

Zcash Community Grants (ZCG) Request For Proposal (RFP) Run Your Own Zcash Full Node



1. Project Description

The Zcash Community Grants (ZCG) committee is inviting qualified individuals or companies (Grantee(s)) to submit a proposal to develop an easy-to-use product that allows Zcash users to run their own full node.

The relationship between the winning Grantee(s) and ZCG shall be that of a grantee and grantor, governed by [standard grant terms and conditions](#).

2. Background and History

ZCG exists to fund projects that advance the usability, security, privacy, and adoption of [Zcash](#), a privacy-focused cryptocurrency. [Here's what we've funded so far](#).

Formerly known as the Major Grants Review Committee, ZCG was created by community members of the Zcash cryptocurrency in [ZIP 1014](#), working within the Zcash governance process.

ZCG's funds come from the decision in ZIP 1014 to allocate a portion of all newly created Zcash—over a four-year period—to the ZCG.

Legally speaking, ZCG is a technology advisory board that constitutes a committee of the [Zcash Foundation](#), under its [bylaws](#). Grants are chosen by a committee of [five members](#) who were chosen by the [Zcash Community Advisory Panel](#) in an [open election](#).

Operational support is provided by the Zcash Foundation.

Resources:

- www.zcashcommunitygrants.org
- zcashgrants.org

3. ZCG Responsibilities

ZCG will provide the Grantee(s) with all available relevant information to aid in the successful completion of the project. ZCG will also provide:

Aside from funding, ZCG can provide you with ourselves as guests, our feedback as listeners, and are happy to try to use our inroads with ZF, the ECC, and the Zcash Community at large to help you connect with potential guests.

We will amplify any endeavor we fund wholeheartedly through our official and personal social media presences.

4. Project Assumptions

The following assumptions were made in the development of this Scope of Work:

This integration will cover the complete scope of requirements listed with deliverables spread across milestones as suited by the applicant. The development activity must preferably take place publicly for transparency and history. All implementations for server setup must preferably be licensed under [MIT License](#).

5. Proposal Submittal and Contacts

The Grantee's proposal shall be submitted to the [Zcash Grants Platform](#) in PDF format unless ZCG has otherwise requested supplementary materials in a different format. Late submissions will not be accepted.

Questions should be directed to [ZCG](#).

6. Project Schedule

The anticipated project schedule is summarized as follows:

05/02/2022	RFP Posted
TBD	Proposals Due
TBD	Contract Awarded
TBD	Final Deliverables Submission Deadline

7. Project Background

According to Blockchair, there are currently 240 nodes operating on the Zcash network. Full nodes are the backbone of the Zcash network. By validating and broadcasting transactions without relying on third parties, they help keep the network decentralized. Each full node adds to the security and robustness of the Zcash network.

The development of a plug-and-play full node would remove technical barriers and allow more users to participate in the Zcash network. Similar devices exist for Bitcoin and are developed by companies such as Start9 and Umbrel. These products have been extraordinarily successful.

8. Scope of Work

The goal of this project is to make it easier to run a Zcash node and related server side software by removing technical difficulties for users. This can be accomplished by building a plug-and-play full node from scratch or integrating Zcash into an existing hardware device.

Technical Approach

The project should include the following components:

- Automated scripts: Scripts to automate the deployment and maintenance of a Zcash full node. This includes support for both [zcashd](#) and [zebrad](#) full node options. The scripts will start the Zcash daemon and keep it synced with a full copy of the Zcash blockchain. It should also check for tagged updates when available.
- Add support for the user to host their own [lightwalletd](#) instance, accessible from the default ports and IP/host name.
- Update infrastructure: Automated software upgrades to node operators.
- Zcash UI: A web-based user interface that is used to administer the full node and lightwalletd instance from within the local network or monitor the node's status from outside the local network. This shall utilize the available RPC commands via secure credentials and have hardened security on the local network.
- Troubleshoot: If there are reorgs detected in either the full node or lightwalletd, there must be an option to re-index the chain within the user interface.
- Documentation: A user manual that helps users quickly install the node, provides basic information for troubleshooting issues, and answers frequently asked questions. The documentation should also include links to follow up online on further information from the GitHub repositories and online documentation section.
- Audit: The implementation must be audited via a separate grant sourced from ZCG.

9. Proposal Requirements

The Proposal shall outline the Grantee's Scope of Services, which at a minimum must include the criteria set forth within this Request for Proposal, and the Grantee's approach to administering and completing the project. The applicant/team must have the following:

Requirements:

- A strong understanding of running blockchain full node, networking & security fundamentals
- Experience building similar full node products
- Good documentation skills

Nice to Haves:

- Prior experience working on Zcash-related projects or with Zcash developers
- Experience deploying and maintaining blockchain infrastructure
- Previous technical writing experience to help with documentation manual

10. Selection Criteria

The applicant must attach links to the team member's resume and links to related prior completed works. All proposals submitted for this project will be evaluated. ZCG will review the Proposals and make a selection based on the best value, considering the following selection criteria:

Criteria	Standard	Weighting Factor
Cost	Does the Grantee(s) provide a cost proposal that is deemed reasonable for the complexity of the work to be undertaken? Does it provide "value for money"?	4
Personnel Qualifications	Do the assigned personnel have the skills and experience to produce the project's desired outcome? Have personnel demonstrated success in these roles with documented examples of direct experience with this type of work?	3
Project Approach	Does the Proposal approach show an understanding of project constraints and meet the project objectives? Do the proposed work hours accurately reflect the level of effort required to complete each Project task? Does the Proposal approach demonstrate an efficient, reliable plan of progression and achievable timeline?	3

The criteria scale ranges from 1 to 10: 1 is poor, 5 is average, and 10 is outstanding. Criteria will be multiplied by the associated weight to give a weighted score, which will be summed for a cumulative score. The maximum possible cumulative score is 100.

