

Starbridge

A trust-minimized bridge between Stellar and other blockchains.

Leigh McCulloch

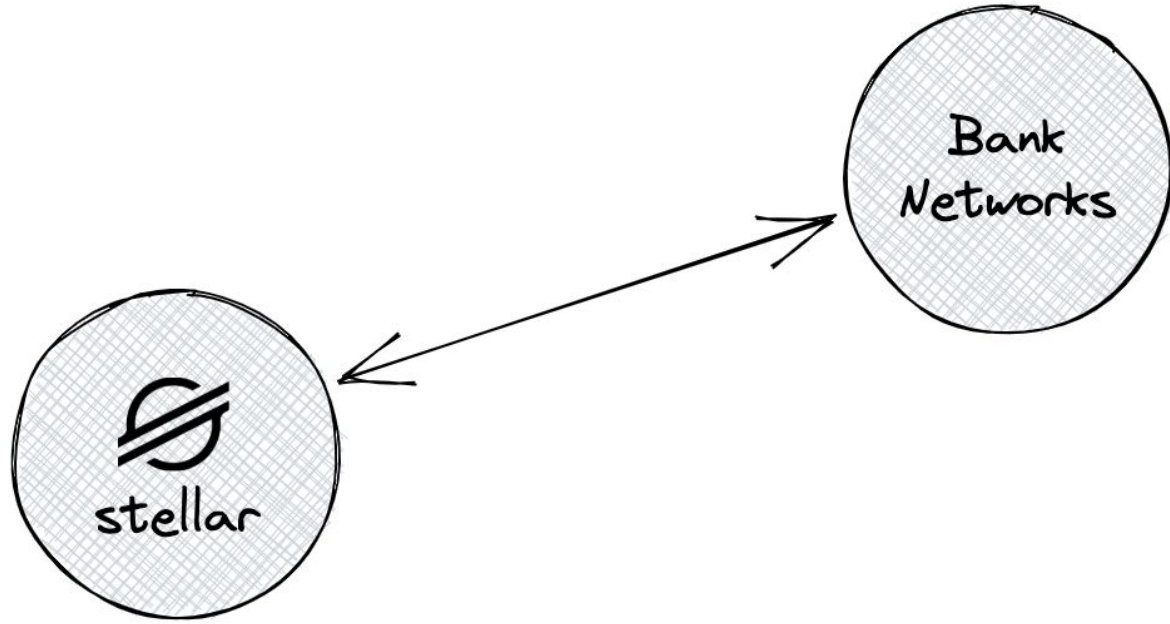
Starbridge

A trust-minimized bridge from Stellar to other blockchains.

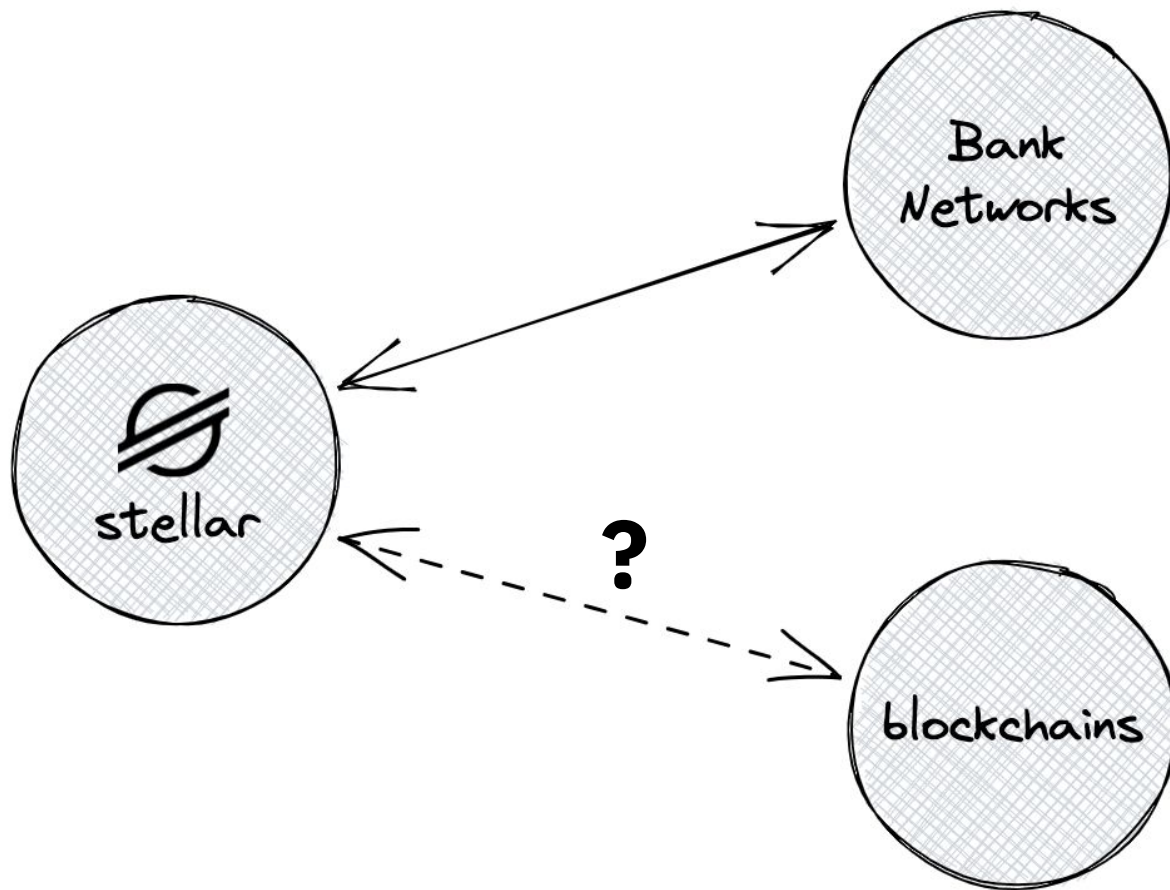
Leigh McCulloch • Nikhil Sariff • Tomer Weller • Nicolas Barry • Siddharth Suresh

Why bridge?

