

How popular are smart contract wallets, really?

1.

What are smart contract wallets, and what makes them so great?

2.

What smart contract wallets exist today?

- How popular are they?
- How trusted are they?

3.

What are next steps for the Gnosis Safe?

What are smart contract wallets, and what makes them so great?



Regular wallets

Controlled by 1 single private key

Smart contract wallets

Controlled by contract code

Recovery schemes

Allowances / daily limits

Multi-signature support



Regular wallets

ETH required for transaction fees

 Gasless transactions only with specific dapps

Smart contract wallets

Transaction fees can be paid by third parties for all transactions

- Gasless transactions
- Token payment



Regular wallets

Transactions must be executed individually and sequentially: one after another

Smart contract wallets

Batched transactions possible: execute many transactions in one confirmation

What smart contract wallets exist today?

Gnosis Multisig Gnosis Safe • Argent ^ Dapper 😐 Monolith 1 Dharma 🚇 Pillar pillar. Abridged /) Authereum 👏 InstaDApp () Oasis M

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Gnosis Safe •

Argent ^

Dapper 😐

Monolith 1

Dharma 🚇

Pillar pillar.

Authereum 💖

InstaDApp ()

Oasis MAKER

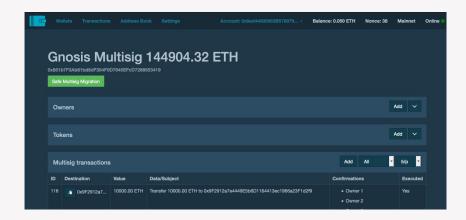
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How popular are they? How trusted are they?

- Number of instances
- Number of transactions
- Total funds stored
 - o ETH
 - ERC20 tokens

- Onchain stats pulled via Dune Analytics
- Data from Feb 24, 2020

Gnosis Multisig





- https://gnosis.io
- Released in 2017
- Multi-signature wallet
- Daily limit
- ETH and ERC20 tokens
- Used by many ICOs and crypto projects
- Standard for high-value, self-custodial crypto fund storage
- Web interface at https://wallet.gnosis.io
- Standalone desktop app available
- Contracts used by Multis



- 1.2M ETH (~ 333M USD)
- 3,288 contracts
 - 264 with >= 1ETH
 - 449 with >= 10 txs
- 40,059 transactions
- > 500M USD in ERC20s
 - 8.5M GNO
 - 204k MKR
 - 32.4M USDT
 - 23.6M OMG
 - 38.5M KNC
 - 52k WETH

All Gnosis Multisigs sorted by number of ETH stored

n	address	eth_amount	
1	https://etherscan.io/address/0x231568baa78111377f097bb087241f8379fa18f4	371,767.81	
2	https://etherscan.io/address/0x7da82c7ab4771ff031b66538d2fb9b0b047f6cf9	222,970.17	
3	https://etherscan.io/address/0xcafe1a77e84698c83ca8931f54a755176ef75f2c	137,722.65	
4	https://etherscan.io/address/0x22650fcf7e175ffe008ea18a90486d7ba0f51e41	137,217.06	
5	https://etherscan.io/address/0xb8d2b921c0ea0ca27266fa63907a079ef25084d0	50,618.82	
6	https://etherscan.io/address/0x3eb01b3391ea15ce752d01cf3d3f09dec596f650	46,720.04	
7	https://etherscan.io/address/0x7b8ffa4fe43d1b476cff9d0787fc0019ca54e421	26,000.00	
8	https://etherscan.io/address/0x3d9256ad37128e9f47b34a82e06e981719477c18	21,147.12	
9	https://etherscan.io/address/0x94133870506af5d0644f41a2ee62cc387b81135e	18,849.41	
10	https://etherscan.io/address/0x5afc06c035619654927614fac6bc1c0413715e59	15,184.57	

All Gnosis Multisigs sorted by number of transactions

address transactions https://etherscan.io/address/0x7f35d9f88ace99168c2cfa026c969459db486afb 5.566 https://etherscan.io/address/0x492eea2038aadc701259f3535841ab985c2f9a80 2,299 https://etherscan.io/address/0xd35a2d8c651f3eba4f0a044db961b5b0ccf68a2d 1,796 https://etherscan.io/address/0x8cc70d4a9fa194a5b4191aa415a81bd8f8bbe2f1 1.263 https://etherscan.io/address/0x8844dfd05ac492d1924ad27ddd5e690b8e72d694 816 https://etherscan.io/address/0xf9c3c1a10787761269274d34ac9c1d7bd06ed11a 655 https://etherscan.io/address/0x2cccc4b4708b318a6290511aac75d6c3dbe0cf9f 583 https://etherscan.io/address/0xfdf28bf25779ed4ca74e958d54653260af604c20 476 https://etherscan.io/address/0x18d8c5f3eb2bb2dfe4c575486075b9193b74ec03 455 https://etherscan.io/address/0x40d6010679f3c43eddda622f906f406f1d4fd84a 432

