EthCC 6 - Building with purpose, building for all

Introducing SocialConnect and rediscovering Celo's fee currency feature

Presentation on Github: 0xarthurxyz/ethcc-presentation

Abstracting the concept of gas currencies

- User experience with native tokens: `CELO`, `ETH`, ...
- User experience with stabletokens: `cUSD`, `cEUR`, ...

Get started using fee currencies

```
import 'viem' from "viem"
import { celo } from "viem/chains"
import { stableTokenABI } from "@celo/abis"
```

```
const transaction = {
    from: account.address,
    to,
    value: parseEther(value),
    feeCurrency: FEE_CURRENCIES["cusd"],
}
```

🔗 Full demo on Github: 0xarthurxyz/ethcc-presentation

Technical details

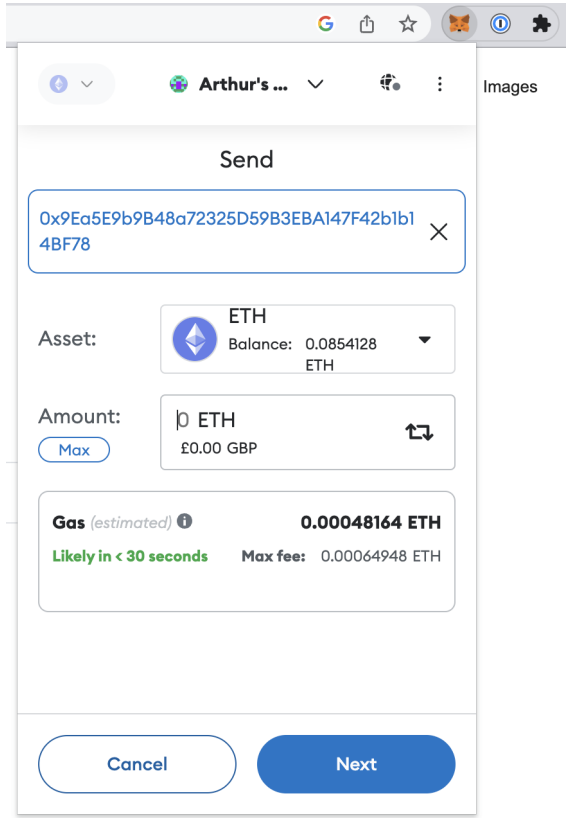
- `feeCurrency` feature uses a whitelist of tokens accepted as fee currencies
- `viem` now has extensible transaction serialisers (uses EIP2718 to create compliant transaction types)
- WalletConnect v2 passes the `feeCurrency` field in the transaction object

