



Government of Trinidad and Tobago

JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: SENIOR INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE SPECIALIST

JOB SUMMARY:

The incumbent is required to perform specialized technical duties in the administration, operations, maintenance and support of the computer centre's hardware, software, systems and related infrastructure of a large Ministry/Department. Duties include: operations and support of servers, SANs, printers and associated IT peripherals; support for email, domain management and related systems; administration and management of operating systems and other system software; administration of support and maintenance of PCs, laptops, PC software and related equipment; and supervision of professional, technical and support staff.

REPORTS TO:

Manager, Networks and Infrastructure or designated officer

SUPERVISION GIVEN TO:

Professional, Technical and Support Staff

KEY RESPONSIBILITIES:

- Operates and maintains the IT infrastructure of the Ministry/Department, monitors its performance, adheres to defined maintenance and support procedures, and ensures that established service levels of IT operations are achieved.
- Contributes to the management of the Ministry/Department's IT infrastructure of the Ministry /Department in accordance with agreed standards and procedures.
- Initiates and monitors actions to investigate and resolve problems with the IT infrastructure and implements agreed solutions and measures.
- Conducts security risk and vulnerability assessments for the IT systems of the Ministry/Department; and develops and applies appropriate technical security controls.
- Monitors the application of and compliance with, security operations procedures for areas of responsibility, reviews the IT infrastructure for breaches in security, and takes appropriate remedial actions.
- Conducts research into and explores ways to use emerging technologies and products to further the ICT goals of the Ministry/Department.
- Provides inputs to the service continuity planning process, and implements approved plans in order to ensure that defined levels of continuity for the IT infrastructure are achieved.
- Provides specialist expertise in the review, evaluation, installation, testing, upgrade and maintenance of system software such as operating systems and related utility software, and in the resolution of any associated service delivery problems.
- Monitors the IT infrastructure of the Ministry/Department for achievement of agreed performance targets and service levels and contributes to the availability management process;
- Documents and implements the arrangements for disaster recovery; and conducts regular testing of the recovery procedures.
- Monitors service delivery of the IT infrastructure components against established service level agreements, diagnoses service delivery problems, and initiates action to maintain and continuously improve the levels of service.
- Monitors IT component capacity, and follows agreed policies and procedures to proactively resolve any projected shortfalls.
- Provides project management services for the ICT infrastructure projects of the Ministry/Department,

<p>including identifying and mitigating project risk, ensuring quality in project delivery and managing resources.</p> <ul style="list-style-type: none"> ▪ Manages the storage and backup systems of the Ministry/Department to provide agreed levels of service, security, storage optimisation, and recovery and growth capacity, in compliance with data retention and data protection requirements of the Public service. ▪ Manages the installation, testing, commissioning/decommissioning of computer hardware and system software in accordance with agreed standards, quality and safety plans. ▪ Prepares and delivers learning activities, such as training, to a variety of audiences in areas of technical specialisation and responsibility. ▪ Keeps abreast of technical developments in respect of IT networks and infrastructure including computer hardware, operating systems and related products provides advice regarding their application, and utilises this knowledge in performing job duties. ▪ Performs other related duties as assigned 	
<p>KNOWLEDGE, SKILLS AND ABILITIES</p>	
<p>KNOWLEDGE:</p>	<ul style="list-style-type: none"> ▪ Considerable knowledge of the defined components of IT infrastructure. ▪ Knowledge of the principles, tools and techniques required for the management and control of ICT within an organisation. ▪ Knowledge of project management tools and techniques. ▪ Some knowledge of Public Service processes and procedures.
<p>SKILLS AND ABILITIES:</p>	<ul style="list-style-type: none"> ▪ Ability to supervise professional, technical and support staff. ▪ Ability to think creatively and to implement technology solutions. ▪ Ability to manage ICT projects. ▪ Ability to communicate effectively both orally and in writing. ▪ Ability to promote teamwork and manage conflict. ▪ Ability to establish and maintain effective working relationships with colleagues. ▪ Ability to interact positively with members of the public and external stakeholders.
<p>MINIMUM EXPERIENCE AND TRAINING:</p>	
<ul style="list-style-type: none"> ▪ <i>Minimum of five (5) years' experience at a supervisory level in the area of ICT, including at least two (2) years' experience in the operations and maintenance of ICT systems</i> ▪ Training as evidenced by the possession of a recognised Bachelor's Degree in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area. ▪ OR ▪ <i>Minimum of seven (7) years' experience at a supervisory level in the area of ICT, including at least four (4) years in the operations and maintenance of ICT systems.</i> ▪ Training as evidenced by the possession of a recognised Bachelor's degree. ▪ Certification in the area of ICT from a recognised institution. ▪ OR ▪ <i>Minimum of ten (10) years' experience at a supervisory level in the area of ICT, in addition to at least five (5) years' experience in the operations and maintenance of ICT systems.</i> ▪ Training as evidenced by the possession of a two-year Diploma/Certificate in the area of ICT from a recognised institution. 	



