Itchysats: Bitcoin CFDs

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Outline

1. What is Itchysats?
2. How does it work?
3. Roadmap
4. Demo
5. Questions

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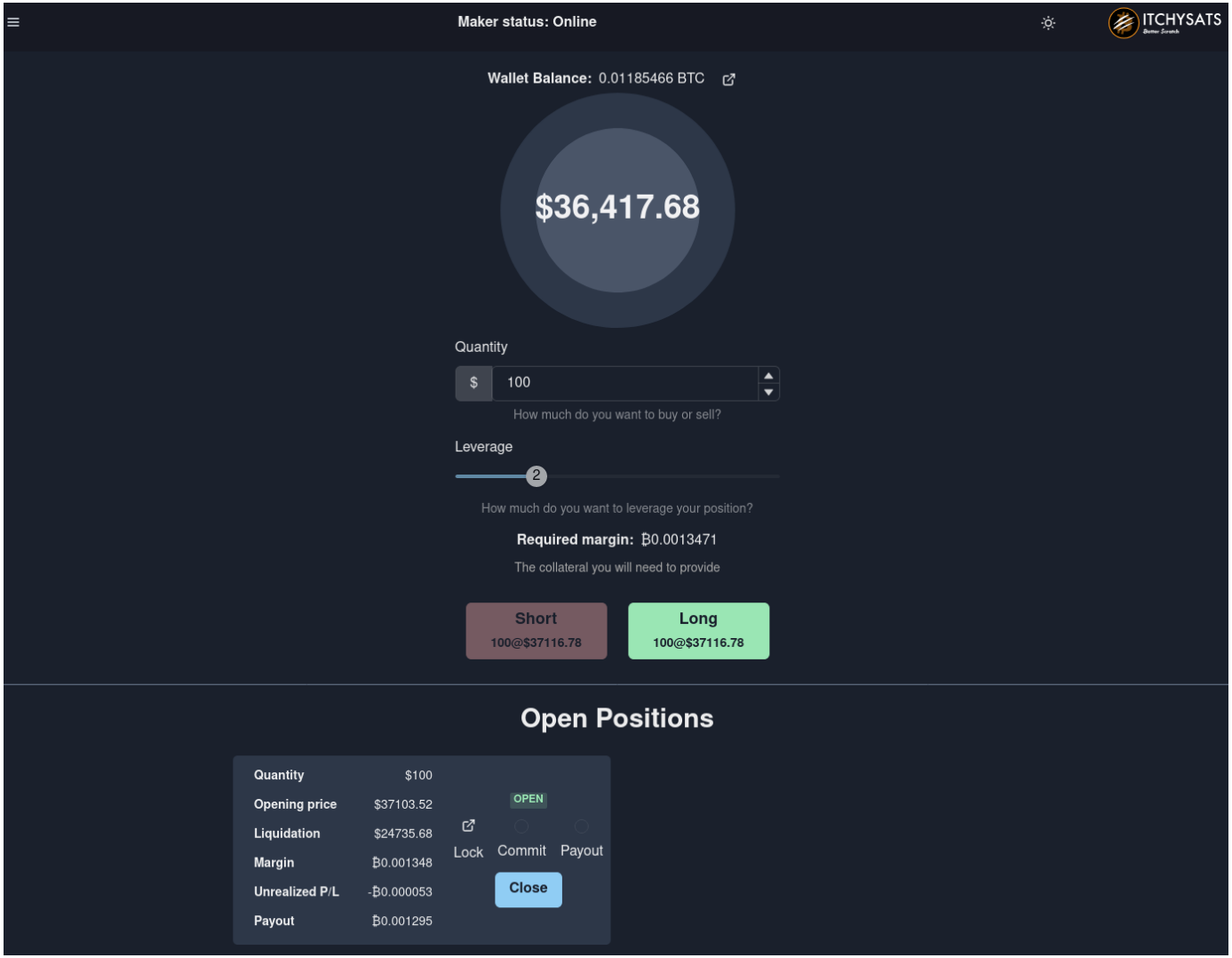
What is Itchysats?