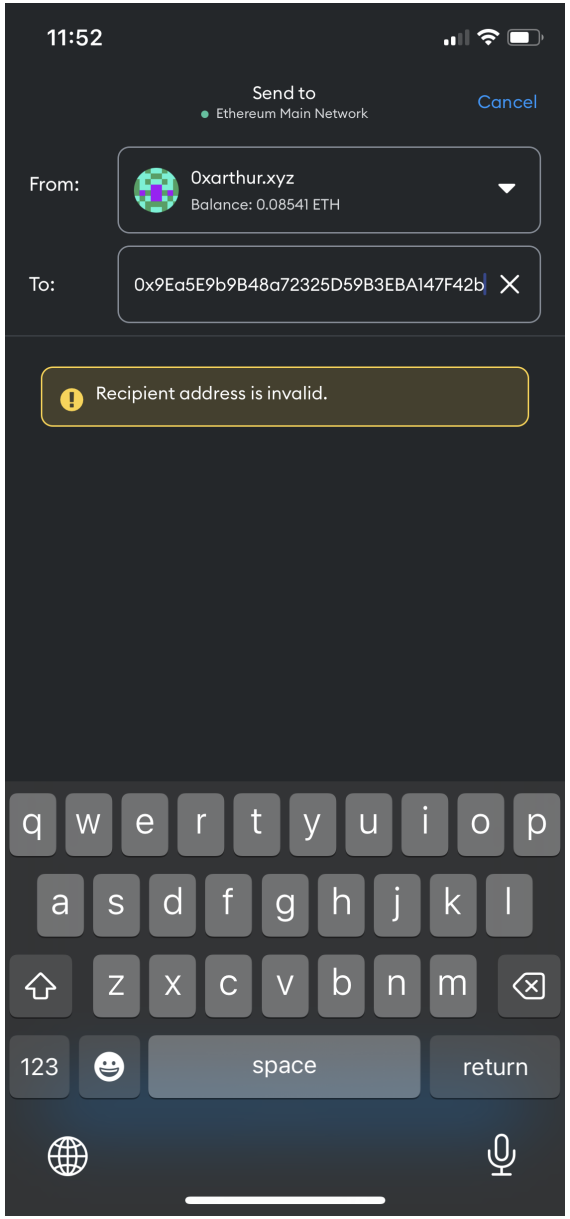
Part 2: Introducing SocialConnect

Abstracting the concept of hexadecimal addresses

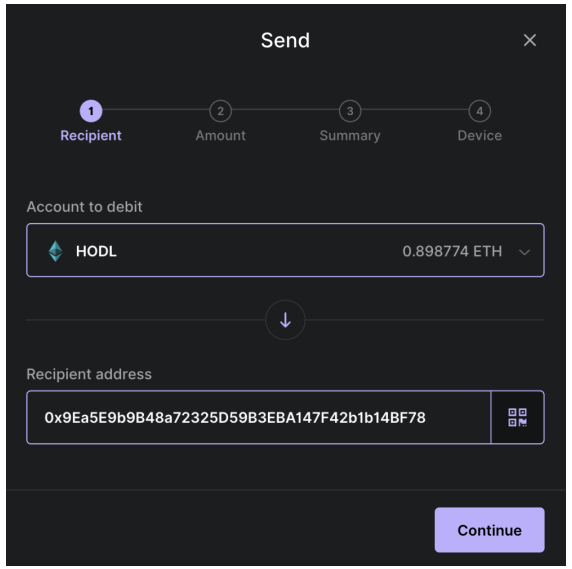
- User experience with **hexadecimal** addresses: `0x76a4dac...a7315`
- User experience with **phone** numbers, **email** addresses, and other social identifiers: `+54 182 143 21743`, `alice@example.com`, ...