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JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE SPECIALIST

JOB SUMMARY:

The incumbent is required to provide technical services in the management, operations and maintenance of the computer centre hardware, software, systems and related infrastructure of a Ministry/Department. Duties include: provision of assistance with the operations and support of computer hardware, operating system software and related support applications; support for email, domain management, and related systems; provision of support and maintenance for PCs, laptops and related equipment; and supervision of other ICT technical and support staff.

REPORTS TO:	Senior IT Specialist/Senior IT Infrastructure Specialist or designated officer
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SUPERVISION GIVEN TO:	Technical and Support Staff
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DUTIES AND RESPONSIBILITIES:

- Installs, tests, corrects, commissions/decommissions IT infrastructure in accordance with defined procedures and instructions, and maintains accurate service and support records.
- Applies and maintains specific security controls to the IT infrastructure, as defined by the policy and standards of the Ministry/Department, to enhance resilience to unauthorised access.
- Investigates minor security breaches within the IT infrastructure in accordance with established procedures, takes necessary corrective action, and maintains relevant security records and documentation.
- Utilises systems management software and tools to collect performance statistics and to carry out agreed system software maintenance tasks.
- Reviews and monitors service level delivery metrics and liaises with supervisors to ensure that service level agreements for the IT infrastructure are adhered to.
- Carries out agreed operational procedures, and maintenance and installation work, on the IT infrastructure of the Ministry/Department.
- Receives and handles service desk and incident management requests for IT infrastructure support following agreed procedures, and maintains relevant records.
- Contributes to the project management of defined IT infrastructure projects by undertaking activities such as the identification and mitigation of project risk, ensuring quality in project delivery and managing assigned resources.
- Assists with the performance of regular backups and restores and tracks offsite storage, in accordance with agreed operational procedures.
- Assists with the investigation and resolution of problems with IT infrastructure and services and assists with the implementation of preventative measures to address future issues.
- Delivers learning activities, such as training, to a variety of audiences in areas of technical specialisation and for assigned projects.
- Keeps abreast of developments in the area of IT infrastructure and utilises this knowledge in performing job duties.
- Performs other related duties as assigned

KNOWLEDGE, SKILLS AND ABILITIES

KNOWLEDGE:	<ul style="list-style-type: none"> ▪ Knowledge of defined components of IT infrastructure.
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	<ul style="list-style-type: none"> ▪ Knowledge of project management tools and techniques. ▪ Some knowledge of the tools and techniques required for the management and control of ICT within an organisation.
SKILLS AND ABILITIES:	<ul style="list-style-type: none"> ▪ Ability to supervise technical and support staff. ▪ Ability to think creatively and to implement technology solutions. ▪ Ability to manage IT infrastructure projects. ▪ Ability to communicate effectively both orally and in writing. ▪ Ability to promote teamwork and manage conflict. ▪ Ability to establish and maintain effective working relationships with colleagues. ▪ Ability to interact positively with members of the public and external stakeholders.
MINIMUM EXPERIENCE AND TRAINING:	
<ul style="list-style-type: none"> ▪ Minimum of three (3) years' experience in the area of ICT, including at least eighteen (18) months' experience in the operation and maintenance of ICT systems. ▪ Training as evidenced by the possession of a recognised Bachelor's Degree in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area. 	



