

digital
currency
initiative



Vision

Create a future in which moving value across the Internet is as intuitive and efficient as moving information, to increase wellbeing for all people.

Layer 2

Currently used as an umbrella term for all operations that are performed "off chain", and use blockchains to settle transactions.

Scale

Every node runs every step of every smart contract. This is unnecessary. Why not use verifiable computation techniques + on chain anchoring?

Smart contracts

- Example: payment conditional on external data
- In this example, Alice and Bob bet on tomorrow's weather. If it rains, Alice gets 1 coin. If it's sunny, Bob gets 1 coin
- Issue: The bitcoin blockchain unaware of the weather

Oracles

- For external state, need way to get it, usually called an "oracle"
- Oracles should not be able to **collude**, or **equivocate**
- Use cryptography to implement one such oracle – that's what we've done

One example

- Bitcoin settled dollar futures
- Allows Alice to move the risk to Bob
- One way to address volatility for Alice

One example (cont.)

The screenshot shows a 'New Futures Contract' dialog box overlaid on a trading interface. The background interface includes a red '+' button labeled 'Channel' at the top left and a grey '+' button labeled 'Contract' at the bottom center. The dialog box contains the following fields:

- I am:** Buying (dropdown menu)
- Amount:** 1000 (text input)
- Asset:** US Dollar (dropdown menu)
- On:** May 11th 06:25 pm (text input)
- Priced at:** 8474.58 (text input) with a refresh icon and a dropdown menu set to 'US Dollar per BTC'
- Peer:** (dropdown menu)

At the bottom right of the dialog box are two buttons: 'CANCEL' and 'SAVE'.

Other use cases?

- General: conditional payments based on any number or elements from predetermined set
- Weather?
- Stocks?
- Commodities?
- Sports?
- Insurance?

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Code Issues 17 Pull requests 16 Projects 0 Wiki Insights

Lightning Network node software

398 commits 28 branches 1 release 18 contributors MIT

Branch: master New pull request Create new file Upload files Find file Clone or download

gertjaap and adiatat First version of Discreet Log Contracts (#158) Latest commit b6b85eb 10 days ago

cmd	First version of Discreet Log Contracts (#158)	10 days ago
coinparam	change regtest bech32 hrp to bcr	2 months ago
dlc	First version of Discreet Log Contracts (#158)	10 days ago
elkrem	fix elkrem test	5 months ago
litbamf	Lit bamf (#70)	a year ago
litrpc	First version of Discreet Log Contracts (#158)	10 days ago
Indc	Fix typos (#146)	2 months ago
Inutil	First version of Discreet Log Contracts (#158)	10 days ago
portxo	somewhat fancier coin selection	6 months ago
powless	add some comments	5 months ago
qln	First version of Discreet Log Contracts (#158)	10 days ago
sig64	Fix typos (#146)	2 months ago

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