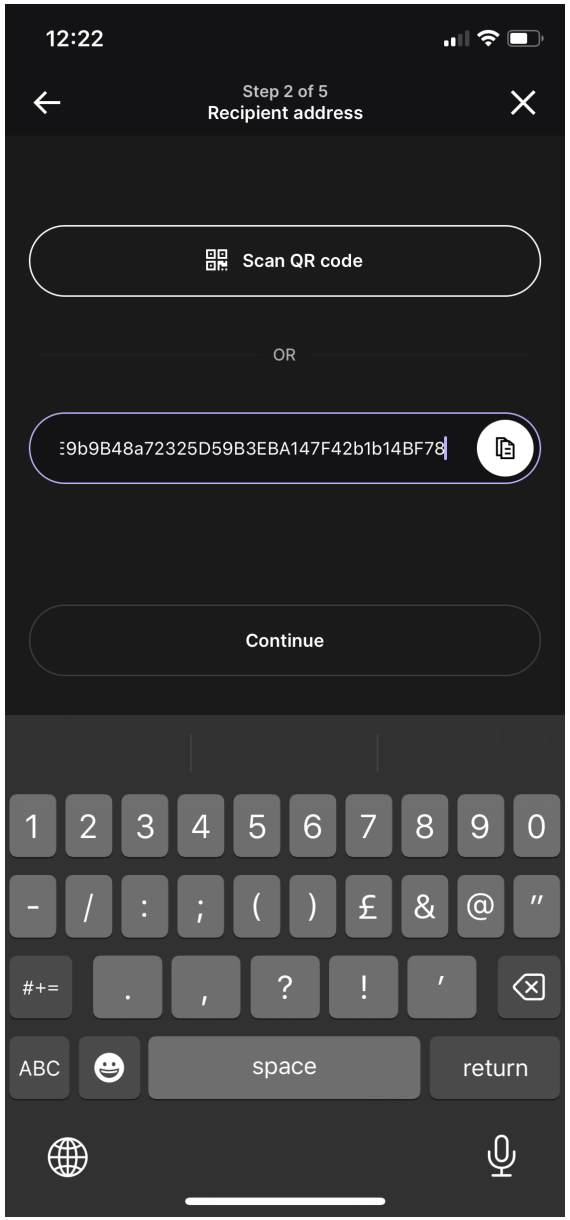
Metamask

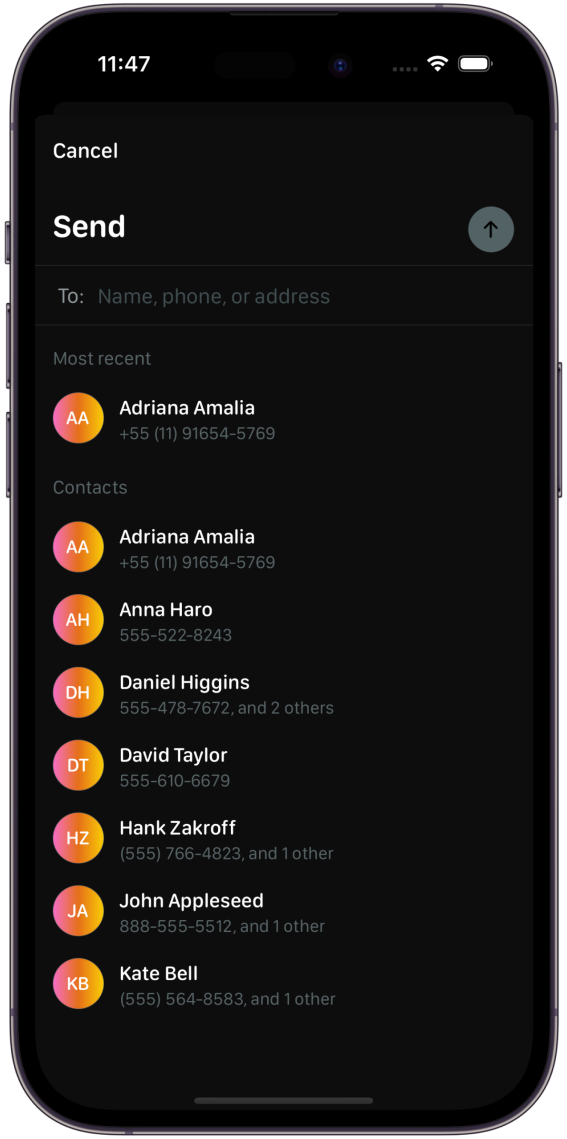

Arthur's ...
Images
Send
0x9Ea5E9b9B48a72325D59B3EBA147F42b1b14BF78
Asset:
ETH
Balance: 0.0854128 ETH
Amount:
0 ETH
£0.00 GBP
Max
Gas (estimated)
0.00048164 ETH
Likely in < 30 seconds
Max fee: 0.00064948 ETH
Cancel
Next