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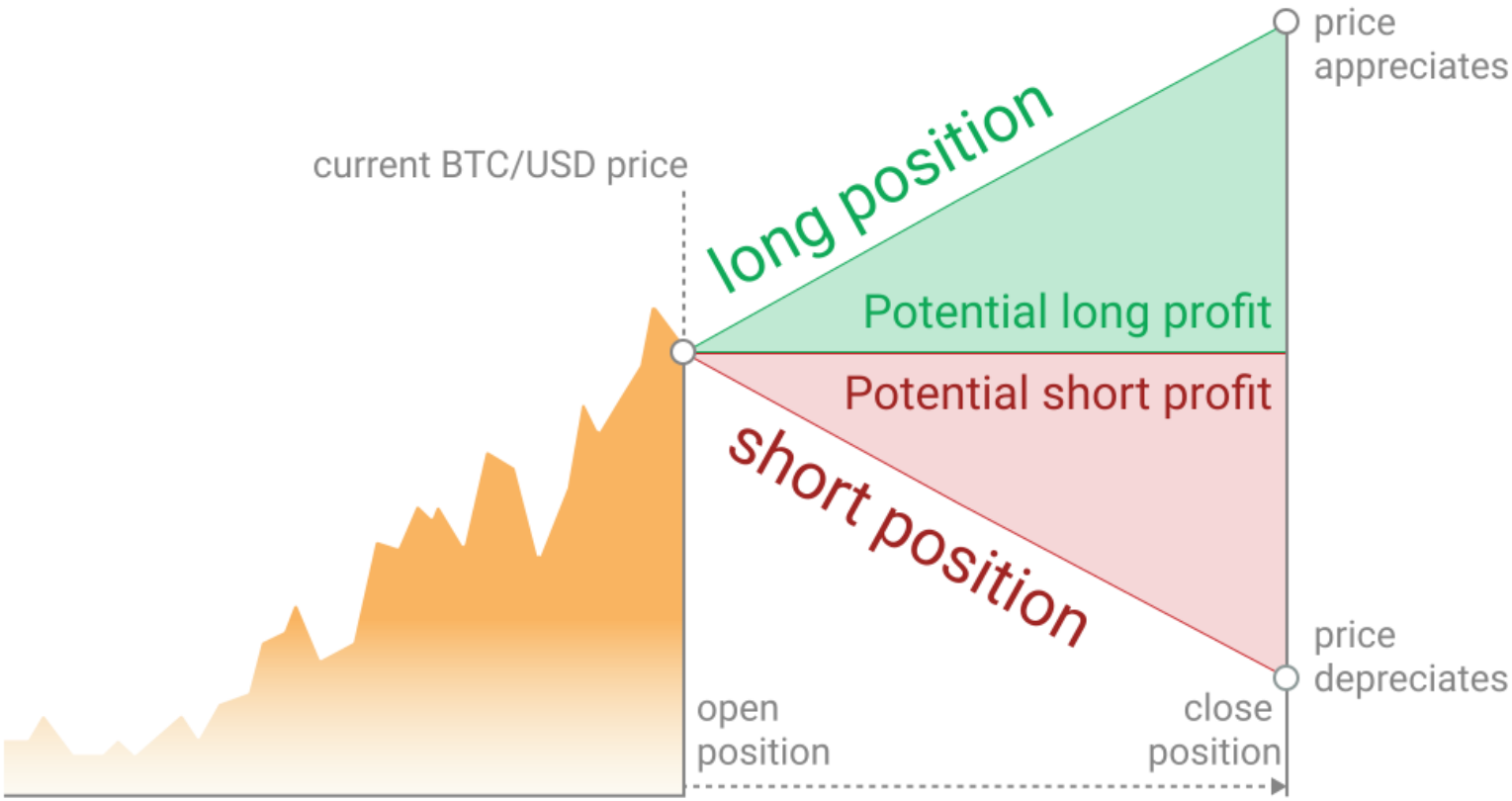
- Derivative
- Bet on the price of an asset in the future
- Leverage
- No expiry date
- Margin call

Potential profits (and losses)



Bitcoin CFDs on Itchysats

- Like conventional CFDs

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- Long can *double-dip*

BitMEX already does this!

But Itchysats is:

- Non-custodial

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BitMEX already does this!

