Job Description

1. Position Identification

<table>
<thead>
<tr>
<th>Position Number</th>
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<tbody>
<tr>
<td>Position Title:</td>
<td>Research Associate</td>
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<tr>
<td>Department:</td>
<td>Ocean Networks Canada</td>
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<tr>
<td>Reports to:</td>
<td>Karen Payne, International Technology Office</td>
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<tr>
<td>Number of Direct/Indirect Reports</td>
<td>Direct 1     Indirect 0</td>
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<tr>
<td>Position Type</td>
<td>1-year Term, Grant Funded</td>
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<tr>
<td>Salary</td>
<td>$55K – 75K annually (Position subject to funding)</td>
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<tr>
<td>Term Dates:</td>
<td>April 1, 2022 - March 31, 2023</td>
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<tr>
<td>Last Updated</td>
<td>23 March 2022</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 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 is also a member of the World Data System (WDS), a global consortium of data distribution centers under the auspices of the International Science Council. ONC is the physical host, along with the Canadian Astronomy Data Center and the University of Waterloo’s Polar Data Catalogue, of the WDS International Technology Office (ITO). The ITO supports the contribution of WDS members to the global research data infrastructure and coordinates the development and integration of components of global research data infrastructure with other operational entities that are invested in research data management. The ITO seeks to empower and enable the WDS community to accomplish complex tasks when dealing with data volumes of increasing size and complexity.

This position will have 3 primary deliverables: support the development of outputs from the RDA Global Open Research Commons (GORC) International Model WG, conduct a data prize that rewards developers, data scientists, researchers, data managers and others that can demonstrate innovative uses of WDS data and help review existing roadmaps and strategic plans for WDS members.

For the first deliverables, the RA will help organize and support the development of a roadmap for Commons integration as outlined in the group’s charter. The WG meets once a month and the RA is expected to maintain both the infrastructures (wiki, zotero collection, slide decks, meeting minutes and recordings etc) and coordinate the review of relevant material that allow the WG to identify features and KPIs currently implemented by different research commons. The RA will help create reports and visualizations of the information gathered by the WG. In this role, the candidate is expected to be able to review technical documentation provided by
research commons, have a working knowledge of different research components including data services, APIs, software development and some experience with creating plans for multi agency technical integration.

For the second deliverable, the RA will conduct a WDS Data Prize pilot project. The WDS Data Prize will be an open competition rewarding innovative use, analysis, or visualization of WDS data. Much of the structure for the data prize is in place (contact lists, terms of reference, promotional material etc). The RA will work with a partner in Quebec, and will convene regular meetings of a prize committee to conduct the prize. The RA will promote the competition, answer questions from applicants, ensure timely review of applications and report on lessons learned.

For the third deliverable, the RA will work with the WDS-ITO Director as well as representatives from the WDS-IPO based in the US in a systematic review of all of the existing technical roadmaps and strategic plans of current WDS member repositories as well as the current set of 17 repositories participating in the Portage CoreTrustSeal Certification Support Cohort and Funding program. This work will help the WDS leadership understand the current state of membership maturity and our potential contribution and integration with the GORC. All activities in this work package will be reported to, and coordinated, with the appropriate Alliance WG or committee, especially those involved in creating the National Service Delivery Model (NSDM), and the Canarie research software registry and service listing.

A dedicated assistance will be provided to the RA to help fulfill these tasks. International working group meetings are often outside of normal business hours. The successful candidate will be eligible to work remotely. The candidate must either be a Canadian or be in possession of a Canadian work permit.

### 3. Key Responsibilities and Expectations

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<tr>
<th>Key Responsibility</th>
<th>% of time</th>
<th>Expectations:</th>
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<tbody>
<tr>
<td>1st Key Responsibility</td>
<td>30%</td>
<td>● Support the tasks and outputs arising from the Global Open Research Commons (GORC) International Model WG</td>
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| 2nd Key Responsibility | 30%       | ● Conduct a WDS Data Prize pilot project  
● Create and organize an advisory group to help design and promote the Prize, review applications and award the winner  
● Summarize lessons learned from the applications in light of pathways between data services and software or analytics packages.  
● Socialize the outputs from the Prize and make recommendations on improvements for a subsequent data prize (both in Canada and internationally) |
| 3rd Key Responsibility 30% | - In conjunction with the WDS-IPO, review existing technical and strategic roadmaps of WDS members and allied Canadian repositories  
- Assist in the creation of profiles of WDS members  
- Assist in the creation of a strategic plan for the WDS arising from the review |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4th Key Responsibility 10% | - Assign tasks to a dedicated coop student to help fulfill all deliverables.  
- Attend relevant meetings (weekly ITO meetings, relevant WG and committee groups)  
- Write reports arising from the work in all 3 areas above  
- Other duties as assigned |

### 4. Classification Factors

**Problem-Solving:**
The position requires critical thinking and judgment to identify solutions that are often difficult to find. The Research Associate uses strong strategic thinking and analytical skills to analyze research infrastructures and services, especially data services. They must understand the technical language associated with web services and data repositories and the ability to speak with and understand developers working on enhancing research environments. Investigation is required to modify methods and procedures, and identify gaps that need to be filled with new software, protocols or standards.

The research associate will have excellent and creative problem solving skills and use strong strategic thinking to help stakeholders efficiently build out scientific infrastructure. The associate should also have the ability to work well with others in a team and write clearly and succinctly to produce guidance and recommendations that are usable and actionable to a variety of professionals.

*A writing sample of 1-2 pages should be submitted with this application.*

**Responsibility for Financial & Material resources:**

This position is not responsible for managing financial or material resources.

**Responsibility for Human Resources:**

This position will in-directly supervise a dedicated co-op student and will need to work cooperatively with other ITO staff and co-op students as well as ITO domestic and international partners.

**Impact of Decisions and Actions:**

The success of this position will have an impact on both the partners that are developing roadmaps and strategic plans, as well as the ITO more broadly. If the project is successful it will have a major impact on future funding and our reputation internationally.

**Independence:**

It is expected that the staff member will have a large degree of independence in managing their own time in the day to day setting as long as they continue to show progress towards project goals and grant deliverables. The staff member will have regular check ins with the Supervisor, primarily through all team weekly calls.

### 5. Summary of qualifications

This position requires a master’s degree in Information Science, Library Science, Digital, Humanities, Computer Science, Physics & Astronomy, Engineering, Mathematics & Statistics, Geography or Earth and Ocean Sciences or related fields plus minimum 3 years of work experience. An equivalent combination of education and experience may be considered.

The candidate should have demonstrated experience in one or more of the following areas:

- An understanding of web technologies and services for scientific data discovery and delivery, and the components of software, compute and data interoperability such as PIDs and APIs
- Ability to read and digest technical roadmaps and strategic plans
- Evidence of working in a community and team, public speaking and writing, specifically giving webinars and tutorials and developing content and resources on web technologies or data infrastructure and management processes

In addition, this position requires the following competencies:

- Excellent analytical, critical thinking and problem solving skills
- Superior communication skills, both written and verbal; good interpersonal skills, especially when dealing with international clients;
- the ability to listen and ask relevant questions about what data managers are experiencing
- Ability to build and maintain productive working relationships with all stakeholders
- Ability to work independently and collaboratively in a team environment
- Proven track record achieving project goals on time and produce deliverables of a high quality
- Demonstrated organizational skills

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<th>Manager’s/Supervisor’s Signature</th>
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