
Ethereum

There really aren't any open questions on the Ethereum side. The attack was funded with 10 ETH through Tornado (dead end) and then exited to BTC via renBTC (see below).

There are 3 addresses involved in the attack:

<https://etherscan.io/address/0xf224ab004461540778a914ea397c589b677e27bb>

(Mastermind address who creates and calls the attacker contract to orchestrate the economic attack)

<https://etherscan.io/address/0xc6028a9fa486f52efd2b95b949ac630d287ce0af>

(Attacker contract with the steps to execute the attack)

<https://etherscan.io/address/0x3811765a53c3188c24d412daec3f60faad5f119b>

(Accomplice address who exits with RenBTC)

Transactions that funding the attacking address:

10 ETH from Tornado to Mastermind

<https://etherscan.io/tx/0x4b7b9e387a79289720a0226f695913d1d11dbdc681b7218a432136cc089363c4>

1 ETH sent from Mastermind to Accomplice

<https://etherscan.io/tx/0x87a7a3e0ef64692c964fafa110a04077597cb1410ac126851f68f5e5441ea169>

There were two renBTC exit transactions. In the exit transactions, choose 'View Input As...' and select UTF-8 to see the bitcoin address that the renBTC was cashed out too:

<https://etherscan.io/address/0x3811765a53c3188c24d412daec3f60faad5f119b#tokentxns>

44.66054934 renBTC exit cashed out to 1Paykw4s2WX4SaVjDrQkwSiJr16AiANhiM

eth: <https://etherscan.io/tx/0xef20b8f793dc06d23a146e20a7afd54f44d4b00972e7dc750644f236f6c633da>

250.73813119 renBTC exit cashed out to 1Paykw4s2WX4SaVjDrQkwSiJr16AiANhiM

eth: <https://etherscan.io/tx/0xb39030ee60ce984e96c0201b771927571c3ff3d64af692f93728553ec3914f3a>

Transaction into BTC:

<https://blockstream.info/address/1Paykw4s2WX4SaVjDrQkwSiJr16AiANhiM>

Bitcoin

Much of the bitcoin exited from renBTC remains at rest on the chain. If we can generate a list of the main addresses involved, these can be passed to exchanges to blacklist.

Transaction into BTC:

<https://blockstream.info/address/1Paykw4s2WX4SaVjDrQkwSiJr16AiANhiM>

A lot of this bitcoin is very transparently just sitting on-chain where it was left:

big chunks:

25 BTC <https://blockstream.info/address/36mA6n1rgDWmTFY2hQdyim1PmHHMNyRzT2>
7.1 BTC <https://blockstream.info/address/1JRArFSNSRRhHnX7ywfwcGxX8y5WrJDJiB>
6.5 BTC <https://blockstream.info/address/1MEPgXKDNQG5opaFrbPdwdso5dsTFYQ69G>
3.1 BTC <https://blockstream.info/address/1D9oy2UnS8M3PsbMrCstgxytFMrT9ZNyxW>
2.7 BTC <https://blockstream.info/address/1MgLKBeEPxow7XZxXM7VfMoEd5yrL3epSD>
2.7 BTC <https://blockstream.info/address/1FA5tP51BGwAwo6A8zAPfgf98Kq32ne1HT>
7.0 BTC <https://blockstream.info/address/1DSAZNnYNRNjeszpbhQmqvg1zPR6iPJ6BX>
2.4 BTC <https://blockstream.info/address/14Fip8EBsV6C7QDJKqn62j4oTxEuU3BiiM>
2.9 BTC <https://blockstream.info/address/1DEdKUVQHM2bYprWVfRpdFcSaBHt9KiAew>
6.7 BTC <https://blockstream.info/address/1GGGkHehARTgsBsqcRYpMdyggevv1sVHrf>
1.5 BTC <https://blockstream.info/address/1EAP2ip3HpnYWWqD7k1NUxu18KgN8hmNUp>
1.2 BTC <https://blockstream.info/address/1PF3oauH2tt6FHG4HpM8jBYeHtGNKy8CCK>
1.5 BTC <https://blockstream.info/address/198pbLQgPf5HcivTG4Q8jyv6JuWbDoGvX6>
1.6 BTC <https://blockstream.info/address/1NmMe7xZtw2xQVJLUzcXrFa613VDMWNVod>
1.3 BTC <https://blockstream.info/address/1FVbZVroscVpmdpoD6N7U44wGthCmiQApc>
0.7 BTC <https://blockstream.info/address/1CzGfZndYtEusrbsPBpTBjMSJBYPqJDpgh>
0.9 BTC <https://blockstream.info/address/16griZtBaLPMxAA4MhCJF38Coq12ZoySz2>

this was reused from a tx in September

<https://blockstream.info/address/1Paykw4s2WX4SaVjDrQkwSiJr16AiANhiM>

The diagram illustrates a network of Bitcoin transactions. Nodes are represented by circles, some black (sellers) and some white (buyers). Edges represent transactions. Annotations explain node types and transaction details.

Node Types:

- Red lines:** represent transactions that consist of BTC that originates for 100% from address 1Pwau432094 Sat9p3wGz375a6W9t and are likely executed by the same party.
- Black dots:** are sellers that no longer hold any balance.
- White dots:** are sellers that still hold funds.

Transaction Details:

Transaction: 3c1145e153e3447a6e156e438a7ec7d5339a6d515d67737d3495d673
 to address: 1QdKwHm9m4q9K7T5D7K9p3d9fu
 2018-10-26 00:17 UTC

Network Structure:

The network shows a hierarchical structure of transactions. At the top, a transaction (2811030580000000) is split into two paths. The left path leads to a transaction (1847813776... 3C49a3C95fa...) which then splits into two more transactions (2531032480000000 and 13756349Fb... 11470618e...). The right path leads to a transaction (3510000000 2401037800) which splits into two more transactions (3159a9172b... and 161d341A95...). This structure continues down to a final transaction (0.004195480470103817271) which is connected to four nodes: 1b202870, 000000, 000000, and 000000.

Additional Annotations:

- Likely change of ownership. Different address types for inputs and outputs. This is a strong indication that different wallet software was used to create and receive. This often means that sender and recipient are not the same party.
- This wallet has interacted with multiple known services. These services can possibly help identify the sender in this wallet.

15EJQz7okFrF1qUTXC4uJC7aaYSHMfr5Xr executed. The services that interacted with this service may be able to identify the sender that sent funds from 1NSCkRWKYot7MyZdWZc9EZFXbWMDCXa2Sj.

Through:

- Flugsvamp 3.0
- wm_cash
- coins.ph
- treddr

kraken

- 84a1c7b16838d695a1ffc1a03762a57a8251ee752302ba831017fac556cc86a

binance

- 7777569f003193ae59dbc5afbbf8bfbf3ac6c8ce8a8ec2b8707de14ddc3329a6

- 9fcc273f2d50fc5824b8fd0bbe832831d02e7fe04bcc09d143e787455c602195

huobi

- 37887243f8a30071b12fe4831e7a01e64a1667ddced6445282f62eece571d871

- a4cb40e5e6d58e8c5a463fc9df49fd506820686bea63b71cfd0ac6490182ba22