But Itchysats is:

- Non-custodial
- Peer-to-peer
- Built on top of Bitcoin
- Free of counterparty risk
- Accountless

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Example

- Taker goes long: bets 0.5 BTC that BTC >= 40k USD

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- Taker goes long: bets 0.5 BTC that BTC >= 40k USD
- Maker goes short: bets 0.5 BTC that BTC < 40k USD

Example

- Taker goes long: bets 0.5 BTC that BTC >= 40k USD
- Maker goes short: bets 0.5 BTC that BTC < 40k USD
- Winner takes all

Counterparty risk

- 1st step on chain: lock up margin as collateral

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- 2-of-2 multisig output

Enforcing the bet

- Spend condition based on external information

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- Settle bet without collaboration

DLC (Discreet Log Contract)

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- 2-of-2 multisig
- Spent according to an oracle
- Oracle is oblivious
- Privacy-preserving
- *dlcspecs*

Olivia

Oracle server made and hosted by Lloyd!

In practice

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- Itchysats uses `P`, `R` and prices to lock spending conditions for DLC

Olivia

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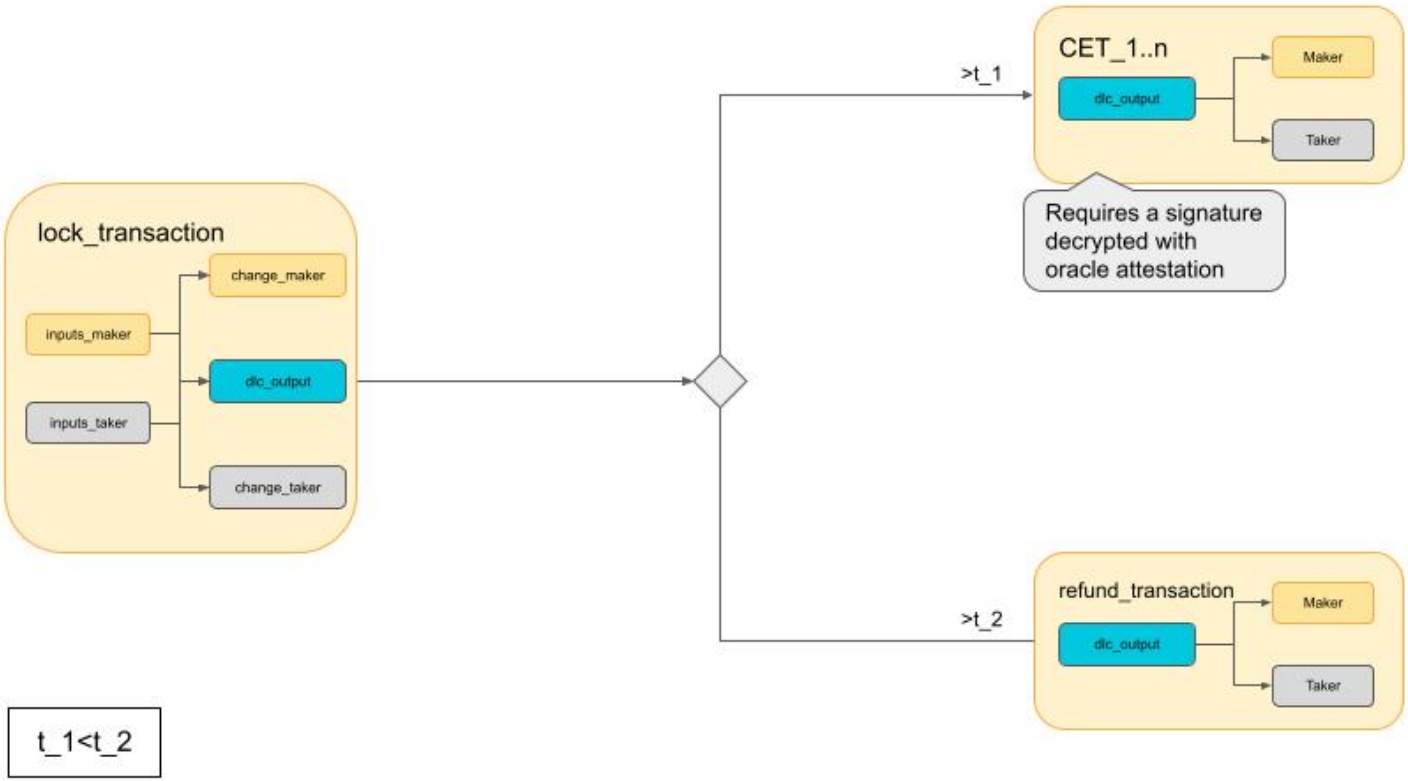
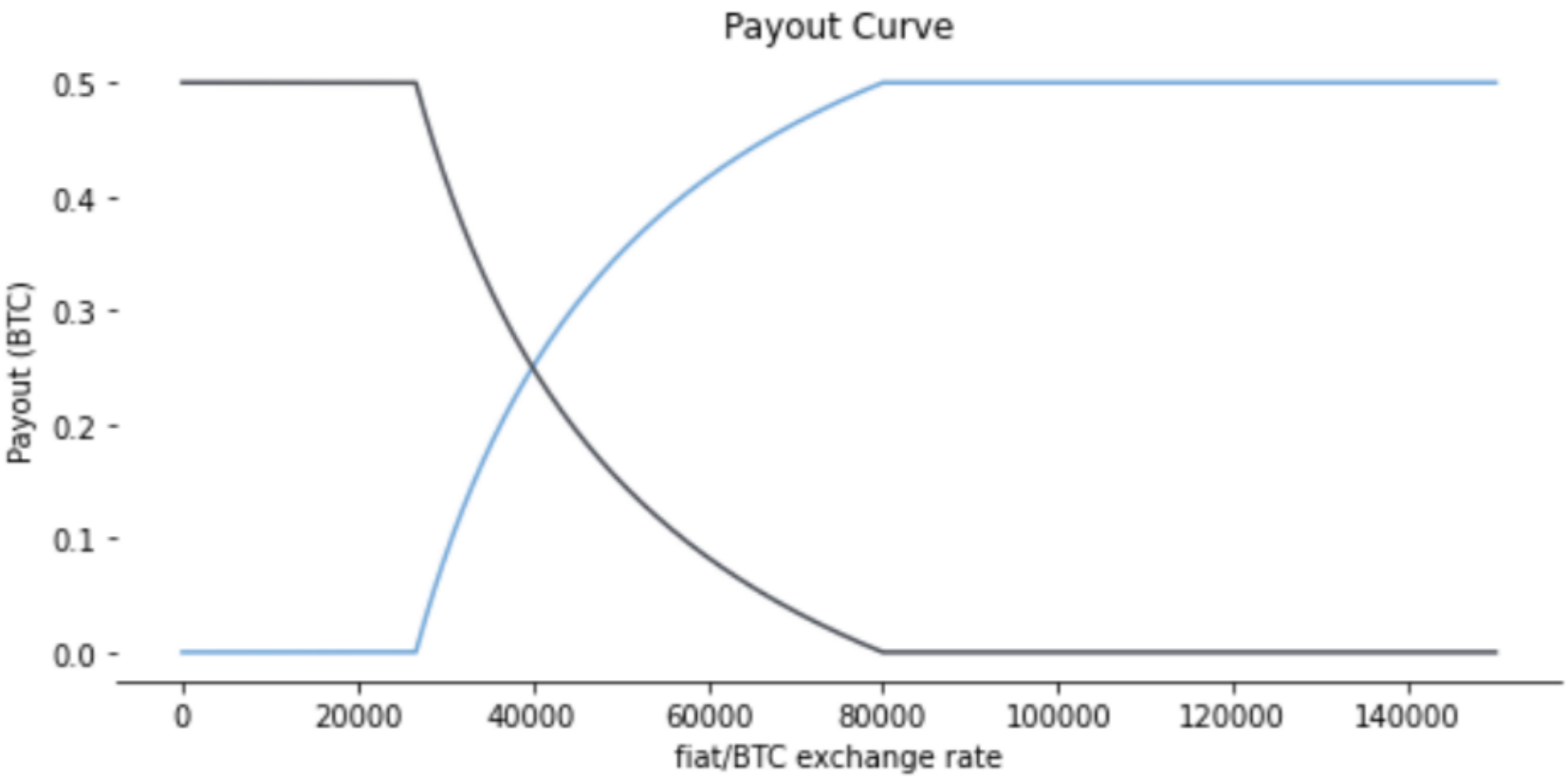
In practice

- Olivia identified by `P`
- Olivia announces future attestation, including a public nonce `R`
- Itchysats uses `P`, `R` and prices to lock spending conditions for DLC
- Olivia attests to price using `p` and `r`, enabling one spending path

Transactions



Payout curve



Perpetual CFDs

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- CFDs aren't meant to expire
- Can't get rid of the deadline
- Can we push the deadline?

