

Request for Proposal - Development Tooling

Ecosystem Development Fund (EDF) - IOTA Foundation

Berlin, Germany

0.0 Summary

Over the last 3 years the IOTA protocol has matured in leaps and bounds due to the contributions of the IOTA Foundation and its vibrant community. As the protocol matures so does its requirement for a set of open source tools that enable greater consistency, accessibility, and abstraction when understanding the mechanics of an operating network.

We've seen a number of amazing tools emerge from developers within the community. These tools have become a vital part of the development cycle for IOTA Foundation and community developers alike. Tools such as The Tangle, Tangle Monitor, Tangle Glumb, Tangle Beat and many others have all improved the adoption of IOTA by improving the accessibility of the technology to all interested parties.

The Ecosystem Development Fund is actively interested in ensuring active development of tools that promote the adoption of the technology. That is why we are requesting proposals for the development of open source tools that improve the development experience. While the industry we are in is young there is numerous examples of high quality tooling that we should adapt and extend in the context of IOTA. Here are examples of tools that have had a measurable impact on other development communities in the Distributed Ledger Space:

[Ganache](#)

Ganache is a cross platform "Ethereum-in-a-box" solution. This application can bootstrap a local testnet with wallets, a miner, and an explorer. This tool's UX and configurability has had a major impact on the ability of new developers, corporate and private, to get started with the Ethereum technology. The IOTA developers would greatly benefit from an all-in-one solution to launch a tangle and

[Stellar Laboratory](#)

This simple web-app is a powerful resource for the Stellar community. It provides a quick-reference for transaction construction, key pair creation, conversions and other small tasks relevant to Stellar's design. IOTA has some of these tools available, ie unit converters,

tryte converters, mam stream readers etc, however there is no comprehensive resource that is open source and enables developers to quickly and efficiently all the required operations when developing.

[Ethstats](#)

ETHstats is a wonderful resource for the Ethereum community when trying to monitor and understand the current usage of the Ethereum network. It is also a vital tool in determining required transaction fees at a glance We have a number of tools within the community that mirror this functionality; Tangle Monitor, Tangle Glumb, Tangle Beat, TheTangle. All of these project provide wonderful data to the IOTA community, however they are closed sourced and often unconfigurable. An open source resource for the community would provide developers on private testnets and those wanting to modify these tools the ability to go so.

Other tools

These examples are by no means exhaustive, there is a vibrant distributed ledger technology community who is constantly investing in tools that ultimately improve adoption or the protocol itself. The EDF is committed to fostering the development of any tools that will provide these benefits to the IOTA ecosystem.

1.0 Project Description

1.1 Purpose

- The tool provides a compelling benefit to the IOTA developer community
- The tool should

1.2 Compatibility

- The tool must consume or interact with the IOTA protocol
- The tool should run on at least two of the following operating systems: Windows, Mac OS, or Linux

1.3 Utility

- The tool must be well documented so that users can easily get started
- The tool must be configurable, where necessary
- The tool must have a simple setup process

2.0 Deliverables

2.1 Documentation

- Clearly documented Github repository
- Multi-page document describing the design of the application or tooling to be delivered
- Flow diagrams showing how the subject of the grant operates
- Multiple update posts, on platforms such as Medium, describing the state of the project at regular time intervals

2.2 Code

- An interactive application that is easy to setup and use
- Extensive in code commenting across the whole repository
- Monorepo covering the standard, library & reference application

3.0 Timeline

3.1 This RFP will support **up to 3** grant proposals. However, given the quality and cost of proposals the RFP may be withdrawn without funding a proposal.

4.0 Requirements & Submissions

4.1 All submissions must use the following template and fill out each section comprehensively. If a section is left uncompleted the grant proposal will be rejected.

4.2 All submissions must be submitted via the following form in order to be considered for approval of the project will be open-source under the MIT License. This is to ensure the funds of the grant are able to be utilised by everyone within the community.

4.3 The entirety of the project will be open-source under the MIT License. This is to ensure the funds of the grant are able to be utilised by everyone within the community.

5.0 Contact

5.1 To ask questions about this RFP please contact Mark.Schmidt@iota.org