PEA Job Description

1. Position Identification

<table>
<thead>
<tr>
<th>Position Number</th>
<th>992204, 994376</th>
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<tbody>
<tr>
<td>Position Title</td>
<td>Systems Administrator Support</td>
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<tr>
<td>Department</td>
<td>Ocean Networks Canada</td>
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<tr>
<td>Reports to:</td>
<td>IT Architect and Team Lead</td>
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<tr>
<td>Number of Direct/Indirect Reports</td>
<td>Direct 0</td>
</tr>
<tr>
<td>Classification Level</td>
<td>SG9</td>
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<tr>
<td>Last Updated</td>
<td>July 2019</td>
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2. Position Summary

Ocean Networks Canada (ONC) is a world-leading organization supporting ocean discovery and technological innovation. ONC is as a not-for-profit society that operates and manages innovative cabled observatories on behalf of the University of Victoria that supply continuous power and Internet connectivity to various scientific instruments located in coastal, deep-ocean, and Arctic environments. ONC’s cable arrays host hundreds of sensors distributed in, on and above the seabed along with mobile and land based assets strategically located, instruments that address key scientific and policy issues (subsea earthquakes and tsunamis, ocean acidification, marine biodiversity, etc.) within a wide range of environments.

Reporting to the Manager Business Operations, the Systems Administrator Support position is a part of the ONC Corporate Operations team, which is comprised of the Human Resources, Information Technology, Project Management, and Strategic Partnerships units. As a member of the Information Technology team, this position works under the direction of the Systems Administrator to assist in architecting new systems as required by ONC science and engineering staff. The Systems Administrator Support position receives notifications from ONC staff regarding IT operational issues for follow-up. User computing set up, support and training is also provided by this position. As a technological innovator, ONC utilizes Virtual and Cloud computing and adopts innovative new technologies, which requires the System Administrator position to develop and maintain their knowledge of new technologies and high performance computing.

This position may be required to respond to operational computing issues outside of regular office hours, which are Monday to Friday, 8:30 - 4:30.

3. Key Responsibilities and Expectations

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<tr>
<th>Key Responsibilities</th>
<th>% of time</th>
<th>Expectations:</th>
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<tbody>
<tr>
<td>Client Support</td>
<td>40%</td>
<td>• Receive, troubleshoot and resolve desktop computing issues</td>
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<td></td>
<td></td>
<td>• Maintain and improve Hyper V and VMware virtual infrastructure</td>
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<tr>
<td>Role Descriptions</td>
<td>Tasks</td>
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<td>----------------------------------------------------------------------------------</td>
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</table>
| Ongoing support and maintenance 30%                                              | - Collaborate with the Systems Administrator to monitor and respond to operational computing issues  
|                                                                                  | - Monitor Virtual infrastructure and backend storage systems which includes monitoring high performance computing systems e.g. cpu, ram usage |
|                                                                                  | - Ensure ONC servers and computers are backed up on a regular basis  
|                                                                                  | - Maintains ONC primary Domain controllers and associated services, cloud based infrastructure, general active directory and virtual networks |
|                                                                                  | - Deploys, racks and maintains servers; proactively monitors for issues for escalation to the Systems Administrator  
|                                                                                  | - Assist the to maintain the user directory  
|                                                                                  | - In consultation with the Systems Administrator liaise with University Systems to maintain IT security for ONC and investigate unusual network activity |
|                                                                                  | - Maintain inventory of computing systems and equipment  
|                                                                                  | - Coordinate the purchase of computing hardware and software  
|                                                                                  | - Create and maintain technical and functional documentation  
|                                                                                  | - Follow ITIL best practices  
|                                                                                  | - Train ONC staff and yourself on the use of new functionality created by modifications to existing infrastructure |
| Development and enhancement 30%                                                  | - Participate in the identification of computing system requirements in order to create technical specifications for system enhancements and development |
|                                                                                  | - Support the research design, development, integration, testing and implementation of new |