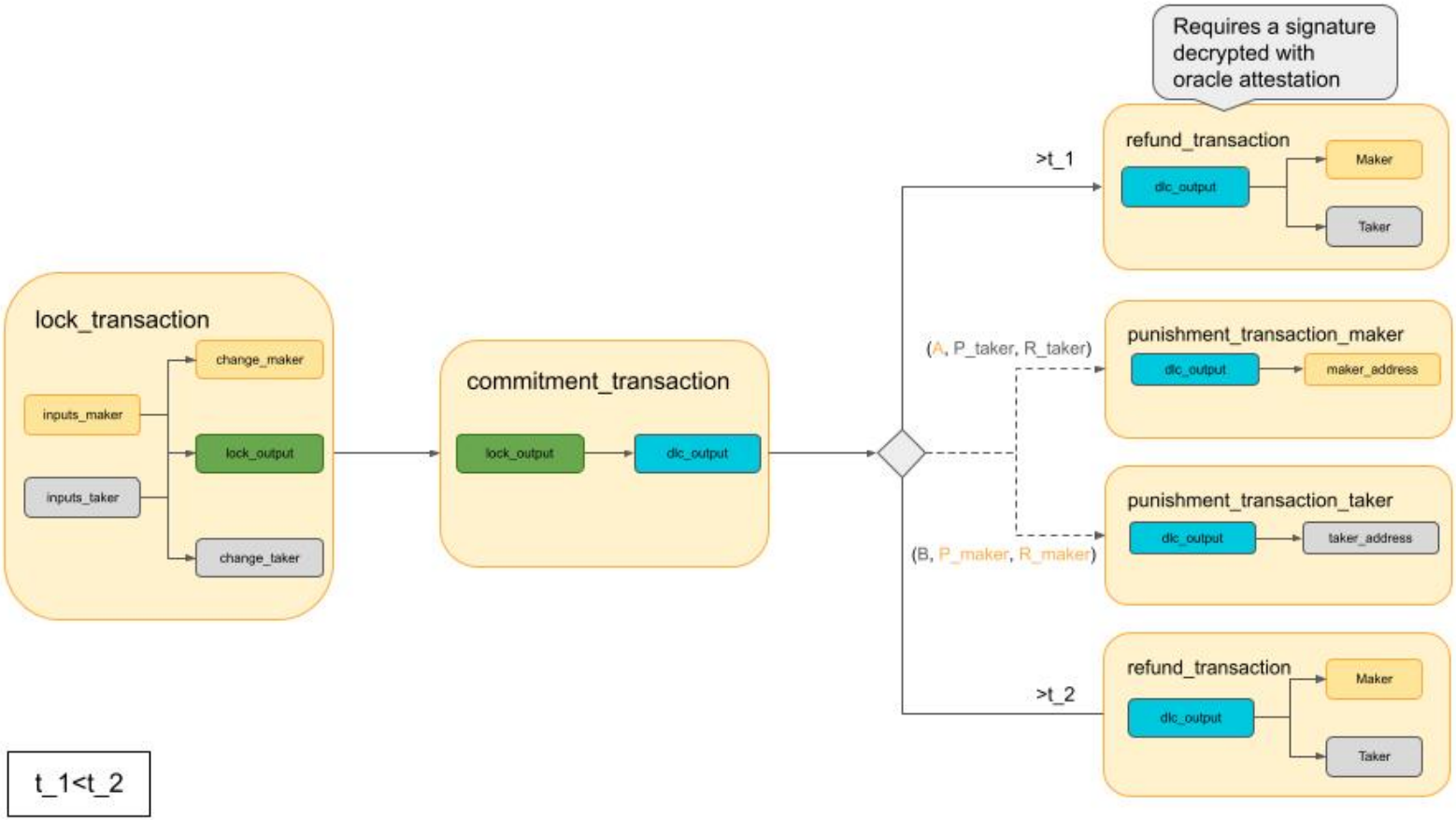
Using channels

- Look at Lightning

Using channels

- Look at Lightning
- We have experience: implemented Generalized Bitcoin-Compatible Channels PoC

