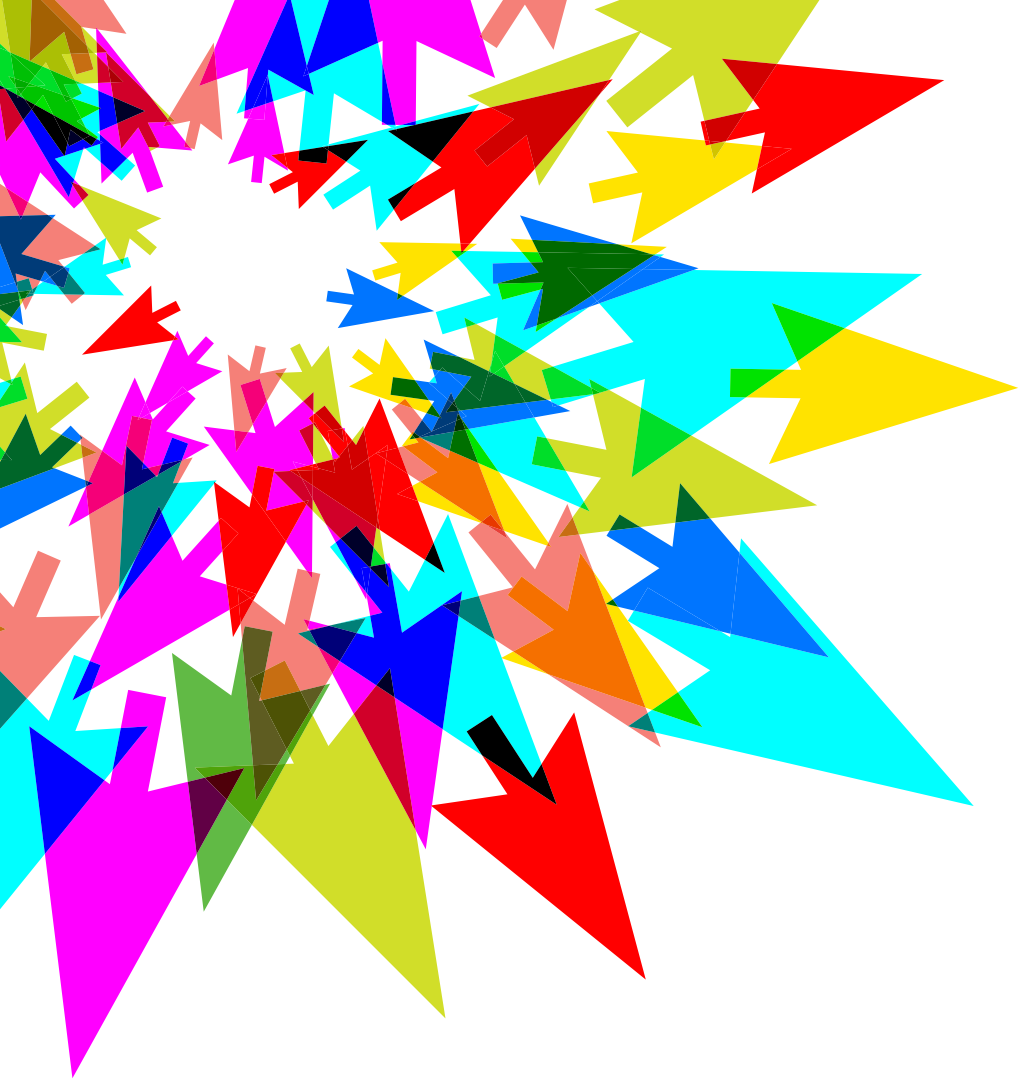

compute canada

Research Platforms and Portals Competition 2016

Call for Proposals | June 2015

Context

The Research Platforms and Portals (RPP) Competition was created in 2014 to enable communities of researchers to develop projects that improve access to shared datasets, enhance existing online research tools / facilities, or advance national or international research collaborations. The RPP competition is targeted specifically at applications that create new or support existing research platforms or portals, whereas the Resource Allocation Competition (RAC) is targeted at individuals and small groups requesting access to Compute Canada resources. Details on the RAC can be found here.