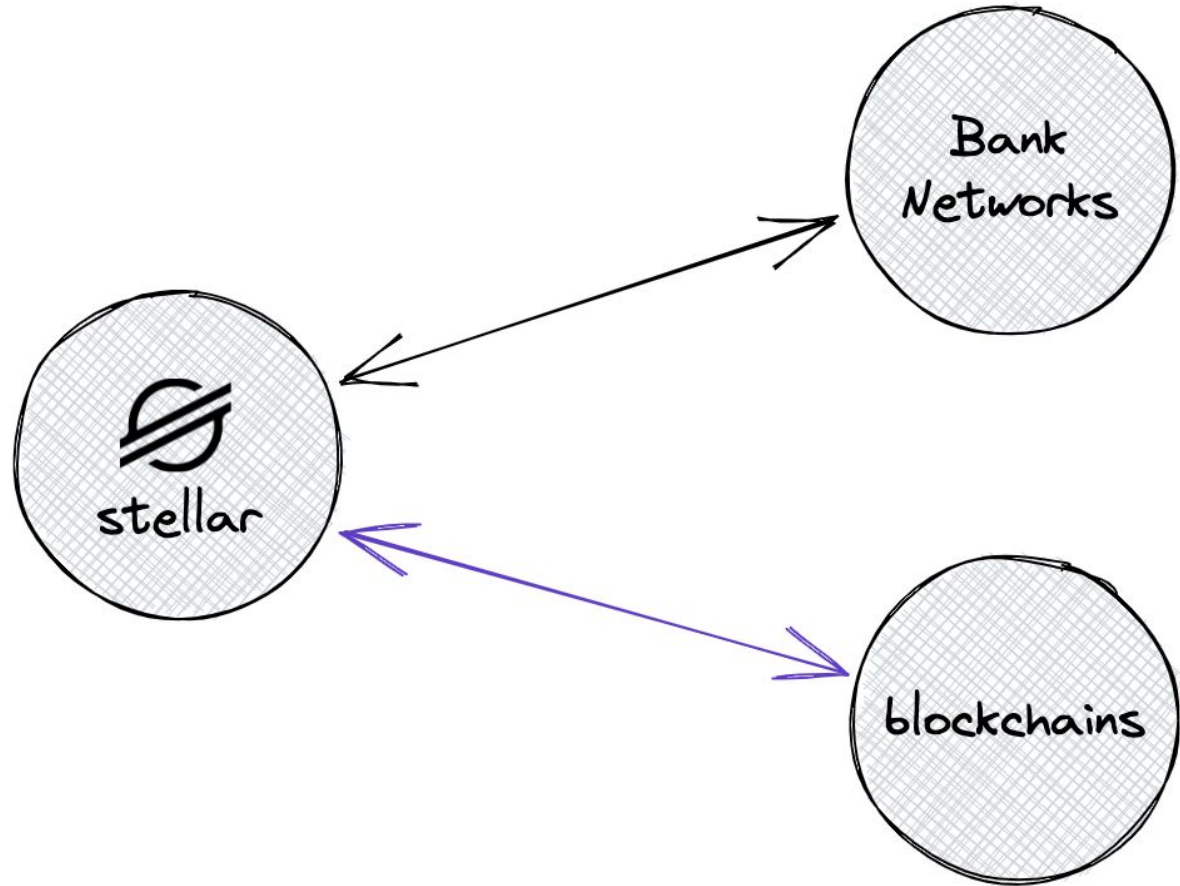
Why bridge?



Why bridge?



Why bridge?