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JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: NETWORK SPECIALIST

JOB SUMMARY:

The incumbent is required to provide technical services in the management, operations and maintenance of the computer network hardware and software, intranet, internet, portal, communications, LANs, WANs and related connectivity infrastructure of the Ministry/Department. Duties include: operating and maintaining network and connectivity components; monitoring network security; resolving network problems and service incidents; and supervision of technical and support staff as required.

REPORTS TO:

Senior Network Specialist, Senior IT Specialist or designated officer

SUPERVISION GIVEN TO:

Technical and Support Staff

DUTIES AND RESPONSIBILITIES:

- Identifies and resolves network problems in accordance with agreed procedures and assists with monitoring and reporting on performance, using network management software and tools.
- Installs, tests, corrects, commissions/decommissions networking and connectivity infrastructure in accordance with defined procedures and instructions, and maintains accurate service and support records.
- Investigates minor security breaches with networks and connectivity infrastructure in accordance with established procedures, takes necessary corrective action, updates and maintains relevant security records and documentation.
- Applies and maintains specific security controls to the network and connectivity infrastructure, as defined by the policy and standards of the Ministry/Department, to enhance resilience to unauthorised access.
- Monitors service level delivery metrics to ensure that service level agreements for the networks and related infrastructure are not breached.
- Carries out agreed operational procedures and maintenance and installation work on the network and connectivity infrastructure of the Ministry/Department.
- Participates in the investigation and resolution of problems with networking infrastructure and services, and assists with the implementation of preventative measures to address future issues.
- Receives and responds to service desk and incident management requests for network and connectivity infrastructure support in accordance with agreed procedures, and maintains relevant records.
- Delivers learning activities, such as training, to a variety of audiences in areas of technical specialisation and for assigned projects.
- Participates as a member of a project team in the management of defined networking and connectivity projects of the Ministry/Department by undertaking activities such as identifying and mitigating project risk, ensuring quality in project delivery and managing assigned resources.
- Keeps abreast of developments in computer networking and communications infrastructure, provides advice regarding their application, and utilises this knowledge in performing job duties.
- Performs other related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES

KNOWLEDGE:

- Knowledge of defined components of networking and connectivity infrastructure.
- Knowledge of project management tools and techniques.

	<ul style="list-style-type: none"> ▪ Some knowledge of the principles, tools and techniques required for the management and control of ICT within an organisation.
SKILLS AND ABILITIES:	<ul style="list-style-type: none"> ▪ Ability to supervise technical and support staff. ▪ Ability to think creatively and to implement IT connectivity solutions. ▪ Ability to communicate effectively both orally and in writing. ▪ Ability to promote teamwork and manage conflict. ▪ Ability to establish and maintain effective working relationships with colleagues. ▪ Ability to interact positively with members of the public and external stakeholders.
MINIMUM EXPERIENCE AND TRAINING:	
<ul style="list-style-type: none"> ▪ Minimum of three (3) years' experience in the area of ICT, including at least eighteen (18) months' experience in the operation and maintenance of network, messaging and communications infrastructure. ▪ Training as evidenced by the possession of a recognised Bachelor's Degree in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area. 	



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JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SECURITY SPECIALIST

JOB SUMMARY:

The incumbent is required to provide specialized technical services in the administration and maintenance of the security of all ICT infrastructure of the Ministry/Department. Duties include: providing specialist ICT security advice to the Ministry/Department; developing ICT policy and procedures; monitoring and enabling secure operations for all technology infrastructure of the Ministry/Department; assisting with security implementations; performing ICT security audits and reviews; and supervising other ICT technical and support staff.