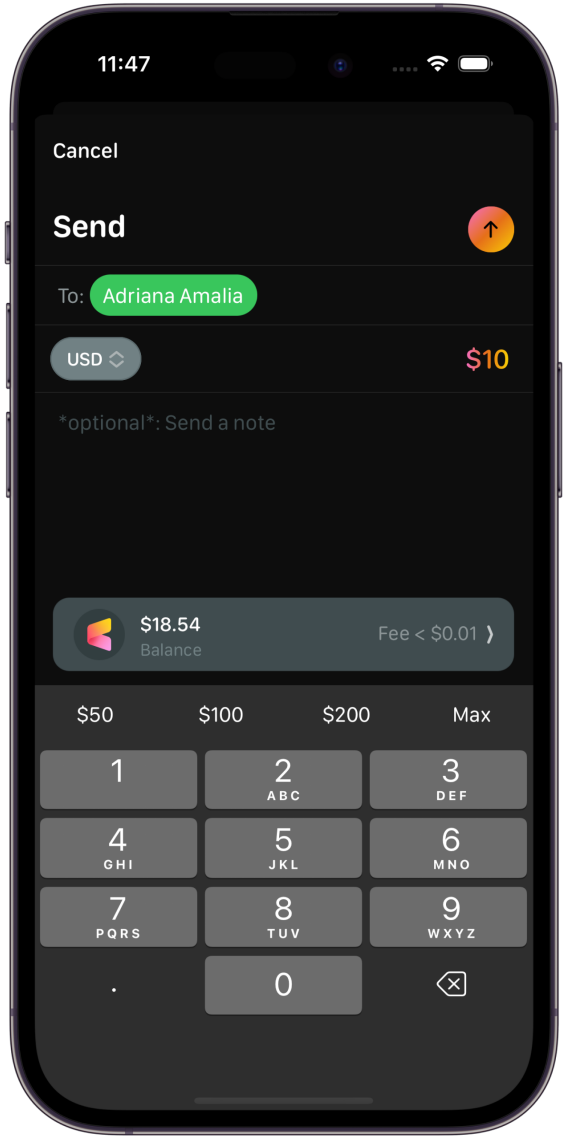

11:52
Send to
Ethereum Main Network
Cancel
From:
0xarthur.xyz
Balance: 0.08541 ETH
To:
0x9Ea5E9b9B48a72325D59B3EBA147F42b
Recipient address is invalid.
space
return

