



# Multi-Validator Staking UI

## Grant Opportunity

### Overview

To support the decentralization of stake on the Solana network, the Solana Foundation will be issuing one or more grants to teams that can develop an easy-to-use user interface that allows users to manage stake delegations across multiple validators simultaneously. The goal is for this staking solution to be as simple and intuitive as delegating to a single validator. This solution should not be confused with a stake pool; this non-custodial solution should not engage with on-chain programs other than the native Stake program, nor should it take stake authority over any SOL tokens held by the user.

### Goals

- Provide users the ability to stake SOL to multiple validators through a one click easy-to-use solution
- Provide users the ability to select which validators to delegate to depending on a list of user-defined criteria
- Provide users the ability see which validators they've delegated to, how much they've delegated, and how much they've accrued in rewards
- At completion of project, provide an open source reference implementation and working product, which includes the following:
  - Logic to execute queries against on-chain data or other analytics backends to provide filtered validator lists
  - Transaction construction to create and manage (delegate, split, merge, undelegate as needed) multiple stake accounts in as few transactions as possible, based on user input
  - Websockets implementation to push data to front end site or visualizer

### Scope

- Provide users a one-click solution for delegating to multiple validators at once. Users should be able to filter which validators to delegate to depending on a list of criteria such as:
  - # of validators
  - Validator Name
  - Validator Data Center
  - Validator Data Center concentration

- Validator ASN
- Software version (and whether they're running a version that the majority of the cluster is on)
- Validator active stake (in total SOL and % of total staked SOL)
- Is this validator also receiving stake from stake pools (be it JPool, Socean, etc or the Solana Foundation's stake pool)
- Historical validator commission
- Current validator commission
- Validator APY
- Validator skip rate
- Validator voting performance (# landed votes/# of blocks confirmed)
- The site should explain and provide context on why each metric is important to understanding validator performance
- The site should provide an easy to use dashboard or visualization that provides users the ability to, at a minimum:
  - See all their stake accounts
  - See which validators they've delegated to
  - See all the validators stats for the metrics described above
  - See how much they've delegated to each validator
  - See how much they've accrued in rewards from each validator
  - Highlight any stake accounts whose performance falls outside an expected range (due to commission manipulation or extended validator downtime, for example)
- Published reference implementation that would allow other members of the community to access and create a similar solution
- Site is ideally built with websockets and can push state changes to the front-end for real time monitoring
- The grantee commits to maintaining the website for at least a 1-year period.

## Inspiration

- Many users are interested in staking to multiple validators, but may not be interested in depositing SOL into a stake pool and giving up custody of the underlying token. Existing tools for managing stake accounts require the user to manage a single stake account at a time, which makes applying a broad staking strategy very tedious. There exist tools which allow users to execute complex delegation management, but these require advanced command line knowledge.

## Timeline

- Product should be delivered by March 1st, 2022
- If this grant document is up, the grant is open and available for submissions

## Grant Award

- Grantees shall be rewarded \$35,000 in USDC or equivalent amount in locked SOL, depending on their location. SOL payments will be locked for 1-year after receipt.
- Grant amount will be delivered on completion of deliverables.

## Point of contact

For questions on this Grant Opportunity, please email [grants@solana.foundation](mailto:grants@solana.foundation).

## How to apply

Please fill out the grant application on [solana.foundation/grants](https://solana.foundation/grants). Your application should include a high level roadmap with defined project phases, milestones and timing and any creative ideas beyond the scope of what's outlined in this document that helps advance the project goals and staking adoption.