Requirements

Requirements

Transfer
value

Symmetrically
bidirectional

Sender and
receiver must
not need to
be online at
same time

Users are
probably
sender and
receiver

Preselected
assets

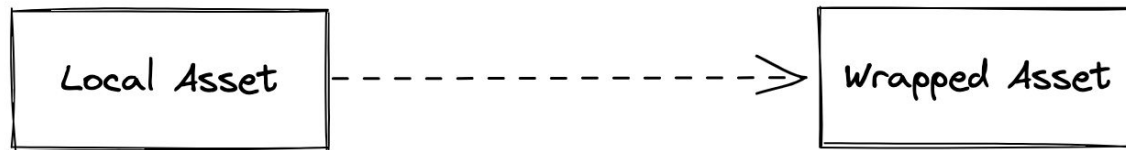
Decentralized
closed
participation

Throughput
and latency

Fees paid by
sender /
receiver

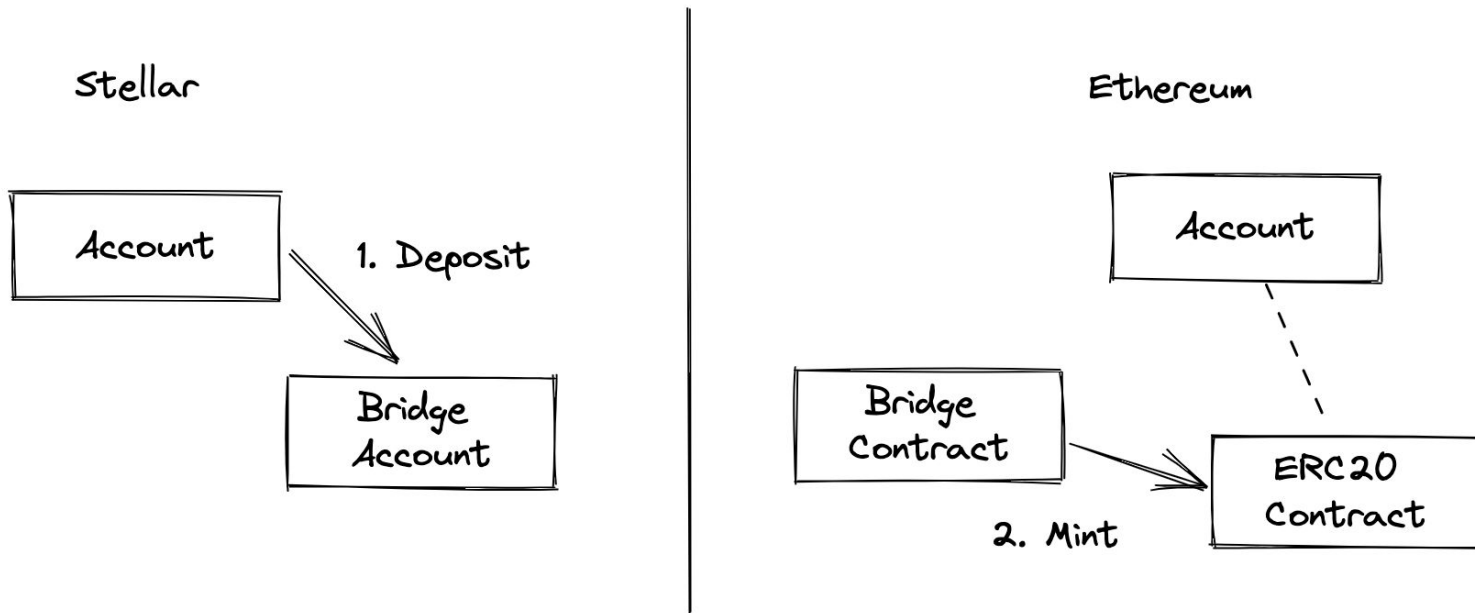
Design

Design



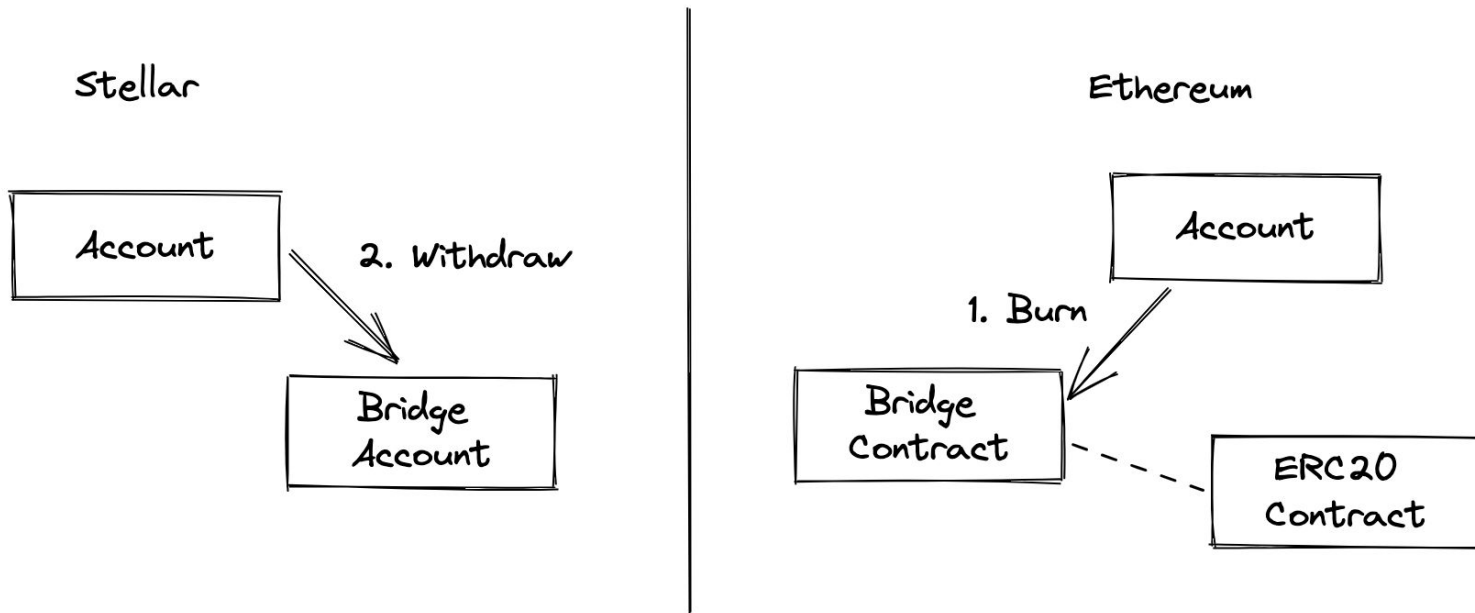
Sending a local asset that may be used as a wrapped asset

Design



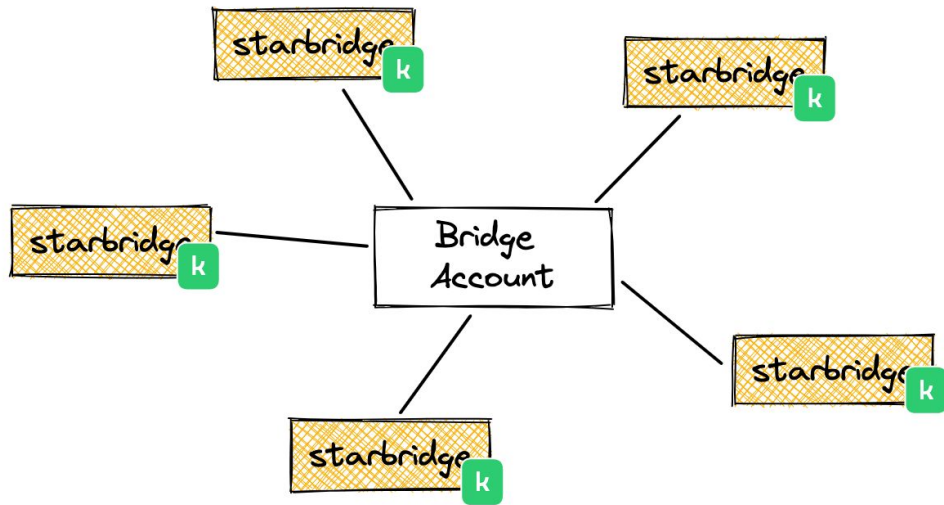
Returning a wrapped asset that unlocks a local asset

