ESIP October 2014 Testbed Request for Proposals

I. Introduction

The ESIP Products and Services Committee with the ESIP Testbed Configuration Board are seeking proposals to carry out funded work to expand the ESIP Testbed.

The Testbed serves as a forum for innovative collaboration across all sectors of the ESIP Federation by enabling Federation committees and clusters to develop, test, and improve availability and accessibility of member products and services. The Testbed is intended to offer a unified environment to gain consensus on community best practices and approaches to utilizing technological advances that are of interest to the ESIP Federation community.

Some ideas for this funding round could include, but are not limited to, offering solutions that do one or more of the following:
- Further goals of committees, clusters and working groups by implementation of demonstration technologies using the ESIP Testbed resources and infrastructure
- Build upon the initial research and work of a previous Testbed project
- Investigate ideas related to other initiatives such as President Obama's Climate Action Plan and app challenges, or Thriving Earth Exchange
- Organizations that sponsor a student to investigate an interesting problem

In addition to the funding available for Testbed Projects, Microsoft Research has offered to award some projects with Azure cloud server space. Microsoft Research will be joining the Testbed Configuration Board to review proposals for this purpose, and contribute to the Testbed award with Azure cloud resources.

This RFP has the following sections; please make sure to read each as you prepare to respond:

II. Resources for your Project

ESIP has resources you could leverage for your proposed project. These are listed in this section.

Funding

ESIP can provide up to $7,000 for a testbed project - it is up to your team in your proposal to outline a budget and justification for amount requested. Regardless of amount requested, you should provide a breakdown of the budget and how the funds will be used, as part of your proposal. Proposals are reviewed on a first-come basis; there is no guarantee that a project will be funded but the chances are better if submitted early. Of course, projects that require no funding are also welcome.

Testbed Portal

The Testbed Portal is the registry of the testbed projects, and provides a place for project documentation, content registration, and document sharing for your project work. The URL for the Testbed Portal is http://testbed.esipfed.org.

Testbed Cloud Servers

If you need a location to host your project for development, testing, and user feedback, the Testbed can also provide cloud server instances for you to use. Please include in your proposal a plan for how you will use the cloud server and what it contributes to your project. The cloud instance can remain up for the initial project timeframe, but plans should be made to migrate your project to another environment after the duration of your project in keeping with project lifecycle expectations. Your proposed budget should include estimated costs and duration for running the Cloud Server instance, what type of cloud resource you need, and the plan for user feedback and access of the resource. Where there is collaborative development, team members can share an instance password.

Cloud Computing Adoption Advisory Tool

This tool - the result of a Testbed project itself - assists domain experts in selecting the most suitable cloud solution platform for their project needs. Although the output of the tool should be considered a rough estimate to be checked against actual information from cloud service providers, it is a good starting point. For more information and access to the tool, see http://testbed.esipfed.org/node/1244 .

ESIP GitHub Repository

Code for testbed projects should be archived in GitHub and included in the ESIP GitHub organization at https://github.com/orgs/ESIPFed . This is a public organization, but you will need

to be a member of the organization to create a repository here - please contact Erin Robinson (erinrobinson@esipfed.org) with your GitHub username for access.

Webex

If you would like to set up regularly scheduled or group calls, contact Erin Robinson and she can provide webcast and dial-in for you to use.

Meeting Space

ESIP also provides breakout session capabilities at the twice annual ESIP meetings to be used for planning sessions, feedback and presentation of your work, and other project-related meetings. Erin Robinson is also the contact for submitting a meeting session proposal.

III. Past Testbed Projects

There have been many ESIP-funded Testbed Projects in the past - read about them here in the ESIP wiki or Testbed project site: http://wiki.esipfed.org/index.php/Past_Testbed_Tasks or http://testbed.esipfed.org/project, respectively. Follow-on work from a previous Testbed Project can be a great way to continue the research begun in the Testbed and ESIP community. Examples of follow-on projects might be answering additional questions posed by the initial projects that are important to complete the work or analysis of the product or service being tested, building out interfaces or other technologies that leverage the projects, or other innovative work.

If your solution is based on a previous Testbed project, please explain how your solution uses the previous project's research and/or technology, and the ultimate benefit that your solution addresses. Note: While follow-on research is encouraged, the purpose of the testbed is not to provide funding for ongoing maintenance or operations of a product or service, so projects requesting this type of funding are not likely to be accepted.

IV. Relationship of your Project to other Initiatives

The ESIP Winter Meeting theme is "Earth science and data in support of Food Resilience: Climate, Energy, Water Nexus", and encourages topics that investigate Food Resilience from a resource and climate perspective. Your project might have a connection to the Winter Meeting theme. Also related to the theme are external initiatives such as President Obama's Climate Action Plan and the AGU's Thriving Earth Exchange. You might also choose to connect your project work to these initiatives.

If your project has a relationship to the Winter Meeting theme and/or other initiatives, please explain this in your proposal response.

V. Reporting Requirements

Projects chosen for funding will be expected to do the following as part of Reporting Requirements:

- Create a project page on the Testbed Portal (http://testbed.esipfed.org) that explains what your project will achieve, your project plan, and timeline
- Define when and how your project will be concluded; if longer term sustainability is a goal, please describe why it would be maintained in the Testbed longer than the project duration
- During or at the conclusion of your project, post any resultant code and/or a snapshot of the Azure or Amazon instance to the ESIP GitHub organization repository, and place the link on your project page in the Testbed Portal
- You will be asked to present your project progress at Product & Services meeting calls at its halfway point, and also upon its completion
- Presentations/Posters at ESIP Summer &/or Winter meetings are highly encouraged

VI. How to Propose

Document Guidelines
A proposal should be **3 pages in length or fewer** and should specify:

a) Project description; how project fits in with previous Testbed work, if applicable
b) Project plan, budget, and timeline
c) If you plan to use cloud server resources, please indicate what kind of instance you need and how you plan to use it; also, what kind of instance you need, and include the cost to run the instance for the duration of your project in your project budget
d) Names and descriptions of roles for team members
e) Any special skills or intended outcomes that the proposer can bring to the task
f) The ultimate benefit that your solution brings to the ESIP community

Schedule
Projects are intended to be roughly 6 months in duration. You can conceptualize the project's scheduling and reporting out as follows; please consider this as you propose your project plan:
- Project award
- Present project plan at next ESIP meeting (in this case, the Winter Meeting)
- Post-meeting: work on project, report out at intervals
- Present project results at following ESIP meeting (in this case, the Summer Meeting)

Submission Instructions

Proposals may be submitted by any ESIP organization, an individual within such an organization, or a team of such individuals. Civil servants are restricted from receiving ESIP funds. The proposal should include a CV for any participants (not part of the 3-page proposal). Proposals or inquires should be sent to the ESIP Testbed Configuration Board at tcb@esipfed.org for vetting.

Deadlines

Proposals may be submitted during and up to the consideration deadline - for this RFP, the deadline is **on or before October 31st, 2014**. Proposals are reviewed on a first-come basis; there is no guarantee that a project will be funded but one's chances are better if submitted early. Another call for projects is planned for **April 2015**.