- Facilitate the repair of computers, printers and other related equipment  
- Consult Systems Administrator in the resolution of complex issues pertaining to core ONC servers and infrastructure  
- Assemble computing systems for new and existing staff including customizing workstations for engineering, scientific, high performance computing etc.  
- Install the necessary operating system software components on the computers, including OS and standard tools such as web servers, utilities, etc.  
- Provide training to staff in operating systems, applications and computing equipment  
- Support the maintenance and upgrade of ONC computing environment  
- Provides audiovisual support  
- Participate in the identification of computing system requirements in order to create technical specifications for system enhancements and development  
- Support the research design, development, integration, testing and implementation of new
 hardware, software and innovative virtual technologies such as VMware and Hyper v
  • Assemble necessary hardware, including computer racks, rack-mounted equipment, cabling and peripherals of various types
  • Write scripts to automate monitoring of computing operations and functions
  • Install and configure layer 3 network switches, virtual network switches as well as firewall and ACL configuration
  • Provide technical expertise and onboard support for networks deployed on marine research vessels when needed

4. Classification Factors:

Problem-Solving:
  • Analyzes desktop computing issues to determine the root cause and resolve the issue
  • Determines and corrects problems when computing systems are interrupted, unstable etc. Solutions are developed to fit the circumstances
  • Problems may be solved in consultation with the Systems Administrator who is available to provide informed direction
  • Contributes to analyses of client and/or system requirements to determine how best to develop systems solutions to identified client needs
  • Utilizes knowledge of innovative technologies to enhance and assist in architecting unique solutions to ONC’s computing needs

Responsibility for Financial & Material Resources:
  • Ensures IT hardware, software and related equipment is properly maintained and inventoried
  • Contributes to the identification of computing system requirements
  • Obtains quotes for computing software and hardware components and coordinates their purchase once approved

Responsibility for Human Resources:
  • Provides guidance, direction and training to staff in the in operating systems, applications and computing equipment

Impact of Decisions and Actions:
  • The Information Technology Services Team is accountable for the ongoing operation, development and maintenance of complex computer systems at ONC, both in offices and onboard ships. These systems are critical to the scientific, engineering and operations of ONC

Independence:
  • This position performs work within clearly defined practices, procedures and policies
Objectives/priorities are set by the Systems Administrator to meet the needs of clients for issues or projects
Work is checked or reviewed by the Systems Administrator periodically for progress, adequacy and effectiveness

5. Summary of qualifications:

The successful candidate will have a Bachelor's degree in Computer Science and minimum of 3-5 years of closely related experience.

Equivalent combination of education and experience may be considered

Experience must include MS Windows, and OSX and Linux system administration, with special emphasis on:
- Server 2012, 2016, OSX server and Linux server
- VMware, VSphere, Horizon view, ESXi and Hyper v technologies as well as cloud technologies
- VeeaM back up
- Networking configuration, in-host routing between different subnets
- Firewalls and ACL’s
- Hardware / software inventory control
- Account / User management
- Client Computing platforms including desktops, laptops, tablets, and printers
- Computer hardware architectures (CPU, RAM, Storage, Network)
- Audiovisual teleconferencing

Essential knowledge:
- Samba server configuration and maintenance
- Scripting languages such as Perl, windows powershell and/or Scripting Bash
- Knowledge of business continuity and disaster recovery procedures
- Network monitoring systems and SNMP
- Productivity tools such as MS Office, including outlook and resource calendars

Competencies:
- Results Oriented: Relentlessly pursues improvement and results. Flexible, with a strong work ethic and an entrepreneurial spirit to accommodate high level of responsibility and multiple priorities
- Creates a culture of mutual accountability
- Analytical Skill: Excellent analytical, critical thinking and problem solving skills
- Problem Solving: Excellent problem solving abilities
- Communication: Communicates effectively with strong written and verbal skills. Ability to write coherent technical and user documentation
- Independence: Ability to work independently is self-motivated and works well within a team environment
- Flexibility: Ability to work in an effective and organized manner in a complex environment with a willingness to modify one’s preferred way of doing things

In addition this position requires:
- Willingness and ability to acquire new computing and other related skills
- Self-motivated with initiative and the ability to participate in team activities
- Willingness and ability to follow direction and finish tasks in a timely manner
• Ability to troubleshoot in unusual operating requirements

This position requires a valid class 5 driver's license.

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<thead>
<tr>
<th>Employee's Signature:</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Manager's/Supervisor's Signature</td>
<td>Date:</td>
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