

Position: **Reference Job #IS15**

Ministry: Transportation and Highways

Working Title: **Systems Programmer**

Branch: Information Systems

Level: Range 21

Location: Victoria

NOC Code: 2162

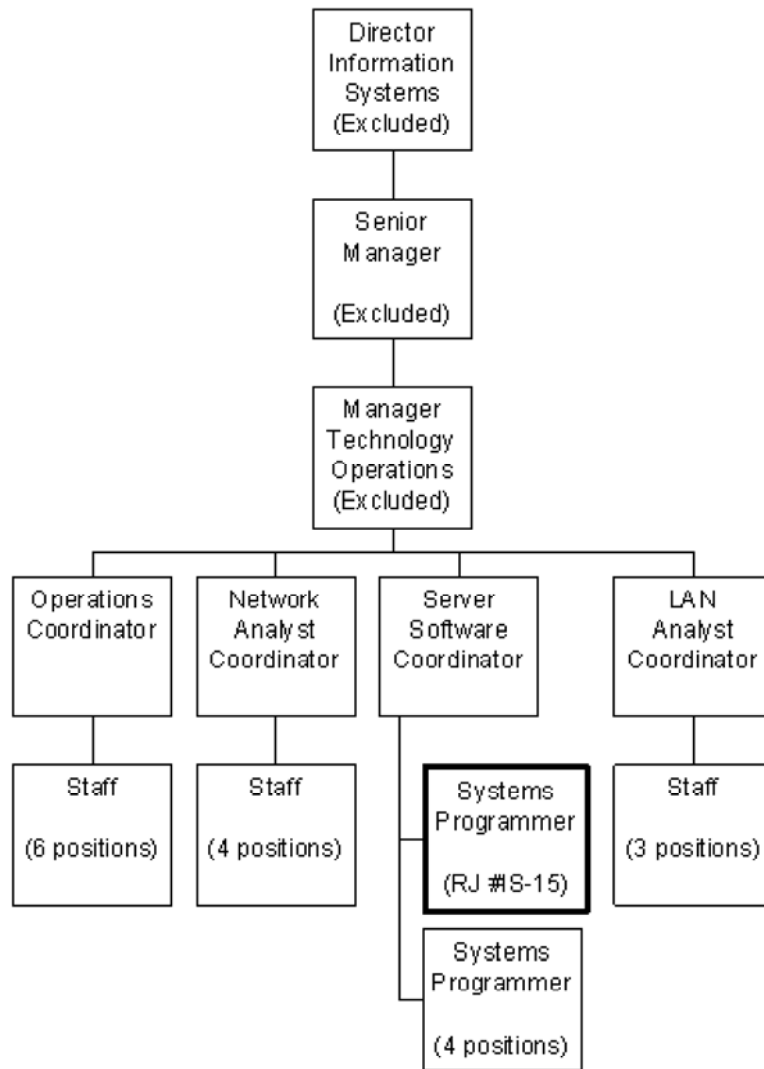
## PRIMARY FUNCTION

To provide installation, technical support, integration and administration of shared software and applications, such as operating systems and e-mail on the ministry's shared systems platforms, which consists of 35 mini-computers and 76 Local Area Network (LAN) servers, located in numerous locations across the province.