REPORTS TO:

Director, Information and Communications Technology or Manager, Networks and Infrastructure or Manager, Information and Communications Technology or Senior IT Infrastructure Specialist or Senior IT Specialist or designated officer

SUPERVISION GIVEN TO:

Technical and Support Staff

DUTIES AND RESPONSIBILITIES:

- Conducts security risk and vulnerability assessments for all business and operational software applications, and all ICT installations within the Ministry/Department and recommends appropriate security strategies and controls; and investigates suspected attacks and manages security incidents.
- Plans and executes programmes to review IT security activities, processes and services within the ICT function to ensure compliance with established security policy and procedures, reports on conformance and makes recommendations for fixes and improvements.
- Investigates security breaches in accordance with established procedures and recommends the required corrective actions; and assists users with the management of their security access and controls, implements *agreed user security and maintains security records and documentation*.
- Provides inputs to the service continuity planning process of the Ministry/Department and assists with the implementation of the resulting plan.
- Keeps abreast of technical developments in IT networks and infrastructure, including intrusion detection and protection, security management, vulnerability assessment and identity management to provide advice to improve security.
- Performs other related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES

KNOWLEDGE:

- Considerable knowledge of security for software applications, computer networks and IT infrastructure.
- Knowledge of relevant IT security solutions such as CheckPoint.
- Knowledge of project management tools and techniques.
- Some knowledge of the tools and techniques required for the management and control of ICT within an organisation.

SKILLS AND ABILITIES:

- Ability to supervise technical and support staff
- Ability to think creatively and to analyse IT security problems and incidents.
- Ability to communicate effectively both orally and in writing.
- Ability to promote teamwork and management conflict.
- Ability to establish and maintain effective working relationships with colleagues.
- Ability to interact positively with members of the public and external stakeholders.

MINIMUM EXPERIENCE AND TRAINING:

- Minimum of three (3) years' experience in the area of ICT, including at least two (2) years' experience in securing ICT systems.
- Training as evidenced by the possession of a recognised Bachelor's Degree in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area.
- Certification in information technology security management, such as the CCNA Security or Certified Information Systems Security Professional (CISSP).



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JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: WEB TECHNOLOGY SPECIALIST

JOB SUMMARY:

The incumbent is required to design, develop, implement, manage, maintain and provide support services under appropriate direction and guidance for the internet technology based applications of the Ministry/Department. Duties include: providing key services related to the website and intranet solutions of the Ministry/Department such as - assisting with the development of enabling policy and standards; assisting with needs assessment, and the design and development of the solutions; providing technical services in the coding and testing of these applications; monitoring, and providing assistance with the management of, the security, integrity and availability of the applications; promoting, maintaining and enhancing the solutions; assisting with related training and documentation; and supervising support staff as required.

REPORTS TO:

Senior Information Systems Specialist or designated officer

SUPERVISION GIVEN TO:

Technical and Support staff

DUTIES AND RESPONSIBILITIES:

- Assists with the design of web-based applications of the Ministry/Department, by, for example, configuring packaged applications, and documents such designs in accordance with defined standards, methods and tools.
- Develops, interfaces, tests, corrects, and documents web-based applications including the website as part of the Ministry's overall application development, configuration and maintenance process in accordance with agreed standards and specifications.
- Assists with the development and execution of software tests, including user acceptance testing, for all new or updated web applications.
- Commissions and decommissions internet-based applications in accordance with the defined procedures and instructions of the Ministry/Department or accepted leading practice, and maintains the related service and support records.
- Monitors the performance of the website and intranet applications of the Ministry/Department, and resolves any technical and performance issues identified using standard processes and procedures, and performs assigned software maintenance and performance improvement tasks.
- Monitors the levels of service delivered by the website and intranet solutions of the Ministry/Department against documented service level agreements or other approved standards of the Ministry/Department, diagnoses identified service delivery problems, and initiates action to maintain and improve the current levels of service.
- Assists with the project management of assigned internet technology projects, by identifying and mitigating project risk, ensuring quality in project delivery, and managing any assigned resources.
- Delivers learning activities, including end-user training, to a variety of audiences in areas of technical specialisation and for any assigned projects.
- Keeps abreast of developments in specific technical specialisations in internet technology based applications including website and intranet technologies; programming procedure and languages; web design, authoring, development, administration and security tools; and utilises this knowledge in performing job duties as required.
- Keeps abreast of opportunities provided by new and emerging internet technology-based, tools and

