BCDEx Network

The Paradigm Shift of BTC-native DeFi

BCDEX

BITCOIN DECENTRALIZED EXCHANGE NETWORK

BCDEx.net

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100x Potential

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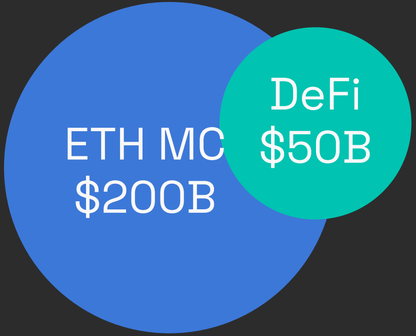
built on BCDEx

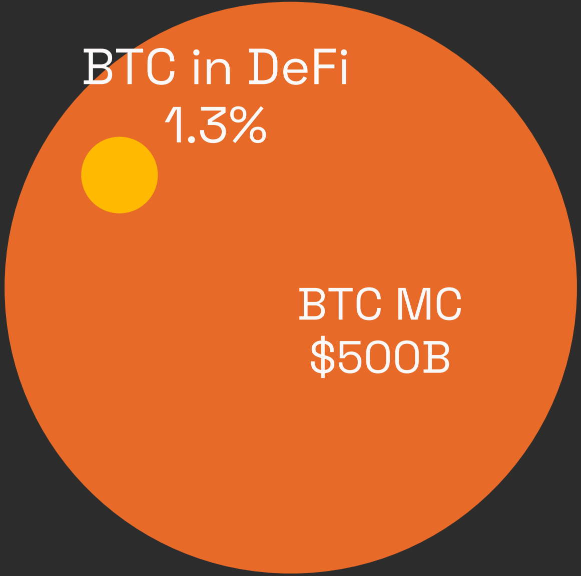
DeFi needs BTC, and soon



DeFi TVL
capped by L1 MC

Market Size
100x

To exchange native BTC
w/ assets on EVM



Most BTC is hibernating

Source: CMC
WBTC $4b, BTCB $1.4b, HBTC $1b, renBTC $100m, RBTC $100m

Native BTC DeFi benefits BTC

No reliable yield for BTC
BTC 5.2% APY on FTX is a scam

LSD makes ETH into interest bearing assets with 5% APY

WBTC or BTCB/HBTC are not reliable nor decentralized

What is BCDEx?

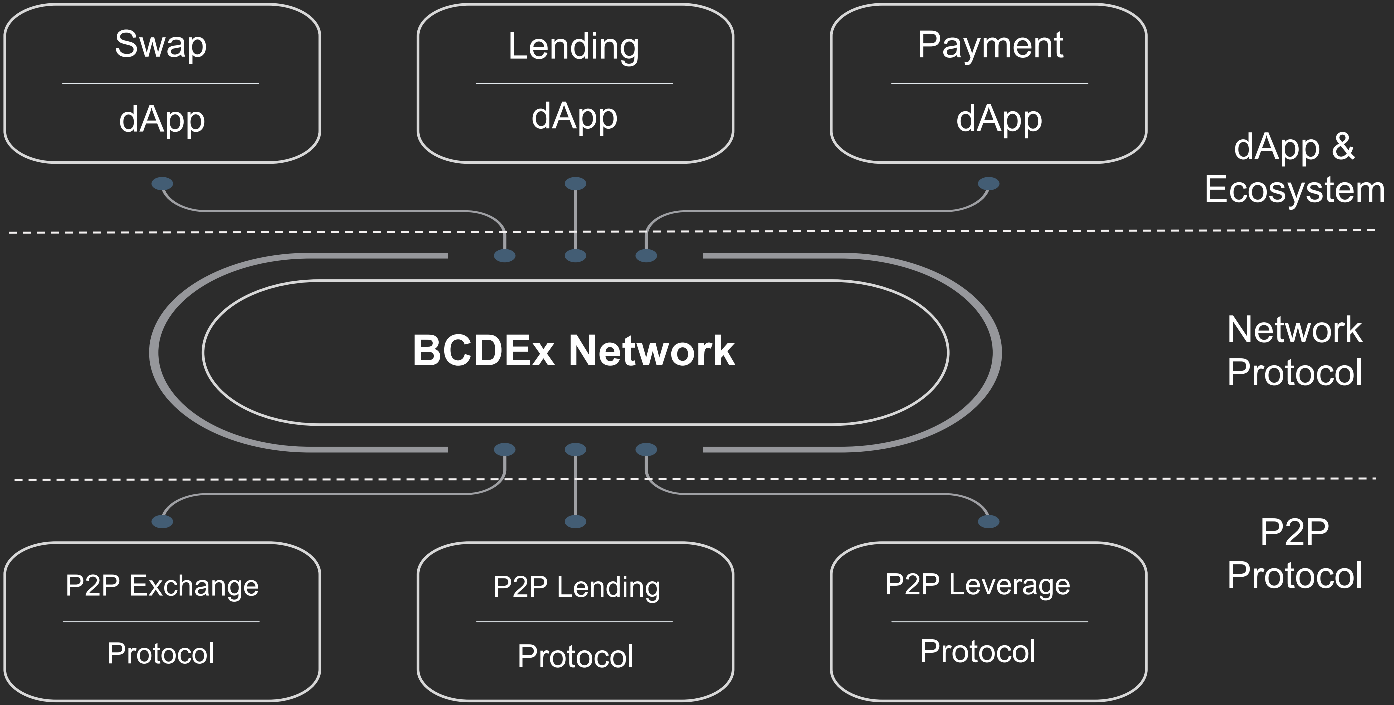
An exchange protocol which enables native BTC DeFi and NFT - allowing developers to construct dApps on top of it.