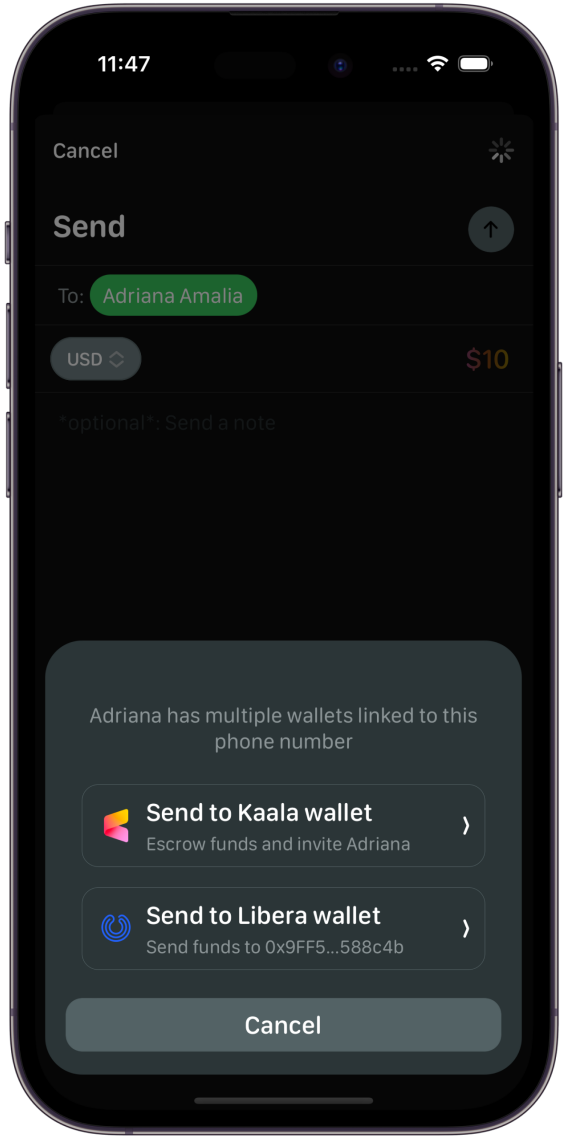
Ledger

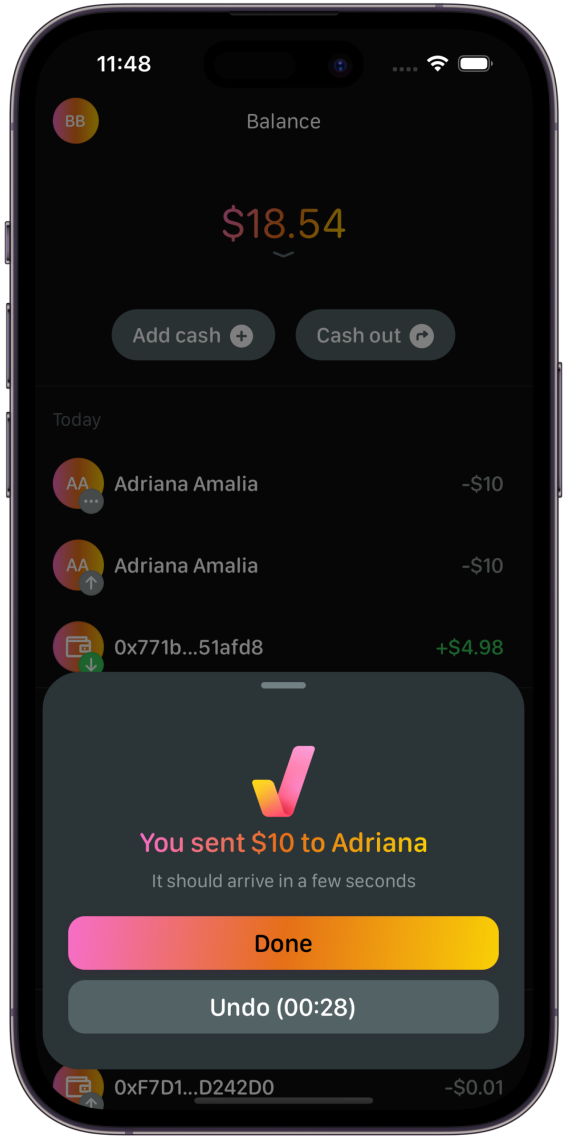

Send
1 Recipient
2 Amount
3 Summary
4 Device
Account to debit
HODL
0.898774 ETH
Recipient address
0x9Ea5E9b9B48a72325D59B3EBA147F42b1b14BF78
Continue


12:22
Step 2 of 5
Recipient address
Scan QR code
OR
:9b9B48a72325D59B3EBA147F42b1b14BF78
Continue
1 2 3 4 5 6 7 8 9 0
- / : ; ( ) £ & @ "
#+= . , ? ! '
ABC
space
return

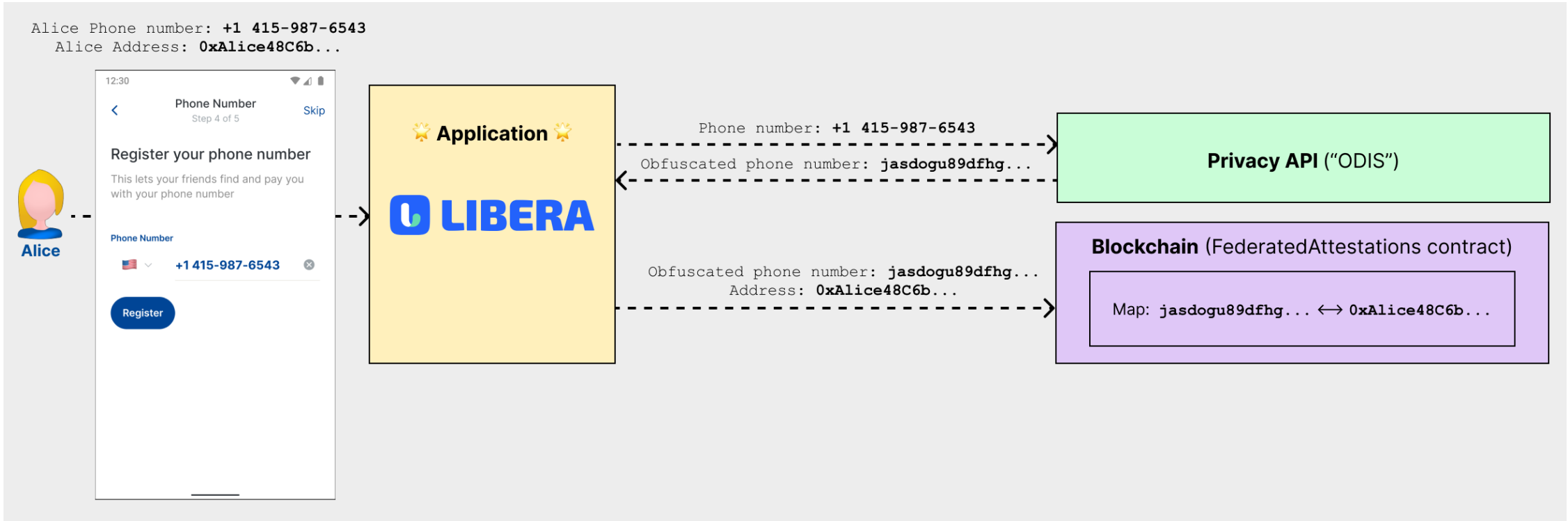

11:47
Cancel
Send
To: Name, phone, or address
Most recent
AA Adriana Amalia
+55 (11) 91654-5769
Contacts
AA Adriana Amalia
+55 (11) 91654-5769
AH Anna Haro
555-522-8243
DH Daniel Higgins
555-478-7672, and 2 others
DT David Taylor
555-610-6679
HZ Hank Zakroff
(555) 766-4823, and 1 other
JA John Appleseed
888-555-5512, and 1 other
KB Kate Bell
(555) 564-8583, and 1 other


