



***CRYPTO FOR
LAWYERS***

HELLO!



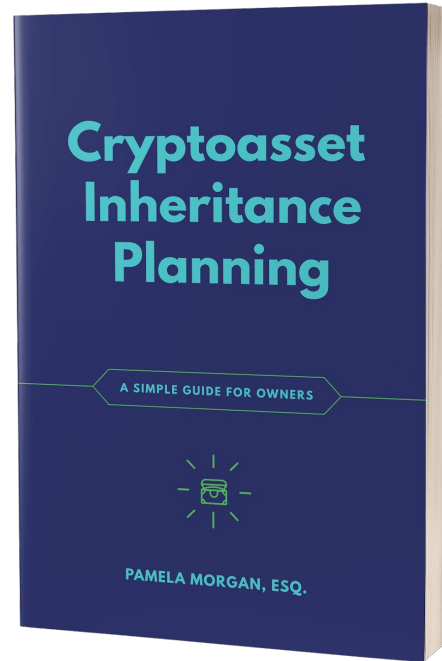
I am Pamela Morgan

I am here because I'm a lawyer, working in crypto since early 2014

You can find me at @pamelawjd

I WROTE A BOOK

A simple guide for owners of cryptocurrencies, like bitcoin, and cryptoassets to understand what needs to be done in terms of inheritance planning for cryptoassets.



INSTRUCTIONS FOR USE OF THIS SLIDE DECK

DISCLAIMER

The information contained in this presentation is not legal advice. It's not intended to be your only source of information on the topics of cryptocurrencies, cryptoassets, or crypto security.

OPEN SOURCE

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CRYPTO MOVES FAST

The information in this presentation is as accurate as possible as of the date it's delivered. However things change fast in crypto and if you're seeing this presentation later, things may have changed.

WE NEED GOOD LAWYERS

WE ARE SHAPING THE LAW – RIGHT NOW

WE HAVE AN OPPORTUNITY

INHERITANCE PLANNING FOR CRYPTOASSETS

Technical Plan

- × Balance security and liability risk
- × Find an expert to help
- × Regular updates

Legal Plan

- × Control
- × Transfer or Liquidate
- × Valuation & Taxes
- × Novel Issues

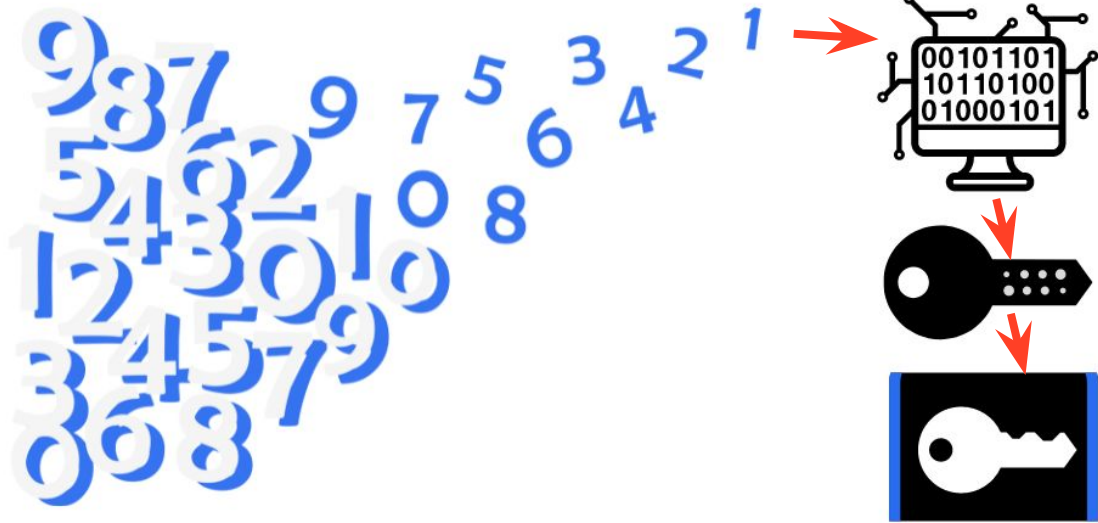


1.

***WHAT IS A
CRYPTOASSET?***

**"A CRYPTOASSET IS ONE THAT
IS SECURED (LOCKED AND
UNLOCKED) BY CRYPTOGRAPHY
USING A PUBLIC-PRIVATE
KEYPAIR"**

WHERE DO PUBLIC PRIVATE KEYPAIRS COME FROM?





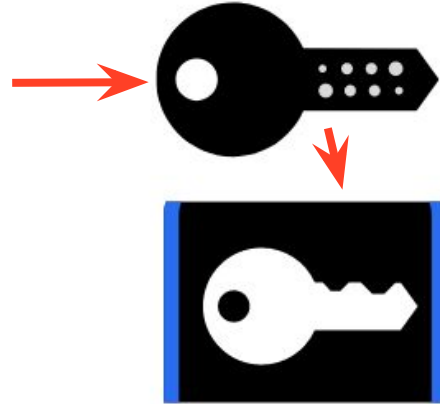
2.

***HOW DO KEYS RELATE
TO CRYPTOASSETS?***

PRIVATE KEYS CONTROL CRYPTOASSETS - ALWAYS

From a network (*not a legal*) perspective, a **private key** demonstrates ownership and control over the underlying cryptoasset.

Your keys, your coins. Your keys, your cryptoassets.

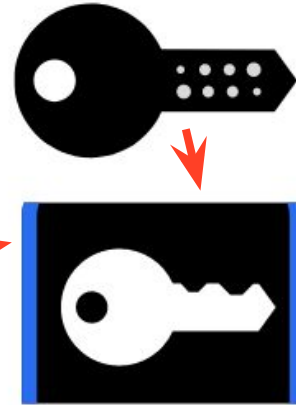


WHAT CAN YOU DO WITH A PRIVATE KEY?

