

NSF 20-108

Frequently Asked Questions (FAQs) for Budgeting for Cloud Computing Resources via CloudBank in NSF Proposals

- 1. Who are the target users for CloudBank?
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- 11. For proposers submitting a collaborative proposal with another organization, how should the costs be budgeted? Together for the entire project or separately for each proposal in the collaborative project?
 - 1. Who are the target users for CloudBank?

NSF funded CloudBank to enhance the research and education community's access to cloud computing resources. CloudBank is initially providing this access on a pilot basis through selected programs within the NSF Directorate for Computer and Information Science and Engineering (CISE). For more information, see question #2 below.

2. Which NSF programs currently enable access to cloud computing resources via CloudBank?

Principal investigators (PIs) submitting to the following NSF program solicitations may include in their proposals requests for access to cloud computing resources via CloudBank:

- NSF 19-564: Smart and Connected Communities (S&CC);
- NSF 20-563: Cyber-Physical Systems (CPS); and
- NSF 20-591: CISE core programs.

3. What resources and services does CloudBank provide?

CloudBank provides information, education, training, and allocations for cloud computing resources – initially, Amazon Web Services (AWS), Google Cloud Platform (GCP), and Microsoft Azure. Information, education, and training resources are available to anyone in the research and education community. Allocation of cloud computing resources is provided to projects funded by specific NSF funding opportunities that allow for the use of CloudBank (see #2 above and the corresponding NSF funding opportunities for details). Projects that receive their cloud computing allocations via CloudBank (https://www.cloudbank.org/faq) will also receive additional services, as described below.

4. How do I gain access to CloudBank?

CloudBank provides access to cloud computing resources to selected NSF-funded projects, as described in #2 and 3 above.

Anyone in the research community is able to access the education and training resources that CloudBank makes available.

5. I am preparing a proposal to one of the NSF programs noted in #2 above and wish to budget for cloud computing resources. How I can estimate the associated cloud computing costs?

CloudBank recommends using the following calculators that the cloud computing providers have made available:

• Amazon Web Services;

Google Compute Platform; and

Microsoft Azure.

6. I have questions about my cloud computing resource estimates. Where can I go for help?

Please email help@cloudbank.org for assistance in reviewing your resource estimates and cloud costs. All information provided to CloudBank will be treated confidentially. Note that all other questions about your proposal to NSF should be directed to the cognizant NSF program officer for the specific funding opportunity.

7. What is the mechanism for funding cloud computing resources that are awarded to successful proposals?

As described in the relevant NSF funding opportunities, proposals should include a supplementary document that provides the cost details, justification, and description of cloud computing resources requested. The NSF Budget should not include any such costs. However, the total cost of the project, including the cloud computing request, may not exceed the budget limit described in the corresponding funding opportunity. Once awarded, funds for cloud computing resources flow directly to CloudBank, which will in turn manage access by the PI team.

8. How do I budget for cloud resources in my proposal?

As stated in the previous question, proposers should include a supplementary document that provides the cost details, justification, and description of the cloud computing resources requested. The NSF Budget should not include any such costs. However, the total cost of the project, including the cloud computing request, may not exceed the budget limit described in the corresponding funding opportunity.

For example, consider a proposal submitted to the Small category, which has a total proposal budget limit of \$500,000. If a PI wishes to request \$20,000 in cloud computing resources through CloudBank, then his/her proposal should request, as part of the proposal budget, no more than \$480,000. The remaining \$20,000 for cloud computing resources should be specified in the Supplementary Document. If a proposal is a collaborative project with two PIs from two different organizations, then each PI may request cloud computing resources separately through independent Supplementary Documents as long as the total budget (on the budget pages plus in the Supplementary Documents) does not exceed \$500,000. See #5, 6, and 7 above for more details.

9. Do the costs of cloud computing resources count toward the overall proposal limit?

Yes, the total cost of an NSF project, including the costs of the cloud computing

resources, may not exceed the budget limit described in the target NSF funding opportunity. See #7 above for more details.

10. Will the addition a request for cloud computing resources cause delays in processing my proposal?

No, NSF does not anticipate any delays.

11. For proposers submitting a collaborative proposal with another organization, how should the costs be budgeted? Together for the entire project or separately for each proposal in the collaborative project?

Each proposal in a collaborative project must submit costs separately. For example, for a collaborative Medium project, each participating organization may request cloud computing resources separately as long as the overall budget is within the limit of \$1,200,000.