What is BCDEx

NATIVE on

BTC Mainnet &

Lightning Network

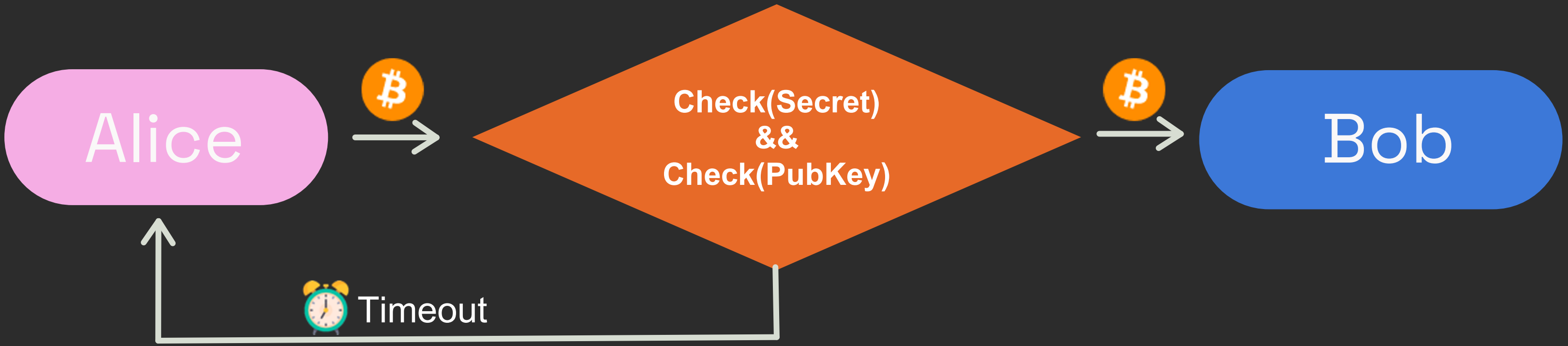


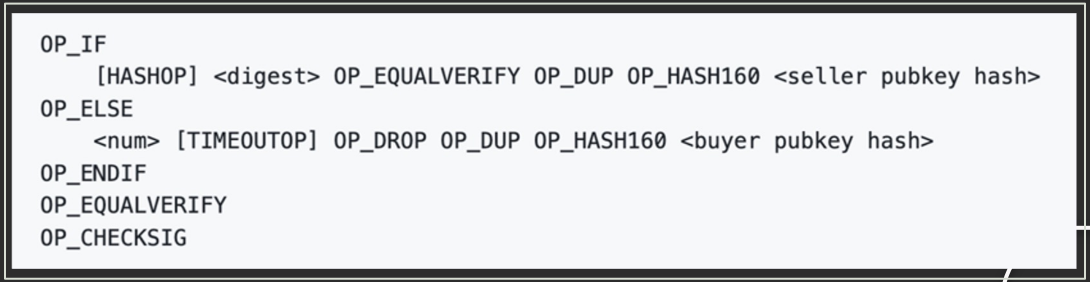
Tech Fundamentals

HTLC

Game Theory

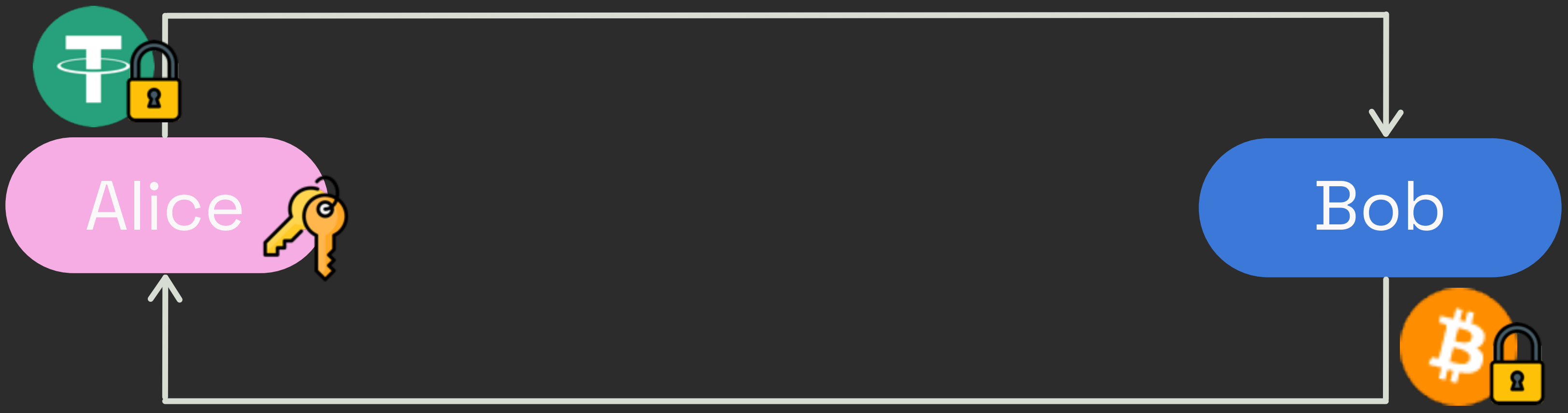
What is HTLC





```
OP_IF
    [HASHOP] <digest> OP_EQUALVERIFY OP_DUP OP_HASH160 <seller pubkey hash>
OP_ELSE
    <num> [TIMEOUTOP] OP_DROP OP_DUP OP_HASH160 <buyer pubkey hash>
OP_ENDIF
OP_EQUALVERIFY
OP_CHECKSIG
```