Manage and control ALL cryptoassets locked to that key

Create public key(s) & network address(es) for cryptoassets

Sign messages to prove authenticity





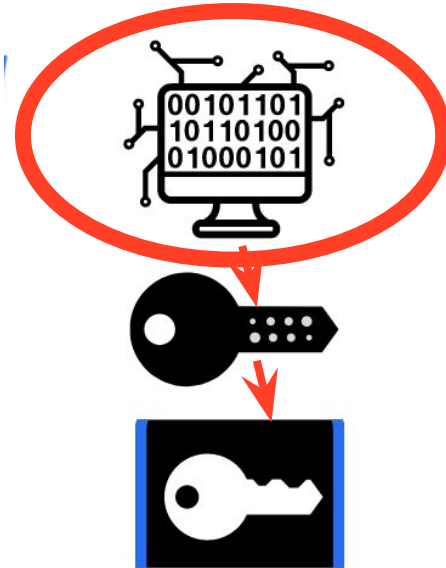
3.

KEYS AND WALLETS

WHERE ARE KEYS CREATED, STORED, AND MANAGED?



WALLETS create, manage, and use KEYS to store and transfer cryptoassets



WHAT DOES A KEY LOOK LIKE?



ASSET ACCESS CODE: do not discard

Software: **Copay**

Date: **March 2018**

Additional Code Req: N

Assets: **BTC, BCH**

Notes: **Part of 2-of-3 multisig w Alice & Bob**

- | | | | |
|----|--------------------------------------|----|---------------------------------------|
| 1 | <input type="text" value="first"/> | 13 | <input type="text" value="drip"/> |
| 2 | <input type="text" value="harvest"/> | 14 | <input type="text" value="thumb"/> |
| 3 | <input type="text" value="walk"/> | 15 | <input type="text" value="resemble"/> |
| 4 | <input type="text" value="fancy"/> | 16 | <input type="text" value="vendor"/> |
| 5 | <input type="text" value="follow"/> | 17 | <input type="text" value="error"/> |
| 6 | <input type="text" value="crazy"/> | 18 | <input type="text" value="path"/> |
| 7 | <input type="text" value="day"/> | 19 | <input type="text" value="trade"/> |
| 8 | <input type="text" value="train"/> | 20 | <input type="text" value="impact"/> |
| 9 | <input type="text" value="purity"/> | 21 | <input type="text" value="verb"/> |
| 10 | <input type="text" value="glide"/> | 22 | <input type="text" value="later"/> |
| 11 | <input type="text" value="grape"/> | 23 | <input type="text" value="club"/> |
| 12 | <input type="text" value="victory"/> | 24 | <input type="text" value="rug"/> |

***WAIT... A WALLET HOLDS
KEYS? WHAT IS A
CRYPTOASSET WALLET?***



A CRYPTOASSET WALLET IS SIMPLY SOFTWARE

A wallet might:

- Create cryptographic keys
- Store and manage keys
- Create and sign transactions
- Publish transactions
- Keep track of one or more blockchain networks
- Interact with one or more networks



**"YOU NEED TO KNOW *HOW*
MANY KEYS YOUR CLIENTS USE
AND DECIDE HOW BEST TO
ACCESS THEM"**

KRAKEN EXCHANGE WALLET (CEX)

The screenshot displays the Kraken Exchange interface. At the top, there is a navigation bar with links for Trade, Prices, Earn, Funding, History, and Support, along with a 'Buy Crypto' button. The 'Available Balances' section shows 0.00000 BTC and 139.01 USD. Below this, a market data table for BTC/USD is visible, including last price, index price, 24h volume, weighted average, and 24h low/high. The main section is titled 'New Order' and includes tabs for Orders, Positions, and Trades. A 'Current time: 09/28/22 19:18:52' and 'Last updated: 1 second ago' timestamp is present. The order form is set to 'Simple' mode and shows a 'Buy' order for 19,540.1 BTC at a limit price of 19,540.1 USD, resulting in a total of 19,645.0 USD to spend. A green 'Buy BTC with USD' button and a 'Skip order confirmations' checkbox are at the bottom.

Trade Prices Earn Funding History Support Buy Crypto

Available Balances:
0.00000 BTC
139.01 USD

Market BTC/USD Last price 19,530.3 USD Index price 19,521.0 USD 24h volume 9,372.82029 BTC Weighted avg. 19,075.4 USD 24h low/high 18,487.5 USD 19,645.0 USD

New Order Orders Positions Trades

Current time: 09/28/22 19:18:52
Last updated: 1 second ago

Simple Advanced

Order Buy Sell Volume BTC × Limit price 19,540.1 USD Order type Limit = Total USD