11:47
Cancel
Send
To: Adriana Amalia
USD
$10
optional: Send a note
$18.54
Balance
Fee < $0.01
$50
$100
$200
Max
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
.
0


11:47
Cancel
Send
To: Adriana Amalia
USD
$10
optional: Send a note
Adriana has multiple wallets linked to this phone number
Send to Kaala wallet
Escrow funds and invite Adriana
Send to Libera wallet
Send funds to 0x9FF5...588c4b
Cancel

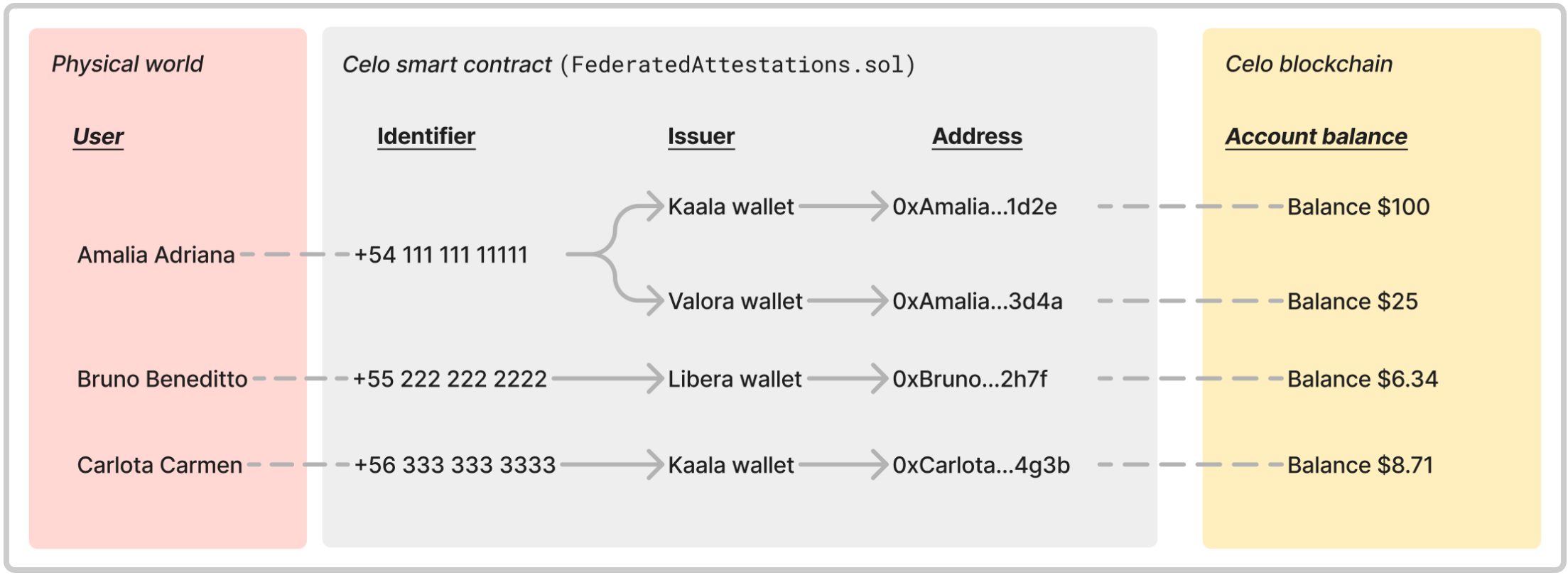

11:48
BB
Balance
$18.54
Add cash
Cash out
Today
AA Adriana Amalia
-$10
AA Adriana Amalia
-$10
0x771b...51afd8
+$4.98
You sent $10 to Adriana
It should arrive in a few seconds
Done
Undo (00:28)
0xF7D1...D242D0
-$0.01