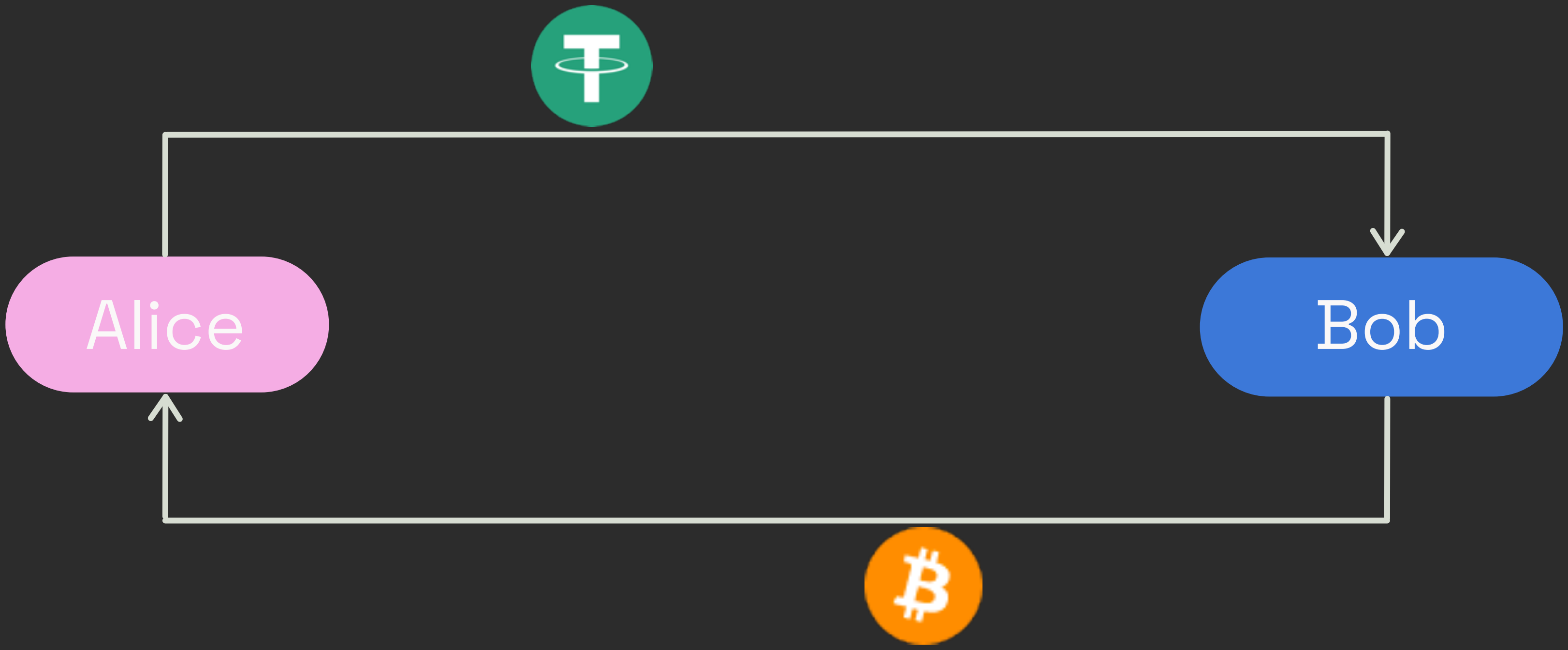
Atomic Swap



Alice

Bob

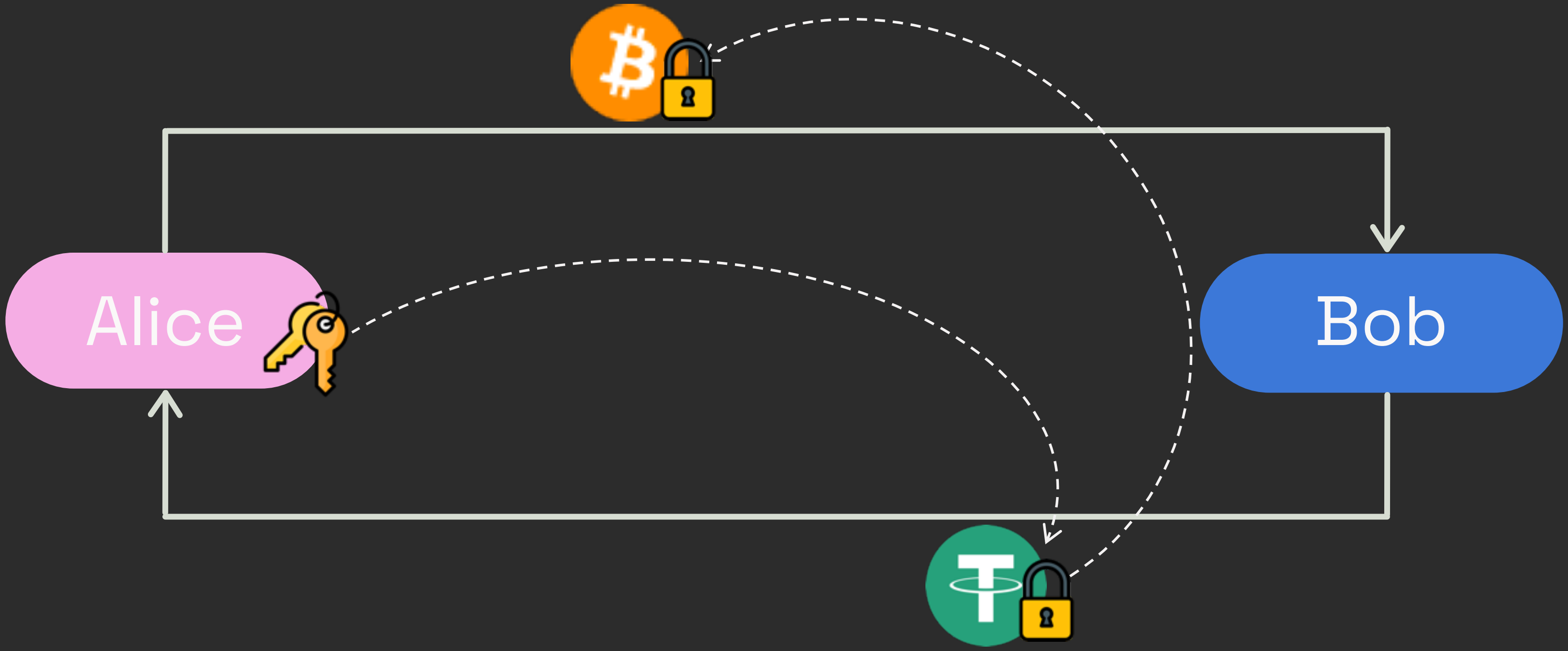
Atomic Swap



Alice

Bob

Atomic Swap



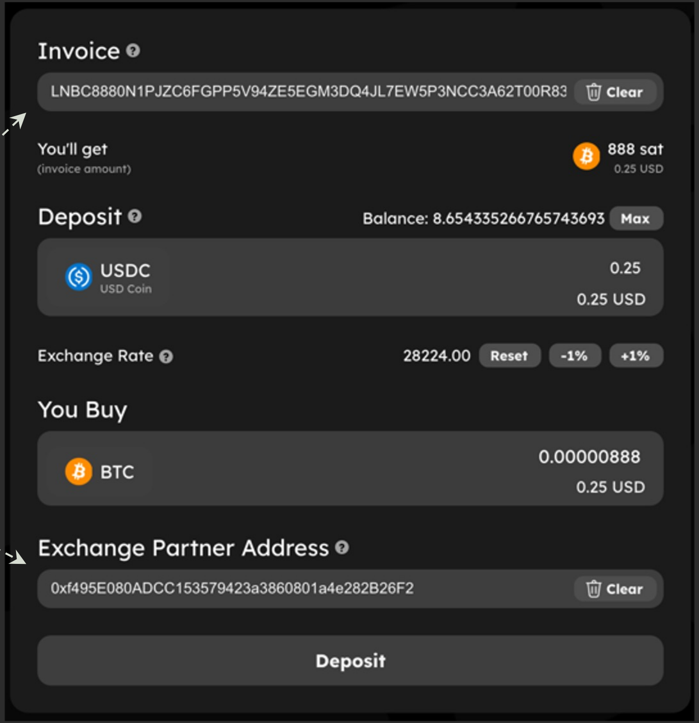
BCDEx Network

What have we built so far?

