

Position: **Reference Job #IS30**

Ministry: Attorney General

Working Title: **Senior Software Engineer**

Branch: Information Technology

Level: Range 30

Location: Victoria

NOC Code: 2147

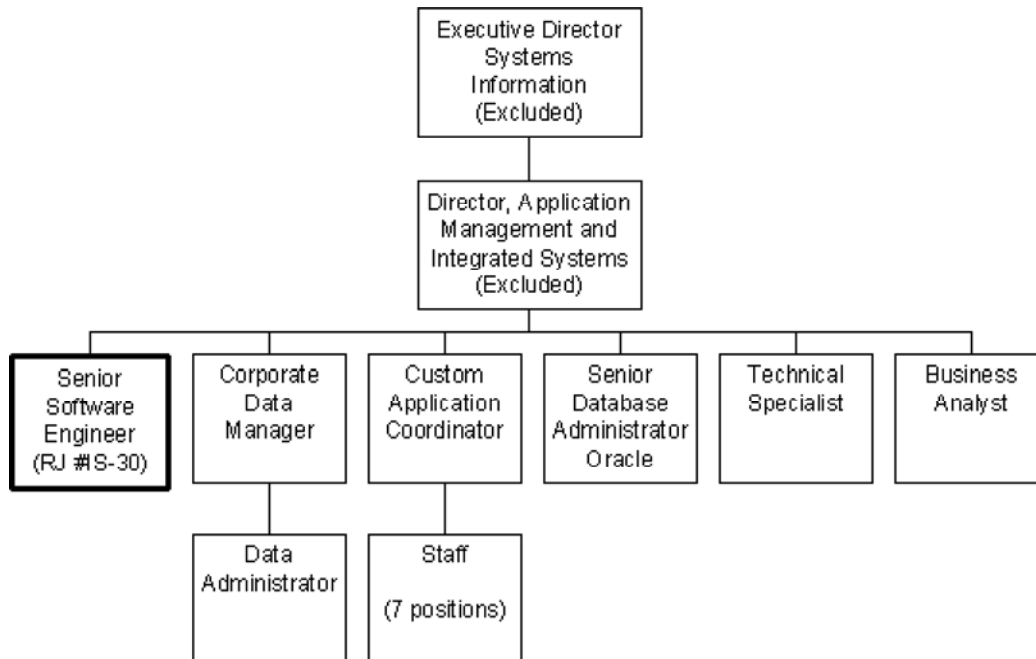
PRIMARY FUNCTION

To manage the ministry corporate software architectural development environment and infrastructure across multiple environments and major applications such as the Corrections System (7x24) and Justice Information (JUSTIN) System, and to provide technical expertise and standards to systems professionals developing, implementing, integrating, and maintaining ministry custom applications.

JOB DUTIES AND TASKS

1. Manages overall software architectural environment used to develop and maintain all Ministry custom applications
 - a. creates and manages infrastructure and software/application architecture for all applications (i.e. JUSTIN)
 - b. provides source code migration management tools to application development teams
 - c. leads design and development of Ministry application development tools, techniques and standards
 - d. organizes problem resolution and preventative maintenance of corporate software engineering and infrastructure
 - e. explores new technology and evaluates new products
 - f. schedules and assigns technical resources for upgrades to infrastructure and existing applications
 - g. defines, develops and maintains a library of standard programming utilities
 - h. leads the evaluation and cost-benefit analysis of new corporate software products and development tools
2. Provides direction, technical expertise and advice to systems professionals supporting corporate databases and applications
 - a. defines and develops corporate custom application migration policies and standards
 - b. leads the identification of corporate tools, integrated products or utilities to solve problems and document solutions
 - c. develops and provides technical expertise and tools used in business process re-engineering
 - d. oversees and optimizes custom application code where a negative impact is identified by operations
3. Develops, defines, documents and implements corporate technical standards
 - a. defines and documents corporate technical standards and tools to develop and implement ministry applications
 - b. leads consultative process for review of technical standards by ministry systems groups
 - c. provides technical expertise/direction to contractors and defines infrastructure and technical standards and policies

- d. reviews contractors work for quality assurance and enforcement of standards
- 4. Manages corporate technical projects for revisions to Ministry custom applications infrastructure
 - a. identifies needs for projects due to technical changes to the software engineering and technical architecture environment, such as a new operating systems
 - b. manages large scale changes to the Ministry's software infrastructure and architecture
 - c. leads project staff (2 FTEs), provides direction to teams assigned to major projects involving significant revisions, new technology, custom application integrations
 - d. consults with senior and executive IS and line management to ensure business feasibility, time frames and availability of resources
 - e. defines, identifies, estimates and schedules project activities, gains consensus and commitment from all groups and management to implement "best technical solution"
 - f. oversees, monitors and controls project process and resource usage
 - g. oversees and ensures completion of all project tasks and identifies reusable systems components for other IS staff



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p>JOB KNOWLEDGE</p> <p>Understand all related issues of a major and highly specialized software development program to plan and provide ministry policy direction for the development, implementation and maintenance of custom applications, define migration policies, develop application development tools, techniques, designs and standards, manage the overall technical infrastructure to ensure integrated application navigation, security and disaster recovery.</p>	J	330
2	<p>MENTAL DEMANDS</p> <p>Judgement to conduct major research and analyze a wide range of issues to develop ministry software infrastructure projects across multiple environments, establish ministry migration policies and standards and create the ministry technical infrastructure for major custom applications.</p>	I	300
3	<p>INTERPERSONAL COMMUNICATIONS SKILL</p> <p>Discretion required to use basic counselling skills to facilitate solutions with IS staff and management to gain consensus and commitment to implement "best" technical solution.</p>	D	45
4	<p>PHYSICAL COORDINATION AND DEXTERITY</p> <p>Moderate coordination and dexterity required to use keyboard with some requirement for speed to create and maintain standard programming utilities and technical infrastructure standards for custom applications.</p>	C	15
5	<p>RESPONSIBILITY FOR WORK ASSIGNMENTS</p> <p>Guided by ministry goals and objectives, to plan, design, commit resources and administer the ministry's integrated systems development program and establish policy and standards for the development, implementation and maintenance of ministry major custom applications.</p>	G	190
6	<p>RESPONSIBILITY FOR FINANCIAL RESOURCES</p> <p>Significant financial responsibility to evaluate the cost implications of new corporate software products and development tools for input to budget decisions.</p>	E	33

FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
7	RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION Major level of responsibility to manage the software development environment and infrastructure for ministry custom applications and manage electronic library of standard programming utilities and policies.	F	43
8	RESPONSIBILITY FOR HUMAN RESOURCES Responsibility to assign, monitor and review work of technical specialists on projects (2 FTEs).	CD	14
9	RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS Responsibility for own well being and safety in low risk environment.	A	5
10	SENSORY EFFORT/MULTIPLE DEMANDS Focused sensory concentration to frequently visually scrutinize computer screen while documenting technical standards and evaluating new products.	C	12
11	PHYSICAL EFFORT Moderate physical effort to apply frequent visual attention to computer screen.	C	12
12	SURROUNDINGS Exposure to occasional dealings with difficult or demanding clients.	A	2
13	HAZARDS Limited exposure to hazards from frequent keyboarding.	B	4

Total Points: 1005

Level: Range 30