others to think creatively and voice ideas • Brings the right people together to solve issues • Identifies new solutions for the organization	Requires knowledge of a large number of IMT systems and how each component could impact an IMT service to be able to quickly narrow down the source of a problem. An understanding of the capabilities of many IMT systems are required when a solution is not available and a workaround option is required. Able to identify trends and operational inefficiencies and create new solutions.
Develop Self and Others	○ ○ ○ ◉ ○	Encourages development and integration of emerging methods: • Shapes group learning for team development • Employs emerging methods towards goals • Creates a shared learning environment • Works with individuals to develop personal development plans	Mentors and coaches staff members and actively guides them to establish their own learning/career plans. Implement Agile Daily scrum and Sprint planning to improve team communication and create collaborative working environment. Self directed and keeps current with an ever changing industry
Agility	○ ○ ○ ◉ ○	Proactively incorporates change into processes: • Creates opportunities for improvement • Is aware of and adapts	Able to handle high-stress situations and manage team stress to make decisions when a clear direction is not available.

		to changing priorities • Remains objective under pressure and supports others to manage their emotions • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices	Understands the impact of decisions in relation to the larger GoA and can adapts solutions as situations change. Strong understanding of risk mitigation, change management process and back-out strategy.
Drive for Results	○ ○ ○ ◉ ○	Works to remove barriers to outcomes, sticking to principles: • Forecasts and proactively addresses project challenges • Removes barriers to collaboration and achievement of outcomes • Upholds principles and confronts problems directly • Considers complex factors and aligns solutions with broader organization mission	Encourages staff to be accountable for their actions and set realistic goals Assigns appropriate resources to tasks and monitors progress

Benchmarks

List 1-2 potential comparable Government of Alberta: Benchmark