Design



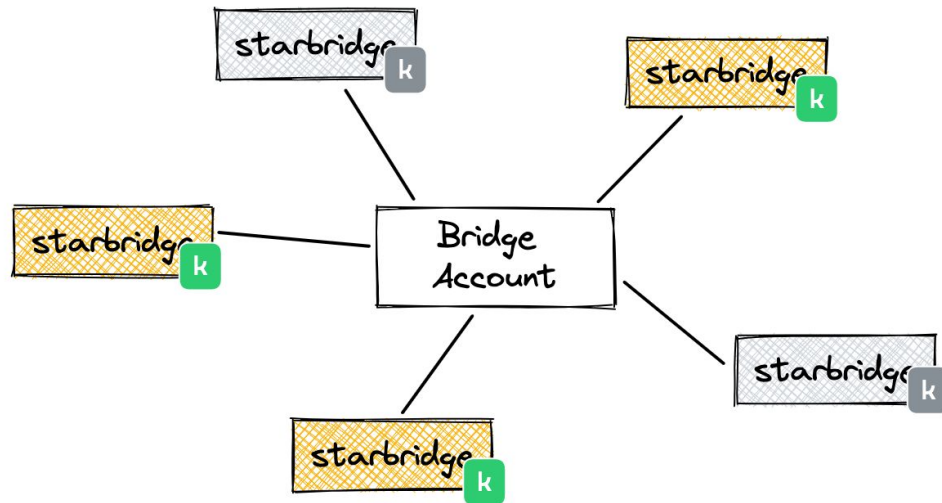
Bridge account with m-of-n signers

Design



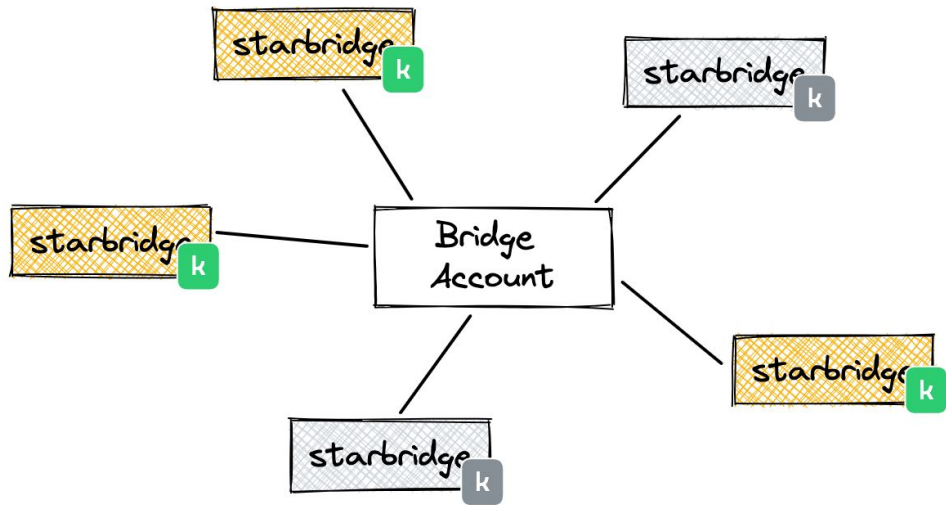
Bridge account with m-of-n signers

Design



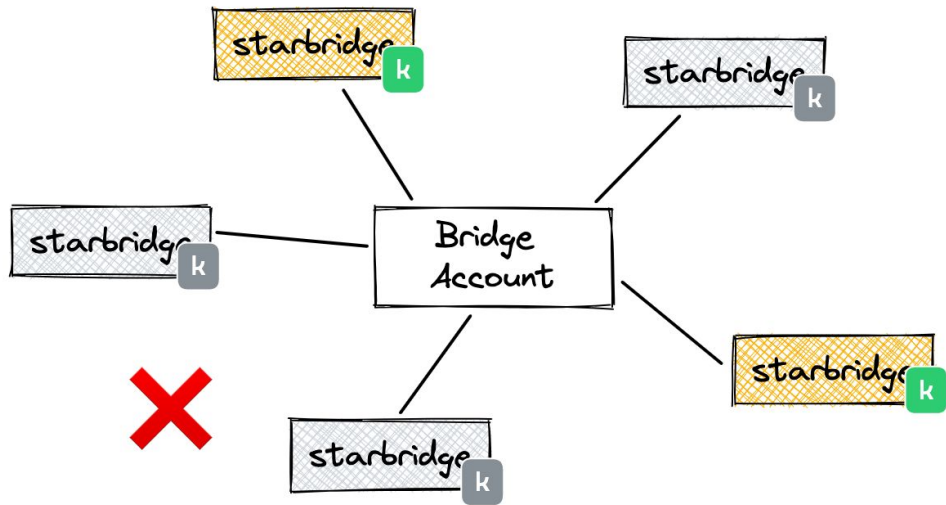
Bridge account with m-of-n signers

Design

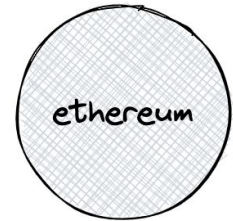
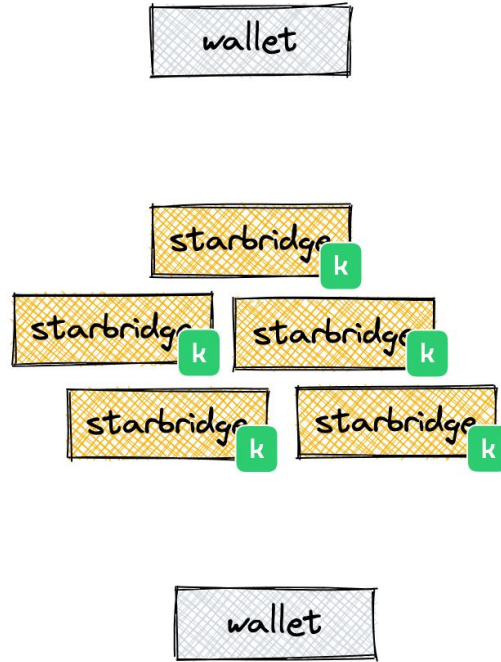
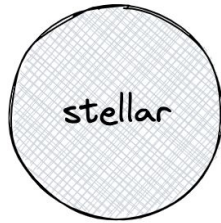