techniques and advises on their relevance and potential value to the Ministry/Department.

- Performs other related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES

KNOWLEDGE:

- Considerable knowledge of web technology including websites and intranets, web authoring languages and tools, web design and architecture, and web development and implementation.
- Knowledge of the management and operation of websites and intranets within an organisation.
- Knowledge of project management tools and techniques
- Some knowledge of relevant web technology solutions e.g. SharePoint, WebSphere.

SKILLS AND ABILITIES:

- Ability to think creatively and to implement website and intranet solutions.
- Ability to supervise technical and support staff.
- Ability to communicate effectively both orally and in writing.
- Ability to operate as part of a team.
- Ability to establish and maintain effective working relationships with colleagues.
- Ability to interact positively with members of the public and external stakeholders.

MINIMUM EXPERIENCE AND TRAINING:

- Minimum of three (3) years' experience in an area of ICT including at least two (2) years' experience in the development, operations and maintenance of web-based systems.
- Training as evidenced by the possession of a recognised Bachelor's Degree in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area.
- Certification in web technology management, such as Microsoft Certified Technology Specialist (MCTS) or CIW Web Design Professional.



Government of Trinidad and Tobago

JOB DESCRIPTION CONTRACTUAL POSITION

JOB TITLE: INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) TECHNICAL OFFICER

JOB SUMMARY:

The incumbent is required to provide technical support in the operations and maintenance of the ICT infrastructure of the Ministry/Department under the guidance and direction of a supervisor. Duties include: installation and support of personal computers and related software; monitoring the operations of the Ministry/Department's IT and networking infrastructure; assisting with the installation of computer and networking infrastructure; and responding to and addressing IT incident reports and requests for help.

REPORTS TO: Designated Specialist

SUPERVISION GIVEN TO: N/A

DUTIES AND RESPONSIBILITIES:

- Installs or removes hardware and/or software, using defined installation instructions and tools; tests and corrects malfunctions, and documents results in accordance with procedure; provides assistance to users in accordance with agreed procedures; and updates related maintenance and configuration records.
- Treats with security breaches of or security attacks on IT system/network/personal computer to limit damage in accordance with the Ministry/Department's security policy; and applies defined security controls to personal computers and related components
- Monitors and logs the actual ICT services provided to users, against that required by service level agreements, and liaises with supervisors in the resolution of any breaches.
- Assists professional staff with the release and deployment of changes and updates to the live IT environment, records activities and results; and assists with early support activities such as providing support advice to users.
- Investigates and acts on minor security breaches with the IT infrastructure, takes defined corrective action, and updates relevant security records and documentation in accordance with established procedures.
- Receives and handles service desk and incident management requests for IT and networking infrastructure support following agreed procedures, and maintains relevant records.
- Carries out agreed operational procedures of a routine nature; and contributes to maintenance, installation and problem resolution for the IT and networking infrastructure of the organisation.
- Assists with the performance of regular backups and restores, and tracks offsite storage, according to agreed operational procedures.
- Performs other related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES

- KNOWLEDGE:**
- Knowledge of defined components of IT and networking infrastructure.
 - Some knowledge of the principles, tools and techniques required for the management and control of ICT within a government based or business organisation.
 - Some knowledge of project management tools and techniques.