Groups are encouraged to use the RPP competition if their application falls within any of the following categories:

- Resources requested on behalf of a large community of users that will be reallocated to individuals and small groups following the award.
- Applications that provide a public platform that will make use of Compute Canada computing or storage.
- Groups engaging in international agreements to provide multi-year computing or storage solutions based in Canada.
- Recipients of the Major Science Initiative from the Canada Foundation for Innovation.
- Groups that are providing shared data sets accessible using a third party (non-Compute Canada) interface.

Allocations in this competition may be awarded over multiple years (maximum of three years). Multi-year allocations are subject to an annual review prior to the start of subsequent years and to the availability of resources.

Compute Canada has seen a significant growth in demand since its first competitive national call in 2010. Over the last five years, the number of applications has increased by 159%, from 135 applications in 2011 to 350 applications in 2015.

In 2016, between the RAC and RPP competitions, we expect to be able to allocate 124,000 core-years in computing power and 15.5 PB of storage.

To learn more about the competitions and resources available at Compute Canada, please visit the Frequently Asked Questions section on our website.

If you are unsure about your eligibility to the RPP competition, please email rac@computecanada.ca or contact your regular support team from the list below (see the **Questions & Additional Information** section in this guide).

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Submission Procedures & Deadlines

Applications must be submitted via the Compute Canada Database (CCDB). Applicants must use an existing login or create a new login to access the RPP Application from the competition landing page. All fields of the competition application page must be completed.

For full application submission, applicants should use the resource identification table in CCDB for computing and storage to indicate the resources requested as part of the application.

Upon completing all fields of the application and uploading the free form documents, use the Submit button to submit the application.

Letter of Intent Deadline: The electronic submission must be received by Thursday August 13, 2015, no later than 4:00 PM Eastern Daylight Time.

Full Application Deadline: The electronic submission must be received by Thursday October 8, 2015, no later than 4:00 PM Eastern Daylight Time.

Guidelines for Completing an RPP application

Applications to the RPP undergo a two-stage evaluation, including a Letter of Intent (LOI) stage and a Full Application stage. The LOI stage is not competitive. Applications are only evaluated against the eligibility criteria to ensure alignment with the RPP competition rules and to ensure that Compute Canada can prepare for the number of expected RPP applications. The Full Application stage includes greater detail about the requested resources, availability of the resources to the platform or portal, operation and management of the platform, and expected impacts and opportunities resulting from the resource allocation.

Both stages of the competition are mandatory and must be completed by the identified deadline dates. All applicants will be contacted regarding the results of their LOI, but only successful LOIs will be invited to submit a full application. Applicants who are unsuccessful at the LOI stage may be directed to the RAC. Applications must be structured using the instructions below and submitted via the CCDB. Groups that are unsure if they qualify for the RPP competition should contact Compute Canada at rac@computecanada.ca. Applications may be submitted in either French or English.

If eligibility requirements are met, applicants may submit to both the RPP and RAC competitions.

Letter of Intent

The LOI should be completed online via the CCDB and include the following sections:

Platform/Portal – *Identify the platform/portal you wish to support or create with this project. Include: name, website, main research area, keywords.*

Overview – *Outline the requested resources and the duration of the activities. (Note applications should not exceed 3 years in duration.)*

Rationale – *Provide rationale for supporting or creating the platform/portal and why this is necessary.*

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Operation – *Describe how the platform/portal provides or awards access to the resources granted through the RPP competition. Include general details on how the platform/portal will work with the community of researchers and enable greater collaboration between participants.*

Scale – *Identify the expected types of participants who will make use of the resource (e.g. Canadian academic researchers, Highly Qualified Personnel (HQP), international researchers, etc.), and the envisioned breakdown of domestic and international institutions involved.*

Full Application (by invitation only)

Resource Request Table

The Resource Request Table is to be completed online in the CCDB on the RPP Full Application page. It includes the details about the resources required to deliver the activities outlined in the Strategic Plan section of the application. Please ensure there are no discrepancies between the resources outlined in the Resource Request Table, the Resource Justification section, and the Strategic Plan. The Resource Request Table generally includes the following information:

Resource Type – *The number of core years (or virtual machines or GPU years), terabytes of storage, or a combination of both.*

Years – *The distribution of the resources across multiple years – including high demand periods within the different years.*

Resource Locations – *The preferred locations for the resources requested (note: resource locations are dependent on availability, Compute Canada may redistribute resources across Canada to meet the needs of all users).*

Storage Type – *The type of storage being requested, such as long-term storage or high performance storage.*

Compute Canada Support[1] – *Any requests for technical support to launch the activities (yes/no) – Choose from the drop-down list and provide specifics around the level of support in the Resource Justification section. Note that general system operation and ticket support should not be included here.*

Resource Justification

The Resource Justification section is a free form document to be completed following the guidelines in the General Presentation section. This section provides additional details to complement the Resource Request Table and should include:

- Details on the resource usage.
- A description of the storage needs.
- A rationale for the choice of specific computing and storage resources.
- If applicable, a description of high demand periods.

1 While Compute Canada can provide support in deploying existing software stacks on Compute Canada systems, we generally do not have the capacity to develop new platform solutions on behalf of researchers.

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- Expected usage of the resources (domestic proportion across country, international proportion and distribution).
- A description of the support requested from Compute Canada to enable success of the platform/portal.
- The impacts of scaling the resource request – given the finite nature of the available resources, requests may be required to scale their activities. Describe the effects of this scaling on the expected outcomes of the platform/portal. Use allocations at 80%, and 50% (of requested) and the expected outcomes in each scaling scenario.

Although the size of resource requests is not limited within the available competition, applicants should note that the resources available are finite and will be allocated to maximize the benefits derived from Compute Canada. Thus, applications may be scaled based on need and availability. Please refer to the Appendix at the end of this Guide for the RPP Evaluation Criteria.

Strategic Plan

The Strategic Plan section is a free form document that should not exceed 15 pages. The Strategic Plan should be completed following the guidelines in the General Presentation section. It should include the following information:

Goal and Alignment

- Main goal of the application
- Importance of the scientific area to Canada
- Alignment with the strategic goals of Compute Canada as outlined in the Strategic Plan 2014-2019

Use of a Platform/Portal

- Describe the need for a platform/portal and the added value that will be created for the community of researchers
- Provide context of the demand by the research community to consolidate efforts into a platform
- Describe the level of interaction between Canadian and international research groups and platforms
- Outline the proposed approach to sharing data sets across the platform

Expected Impacts

- Describe the expected impacts of the research resulting from the research platform/portal
- Provide a detailed list of the outcomes resulting from the use of the Compute Canada resources and the expected schedule for delivery of these outcomes
- Explain how other partners, researchers or scientific areas will benefit from the outcomes of the research

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Management and Operation of the Platform/Portal

- Provide a detailed description of the management system and how the resources will be shared/ distributed across the platform/portal
- Explain how the research community will access the resources and how the platform/portal will maintain/increase the population accessing resources
- Describe the evaluation mechanisms used to provide scientific rigor in selecting projects
- Detail the type of information collected and the regularity of the project reporting to track the progress towards the anticipated expected outcomes

Highly Qualified Personnel (HQP)

- Describe the potential impacts on HQP through their involvement in research activities using Compute Canada's resources
- Provide a table of the total number of HQP directly engaged in projects utilizing Compute Canada Resources and across academic levels (e.g. Undergraduate, Masters, PhD, PostDoc, etc.)
- Describe any unique training opportunities for HQP resulting from the platform/portal
- Provide any examples of potential for cross pollination between disciplines of HQP within the platform/portal community

Curriculum Vitae & Biographies

The lead applicant must upload his / her Canadian Common CV (CCV) as part of the application process. He / she will also be asked to provide the Compute Canada ID (CCI) of any key project collaborators.

General Presentation Guidelines for the Free Form Sections

All applications must be submitted electronically via the CCDB. No paper applications will be accepted. The applications must be compiled into one searchable PDF version and must not be assembled using scanned documents. Applications should be compiled in the following order:

1. Resource Justification – typically 2 pages
2. Strategic Plan Free Form – typically no more than 15 pages (including images and tables)

Hard page limits will not be enforced, but we ask applicants to please keep the guidance above in mind when preparing their documentation.