Bridge account with m-of-n signers

Design

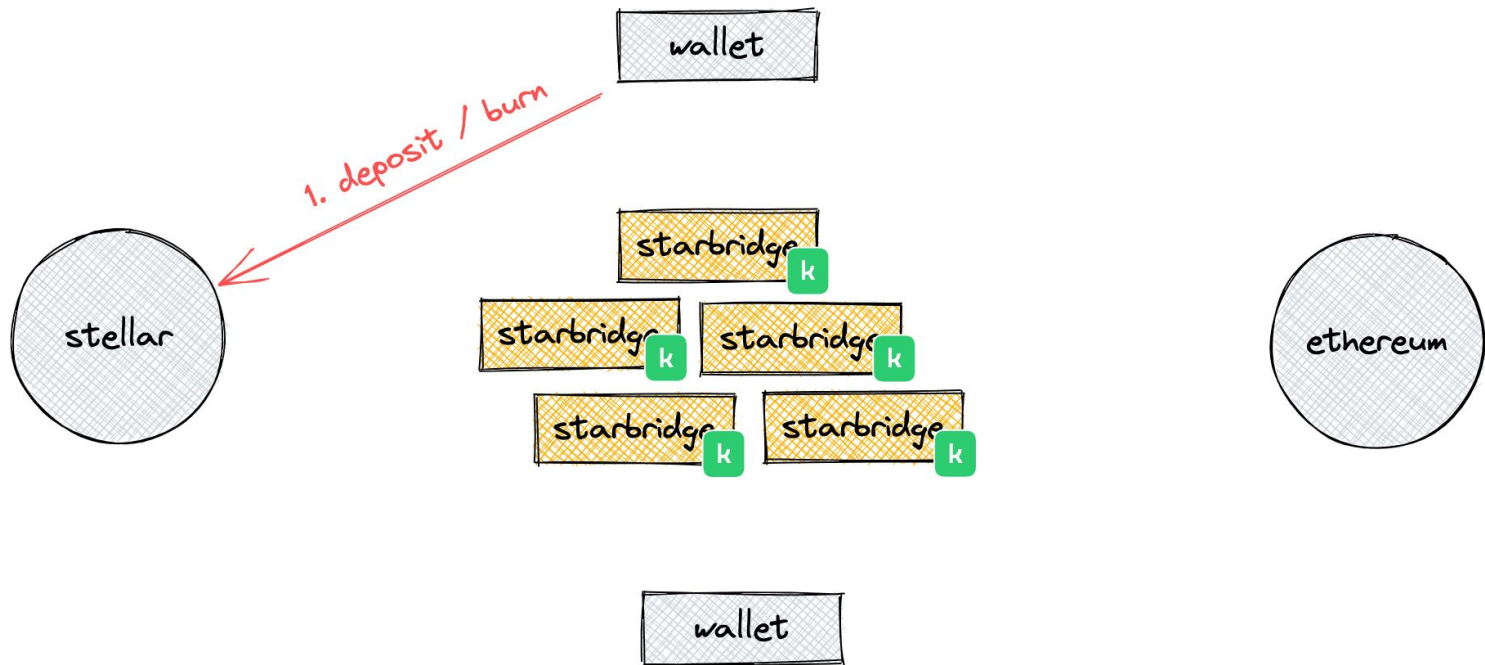


Design



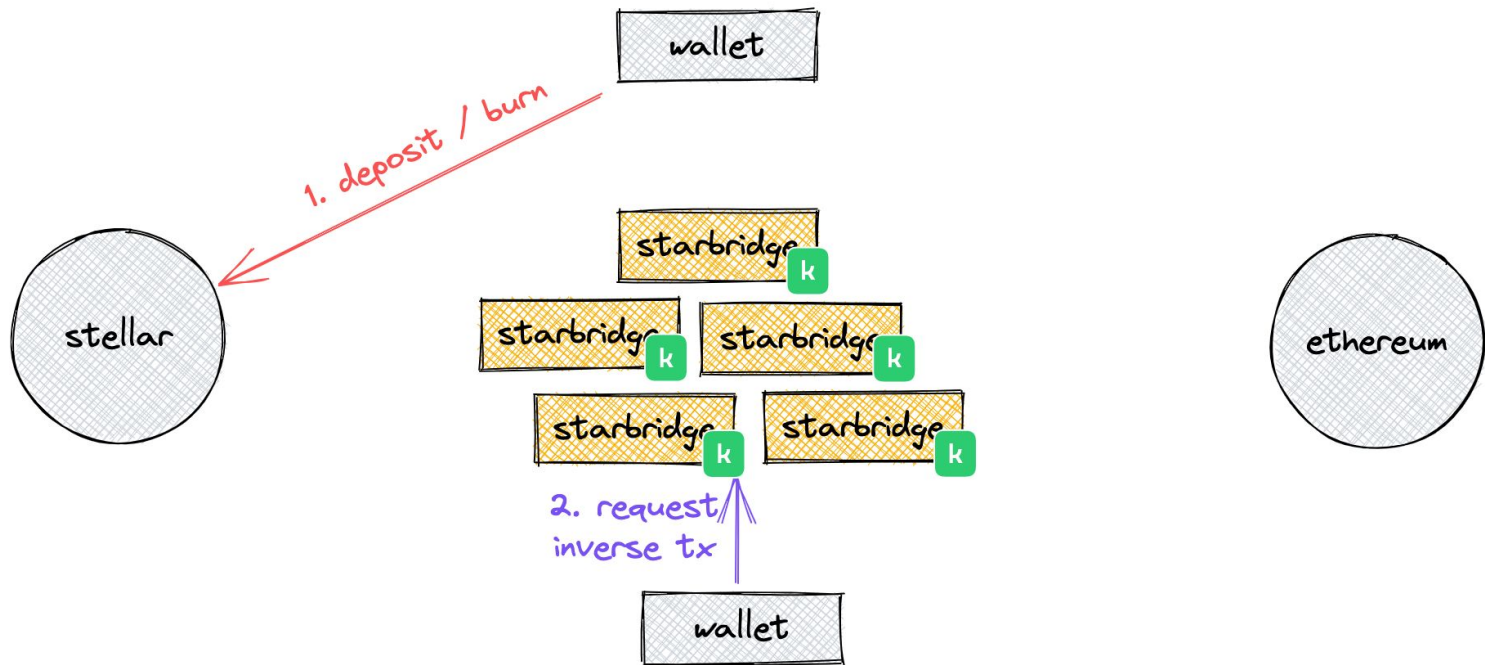
Transfer with send and receive

Design