## JOB DUTIES AND TASKS

1. Provides installation, technical support, integration and administration of shared software and applications on shared systems
  - a. reviews, tests and provides performance reviews on existing, updated or new systems applications, tools or software products
  - b. researches and provides recommendations on how to improve operating systems performance
  - c. analyzes, plans and implements systems configuration upgrades, changes and set up
  - d. monitors and ensures proper use of resources including CPU, printer disk space and capacity
  - e. responds and takes action to resolve problems/issues escalated by other systems staff
  - f. maintains software products that integrate mainframe/mini-computer systems and LANs for approximately 3000 ministry staff and external users
  - g. provides an interface between end users, ministry technical staff and vendor support staff for the resolution of system or application problems and for access to new software or techniques
2. Performs other related systems programming functions
  - a. monitors system usage and prepares performance statistics/reports
  - b. monitors the availability and performance of all disk drives attached to shared systems
  - c. tunes and enhances operating systems, software and hardware configurations to maintain and maximize systems performance and availability
  - d. purges and reorganizes data files residing on the ministry's shared systems to enhance system performance and reliability
  - e. oversees the shared systems administration database configurations and specific system information to ensure database(s) are accurate and current
  - f. evaluates new software to support the Ministry's current or future needs and ensure that new software is compatible with existing software
  - g. verifies completion of contracted work for operating systems modifications and performance analyses
3. Carries out and supports systems programming projects and enhancements
  - a. provides technical advice and guidance to other staff on systems programming requirements, performance impacts, implementation schedules and advanced tools

b. resolves shared systems technical issues resulting from technical changes



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p><b>JOB KNOWLEDGE</b></p> <p>Understand theory of systems technical architecture and operating systems to provide installation, technical support, integration and administration of Ministry shared operating software and applications, anticipate and correct systems programming hardware and software problems, research improvements to systems performance, tune and enhance operating systems software and hardware configurations to maximize performance.</p>	H	280
2	<p><b>MENTAL DEMANDS</b></p> <p>Judgement to modify techniques in working with changing circumstances to determine, analyze and resolve problems with shared software and applications on shared systems, monitor and evaluate operating systems performance, tune and enhance operating systems, software and hardware configurations, analyze, plan and implement configuration upgrades and changes.</p>	G	200
3	<p><b>INTERPERSONAL COMMUNICATIONS SKILL</b></p> <p>Discretion required to exchange information needing an explanation regarding technical problems with clients and vendors.</p>	C	30
4	<p><b>PHYSICAL COORDINATION AND DEXTERITY</b></p> <p>Moderate coordination and dexterity required to keyboard with some requirement for speed to resolve operating systems application, hardware and software problems.</p>	C	15
5	<p><b>RESPONSIBILITY FOR WORK ASSIGNMENTS</b></p> <p>Guided by general ministry policies and technical standards, provide installation, technical support, integration and administration of Ministry shared software and applications on shared systems to anticipate and resolve problems, evaluate applications, tools and software products, recommend improvements to systems performance; tune and enhance operating systems, software and hardware configurations; and plan and implement configuration upgrades, changes and set up.</p>	F	160
6	<p><b>RESPONSIBILITY FOR FINANCIAL RESOURCES</b></p> <p>Moderate financial responsibility to verify completion of contracted work for operating systems modifications and performance analyses.</p>	D	22.5

FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
7	<p><b>RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION</b></p> <p>Considerable responsibility to coordinate the installation, technical support and integration of Ministry's shared software and applications on shared systems to tune and enhance systems performance.</p>	E	33
8	<p><b>RESPONSIBILITY FOR HUMAN RESOURCES</b></p> <p>Limited or no responsibility for human resources.</p>	A	5
9	<p><b>RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS</b></p> <p>Responsibility for own well-being and safety in a low risk environment.</p>	A	5
10	<p><b>SENSORY EFFORT/MULTIPLE DEMANDS</b></p> <p>Focused sensory concentration and attention to detail to frequently view computer screen to configure changes, tune operating systems and resolve shared software and application problems.</p>	C	12
11	<p><b>PHYSICAL EFFORT</b></p> <p>Moderate physical effort to apply frequent visual attention to computer screen to monitor systems performance, tune operating systems and resolve shared software and application problems.</p>	C	12
12	<p><b>SURROUNDINGS</b></p> <p>Exposure to office setting with minimal disagreeable elements.</p>	A	2
13	<p><b>HAZARDS</b></p> <p>Limited exposure to hazards from frequent keyboarding while tuning systems and resolving shared software and application problems.</p>	B	4

Total Points: 780.5

Level: Range 21