Amount of BTC to buy Buy at a fixed price per BTC Amount of USD to spend

Buy BTC with USD Skip order confirmations

Kraken is a CEX; it uses its own keys to manage your crypto

METAMASK



Features ▾

Support ▾

About ▾

Build ▾

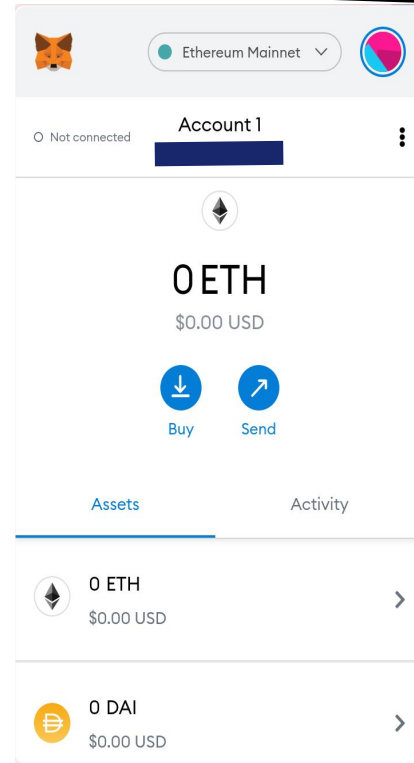
Download

Multicurrency and
multichain

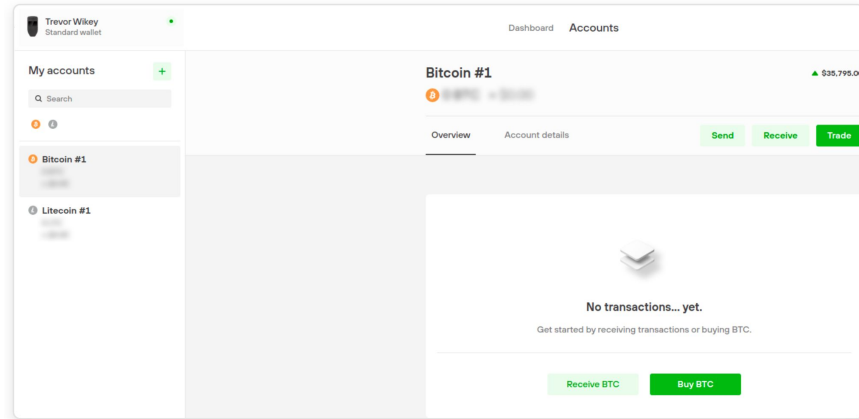
Most widely used wallet for
NFT projects

Limited and expensive
“buy” options

**MetaMask is a self custody wallet; you use your keys to manage
your crypto**



TREZOR HARDWARE WALLET



Trezor is a self custody device and wallet; you manage your keys

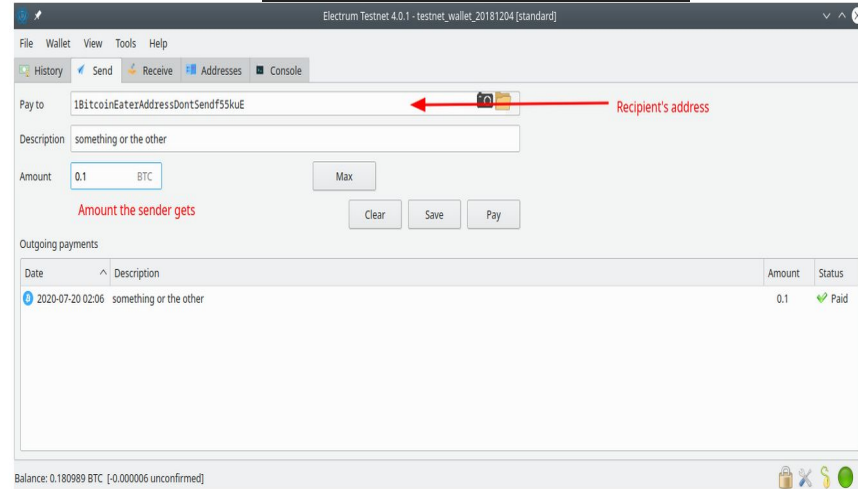
ELECTRUM DESKTOP WALLET



Create **multisignature** &
complex locking

Select UTXO (specific coins)

Advanced features like
CPFP



Electrum is a self custody device and wallet; you manage your keys

HARDWARE WALLETS OFFER MORE SECURITY

Most Popular: Trezor, Ledger
Multi-token support

Integrate with many software wallets
including MetaMask and Electrum



***IF I LOSE MY KEYS, WHO
CAN I CONTACT TO GET
ACCESS TO MY
CRYPTOASSETS?***



***"NO ONE CAN ACCESS A
CRYPTOASSET WITHOUT
ACCESS TO THE PRIVATE KEY"***





***NO KEYS,
NO COINS***

***CAN I MAKE COPIES OF MY
CRYPTO KEYS AND GIVE
THEM TO MY LAWYER?***



**"EVERYONE WITH A COPY OF
YOUR PRIVATE KEY HAS THE
SAME ACCESS YOU DO"**



***"DO NOT HOLD KEYS FOR
CLIENTS. YOU DON'T HAVE
ENOUGH INSURANCE"***





4.