More transactions



Optional collaboration

- We have to wait to close our position

Optional collaboration

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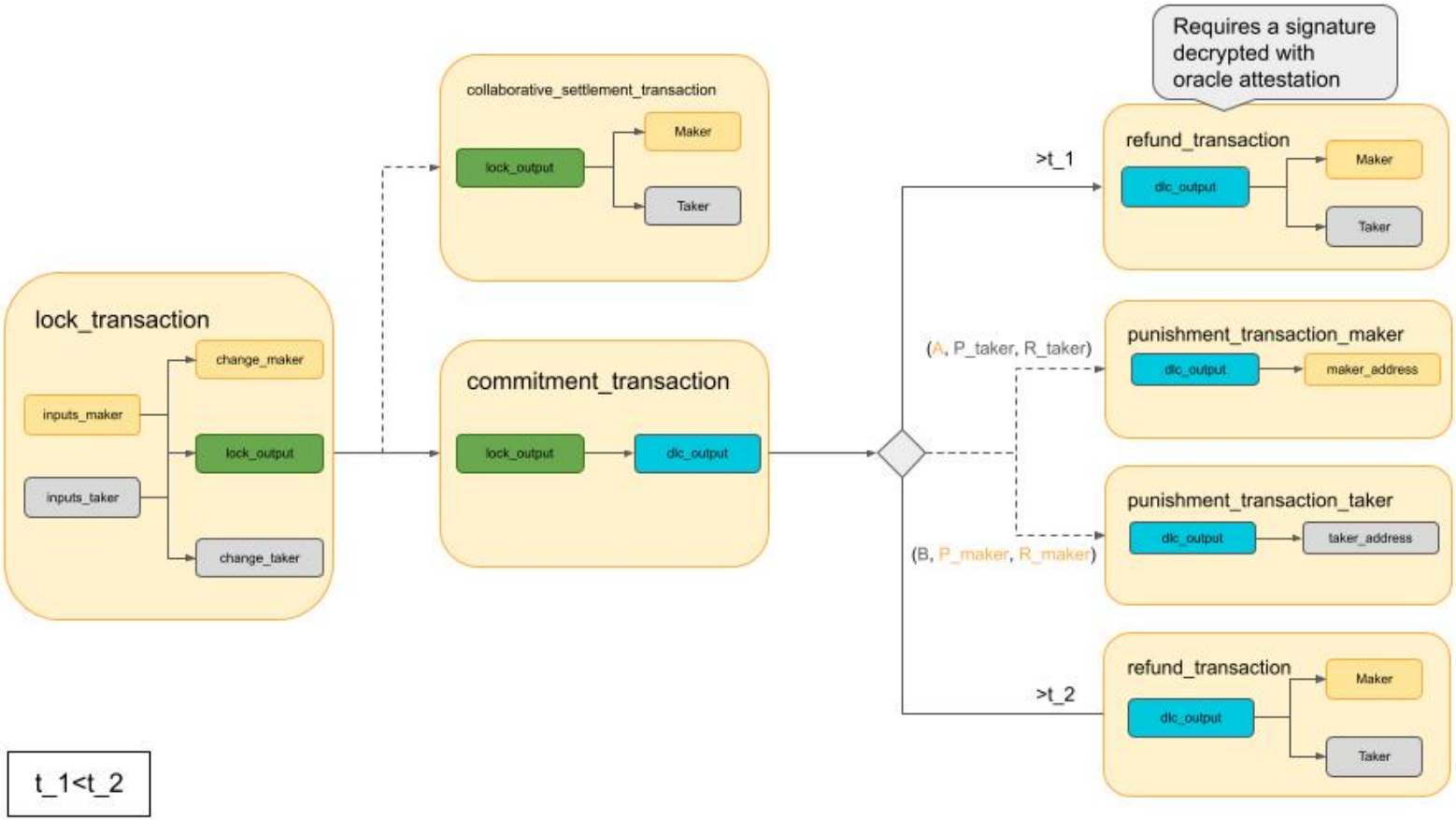
- Introduce optional transaction

Optional collaboration

- We have to wait to close our position
- Introduce optional transaction
- Olivia isn't involved