C2C Exchange

Alice

[Buy BTC Order]	
Invoice	# Receive 888 SATS Lnbc8880n1pjp3t...
Seller Address	# Bob’s Address: 0xABCDEX…
USDT	<**Deposit**> 0.25 USDT



Invoice

LNBC8880N1PJZC6FGPP5V94ZE5EGM3DQ4JL7EW5P3NCC3A62T00R83

You'll get (invoice amount): 888 sat, 0.25 USD

Deposit — Balance: 8.654335266765743693

USDC (USD Coin): 0.25, 0.25 USD

Exchange Rate: 28224.00

You Buy

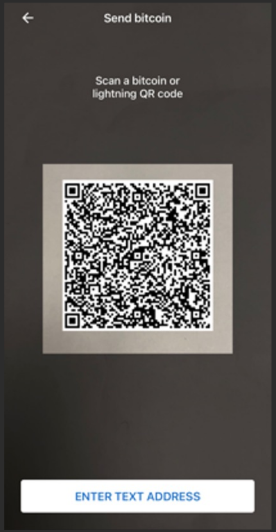
BTC: 0.00000888, 0.25 USD

Exchange Partner Address

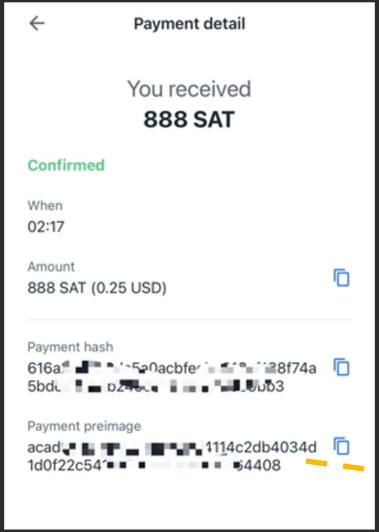
0xf495E080ADCC153579423a3860801a4e282B26F2

C2C Exchange

[Pay invoice]



[Get Secret]



Payment detail

You received
888 SAT

Confirmed

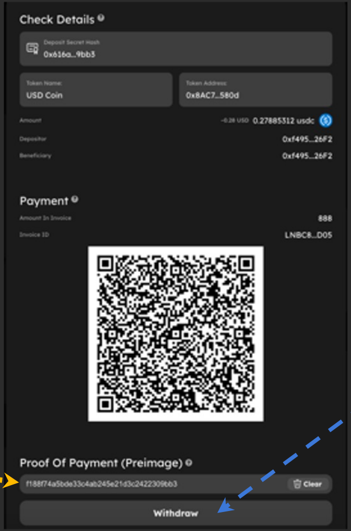
When
02:17

Amount
888 SAT (0.25 USD)

Payment hash
616a[redacted]5a0acbfe[redacted]28f74a
5bd[redacted]b3

Payment preimage
acad[redacted]1114c2db4034d
1d0f22c54[redacted]4408

[Withdraw]



Check Details

Deposit Secret Hash: 0x616a...9bb3

Token Name: USD Coin

Token Address: 0x8AC7...580d

Amount: ~0.28 USD 0.27885312 usdc

Depositor: 0xf495...26F2

Beneficiary: 0xf495...26F2

Payment

Amount In Invoice: 888

Invoice ID: LNBC8...D05

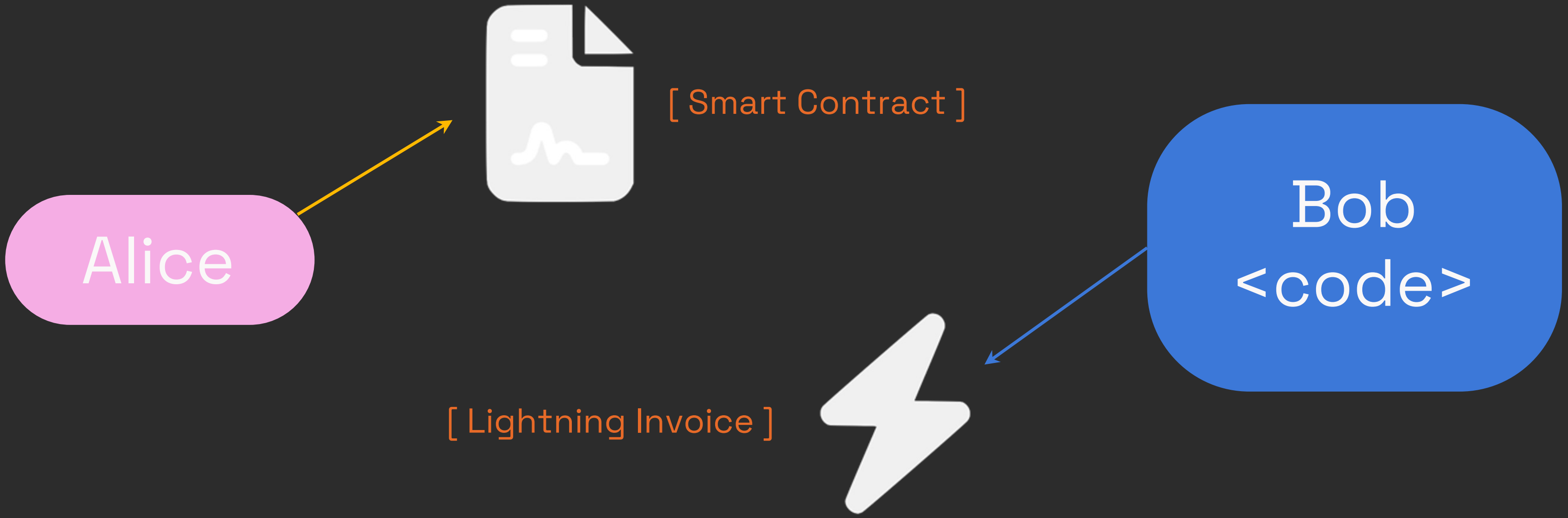
Proof Of Payment (Preimage)

