

RFP - Ledger Plugin Grant

Overview

Create a ledger plugin built to work with Portal Bridge for Ethereum smart contracts. A user, Jim, should be able to bridge assets through Portal Bridge and see the bridge transfer details on their ledger device.

Background

Smart contracts are programs running on the Ethereum blockchain that enable complex transactions and interactions. Ethereum transactions often involve smart contracts. However, previous support for smart contracts on hardware wallets, e.g. Ledger, was limited, with users unable to securely verify the data they were signing.

Adding support for all smart contracts via the Ledger Ethereum App was challenging due to complexity and scalability issues. To address this, Ledger introduced Ethereum plugins in their Ethereum app to support a full smart contract on Ledger products easier and more scalable.

Plugins are lightweight applications that parse custom transaction fields and provide a custom display for users to verify the data on their Ledger device. Users only need to install the plugins for the specific smart contracts they want to interact with, making support more scalable.

For users that want to use their Ledger device to send tokens across the Portal Bridge, or even using Wallet Connect, the native support from the Ledger Ethereum App is not enough to show important information that is necessary to validate the transactions. Building specific smart contract plugins will enable users to verify important transaction details before confirming the their transactions.

Use Cases

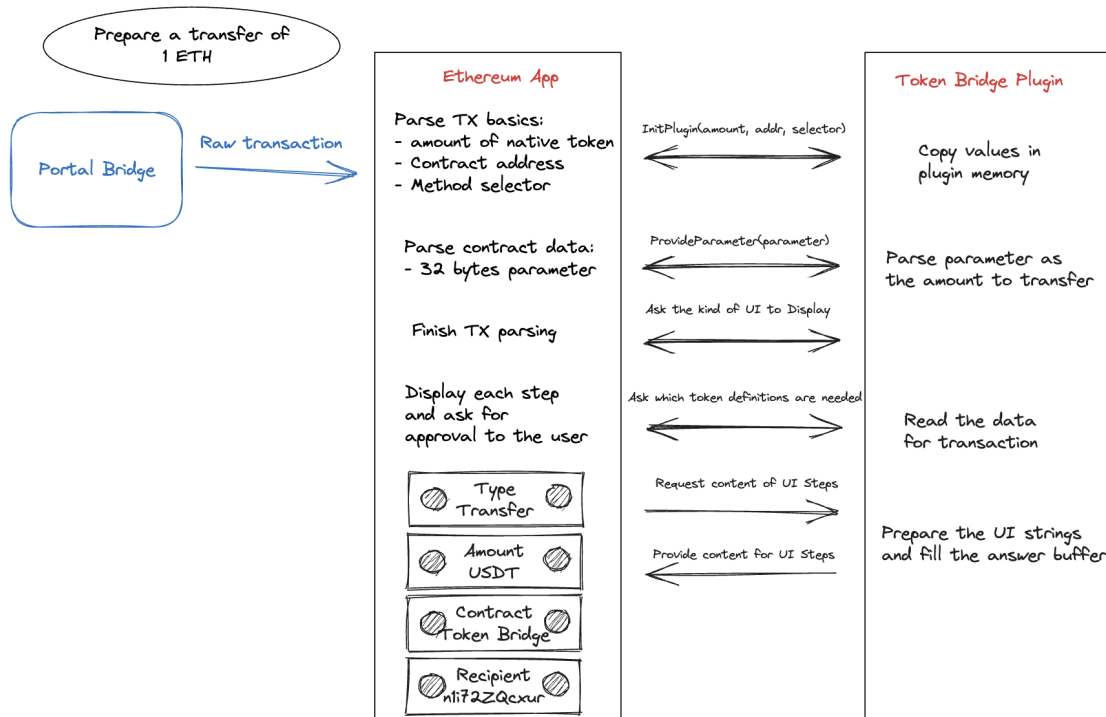
→ Verifying transactions on Ledger when using any application that interacts with the Wormhole Token Bridge (e.g.: portal bridge, wormhole connect) by being able to see the transfer details on the Ledger device

User Stories

- As a user I want to bridge any token from Ethereum to Solana (or any other wormhole supported chain) using my Ledger device
- As a user I want to be able to see the transfer information (which token, amount, destination chain, destination address, etc) on my ledger device when confirming the transaction

Design

This is an example of a potential interaction flow for the Ledger Plugin for the token bridge smart contract.



UI Requirements

- Please show the following details (if possible):
 - Type (transfer, claim, attestation, register)
 - Token source chain
 - Source amount + token name

- Token contract address
- Recipient address
- Token destination chain
- Destination amount + token name

Useful Links

1. Introducing Ledger Plugins: <https://blog.ledger.com/ethereum-plugins/>
2. Portal Bridge: <https://portalbridge.com/>
3. Boilerplate plugin: <https://github.com/LedgerHQ/app-plugin-boilerplate>
4. Example plugin: <https://github.com/LedgerHQ/app-plugin-paraswap>