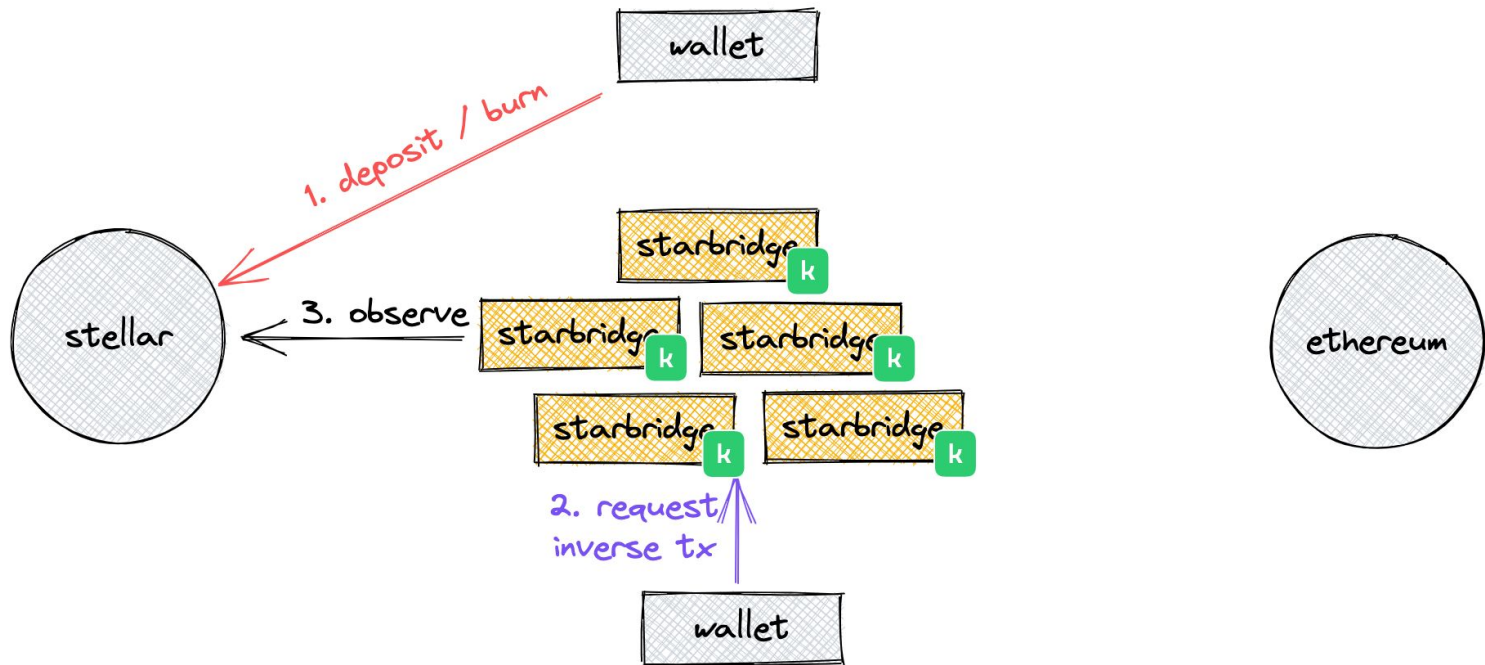
Transfer with send and receive

Design



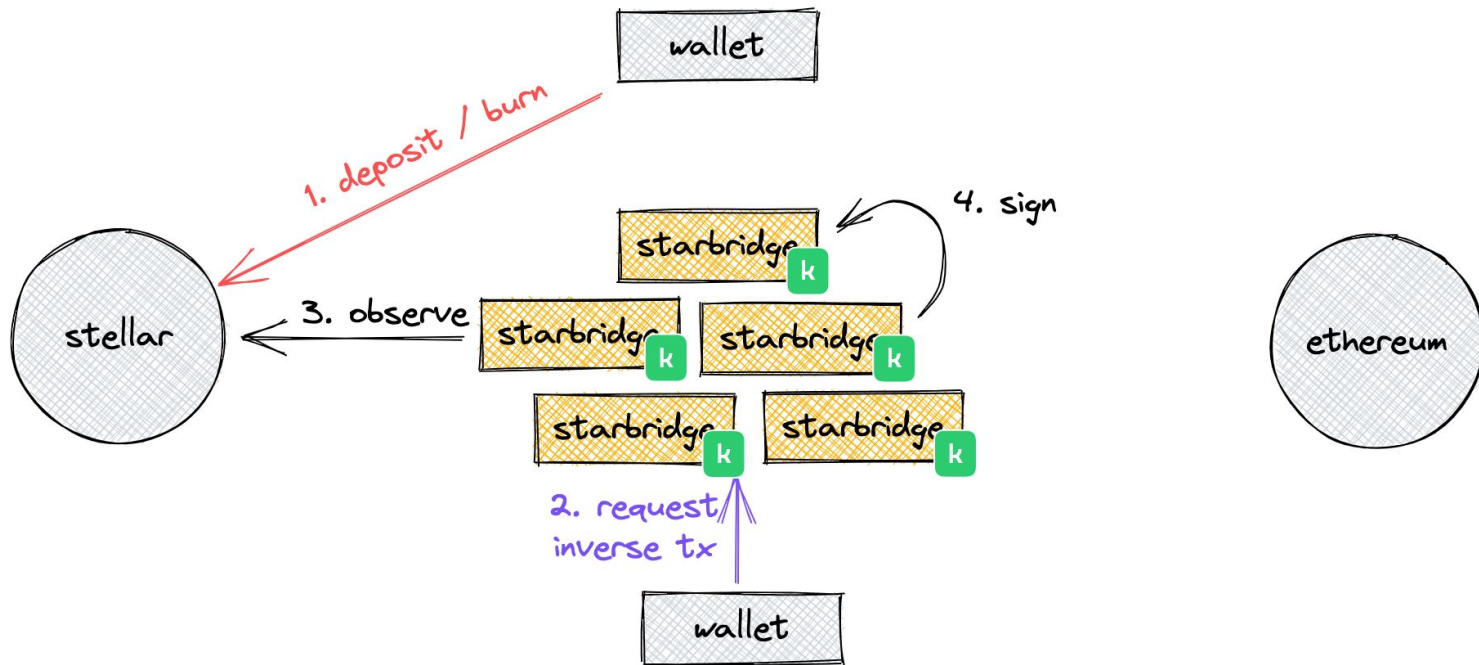
Transfer with send and receive

Design



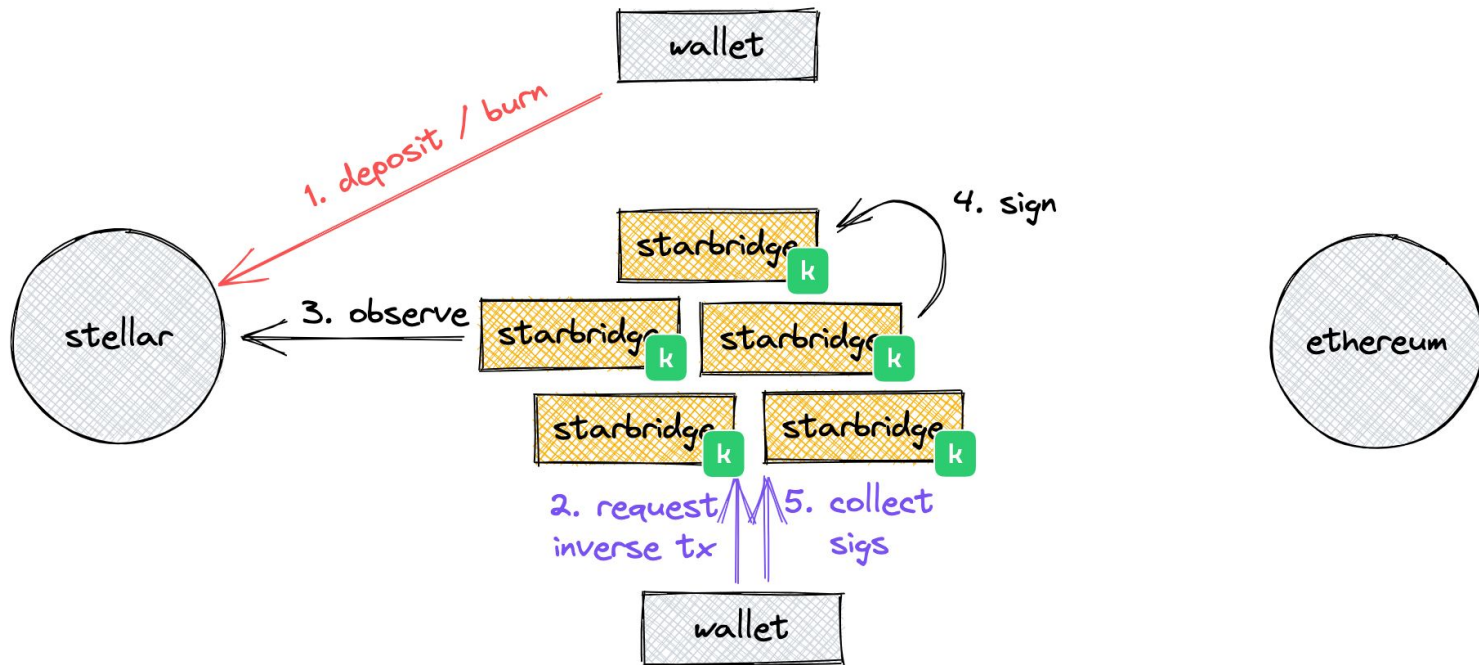