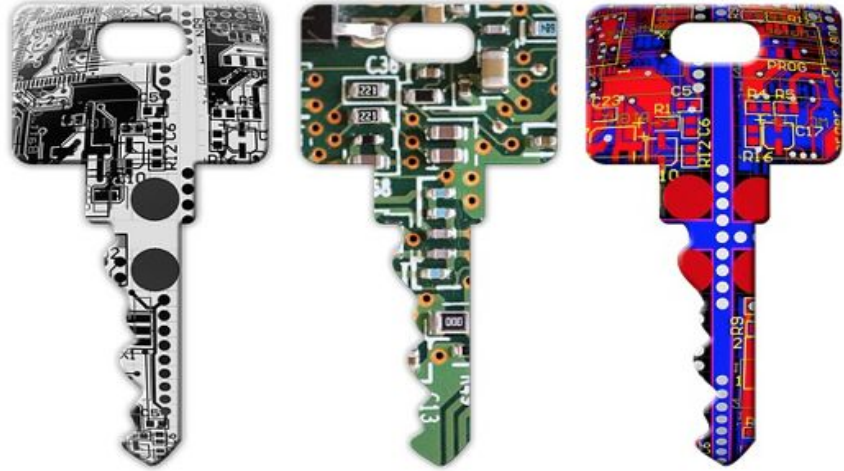
***BALANCING SECURITY
AND ACCESS***

***"MOST CLIENTS HAVE MORE
THAN ONE WALLET"***



MORE THAN ONE KEY

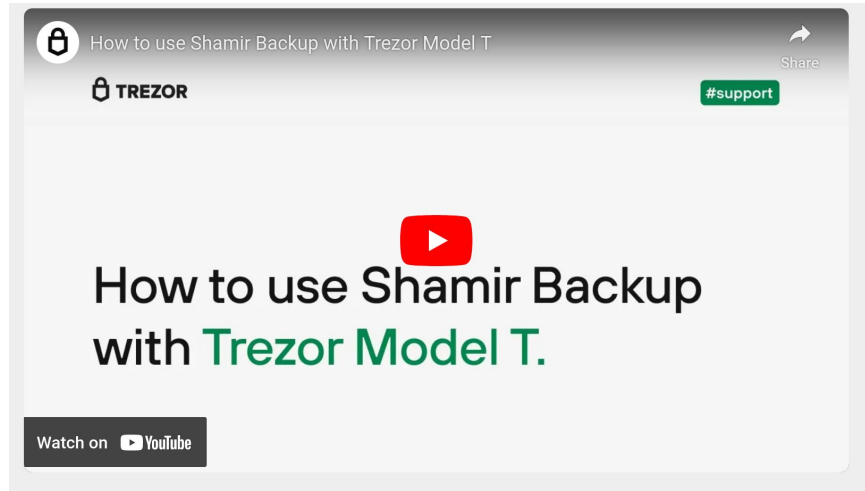
Sometimes more than one key is required to unlock assets



Multisignature and time locks are examples of protocol level security

DIFFERENT PARTS OF ONE KEY

Trezor offers an advanced backup option involving shares of a key.

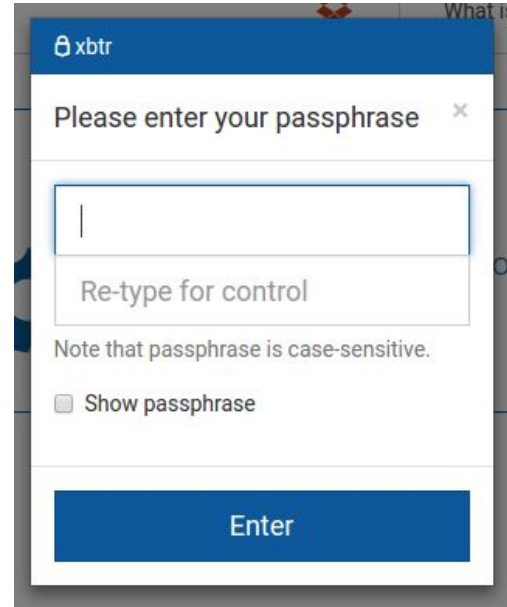


Without the correct number of shares, the key will be unrecoverable

MORE THAN KEYS

Key + Passphrase = Coins

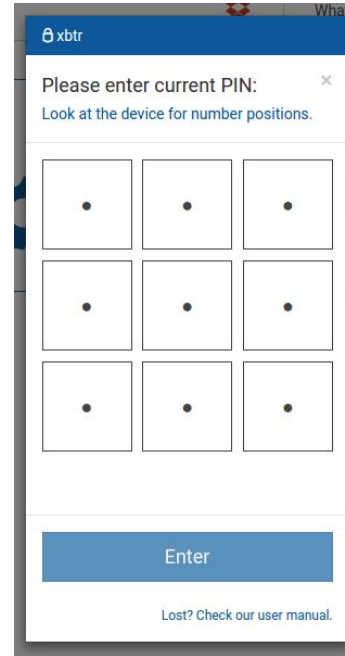
Key + no passphrase =
Empty Wallet



A passphrase is another example of a protocol level security measure

MORE THAN KEYS

Sometimes wallets
are secured with
2FA



2FA is an example of device level security, not protocol level security

KEYS & WALLETS



- Get the name of every cryptoasset owned by your client
- Get the name and a link to the software used to access each asset
- Create a plan to access private keys that control assets when needed (phone, laptop, backups)
- Be sure you have additional access control information e.g. multisignature, passphrase

KEYS & WALLETS



- Store a copy of your client's cryptoasset keys
- Control cryptoassets for your client
- Store client user names and passwords
- Allow your client to share sensitive information with you (like location of key material) on unencrypted channels
- Destroy keys

BLOCKCHAIN EXPLORERS

A space-themed illustration featuring a white rocket ship with a flame trail, a white planet with a ring and two small craters, and several yellow stars of varying sizes, all set against a purple background with a white dot pattern.

Let's take a look at some transactions on the blockchain

USING A BLOCKCHAIN EXPLORER



SOME BLOCKCHAIN EXPLORERS TO TEST



BLOCKCYPHER

<https://live.blockcypher.com/>



Etherscan

<https://etherscan.io/>

More explorers: <https://slashdot.org/software/blockchain-explorers/>

TESTING A BLOCKCHAIN EXPLORER

#1 Scan the QR code using a smart device camera. You should see the bitcoin address:

17SkEw2md5avVNyYgj6RiXuQKNwkXaxFyQ

#2 Copy the address to your clipboard



TESTING A BLOCKCHAIN EXPLORER

#3 Go to <https://live.blockcypher.com>

#4 Choose BTC blockchain

#5 Paste the address in the search bar
& search

17SkEw2md5avVNyYgj6RiXuQKNwkXaxFyQ



TESTING A BLOCKCHAIN EXPLORER

 Bitcoin Address

17SkEw2md5avVNyYgj6RiXuQKNwkXaxFyQ



RECEIVED
10,000.00253593
BTC

SENT
10,000.0 BTC

BALANCE
0.00253593 BTC

Advanced Details ▾

TESTING A BLOCKCHAIN EXPLORER

Bitcoin Address

17SkEw2md5avVNYgj6P



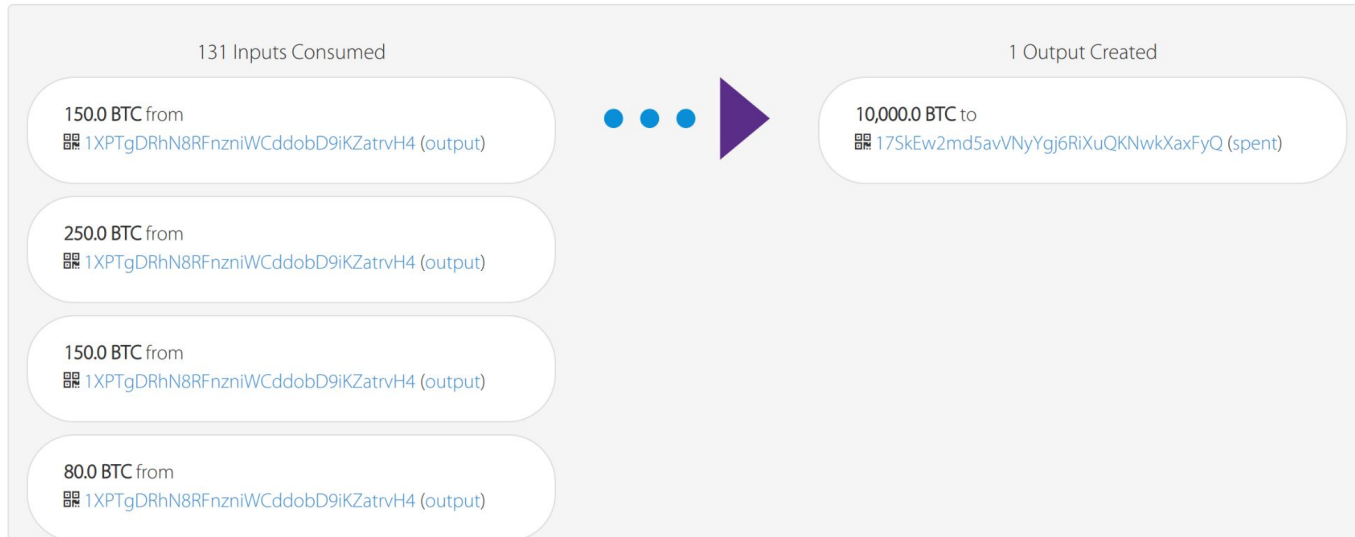
RECEIVED
10,000.00253593
BTC

SENT
10,000.0 BTC

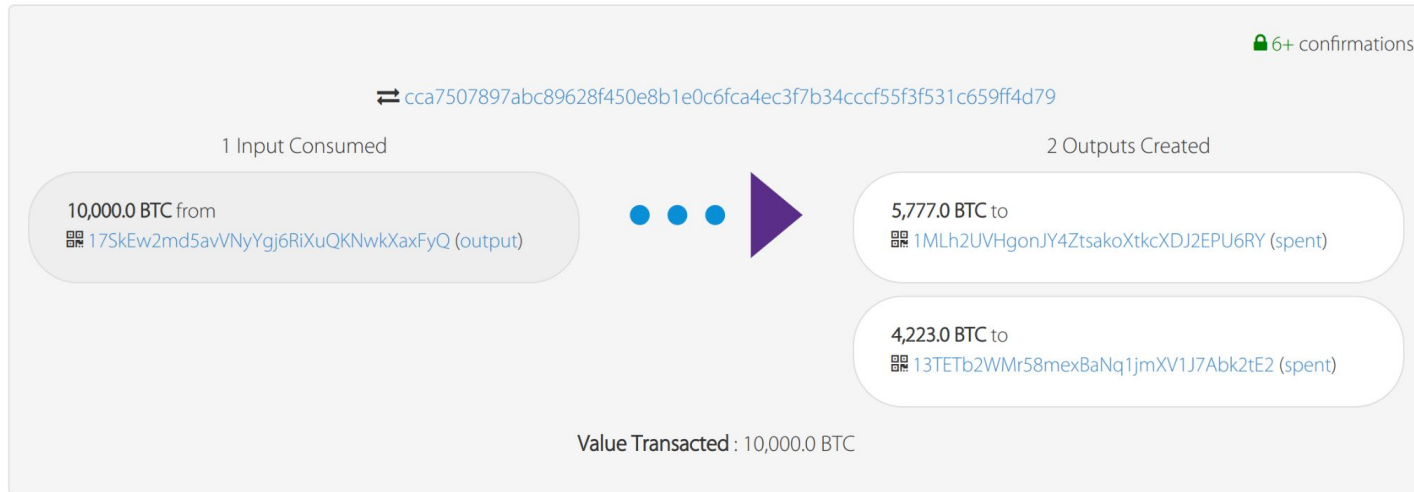
Advanced Details ▾

TESTING A BLOCKCHAIN EXPLORER

Details



TESTING A BLOCKCHAIN EXPLORER



WHAT ABOUT FINANCIAL PRIVACY?



TRICKY STICKY ADDRESSES

Can he stop you (or anyone) from sending bitcoin to this address?

Can he close or cancel this address?

Can he have more than one address?

What does this mean for my client?



***PRIVATE TRANSACTIONS ARE
DIFFICULT "ON-CHAIN"***



***YOU CANNOT CONTROL WHAT
OTHERS DO WITH PUBLIC
ADDRESSES***

Junk Mail / SPAM; Forks; Airdrops;
Surveillance; Dust for Lolz



OFAC SANCTIONS



U.S. DEPARTMENT OF THE TREASURY

ABOUT TREASURY

POLICY ISSUES

DATA

SERVICES

NEWS

We can do this. Find COVID-19 vaccines near you. Visit [Vaccines.gov](https://www.vaccines.gov).