Gnosis Safe

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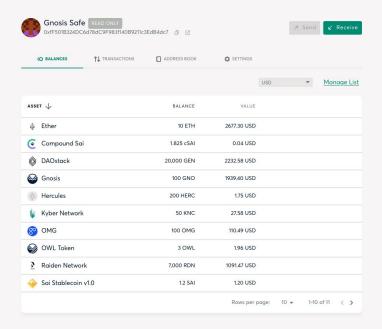
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Modify settings

Outgoing transfer

Outgoing transfer



AMOUNT

Feb 21, 2020 - 00:34:06

Feb 21, 2020 - 00:33:08

Feb 21, 2020 - 00:33:08

n/a

2 OWL

5 OWL

• (

STATUS

Success

- https://safe.gnosis.io
- Released in 2018
- ETH, ERC20, ERC721
- Formally verified
- Token payment
- Web interface at https://gnosis-safe.io
- Android, iOS
- Chrome extension (deprecated)
- Contracts used by UniLogin

G Gnosis Safe

- 83,960 ETH (~ 22M USD)
- 2,056 contracts
 - 140 with >= 1ETH
 - 192 with >= 10 txs
- 10,787 transactions
- >2M USD in ERC20s
 - o 50k GNO
 - 710k USDT
 - 13M cSAI
 - 140 MKR

All Safes sorted by number of ETH stored

n safe address

1	https://etherscan.io/address/0x9d94ef33e7f8087117f85b3ff7b1d8f27e4053d5	20,000.10
2	https://etherscan.io/address/0xf661107395729afc8a027b976337b859a0847d8e	19,797.90
3	https://etherscan.io/address/0xafc2f2d803479a2af3a72022d54cc0901a0ec0d6	15,000.00
4	https://etherscan.io/address/0x9f2912a7e4449e5b6d1164413ec1966a23f1d2f9	10,001.00
5	https://etherscan.io/address/0x99f4176ee457afedffcb1839c7ab7a030a5e4a92	8,807.90
6	https://etherscan.io/address/0xcf60916b6cb4753f58533808fa610fcbd4098ec0	2,272.25
7	https://etherscan.io/address/0x97e270c954f61f212fb29c0aac13ae6b39fd730c	2,100.00
8	https://etherscan.io/address/0x0632dcc37b1fabf2cad20538a5390d23c830962e	1,050.00
9	https://etherscan.io/address/0xd010eb53a6522dd4da66a3a156334539ec1cb2a7	741.34
10	https://etherscan.io/address/0xd29bb64673c42ae96f0008342ef9a71918b46d7e	400.78
10 All S	Safes sorted by number of transactions	
10		400.78 safe_transactions
10 All S	Safes sorted by number of transactions	
10 All S	Safes sorted by number of transactions safe_address	safe_transactions
10 All S	Safes sorted by number of transactions safe_address https://etherscan.io/address/0x84443f61efc60d10da9f9a2398980cd5748394bb	safe_transactions
10 All S	Safes sorted by number of transactions safe_address https://etherscan.io/address/0x84443f61efc60d10da9f9a2398980cd5748394bb https://etherscan.io/address/0xfad1611565ac495c927000623f0d04c84e1091e6	safe_transactions 835 420
n 1 2 3	Safes sorted by number of transactions safe_address https://etherscan.io/address/0x84443f61efc60d10da9f9a2398980cd5748394bb https://etherscan.io/address/0xfad1611565ac495c927000623f0d04c84e1091e6 https://etherscan.io/address/0x73555792708d34d5d2c3fce67134ea691ceb4d65	safe_transactions 835 420 391
10 All S	Safes sorted by number of transactions safe_address https://etherscan.io/address/0x84443f61efc60d10da9f9a2398980cd5748394bb https://etherscan.io/address/0xfad1611565ac495c927000623f0d04c84e1091e6 https://etherscan.io/address/0x73555792708d34d5d2c3fce67134ea691ceb4d65 https://etherscan.io/address/0xae5fb390e5c4fa1962e39e98dbfb0ed8055ed7a9	safe_transactions 835 420 391 354

https://etherscan.io/address/0x0ddf6d8d6a082ed2714c16bae48394f00bf78f6e

https://etherscan.io/address/0x58fdd0fa08ccde333e1f17d232dd418258fc5150

https://etherscan.io/address/0xf35b11c5bd590969a55302ee9068b4c3bb46057b https://etherscan.io/address/0xe858a4bf603995a9156edbd25ff06269d997839e

0.//athassana in/address/0v0d04af22a7f0007117f0Eh2ff7h1d0f27a40E2dE

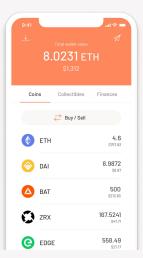
eth amount

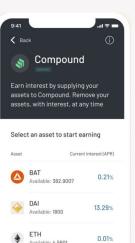
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- https://argent.xyz
- Released in 2018
- Mobile app with seamless UX
- ETH, ERC20 and ERC721
- Direct dapp integrations (KyberSwap, Compound, DSR)
- Free transactions
- Social recovery via guardians
- WalletConnect
- Daily limit
- ENS integration
- Fiat onramp