f188f74a5bde33c4ab245e21d3c2422309bb3

Bob

DEMO: https://dev.bcdex.net/

B2C and Maker



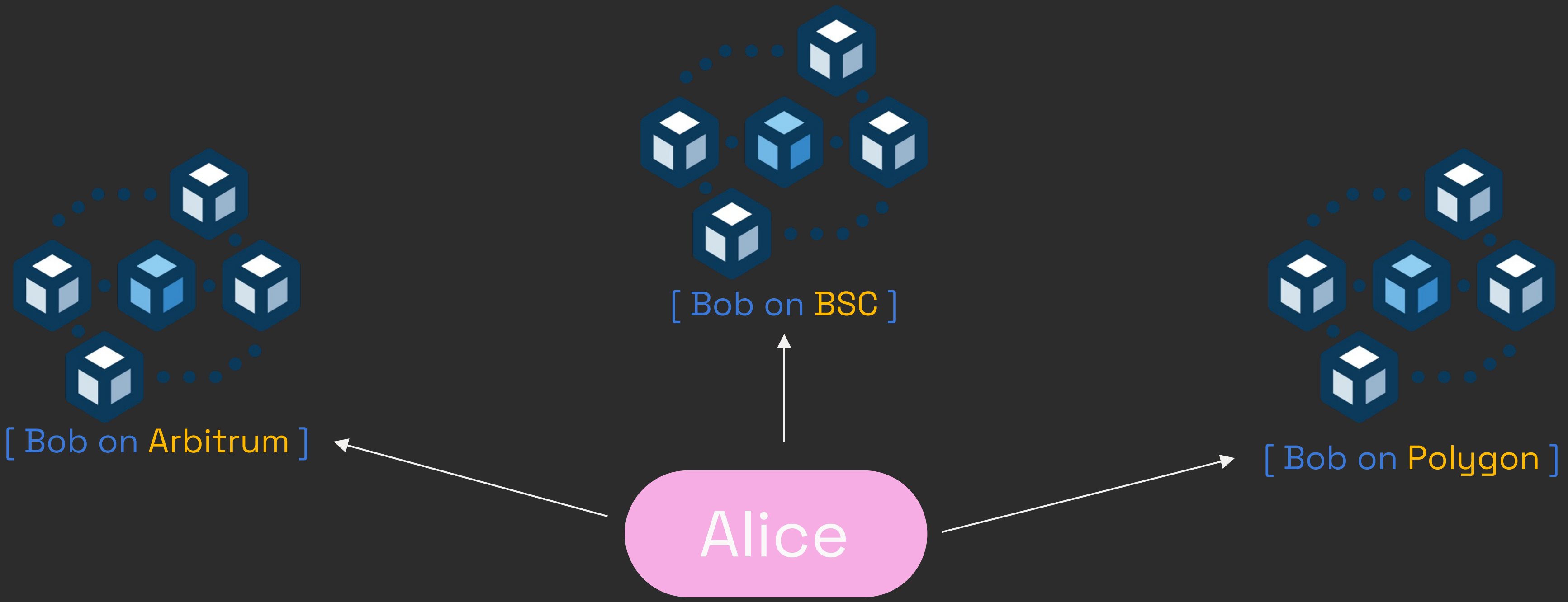
Alice

[Smart Contract]

Bob
<code>

[Lightning Invoice]

B2C and Maker



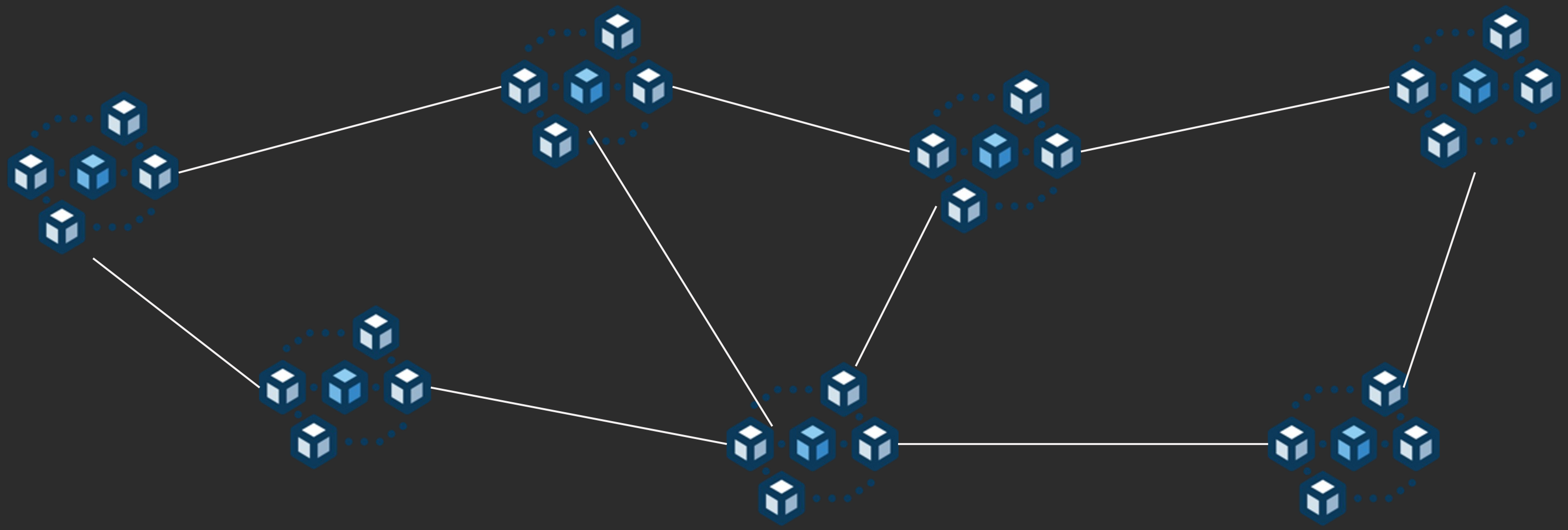
[Bob on BSC]

[Bob on Arbitrum]

[Bob on Polygon]

Alice

Exchange Network



BCDEx Network

/imagine more BTC-native opportunities…

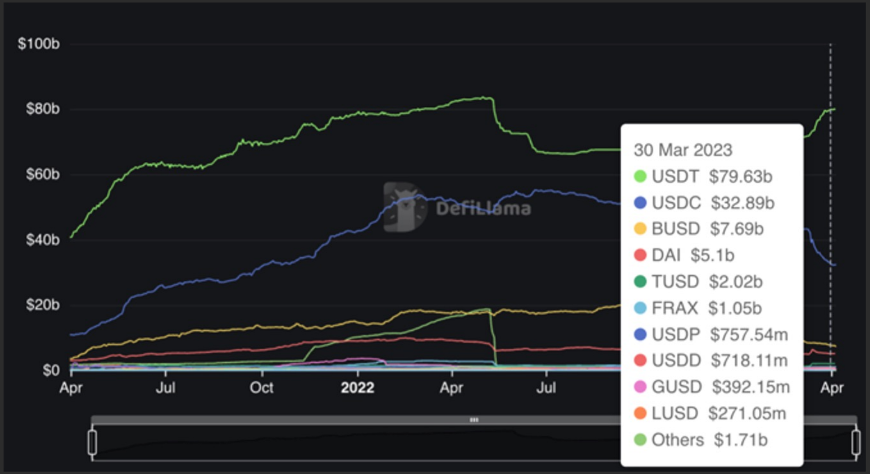
"Give people the right tools, and they will create wonderful things."
— Tim Berners-Lee (inventor of the World Wide Web)

Base On the Exchange Network

Stablecoin	$	Decentralized, 0% interest, BTC-native stablecoin
Swap NFT	⇄	NOT just FT, it can also be NFT, including inscriptions based on Ordinals protocol, sats name, and ”BRC-20"
Swap Route	📍	A pays B, B pays C, and C pays A, thus achieving interchain routing without direct channels
Proxy Payment	👛	BTC believers use Lightning wallets to pay for coffee. Merchants prefer stablecoins. AMM can help convert BTC to stablecoins for payment.
Payment & Call	🔀	Encoded payment or meaning triggers contract call. Automarket makers enable payment-on-call between Lightning Network and smart contracts.