Statements & Remarks

Readouts

Testimonies

Featured Stories

Webcasts

Currency Mixer Tornado Cash

August 8, 2022

WASHINGTON – Today, the U.S. Department of the Treasury’s Office of Foreign Assets Control (OFAC) sanctioned virtual currency mixer Tornado Cash, which has been used to launder more than \$7 billion worth of virtual currency since its creation in 2019. This includes over \$455 million stolen by the Lazarus

You should check OFAC lists prior to transferring cryptoassets

CRYPTO COMMUNITY RESPONDS



2.7k



Someone is using Tornado Cash to send ETH to Doxxed Wallets

GENERAL-NEWS

It appears there's still some chaotic good left in the world. Earlier today, someone or a group of individuals began using tornado cash to send ETH to known wallets of celebrities. Recipients included Donald Trump, Jimmy Fallon, Bleep, Shaq, Brian Armstrong, Randi Zuckerberg, BitBoy and many more.

| | | |
|-----------------------|---|-----------------|
| Tornado.Cash: 0.1 ETH | → | benahorowitz.et |
| Tornado.Cash: 0.1 ETH | → | 0xproxy.eth |
| Tornado.Cash: 0.1 ETH | → | Jimmy Fallon |
| Tornado.Cash: 0.1 ETH | → | 0xproxy.eth |
| Tornado.Cash: 0.1 ETH | → | 0xd4402526d907f |

https://www.reddit.com/r/CryptoCurrency/comments/wkdwj8/someone_is_using_tornado_cash_to_send_eth_to/
<https://www.coindesk.com/policy/2022/08/09/someone-is-trolling-celebs-by-sending-eth-from-tornado-cash/>

OFAC RESPONDS

Cyber-related Sanctions

1078. Do OFAC reporting obligations apply to “dusting” transactions?

OFAC is aware of reports following the designation of Tornado Cash that certain U.S. persons may have received unsolicited and nominal amounts of virtual currency or other virtual assets from Tornado Cash, a practice commonly referred to as “dusting.” Technically, OFAC’s regulations would apply to these transactions. To the extent, however, these “dusting” transactions have no other sanctions nexus besides Tornado Cash, OFAC will not prioritize enforcement against the delayed receipt of initial blocking reports and subsequent annual reports of blocked property from such U.S. persons.

For guidance related to filing an initial and annual report of blocked property, please see FAQs 49, 50, and 646, respectively, and 31 C.F.R. § 501.603. Please note that the annual filing requirement for 2022 applies only to persons holding blocked property as of June 30 of this year.

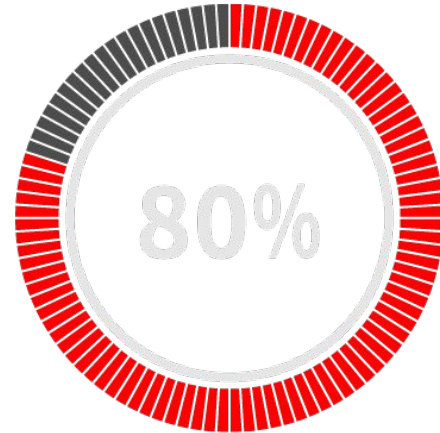
Released on 09/13/2022

<https://home.treasury.gov/policy-issues/financial-sanctions/faqs/added/2022-09-13>

OFAC OVERSTATED ILLICIT ACTIVITY BY ~80%

“The Treasury Department said about **\$7 billion** in crypto flowed through the mixer over the past three years or so since Tornado launched. Blockchain analytics firm Elliptic estimated that **some 20% of this was illicit**, which, to be clear, is a lot.”

Estimated (at the high end) at \$1.4 billion



<https://www.coindesk.com/policy/2022/08/12/issues-crypto-should-watch-for-in-the-tornado-cash-sanctions/>

ETHEREUM FOUNDER IS PART OF THE 80%



Jeff Coleman | Jeff.eth @technocrypto · Aug 9

Wanting to donate to Ukraine is a great example of a valid need for financial privacy: even if the government where you live is in full support, you might not want Russian government to have full details of your actions.

23

138

880



Jeff Coleman | Jeff.eth @technocrypto · Aug 9

On this note, curious if there are documented examples of TC having been used for this. Obviously self-identifying sort of defeats the point but e.g. groups or guides recommending people to do so?

5

8

391



vitalik.eth ✓
@VitalikButerin

Replying to @technocrypto

I'll out myself as someone who has used TC to donate to this exact cause.

10:49 AM · Aug 9, 2022 · Twitter Web App



5.

***CAPITAL APPRECIATION
AND YIELD***

***THIS IS WHY WE CAN'T
HAVE NICE THINGS...***



FTX

LENDING AND STAKING ARE DIFFICULT IN THE USA NOW

Lending

Prior to FTX, many crypto owners were lending their crypto to others at comparatively high interest rates.

Staking

Staking is offering crypto for collateral to secure a crypto network. Staking is rewarded with tokens.

Stablecoins

Stablecoins are tokens pegged to another asset. Whether or not they are stable depends on many factors.

MARGIN TRADING IS EXTREMELY RISKY IN CRYPTO

- × Make sure you know if your client is crypto trading on margin (prepare a plan)
- × Given the price fluctuations margin trading is the wrong choice for most people

A FEW TAX ISSUES (RELATING TO FTX)

- × Reported gains without actual access
- × Unable to offset gains
- × Companies have not yet written off the losses
- × Bankruptcy is complex and lengthy



6.

BEYOND CURRENCY

WHAT IS A FUNGIBLE TOKEN?

With a fungible token one token or coin is exactly the same as another. A bitcoin is a bitcoin is a bitcoin (mostly) :)



WHAT IS AN NFT?

WHY ARE THEY VALUABLE?

ARE THEY VALUABLE?



NON FUNGIBLE TOKENS (NFT)

A token that is unique and different from all other tokens. Rights are part of the token, much like the bundle of sticks in real property law.



GOVERNANCE TOKENS (INTERNET DEMOCRACY)

Maker Governance Voting Portal

Vote with or delegate your MKR tokens to help protect the integrity of the Maker protocol

► How to vote

<https://makerdao.com/en/>

Latest Executive

View more >

POSTED SEP 14 2022

Core Unit Budget Streams, SPF Funding, HVBank Legal Update, MKR Stream Accounting Cleanup - September 14, 2022

New DAI budget streams for the Oracles and DAI Foundation Core Units, funding for two Special Purpose Funds, updating the IPFS hash of the HVBank legal agreement, cleanup of the former Growth Core Unit MKR vesting stream.

