

Client Support Specialist

Job Title: Client Support Specialist
Department: Institute for Quantum Computing
Grade: USG 7
Reporting To: Manager, Information Technology, IQC
Effective: 2011-09-01
Position Number: 00005768

General Accountability

Reporting to the Manager, Information Technology, Institute for Quantum Computing (IQC), the Client Support Specialist provides a wide range of information technology services and direct support to the faculty, visiting scholars, researchers, staff and students of the Institute for Quantum Computing. In addition, the Client Support Specialist also provides primary direct information technology support to the Quantum NanoFabrication facility located in the Mike & Ophelia Lazaridis Quantum-Nano Centre.

Nature and Scope

The Client Support Specialist function is responsible for providing information technology services, support, consulting and training to all resident members of IQC and to the operational staff of the Quantum NanoFab facility. The key services include, the diagnostic and resolution of hardware, software and connectivity problems, account management, software licensing management, personal workstation preparation/deployment, consultation, recommendation, procurement and assembly of module-level computing hardware. The Client Support Specialist also creates end-user learning materials to supplement the routine use of IQC's information technology systems. Requests for these services are received via multiple vectors which include e-mail, telephone and walk-in traffic. An integral member of the IQC Information Technology Team, the Client Support Specialist actively participates in day-to-day planning with support from the Manager, Information Technology. Due to the breadth and depth of knowledge required by this role, the successful Client Support Specialist will have a minimum of 3 years of related work experience.

Statistical Data

IQC comprises 8 scientific areas of focus, with 18 faculty, 4 research assistant professors, 37 postdoctoral fellows, 74 graduate students, 35 research assistants, 16 long-term visitors and 23 administrative support personnel. Faculty and student numbers are slated to significantly increase in the next several years.

IQC faculty are engaged in leading-edge research, with a range of collaborators and partners, with over 100 active grants and contracts. Research funds awarded during the past fiscal year amounted to over \$25 million. IQC has also received \$50 million from

Industry Canada and nearly \$70 million from different granting agencies within the Government of Ontario, adding to the significant original investment of over \$100 million from Mike Lazaridis.

The Quantum NanoFabrication facility located in the Mike & Ophelia Lazaridis Quantum-Nano Centre, is a University resource shared between the Institute for Quantum Computing and the Nanotechnology Institute, with members from 3 faculties and 7 departments.

Information Technology is deployed throughout the Institute and the Quantum NanoFab facility and is an important success enabler for the members. The unique nature of IQC and the Quantum NanoFab facility, presents requests which are non-routine in nature and require consistent closure as an outcome of collaborative problem solving, reasoned judgment and co-ordinated actions executed in a timely fashion.

Specific Accountabilities

Responsibilities

- performs advanced diagnostics and resolves problems for workstation computing hardware and software configurations
- performs advanced data recovery from hard-drives and other media
- performs installation and configuration of common information worker software suites (e.g. productivity) and scientific software suites (such as MatLAB, Mathematica) on all supported operating systems (e.g. Microsoft, Apple, Linux)
- performs installation, configuration of desktop e-mail clients and facilitates the creation of e-mail accounts with campus computing services (IST). Configuration may also involve the migration of existing end-user message repositories from one e-mail system to another.
- procures, assembles and configures customized computing equipment to address expressed needs of researchers and administration
- provides primary support for mobile devices used within the Institute (e.g. Blackberry, Playbook)
- assesses and resolves desktop computing security threats as presented, including direct end-user education on the prevention of future security exposures
- monitors and reports (to the Manager, Information Technology) the usage trends of information technology within the Institute
- actively maintains a knowledge of available information technologies (e.g. communications providers, hardware suppliers and associated technology offerings), providing a knowledge resource to the IQC community

- performs distribution, procurement and tracking of software licensing used within the Institute, including multi-seat licensing
- performs configuration and maintenance of all printing and photocopying equipment within the Institute
- implements and maintains all information technology asset management
- primary contact for audio/visual equipment co-ordination which includes the deployment of equipment upon request
- designs, implements and maintains primary responsibility for critical operating system and user data backups (and recovery) for an ensemble of complex lab equipment located in the nanofabrication facility which is worth in excess of ten million dollars
- participates in the implementation and support of complex machine interfaces. Such interfaces are a key operational component of the nanofabrication facility which is instrumental in maintaining a safe environment for all lab users and in the billing of users for facility access
- other duties and special projects as assigned

Technical Skills

- in-depth knowledge and experience of advanced diagnostics (and associated tools) used to resolve workstation computing hardware and software failures
- in-depth knowledge of Intel-based computing equipment. Specifies and implements custom workstation builds based upon an assessment of the expressed needs of researchers
in-depth knowledge of hardware and software configuration on a wide-range of supported systems (e.g. desktop, mobile, server)
- in-depth knowledge of at least one of the supported operating systems used within the Institute and is proficient with at least two others (e.g. Microsoft, Apple and Linux)
- proficient with the configuration of common networking requirements of desktop computing environments
- proficient with the diagnosis and resolution of common networking problems
- proficient with the installation and configuration of all supported operating systems used within the Institute (e.g. Microsoft, Apple and Linux)
- proficient with creating multi-boot operating system configurations
- proficient with the administration of virtual machine server environments
- proficient with the use of supported productivity software used throughout the Institute (e.g. Microsoft Office, iWorks)

- proficient with at least one markup syntax language (e.g. HTML, MultiMarkdown, LaTeX)
- proficient at routinely and successfully triaging demands from multiple IQC members and the operational staff of the Quantum NanoFab facility, while maintaining a high-level request closure and end-user satisfaction
- proficient in the practise of safety and security protocols that are required while working with computing equipment used within a cleanroom fabrication environment
- competent with at least one scripting language (e.g. bash, perl, python)
- competent at interpreting GNATT charts and other related planning materials
- competent with the setup and arrangement of audio/visual equipment (e.g. panel displays, teleconferencing equipment)

Communication and Teaching

- proficient at creating supplemental end-user documentation on the use of information systems within the Institute.
- creates and disseminates, status bulletins on information technology services to the membership of IQC via e-mail and/or the web
- competent at developing and delivering training sessions on the use of technologies within the Institute

Accountability

- primary client information technology services to both Institute for Quantum Computing and the Quantum NanoFabrication facility located in the Mike & Ophelia Lazaridis Quantum-Nano Centre
- participates in the planning of information technology projects within IQC.

Working Environment

The working environment is highly team oriented, with the emphasis being placed upon building strong complementary working relationships through the practise of open communication, continual improvement and achieving timely results.

Physical Effort

- Periodic lifting and carrying of heavy, bulky computing equipment: servers, workstations, displays and printers.

Physical Environment

- Frequent walking and climbing of stairs is required to reach support areas and end-users within the facility.
- Some ongoing background noise from computing and server equipment.

Sensory Requirements

- Empathy, understanding and sensitivity towards clients who are exhibiting stress or anxiety.

Mental Stress

- Must be able to deal with the pressure of multiple, concurrent demands for service in a fast paced and occasionally intense environment.
- Must be able to cope with the pressure to independently and consistently acquire and apply technical knowledge while under time sensitive demands.

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