Stablecoin

Stablecoins are the Holy Grail of the crypto world



🟦

Fiat-Collateralized

USDC/USDT/BUSD

Centralization risk. On-chain and off-chain asynchronous.

🟧

Crypto-Collateralized

DAI/LUSD

Limited scalability. High opportunity cost for ETH

🟨

Algorithmic

UST/BAS/AMPL

Not sustainable nor scalable

Stablecoin

BTC-Native Stablecoin Using CDPs

A

Decentralization

BTC PoW guarantees no dependency on any entity

B

Large Scale

Underlying assets are robust, liquid, and with the largest market cap

C

Strong Demand

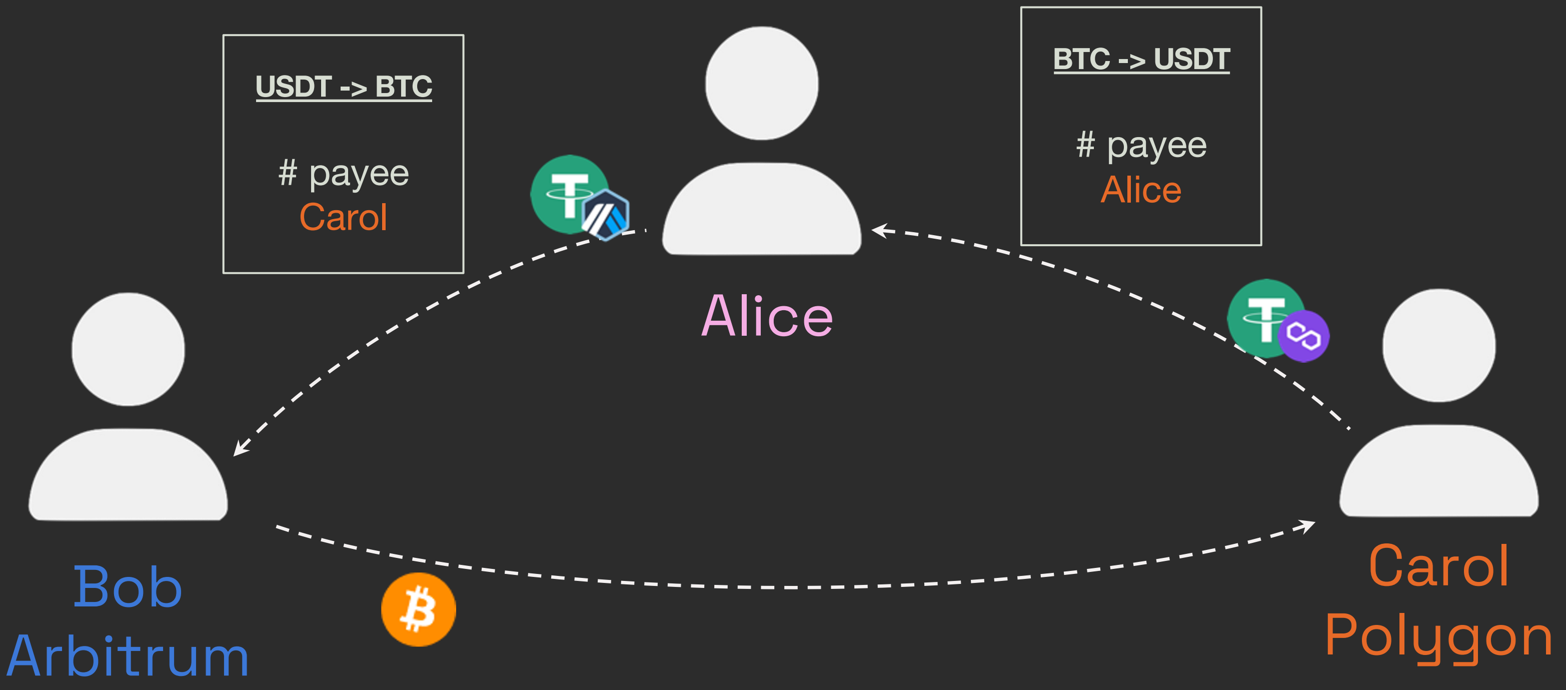
No yield-generating opportunities for BTC holders