Governing Proposal

View Details

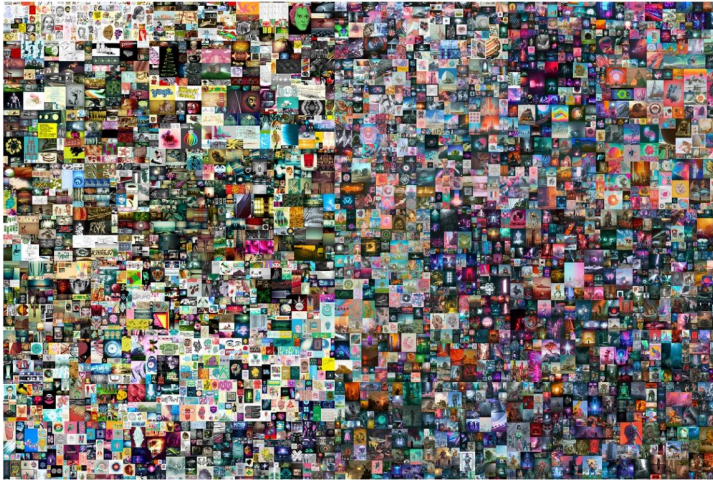
92,683

MKR Supporting

PASSED ON SEP 16 2022 14:49 UTC. EXECUTED ON SEP 18 2022 14:50 UTC.

BEEPLE

Beeple sold an NFT for \$69 million



Beeple's collage, *Everydays: The First 5000 Days*, sold at Christie's. Image: Beeple

/ Through a first-of-its-kind auction at Christie's

By **JACOB KASTRENAKES** / @jake_k

Mar 11, 2021, 3:09 PM UTC | □



<https://www.theverge.com/2021/3/11/22325054/beeple-christies-nft-sale-cost-everydays-69-million>

BAYC NFT

“BAYC is arguably the most successful NFT project in the world. As of 2022, sales of BAYC have produced more than **\$2 billion** in trading volume.

Members of the Bored Ape Yacht Club include a-star celebrities like Snoop Dogg, KSI, Post Malone, **Jimmy Fallon**, Mark Cuban, KSI, DJ Khaled, Shaquille O’Neal, Justin Beiber, Serena Williams, Future, and more”

<https://www.peerplays.com/news-articles/the-10-most-successful-nft-projects-of-all-time-what-made-them-so-successful%ef%bf%bc/>



ACCESS TOKENS (SPECIAL PLACES, THINGS, OFFERS)

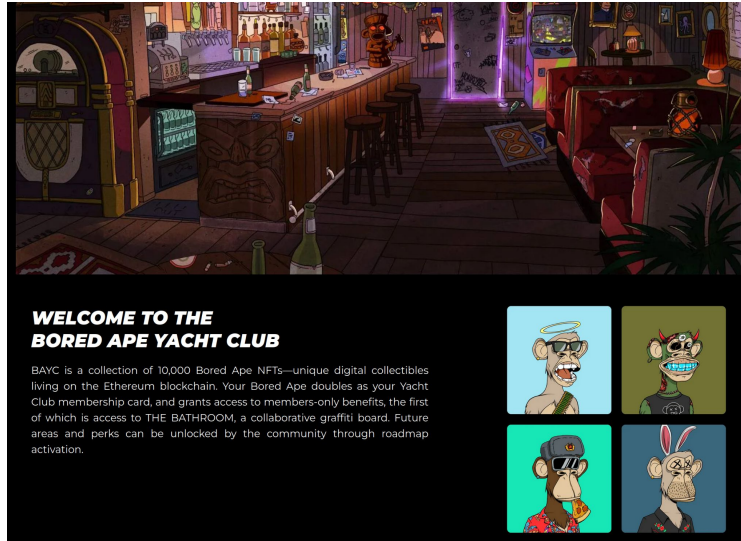
Membership tokens unlock access to spaces and perks

Owners can commercially exploit (in ToS) <https://boredapeyachtclub.com/#/terms>

Ethereum blockchain (network)

No choice of law. AAA arbitration in NY, NY

<https://www.gemini.com/cryptopedia/what-is-bored-ape-yacht-club-nft-bored-apes>



***CAN I CREATE MY OWN
NFTS EASILY AND
QUICKLY?***



BUYING AND CREATING NFTS ON OPENSEA.IO

Largest marketplace

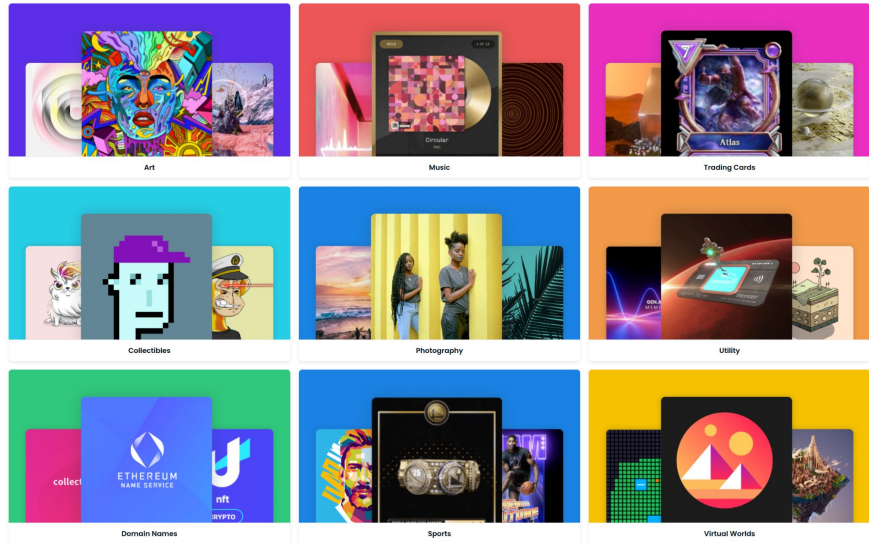
No standardization of rights or services

