

# CITY OF HAMILTON

## CORPORATE SERVICES DEPARTMENT (INFORMATION TECHNOLOGY DIVISION – LOCATION – 55 YORK BLVD, 6<sup>th</sup> FLOOR)

### MANAGER, IT INFRASTRUCTURE & SECURITY

#### SUMMARY OF DUTIES

Reporting to the Director, Information Technology, the Manager, IT Infrastructure & Security provides overall direction, guidance and oversight to the operations of the enterprise's infrastructure and security solutions to ensure the stability of the City IT infrastructure and security of the City's computer environment from unauthorized access.

The Manager, IT Infrastructure & Security leads a team of Information Network Analysts and Security Analysts, in the definition of solution architecture, hardware and application requirements, information models and functional specifications to meet current and future requirements to ensure the secure and integrity of the City's computer environment. In addition, the Manager, IT Infrastructure & Security mentors the development, testing, configuration, integration/installation and maintenance of custom and packaged applications within and across City divisions.

The Manager, IT Infrastructure & Security is responsible for planning and coordinating the processes required for the provision of business applications and systems to ensure that the integrity of the City's environment is not compromised. In doing so, this individual will apply proven communication and problem-solving skills to guide and assist the stakeholder on issues related to the design, development, and deployment of mission-critical information and software systems.

As a member of the IT Management Team, the Manager, IT Infrastructure & Security provides the leadership, oversight, business knowledge, technical knowledge and advice, contributing to the design and implementation of the methods, practices and policies governing the security and/or acquisition of enterprise infrastructure and security solutions.

#### GENERAL DUTIES

##### **STRATEGY & PLANNING**

Lead and provide strategic direction to achieve business goals by articulating standards, prioritizing technology initiatives and coordinating the evaluation, deployment, and management of current and future security and infrastructure technologies.

Participate in the development and implementation of IT strategies in collaboration with the IT Management team. Provide advice and recommendations to the Senior Management team on strategic infrastructure and security architectures and best practices to ensure the integrity of the City environment.

Design and implement short and long-term strategic plans to ensure internet infrastructure capacity meets existing and future requirements in light of City business strategies and trends in usage. Strategic decisions are made in collaboration with City senior management.

Develop and communicate security and technology plans and directions to senior management team, staff, partners, customers and stakeholders. Collaborate with the appropriate departments to develop and maintain a security technology plan that support organization risk assessment needs.

Direct development, execution and updating of enterprise-wide disaster recovery and business continuity plan.

Design and develop enterprise infrastructure and security standards, architecture, infrastructure and security technology evaluation and implementation.

Review proposed infrastructure and application projects and solutions for compliance to defined City security and technology policies, procedures and standards.

Perform corporate cultural analysis and develop change strategies that are flexible and adaptive in collaboration with the IT Management Team to support effective adoption of new applications, technologies and related processes.

Conduct research and provide recommendations on infrastructure and security products, services, protocols, and standards in support of all infrastructure procurement and development efforts. Provide insight on emerging security technologies, trends and changes in the IT landscape. Identify and validate those security technologies that are right for the City and develop the best strategy for adoption and implementation. Maintain current knowledge of security industry trends and emerging technologies in anticipation of new business processes and system alterations.

Establish and manage delivery of quality service through the establishment and monitoring of Key Performance Indicators (KPI).

Devise strategies and make recommendations for enterprise information/data and solution architectures that meet the City's security and infrastructure objectives and goals, working in collaboration with City senior management team.

Coordinate feasibility studies for software and system products under consideration for purchase and provide recommendations and advise to Senior Management and IT Management Team.

Coordinate with the IT Management Team to effectively and efficiently utilize IT resources – including personnel and equipment – across the IT organization.

Manage and maintain strategic relationships with the corporate departmental leadership - across the City with a view to sustained insight on City business strategies and directions and the provision of advice and guidance on opportunities for managing risk by complying with the City's security and infrastructure policies and procedures.

Oversee the support, management and administration of contracts for spending on services and products related to managed security and infrastructure hardware and applications. This includes overseeing the preparation and execution of requests for proposals (RFPs), bid proposals, contracts, and other documentation for security applications and hardware. Negotiates enterprise wide contracts with software and service providers as required and liaise with City vendors for prompt rectification of any security problems or emergencies. This will require the definition and facilitation of communication between the City and its providers in order to deliver products and services according to plan and within budget.

Participate in the evaluation, installation, configuration and deployment of new applications, systems software, products, and/or enhancements to existing applications to ensure compliance with the City's security policies.

Oversee the delivery of IT projects using standard project management practices and methods.

Validate the compliance of proposed new software against the City's security and infrastructure architecture and policies.

Plan, organize, and manage staff and overall section operations to ensure the stable operation of the City's IT security applications and software. This includes developing, maintain, supporting and optimizing key enterprise security hardware applications such as Antivirus, firewalls, etc.

Direct and manage a contingent of Information Security and Networks analysts, including recruitment, supervision, scheduling, development, performance evaluation and disciplinary actions.

Ensure that employees are provided with and use the appropriate equipment, material and/or procedures required to perform the assigned duties.

Ensure that all employees perform work in accordance with applicable health and safety legislation and all City of Hamilton corporate and departmental policies and procedures. Ensures that appropriate action is recommended for those employees who do not work in compliance with legislation, policies or procedures.

Develop and manage operational and capital budgets to support strategic and operational requirements; conduct near and long-term financial forecasts for expanding functionality/user base.