SKILLS AND ABILITIES:

- Ability to install/remove hardware and software.
- Ability to recognise and correct IT security breaches.
- Ability to communicate effectively both orally and in writing.
- Ability to operate as part of a team.
- Ability to establish and maintain effective working relationships with colleagues.
- Ability to interact positively with members of the public and external stakeholders.

MINIMUM EXPERIENCE AND TRAINING:

- Minimum of three (3) years' relevant technical experience.
- Training as evidenced by the possession of a recognised Associate Degree or Diploma in Computer Science, Computer Information Systems, Information Systems Management, Computer Engineering or a related area.

Information Systems Specialist (Broadcast)

Job Summary: The Information Systems Specialist (Broadcast) is responsible for the management of the Information Technology functionality of the Corporate Communications Department in consultation with the Director, Information and Communication Technology. Work is performed with a high degree of independence and initiative.

Reports to: Director, Corporate Communications and Productions

Supervises: Broadcast Technician (IT)

Key Responsibilities:

- Plans, manages and reviews the IT infrastructure for the Corporate Communications Department in collaboration with the Director, ICT and contributes to the office's policy with regard to its quality and standards
- Supervises the implementation and management of all IT requirements stipulated in the Strategic and Operational plans
- Implements strategic Information Systems plans for the Corporate Communications Department
- Analyses and assesses IT trends and determines their usefulness and relevance to the Department
- Makes recommendations to the Director, Corporate Communications and Productions and the Director, ICT on the procurement of all software, operating systems, network, web and database developer software and end user application software for use in the Corporate Communications Department
- Assists in the design, evaluation and management of the Corporate Communications Department's Multimedia Network and related systems (cable and managed television systems)
- Develops, directs and plans for the security of data, networks and all equipment purchased for the Corporate Communications Department
- Maintains/operates broadcast systems in:
 - Televising/Broadcasting
 - Multimedia; and
 - Conferencing
- Installs and certifies installation of necessary video, audio and data cabling for recording, playback, storage and network connectivity
- Performs and maintains systems and application backups
- Maintains operational procedure manuals, equipment inventory
- Prepares reports on equipment problems
- Performs routine and preventive maintenance on broadcasting and conference equipment and peripherals
- Performs/ensures recorded content of Parliamentary Proceedings is backed up on servers in Information Systems
- Verifies with Information Systems that content is archived off-site at Datacenter
- Determines the cause of system failure and takes corrective action when required
- Installs and supports software/hardware applications and peripheral equipment for broadcasting and audio visual units (inclusive of the Parliament Chamber and Conference rooms)
- Troubleshoots and resolves recorders, players and storage server operating, software/hardware problems and provides technical support as requested
- Performs related duties as required

Minimum Qualifications and Experience:

- Bachelor's Degree in Computer Science, or Information Systems, or Broadcast Engineering or equivalent qualification from a recognized, accredited institution
- A+, Net+, Microsoft Certified Professional (MCP)
- 3-4 years' experience as a computer technician
- 3-4 years' experience in a broadcast television and radio environment
- Experience in supporting operations of large and small-scale computer systems
- Experience in supporting Microsoft operating systems, XP, Server 2000, 2003
- Experience in networking computer systems (UTP cabling, Ethernet, IP protocols)

Required Competencies:

- Considerable knowledge in the management and operations of extensive IT environments and of high tech computer-based broadcasting equipment for television and radio
- Considerable knowledge of databases and the ability to manage databases
- Knowledge of operating characteristics, capabilities, capacities, and limitations of computer, network and related peripheral equipment
- Basic knowledge of the role and functions of the Office of the Parliament and its supporting agency
- Knowledge of current trends in the ICT and broadcasting fields
- Excellent customer service and employee relations skills
- Excellent oral and written communication skills
- Sound problem solving skills
- Ability to work in a standard office environment, sit, stand, walk, kneel, crouch, stoop, squat, and lift 50 lbs.
- Ability to work well without close supervision
- Ability to work long hours and be on call