No standardization of law

JAMS Arbitration

Choice of law and venue NY, NY

<https://opensea.io/tos>



ADIDAS COLLAB WITH BAYC



OpenSea

Search items, collections, and accounts



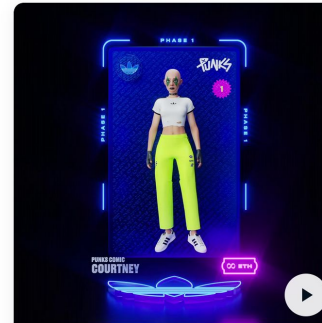
adidas Originals Into the Metaverse ✓

By [adidasOriginals](#) ✓

Items 2 · Created Dec 20, 2021 · **Creator fee 10%**

Bored Ape Yacht Club, PUNKS Comic, and gmoney welcome adidas Originals into the Metaverse. Phase 1 NFT physical product claims have now closed.
See less ^

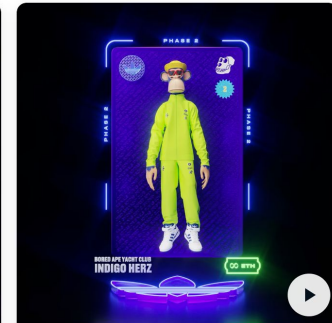
46.7K total volume 0.57 floor price < 0.01 best offer 100% listed 68% unique owners



adidas Originals: Into the Metaverse (Pha...

Price
0.568

Ends in 17 hours



adidas Originals: Into the Metaverse (Pha...

Price
0.599

Ends in a day

<https://opensea.io/assets/ethereum/0x28472a58a490c5e09a238847f66a68a47cc76f0f/0>
https://www.adidas.com/into_the_metaverse

ADIDAS COLLAB WITH BAYC

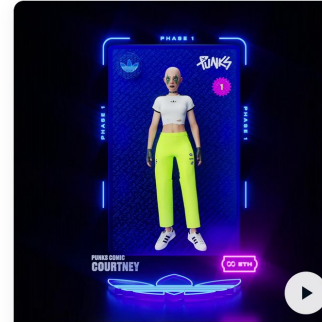
Limited right to physical merch. The Phase 1 token no longer grants the ability to claim collaborative physical merchandise.

Owners **cannot** commercially exploit (in ToS), no derivatives or mods

https://adidasapp.adidas.com/legal/into_the_metaverse_tc.html

Ethereum blockchain (network)

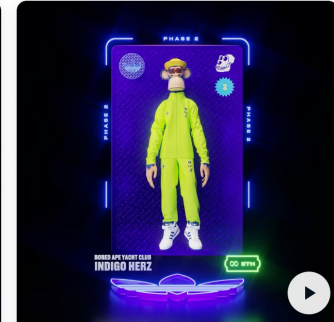
German law applies



adidas Originals: Into the Metaverse (Pha...

Price
⚡ 0.568

Ends in 17 hours



adidas Originals: Into the Metaverse (Pha...

Price
⚡ 0.599

Ends in a day

<https://opensea.io/assets/ethereum/0x28472a58a490c5e09a238847f66a68a47cc76f0f/0>
https://www.adidas.com/into_the_metaverse

NFT LICENSE STANDARDIZATION



The Can't Be Evil NFT Licenses

by Miles Jennings and Chris Dixon

August 31, 2022

NFTS



- Know if your client is a creator (royalties)
- Know what assets your client has & what platforms they're using
- Assume what rights an NFT owner has you must check ToS
- Assume your client's wallet(s) will know of all of their NFTs

ESTATE PLANNING



- **Ensure your client creates an access plan for their cryptoassets**
- **Ask your client if they want their estate to hold cryptoassets**
- **Include a clause that allows the executor or trustee discretion and flexibility for cryptoassets**
- **Create a tech plan if assets will be held**
- **Remember we're all in this together, call on colleagues**

ESTATE PLANNING



- Help your client recognize the technical (in)abilities of their heirs
- Have your client identify helpers with technical expertise who can access the assets when needed
- Consider leaving self custody keys to a specific person or organization after assets have been distributed*
- Plan for dust or junk tokens

ESTATE PLANNING



- Include sensitive information, like asset lists, key locations, and access plans, in estate planning documents
- Allow more than one year to pass without updating asset lists, software lists, and access plans
- Rely on your client to actually do the access planning, trust but verify

ADDITIONAL RESOURCES

The Property Law of Tokens:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3928901

Non-fungible Tokens (NFTs) and Copyright

https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html

Coindesk is a fairly reputable publication: <https://coindesk.com>

Coin Center provides excellent resources for lawyers and policy makers in the USA: <https://coincenter.org>

BONUS

**Service of
Process by
NFT in the
UK?!?**



<https://www.coindesk.com/policy/2022/07/13/uk-court-allows-serving-of-suits-via-nfts/>

<https://www.lawgazette.co.uk/news/high-court-permits-service-by-nft-in-english-legal-first/5113106.article>

BONUS

“awarding luxury brand Hermès \$133,000 in damages from artist Mason Rothschild, who made and sold non-fungible tokens [MetaBirkins] of the brand's iconic Birkin handbag ”

<https://www.entrepreneur.com/business-news/hermes-wins-birkin-bags-nft-trademark-case/444643>

Hermès Wins Trademark Case Against Artist Who Sold Birkin Bag NFTs

The case was deemed a critical examination of how a company can enforce intellectual property rights in relation to virtual assets.

BY [STEVE HUFF](#) • FEB 9, 2023

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THANKS!



Any questions?

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