# Platforms EOI: Data Analytics Platform Launchpad

**Project title**

Data Analytics Platform Launchpad

**Field of Research code(s)**

- 01 MATHEMATICAL SCIENCES
- 03 CHEMICAL SCIENCES
- 04 EARTH SCIENCES
- 05 ENVIRONMENTAL SCIENCES
- 06 BIOLOGICAL SCIENCES
- 07 AGRICULTURAL AND VETERINARY SCIENCES
- 08 INFORMATION AND COMPUTING SCIENCES
- 09 ENGINEERING
- 10 TECHNOLOGY
- 11 MEDICAL AND HEALTH SCIENCES
- 12 BUILT ENVIRONMENT AND DESIGN
- 13 EDUCATION
- 14 ECONOMICS
- 16 STUDIES IN HUMAN SOCIETY
- 17 PSYCHOLOGY AND COGNITIVE SCIENCES
- 18 LAW AND LEGAL STUDIES
- 20 LANGUAGE, COMMUNICATION AND CULTURE
- 21 HISTORY AND ARCHAEOLOGY

**EOI Lead Name**

Nigel Ward

**EOI lead Organisation**

Queensland Cyber Infrastructure Foundation (QCIF)

**EOI lead Email**

Collaborator details

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<tbody>
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**Project description**

In general, cloud-based platforms all require two fundamental service layers: 1) a core infrastructure layer that provides the base 'hardware'/VMs, storage and networking; and 2) a layer for deployment, scaling, monitoring and management of users and applications. This project proposes an extension to the ecocloud and Tinker Studio co-development work through the development of a 'one-click' launchpad for deploying the above service layers to target cloud infrastructure (e.g. AWS, Azure, ARDC Cloud). On top of this the launchpad will include existing discipline-agnostic command-line services (e.g. Jupyter Notebook servers), allowing users to carry out tasks that
they cannot as easily perform on their personal computers.

This project will deliver a standardised, ready-for-use launchpad for deploying, maintaining and operating cloud-based platform technology that is currently otherwise being individually managed, maintained and operated by a number of different institutions and groups. The project will also provide greater standards and harmonisation across research platforms by encouraging the use of a shared technology deployment reducing per-project technical operation overheads.

### Existing technology

**Adopt**

The project will adopt the existing core infrastructure layers that supports the ecocloud Platform and the Tinker Studio.

**Adapt**

The project will then adapt this code into automated deployment modules that can be easily repurposed and rapidly deployed elsewhere to support other platforms and other disciplines. A key component of this will be reducing replication of effort by ensuring updates and maintenance are done at the launchpad level, which can then easily be pulled through to supported platforms.

The code base currently runs on multiple nodes of ARDC’s Research Cloud, the project will adapt this to easily deploy and run on other cloud infrastructure such as commercial and international cloud providers.

**Build**

This project does not propose to build new platform technology.

### Anticipated requirements

**Annual funding**

$0 - $99,000

**Proposed length**

2 years

### Other information

**Other information you wish to provide**

The ecoscience and HASS communities have committed to using the launchpad for co-deployment and shared updates and will work closely with this project to ensure the resulting launchpad is fit-for-use across the domains. It’s worth noting that this program of work is not owned by a single disciplinary community and as part of the sustainability pathway this project will look for partners who would be interested in providing the Platform Launchpad as part of their future core services offering.

### Terms

**I agree to the terms**

Yes