11. Diversity Statement

ZCG believes in providing equal opportunity to all business enterprises to participate in all aspects of the ZCG grant program without regard to race, creed, age, sex, national origin, ethnic identity, physical or mental disability, veteran status, marital status, economic status, religion, sexual orientation, gender identity or expression, or any other legally protected basis, and will conduct its grant program so as to prevent such discrimination.

Recognizing that some individuals, groups, and business enterprises, including Minority Business Enterprises, Women Business Enterprises, Disability-Owned Business Enterprises, LGBTIA+ Owned Business Enterprises, and Veteran-Owned Businesses, have not historically received opportunities to participate equally in contracting opportunities and to ensure and reaffirm ZCG's continuing commitment to progress and succeed in achieving the goal of equal opportunity, ZCG is committed to the goal of enhancing economic opportunities for Diverse Businesses. ZCG will make every good faith effort to identify and utilize Diverse Businesses.

A Grantee that is a Diverse Business may establish its qualification by providing to ZCG:

- Its certification status from a federal, state, or local governmental agency; or
- Documentation that would enable ZF to verify that the Grantee qualifies (examples include community engagement, public declarations, etc).

This method is designed to cover those Grantees who are easily verifiable, such as sole proprietorships, small partnerships, closely-held corporations, and small companies that do not engage in significant government business or do not have the resources to seek a governmental or third-party certification. ZCG will provide minorities, women, persons with disabilities, LGBTQI+ persons, and veterans equal opportunity to participate in all aspects of contracting programs.

It is not the policy of ZCG to provide information or other opportunities to Diverse Businesses that will not be available to all other business enterprises. It is the intent of this statement to establish procedures designed to assure Diverse Business access to information and opportunities available to other business enterprises. ZCG's intent is to widen opportunities for participation and to increase competition.

Definitions:

- "Disability-Owned Business" means a business enterprise which is Owned and Operated by one or more persons with disabilities.

- “LGBTQI+-Owned Business” means a business enterprise which is Owned and Operated by one or more lesbian, gay, bisexual, transgender, queer, intersex, and other sexual and gender identities (“LGBTQI+”).
- “Minority Business Enterprise” means a business enterprise which is Owned and Operated by one or more of the following ethnic minority groups: African American, Hispanic/Latino, Asian American/Pacific Islander, and Native American.
- “Owned and Operated” means (1) the business enterprise is at least 51% owned by a person or persons within one of the respective diversity groups, or in the case of any corporations, limited liability companies, or partnerships, at least 51% of the voting stock or interests, as applicable, is owned by a person or persons within one of the respective diversity groups and (2) the management and daily business operations of the business enterprise are controlled by a person or persons within one of the respective diversity groups.
- “Women Business Enterprise” means a business enterprise which is Owned and Operated by one or more women.
- “Veteran-Owned Business” means a business enterprise which is Owned and Operated by one or more veterans

12. General

- a. Selection of a Grantee(s) will be based on the selection criteria described above. The proposal shall address all of the selection criteria.
- b. All pre-award costs related to Proposal generation shall be borne by the Grantee(s).
- c. Proposal information is not considered confidential or proprietary. Trade secrets and other proprietary data contained in Proposals may be held confidential if the Grantee(s) requests, in writing, that ZCG does so, and if ZCG agrees, in writing, to do so. Material considered confidential by the Grantee(s) must be clearly identified. Such confidential/proprietary information must be easily separable from the non-confidential sections of the Proposal. Marking the entire Proposal as proprietary will be neither accepted nor honored.
- d. A potential or actual conflict of interest exists when commitments and obligations are likely to be compromised by the Grantee’s other material interests, or relationships (especially economic), particularly if those interests or commitments are not disclosed. Therefore, it is the Grantee’s responsibility to disclose any real or perceived conflict of interest with an officer or senior employee of the Zcash Foundation or a ZCG committee member, at the time of RFP submission and anytime during a subsequent grantor/grantee engagement, Updated Zcash Foundation and ZCG rosters can be [viewed here](#).
- e. Grantee(s) may be required to agree to AML/KYC requirements [as set forth here](#). Applicability of these requirements will vary based on multiple factors, to be determined at the time of grant award.

- f. Upon ZCG approval, the selected Grantee(s) shall submit their winning proposal to the [grants platform](#) for tracking, milestone payment (if applicable), and transparency purposes. Instructions regarding community posting and update requirements will be provided upon grant approval.