Transfer with send and receive

Design



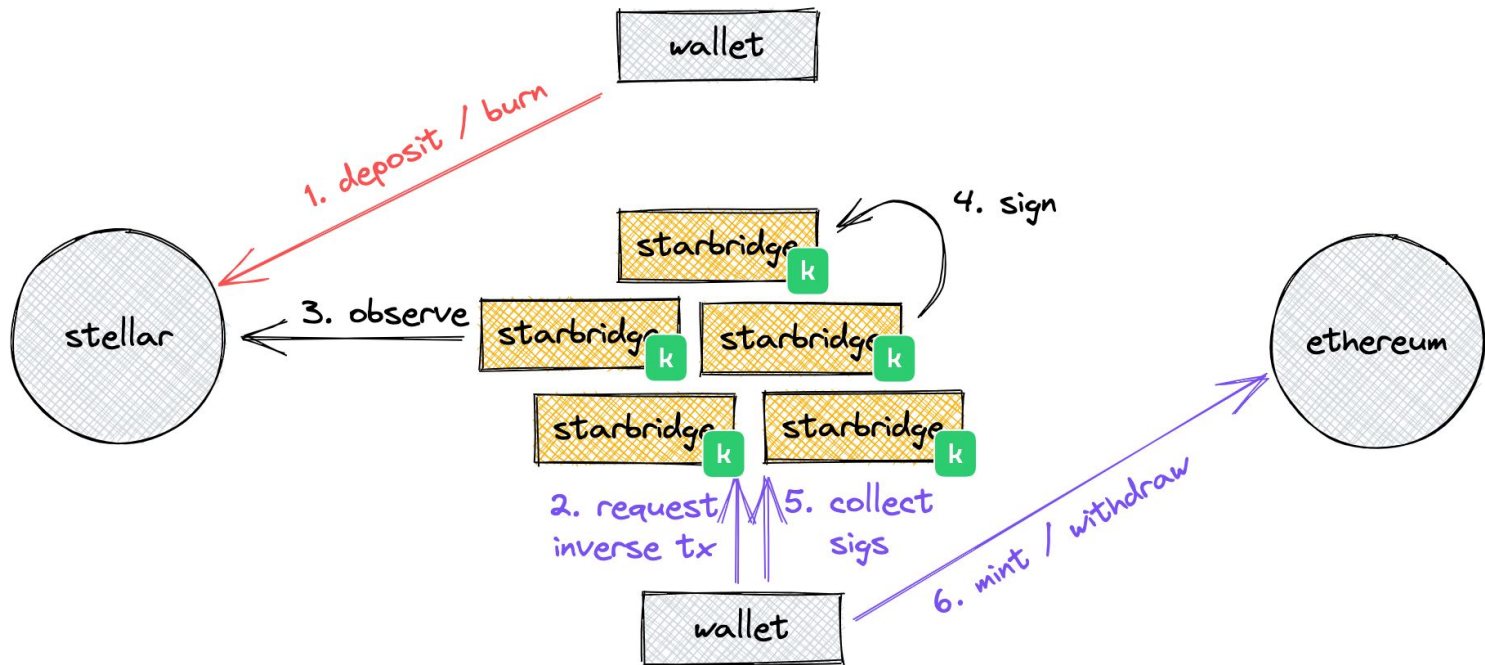
Transfer with send and receive

Design



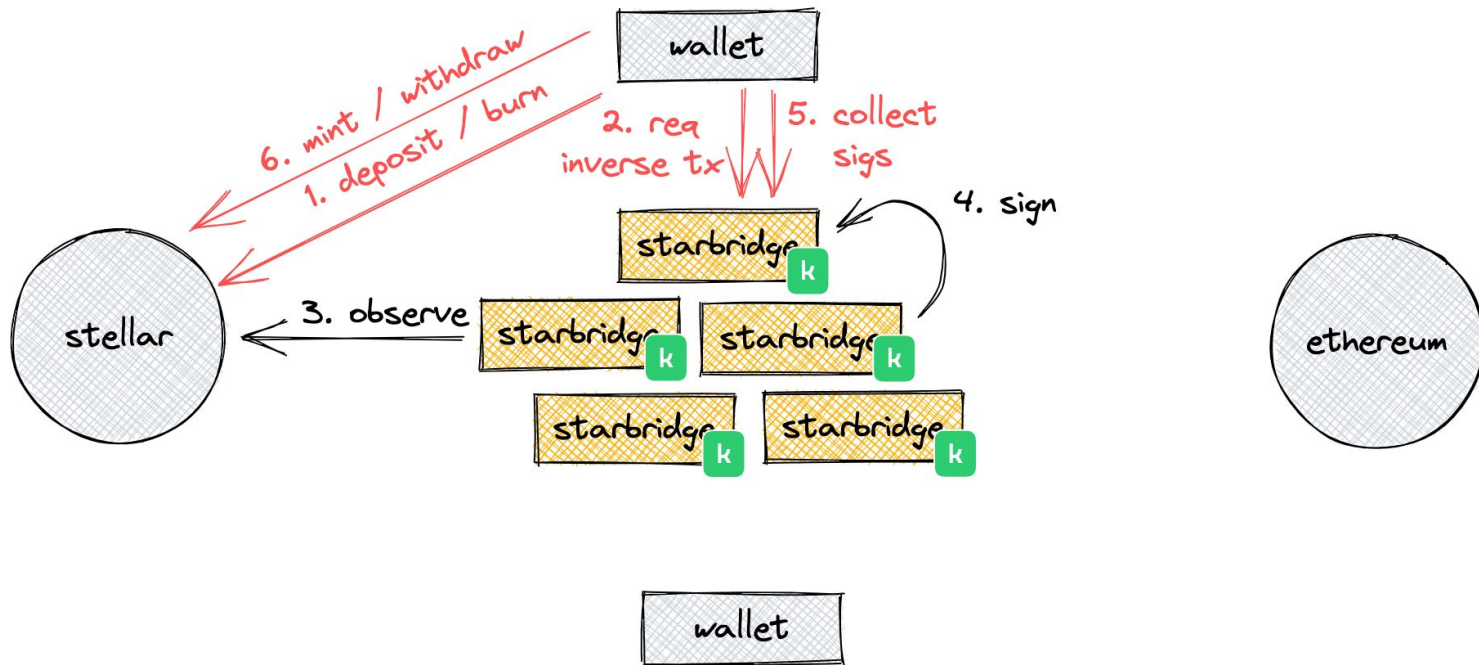
Transfer with send and receive