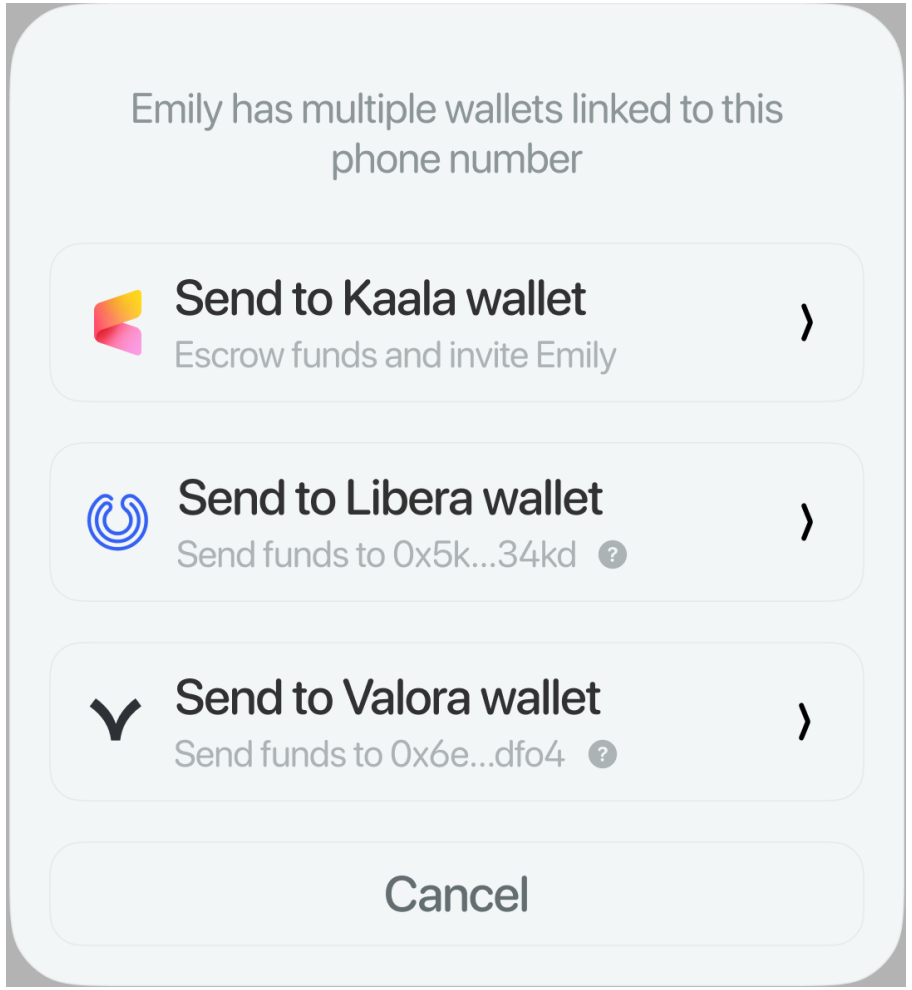
Onboarding request flow



Lookup request flow

Technical intuition




Emily has multiple wallets linked to this phone number
Send to Kaala wallet
Escrow funds and invite Emily
Send to Libera wallet
Send funds to 0x5k...34kd
Send to Valora wallet
Send funds to 0x6e...dfo4
Cancel

Get started using SocialConnect

```
// upload identifier -> address mapping to onchain registry
await federatedAttestationsContract.registerAttestationAsIssuer(
        obfuscatedIdentifier,
        account,
        NOW_TIMESTAMP
);
```

```
// lookup onchain mapping
const attestations = federatedAttestationsContract.lookupAttestations(
        obfuscatedIdentifier,
        [ this.issuer.address, ]
);
```

🔗 Full demo website: socialconnect.dev

Next steps

- Learn more: socialconnect.dev
- Join: ETHGlobal Paris hackathon
- Find me: @0xarthurxyz

Prizes

Celo Foundation will award 5 prizes to the best teams building for Access: onboarding the next billion users utilizing Celo and tools like Account Abstraction and Social Connect.