All free form sections should follow these formatting recommendations:

- Page size: 8½ x 11 inches
- Margins: no less than ¾ of an inch on all sides
- Font: Times New Roman (no smaller than 12 pts) or Arial (no smaller than 11 pts)
- Header: include the title of the application at the top of every page
- All pages should be consecutively numbered

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Questions & Additional Information

For any questions or for more information on the RPP Competition please contact us at rac@computecanada.ca.

For server-specific questions, please contact your regional support team:

ACENET:	support@acenet.ca
Quebec:	support@calculquebec.ca
Ontario:	
HPCVL:	help@hpcvl.org
SciNet:	support@scinet.utoronto.ca
SHARCNET:	help@sharcnet.ca
WestGrid:	rac@westgrid.ca

Privacy Policy

Confidentiality of Information
Compute Canada will safeguard the information it receives from applicants. It will instruct proposal reviewers to keep all information confidential and to use it only for review purposes. All proposals will be available for review by all Compute Canada reviewers and the RAC Administrative Committee.

Use of Personal Information
Any personal information collected by Compute Canada is used only to review applications. Such information may be shared with relevant officials in the relevant consortium and/or with their research institution.

Public Information
If approved for an allocation, Compute Canada will post the following project information on its website:

Applicant's Name
Department/Institution/Organization
Platform or Portal Title
Summary
Allocation

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Appendix - Evaluation Criteria

Strategic Plan

1. Goal and Alignment
   - The project goal is clearly stated and aligns with the goals of Compute Canada.
   - The scientific area of focus is of importance to Canada and will generate positive benefits.

2. Use and Development of a Platform/Portal
   - The applicant has clearly explained the added value from the creation of the proposed platform or portal for the identified communities.
   - Creation of the research platform/portal is being driven by the research community targeted.
   - If Applicable – The application details the level of interaction between Canadian and international research groups.
   - The approach to sharing data sets across the platform/portal is well detailed and the application addresses any potential accessibility issues.

3. Expected Impacts
   - The expected impacts have been clearly articulated over the entire duration of the requested allocation and have indicated the means by which they will be measured.
   - The application presents a clear timeline for the delivery of the anticipated outcomes.
   - The outcomes presented are of relevance and importance, and will benefit the partners and the research community.

4. Management and Operation of the Platform/Portal
   - The proposed management of the resources is well defined and will provide broad access to the research communities.
   - The process for resource access is well defined and the application identifies a credible plan to maintain or increase the population accessing resources.
   - If applicable, the scientific evaluation of selecting projects will result in supporting excellent research with the resources available.
   - The reporting framework presented will ensure information collected on the users of the portal will provide the ability to track impacts (scientific, HQP, social, etc.) and the participants are maximizing the benefits of the resources to meet the expected outcomes of the application.
   - The team assembled to deliver on the platform/portal have the right combination of skills to execute the strategic plan (where positions are not yet filled, a description of the position has been included).

5. Highly Qualified Personnel (HQP)
   - The application will generate significant benefits to HQP and has outlined these benefits in the application.
   - The anticipated number of HQP participating in the platform/portal have been clearly delineated across academic levels.
   - The platform/portal will create unique training opportunities for the participating HQP.
   - The application identifies strong examples of cross-pollination between HQP disciplines resulting from the platform/portal.

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Appropriateness of Resources Requested

- The applicant has a good understanding of the resources required and has provided a justified request for resources.
- The resources requested are acceptable for the level of activities and anticipated deliverables.
- The resources are well justified over the entire duration of the request.
- The distribution of resources over the entire duration of the request is well defined and includes any periods of high demand.
- The locations of the resources requested are appropriate given the capacity of the Compute Canada systems.
- If applicable – The storage requested has been appropriately categorized as long-term/archival storage or a rapid accessibility storage solution.
- For applications involving international participation, the application has indicated the domestic proportion of resources for use across Canada compared to the international proportion and distribution.
- The applicant has provided a clear indication of the impacts of scaling down the resource allocation and has tied these impacts to the expected outcomes.

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