Design

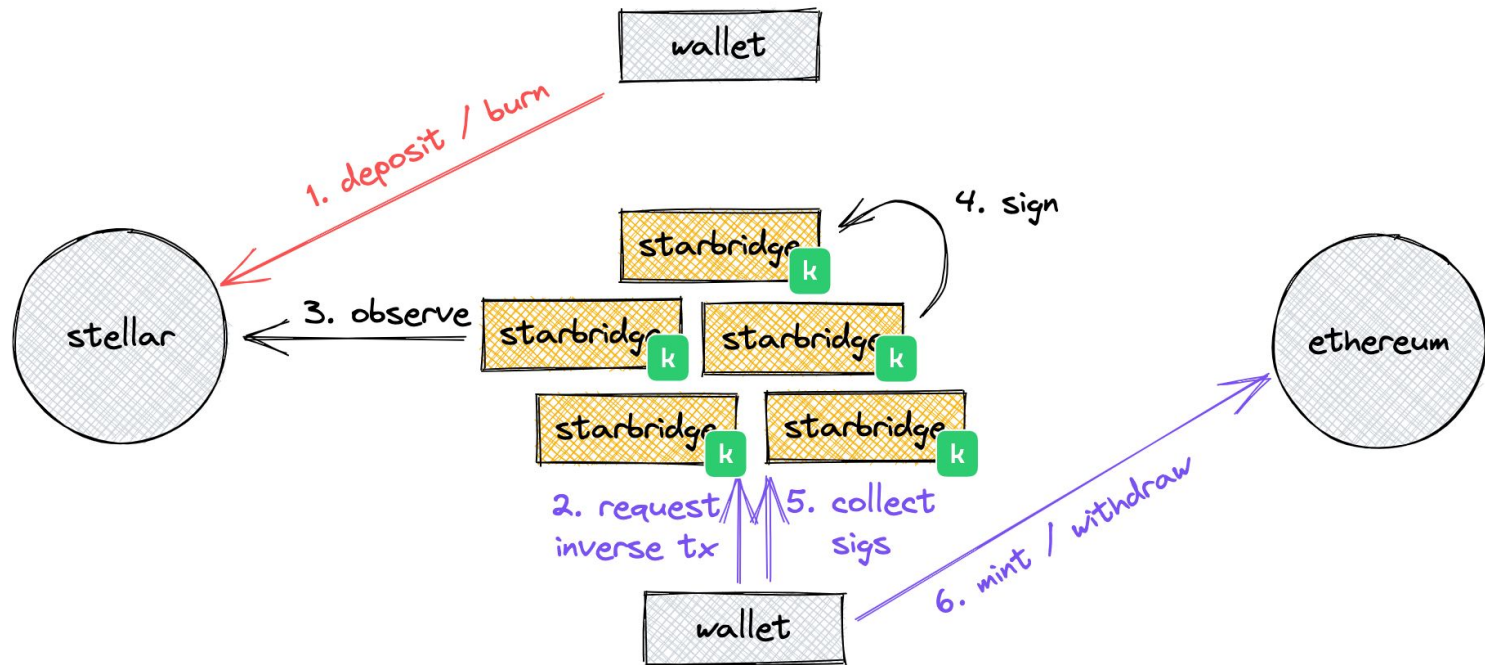


Transfer with send and reverse / refund

Design



Design



Find out more at <https://github.com/stellar/starbridge/blob/main/doc>