D

Low Cost

Lightning network is fast, cheap and secure

Swap Route



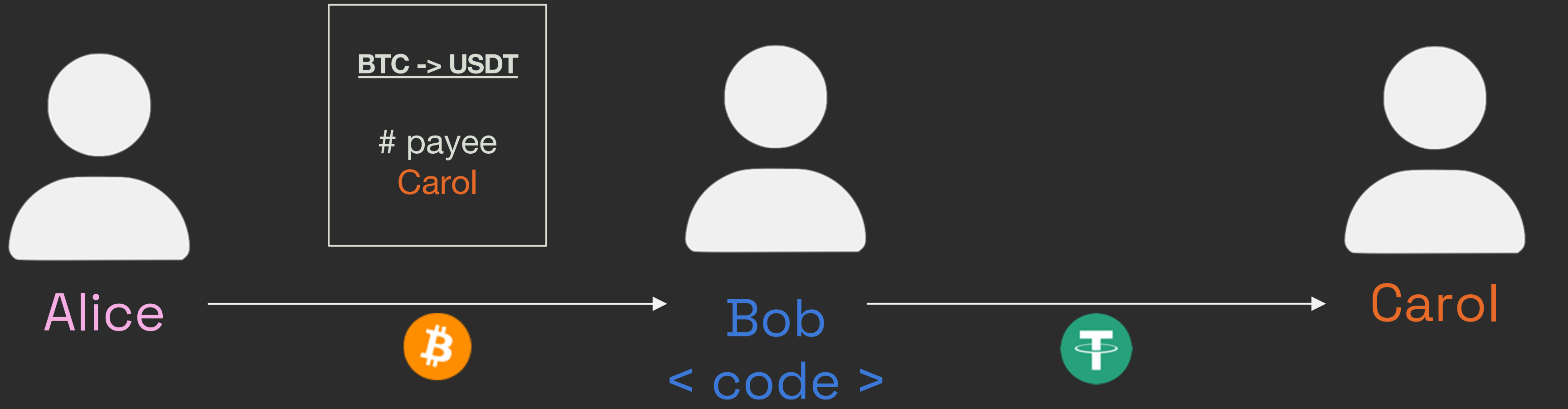
USDT -> BTC

# payee
Carol

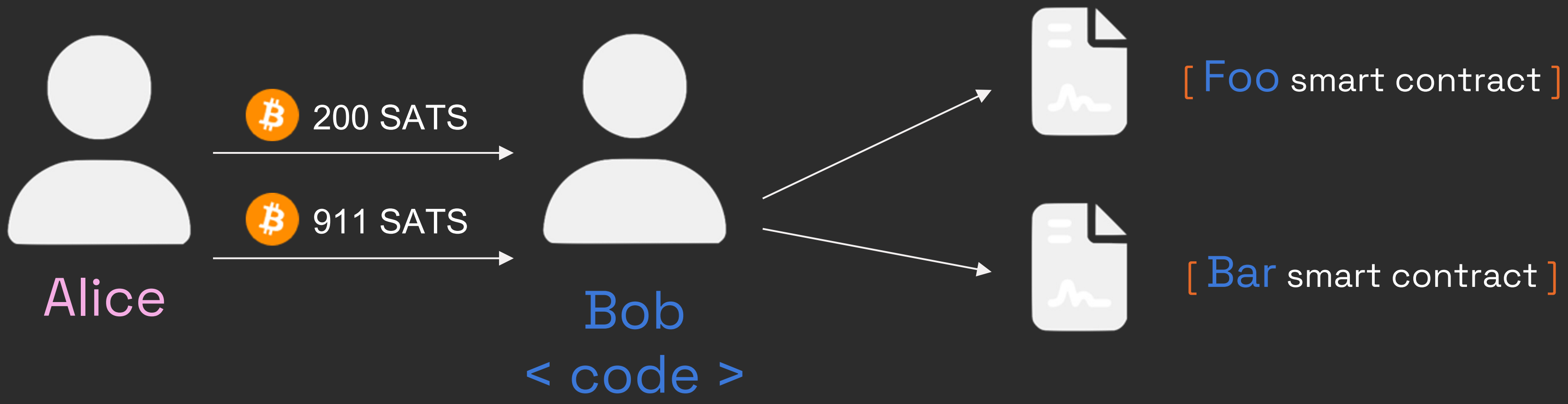
BTC -> USDT

# payee
Alice

Proxy Payment

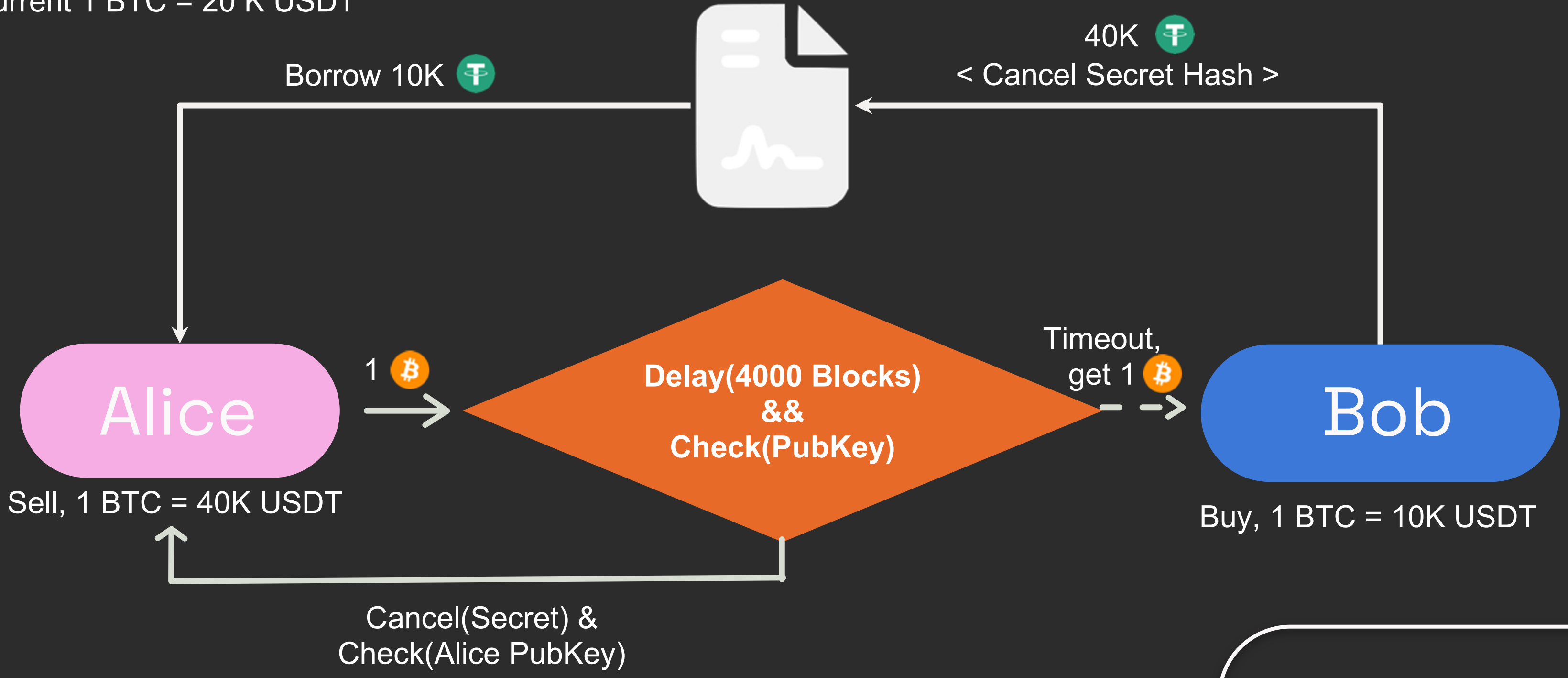


Payment and Call



Lending Protocol

Current 1 BTC = 20 K USDT



Borrow 10K

40K

< Cancel Secret Hash >

Alice

1

Delay(4000 Blocks)
&&
Check(PubKey)