Manage and maintain an inventory of company security application software and systems assets and their corresponding contracts/agreements.

Establish and maintain regular written and in-person communications with the organization's executives, department heads and end users regarding pertinent Security and IT activities.

Ensure effective management and communication of training and documentation for end users, hold clinics as necessary, and other user-related activities.

### **ACQUISITION & DEPLOYMENT**

Assess and communicate risks associated with technology-related investments and purchases. Provide recommendations to mitigate the risks including identification of alternative solutions.

Develop business case justifications and cost/benefit analyses for technology spending and initiatives.

Define requirements for new technology implementations and communicate them to key business stakeholders.

Review hardware and software acquisition and maintenance contracts and pursue master agreements to capitalize on economies of scale.

Define and communicate corporate procedures, policies, and standards for the organization for acquiring, implementing, and operating new network systems, equipment, software, and other technologies.

Approve and prioritize projects and the project portfolio as they relate to the selection, acquisition, development, and installation of major information systems in collaboration with the IT Management Team.

Collaborate on the preparation of RFPs, bid proposals, contracts, scope of work reports, and other documentation for infrastructure projects and associated efforts with the Manager, Infrastructure & Operations.

Review the planned purchase of technology equipment and supplies for architecture compliance and that they meet operational requirements of the business.

Validate that the security, deployment, monitoring, maintenance, development, upgrade, and support of IT infrastructure systems, including networks, data centers, servers, PCs, operating systems, and associated hardware comply with documented standards.

Analyze existing operations and make recommendations for the improvement and growth of the IT infrastructure and IT systems.

### **OPERATIONAL MANAGEMENT**

Design and direct the governance activities associated with ensuring compliance with the enterprise architecture.

Oversee the delivery of projects using standard project management practices and methods

Plan, develop and deploy security measures in collaboration with infrastructure, application and security resources.

Identify and research infrastructure and security technologies that are right for the City of Hamilton and develop/refine adoption strategies. Maintain current knowledge of industry trends and emerging technologies in anticipation of new business processes and system alterations.

Continually analyze/review and improve upon infrastructure and security technology standards across the organization to maintain a technological and competitive edge within the market and ensure compliance with the City security policies and procedures.

Supervise the design and execution of vulnerability assessments, penetration tests, security audits, ensuring legislative compliance e.g. PCI compliance.

Provide continuous delivery of technical services through management of service level agreements with end users and monitoring of systems, programs, and equipment performance.

Ensure equipment and software operation adheres to applicable laws and regulations.

Convey the technology vision through the establishment and maintenance of regular written and in-person communications with the organization's executives, decision-makers, stakeholders, department heads, and end users regarding pertinent IT activities.

Coordinate with the IT Management Team to effectively and efficiently utilize IT resources – including personnel and equipment – across the IT organization.

Manage and develop operational and capital budgets and forecasts to support strategic and operational requirements in collaboration with IT Management.

Ensure that employees are provided with and use the appropriate equipment, material and/or procedures required to perform the assigned duties. Ensure that all employees perform work in accordance with applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures. Ensure that appropriate action is recommended for those employees who do not work in compliance with legislation, policies and procedures.

Work in accordance with the provisions of applicable health and safety legislation and all City of Hamilton corporate and departmental policies and procedures related to occupational health and safety.

Perform such other duties from time to time, as may be assigned by the IT Director, which are directly related to the normal job function.

**QUALIFICATIONS**

1. University Degree in field of Computer Science, Information Systems, or equivalent. Master's or PhD. degree in one these fields preferred.
2. Fifteen (15) years of relevant experience in the field with demonstrated leadership capability including 10 years direct experience managing and/or directing the direction, development and implementation of security hardware and application services.
3. Industry security certification. CISSP from the International Information Systems Security Certification Consortium.
4. Knowledge of network security practices and experience in interpreting the applicability of local and federal laws/regulations to City operations.
5. Strong knowledge of change management practices, business process flow analysis and re-engineering and methodology development.

6. Experience overseeing the design, development and implementation of change management facilitation programs and process review.
7. Experience with multi-platform environments, infrastructure and security architectures. Demonstrated experience in strategic security technology planning, execution and policy development.
8. Excellent knowledge of technology environments including telecommunications, networks, programming, media and desktops for both data and voice.
9. Experience in strategic technology planning, execution and policy development.
10. Knowledge across multiple technical areas and business segments relevant to the City's network and infrastructure architecture.
11. Knowledge of network security practices and experience in interpreting the applicability of local and federal laws/regulations to City operations.
12. Knowledge of the City and IT department's goals and objectives.
13. Ability to prioritize and execute tasks in a high-pressure environment and make sound decisions in emergency situations.
14. Good Knowledge of the ITIL standard.
15. Strong technical knowledge of network and PC operating systems.
16. Strong technical knowledge of current network hardware, protocols, and standards including voice communications.
17. Experience working in a team-oriented, collaborative environment.
18. Knowledge of and experience in utilization of project management principles.
19. Knowledge of HR practices and policies relating to the hiring, retention and performance management of direct reports.
20. Exposure to business theory, business processes, management, budgeting, and business office operations.
21. Proven and problem-solving abilities.
22. Strong leadership skills.
23. Ability to make sound and logical judgments.
24. Demonstrated leadership and personnel/project management skills.
25. Strong interpersonal, written, and oral communication skills

**THE INCUMBENT SHALL COMPLY WITH ALL HEALTH AND SAFETY POLICIES AND PRACTICES FOR THIS POSITION AND THE WORKPLACE.**

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