Best dApps on Celo blockchain

🥇 1st Place: $3,000
🥈 2nd Place: $2,000
🥉 3rd Place: $1,000
📲 **Best dApp on Celo utilizing Social Connect:** $2,000
🏆 **Best dApp utilizing Account Abstraction on Celo:** $2,000

Workshop

This workshop is happening in-person

Build Consumer Focused DApps using SocialConnect and Account Abstraction

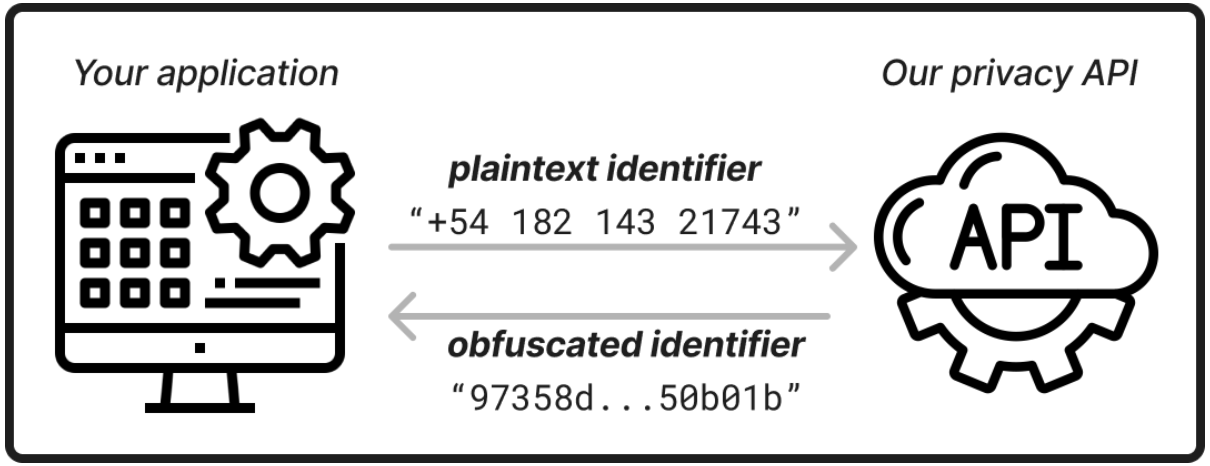
Time: 04:00 PM CEST – Jul 21, 2023
Location: Workshop Room 3

Workshop description

Appendix

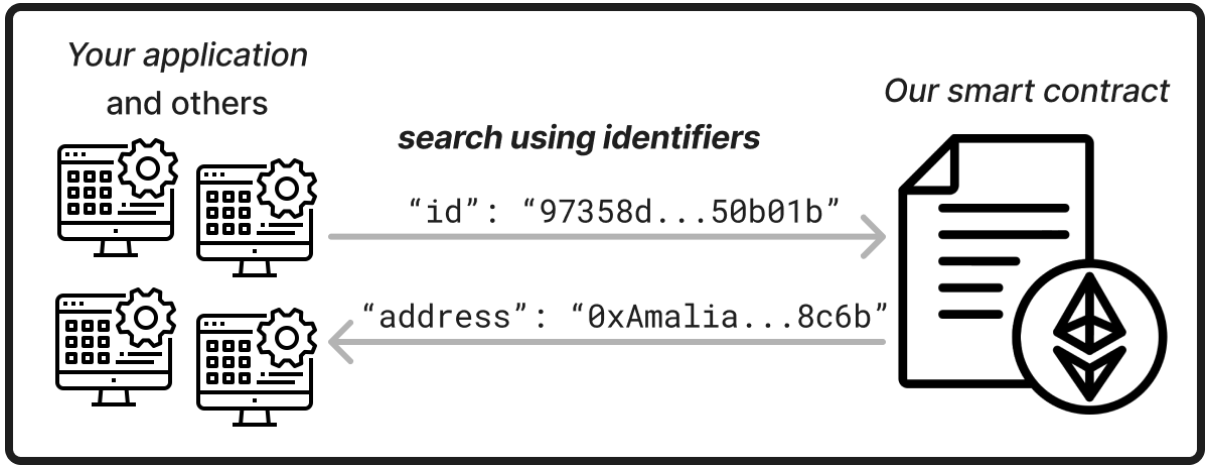
SocialConnect: Obfuscation

Our **privacy** API lets developers obfuscate identifiers while maintaining **interoperability** across applications.



SocialConnect: Registration

Our SDK gives developers complete **freedom** to design **verification** flows and **register** identifiers.

SocialConnect: Lookup

Our SDK lets developers design **delightful** and intuitive **user experiences**.