Timeout,
get 1

Bob

Sell, 1 BTC = 40K USDT

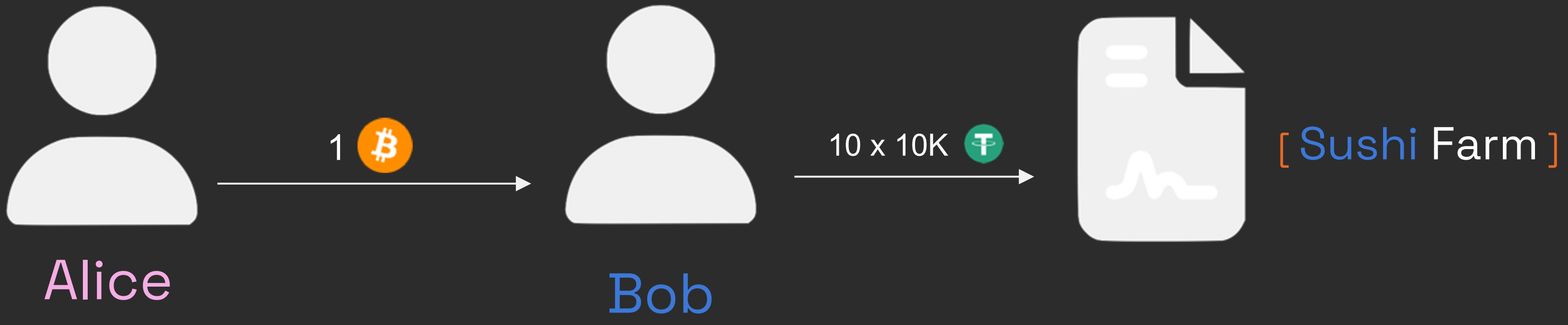
Buy, 1 BTC = 10K USDT

Cancel(Secret) &
Check(Alice PubKey)

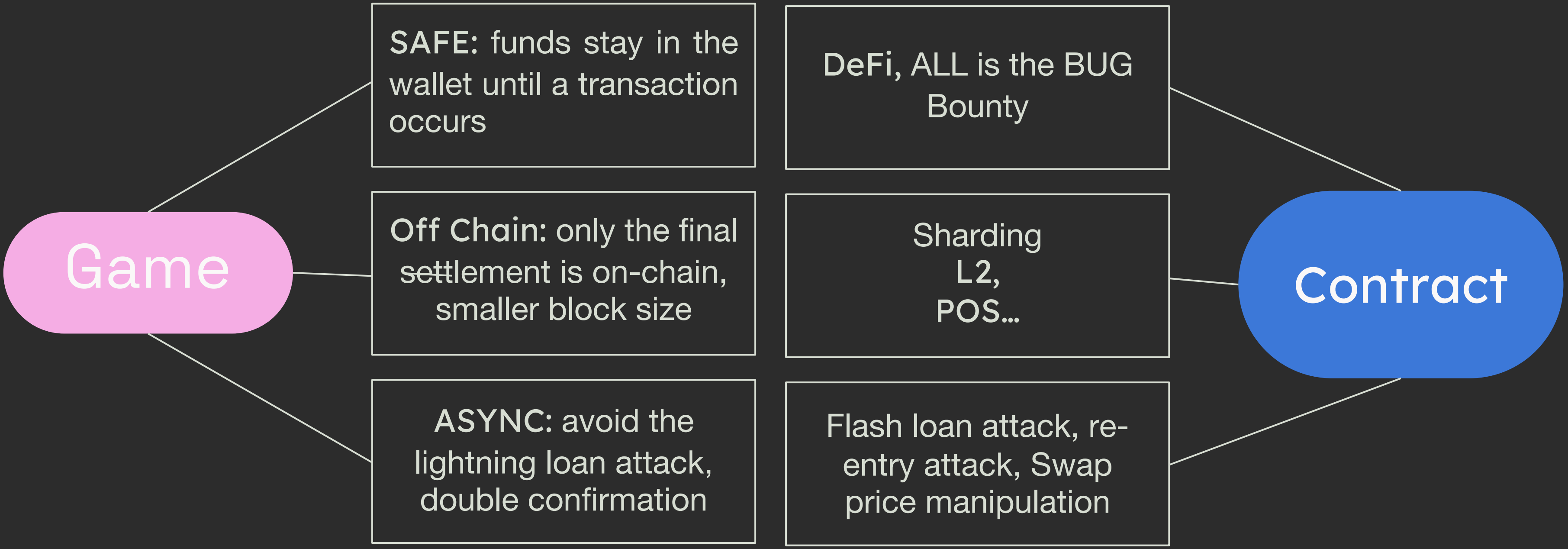
Lending Protocol

		Alice	Bob	Price
Alice	**Defaulted**	+10K USDT, -1 BTC	-10K USDT, +1 BTC	1 BTC < 10K USDT
	Repaid	No change	No change	
Bob	**Confirmed**	No change	No change	
	Defaulted	+40K USDT, -1 BTC	-40K USDT, +1BTC	1 BTC > 40K USDT

Leverage Protocol



GAME vs CONTRACT



Game

SAFE: funds stay in the wallet until a transaction occurs

Off Chain: only the final settlement is on-chain, smaller block size

ASYNC: avoid the lightning loan attack, double confirmation

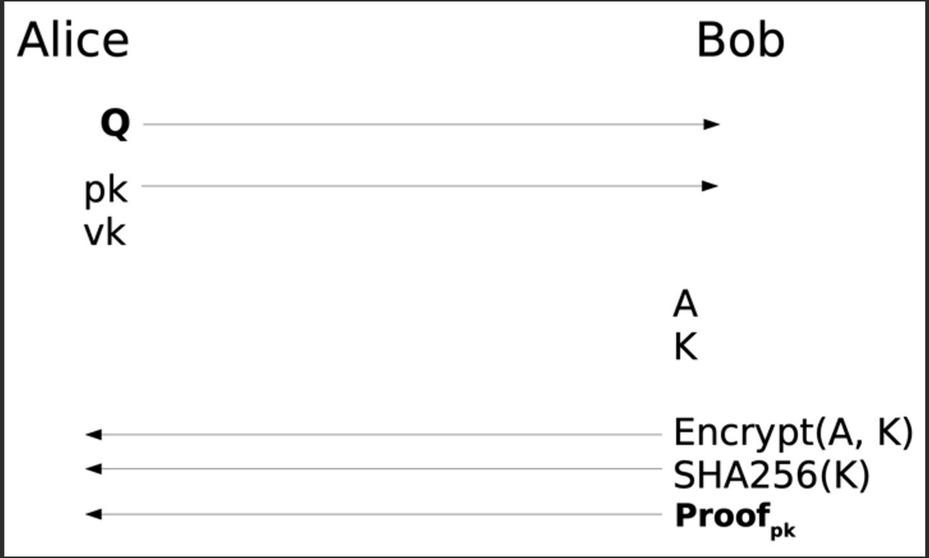
Contract

DeFi, ALL is the BUG Bounty

Sharding
L2,
POS...

Flash loan attack, re-entry attack, Swap price manipulation

/Imagine ZK+HTLC



Given a question Q, a hash H, and an encrypted answer E, Bob know answer A and key K

Step 1, Verify Proof and E(A,K)

Step 2, Swap K via HTLC

Thanks!

sjun.song@gmail.com

BCDEx.net

HAVE A TRY