All of the transactions



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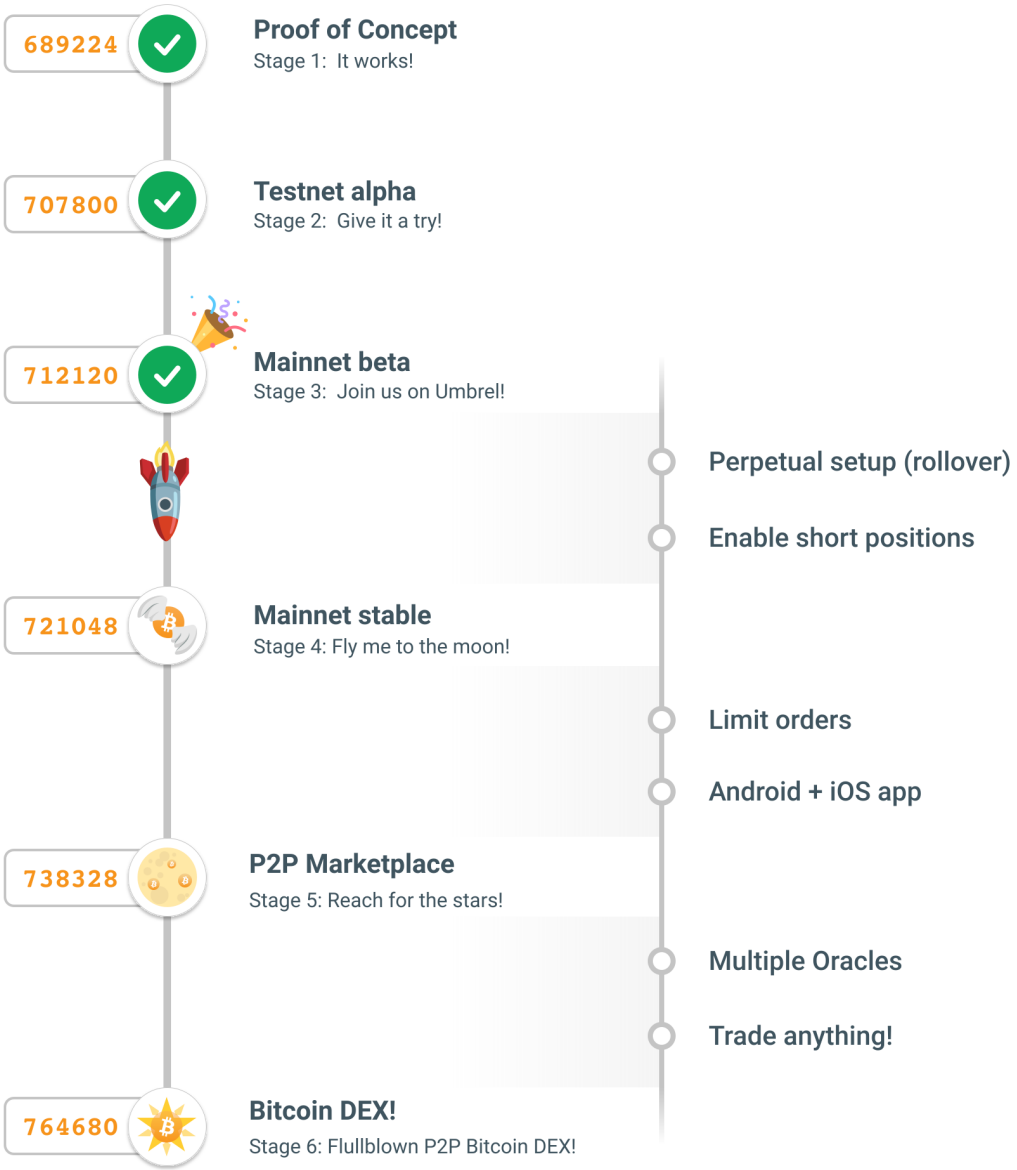
Roadmap


689224
Proof of Concept
Stage 1: It works!
707800
Testnet alpha
Stage 2: Give it a try!
712120
Mainnet beta
Stage 3: Join us on Umbrel!
Perpetual setup (rollover)
Enable short positions
721048
Mainnet stable
Stage 4: Fly me to the moon!
Limit orders
Android + iOS app
738328
P2P Marketplace
Stage 5: Reach for the stars!
Multiple Oracles
Trade anything!
764680
Bitcoin DEX!
Stage 6: Flullblown P2P Bitcoin DEX!

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Ask us anything