

**POSITION SUMMARY**  
**QUEEN'S UNIVERSITY - GENERAL STAFF**

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POSITION TITLE: Systems Engineer

DEPARTMENT: Centre for Advanced Computing

POSITION NUMBER: 00503963

GRADE: 9

EFFECTIVE DATE: May 26, 2017

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**JOB SUMMARY:**

Reporting to the Operations Manager, the Systems Engineer is responsible for installation, configuration, operation, and maintenance of systems hardware, software, and related infrastructure. This position will be responsible for developing project schedules, prioritizing system work, and ensuring uninterrupted support to the Centre for Advanced Computing (CAC) and its clients.

**KEY RESPONSIBILITIES:**

- Work with CAC staff, partners, and clients to determine complex requirements and translate into actionable work plans through internal and external collaborations.
- Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements. Configure and implement hardware/software packages within complex environments.
- Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups.
- Review daily backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media, recovery tapes or disks are created, and media is recycled/destroyed and sent off site as necessary. Perform regular restoration and disaster recovery testing.
- Develop, document, and maintain installation and configuration procedures. Contribute to and maintain system standards.
- Research and recommend innovative, and where possible automated, approaches for system administration tasks. Identify approaches that leverage our resources and provide economies of scale.
- Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary.
- Provide continuous support for CAC operational systems.
- Coordinate and establish project schedules, and ensure assigned projects stay on schedule.
- Report on project status at regular meetings and when requested by management.

- Manage day-to-day operational aspects of project scope, timelines, and resources.
- Undertake other duties in support of the department.

**REQUIRED QUALIFICATIONS:**

- University degree in a relevant field.
- 10+ years relevant experience working within information technology field.
- Demonstrated expertise in Linux environments.
- Demonstrated experience managing compute cluster infrastructure.
- Experience in a research environment an asset.
- Criminal background check (CPIC) required.
- Consideration will be given to an equivalent combination of education and experience.

**SPECIAL SKILLS:**

- Ability to learn new technologies and assess their usefulness to users.
- Good understanding of security and security risks and intrusion and event monitoring.
- Advanced analytical and problem-solving skills.
- Strong communication and organizational skills.
- Demonstrated project management skills.
- Ability to work under pressure, tight time constraints, and to handle/manage numerous tasks effectively.
- Ability to work in a client centered environment.

**DECISION MAKING:**

- Determine how best to meet the client's research and/or business requirements.
- Determine appropriate problem-solving procedures and decide how to best rectify the problem. Decide when others need to be engaged to resolve issues.
- Allocate time, prioritize tasks and determine work flow. Continually assess and adjust priorities and manage tasks in a fast-paced and demanding environment.
- Evaluate and make recommendations such as the acquisition and/or adoption of new tools.

**RESEARCH ASSESSMENT QUESTIONS:  
(must be completed)**

YES NO

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Is this position technical in nature in a teaching or research lab or lab-related area?                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Does this position support a research project?<br>If yes, indicate name of the project:                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Does this position report directly to a Principal Investigator (PI)?<br>If yes, indicate name of the PI: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**SIGNATURES:**

Date

_____	_____
Incumbent	
_____	_____
Manager	
_____	_____
Department Head/Director or Designate	