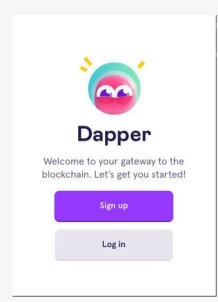


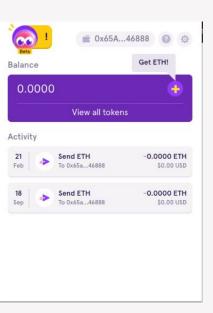
- 10,425 ETH (~ 2.7M USD)
- 13,957 contracts
 - 505 with >= 1ETH
 - 825 with >= 10 txs
- 36,434 transactions
- >2M USD in ERC20s
 - 40M cUSDC
 - 20M cDAI
 - o 127k LINK
 - 326 MKR

All Argent contracts sorted by number of ETH stored

n	safe_address	eth_amour
1	https://etherscan.io/address/0xf8c5a3238bd5caff52ee00c4b9aa861199ed03cd	850.0
2	https://etherscan.io/address/0xe006d75ed9fe8f1564fbbd5d198ad521bd60d1c1	801.2
3	https://etherscan.io/address/0x164ae4442390943f96961cf754fa3c810fe1a392	600.0
4	https://etherscan.io/address/0xe79057088a15ac8c9c8bec3b90bd9891a1b3af51	558.3
5	https://etherscan.io/address/0x62991a1b4187481c8b5bb49fa567711e09ff488d	273.3
6	https://etherscan.io/address/0x7d1b5ba0f326f0c6a68e2080c9cb4251500e152a	254.
7	https://etherscan.io/address/0xf9c5c00201067a5f9baa19271e11c7b685fa5dd4	200.0
8	https://etherscan.io/address/0x15b7059b7cb2d675403631ba9559aa7de0208890	200.0
9	https://etherscan.io/address/0x596e7d5e47820c809c5fa8ca82c2829a67143b1a	200.
	https://etherscan.io/address/0x26d8bd22c1b3ce53d6c5110c71138749f4c69439	187.
10 All	Argent contracts sorted by number of transactions	107.
All /	Argent contracts sorted by number of transactions	transactio
All /	Argent contracts sorted by number of transactions address	transactio
All A	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28	transactio
n 1 2	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338	transactio
n 1 2 3	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338 https://etherscan.io/address/0x91d07a15106e6b75c3092f9bcec10dc186c43079	transactio
n 1 2 3 4	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338 https://etherscan.io/address/0x91d07a15106e6b75c3092f9bcec10dc186c43079 https://etherscan.io/address/0xc4d46ecbc83f41d0bf71a39868d3f830299068b8	transaction
n 1 2 3 4 5	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338 https://etherscan.io/address/0x91d07a15106e6b75c3092f9bcec10dc186c43079 https://etherscan.io/address/0xc4d46ecbc83f41d0bf71a39868d3f830299068b8 https://etherscan.io/address/0x26d8bd22c1b3ce53d6c5110c71138749f4c69439	transactio
n 1 2 3 4 5 6	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338 https://etherscan.io/address/0x2d1d07a15106e6b75c3092f9bcec10dc186c43079 https://etherscan.io/address/0xc4d46ecbc83f41d0bf71a39868d3f830299068b8 https://etherscan.io/address/0x26d8bd22c1b3ce53d6c5110c71138749f4c69439 https://etherscan.io/address/0x02412bd3f80e8c42af80ab85e094cf88958f14ff	transactio 8 7 6 4 3
n 1 2 3 4 5 6 7	Argent contracts sorted by number of transactions address https://etherscan.io/address/0x9b6b31c2a2580f4a0fb822530ac6606222e37d28 https://etherscan.io/address/0x2c8f3f786afdb01b9329e8bdf0f5e2b583ce3338 https://etherscan.io/address/0x91d07a15106e6b75c3092f9bcec10dc186c43079 https://etherscan.io/address/0x2d4d6ecbc83f41d0bf71a39868d3f830299068b8 https://etherscan.io/address/0x26d8bd22c1b3ce53d6c5110c71138749f4c69439 https://etherscan.io/address/0x02412bd3f80e8c42af80ab85e094cf88958f14ff https://etherscan.io/address/0x107c869a42a737fd3dbcdb8aae094eabf120af8d	transactio 8 7 6 6 4 3 3 3







- https://www.meetdapper.com/
- Released in 2019
- ETH, ERC20 and ERC721 support
- Built for games and collectibles (CryptoKitties)
- Free transactions
- Chrome extension
- Fiat onramp



- 546 ETH (~ 147k USD)
- 27,540 contracts
 - 460 with >= 1ETH)
 - 1,799 with >= 10 txs
- 501,190 transactions
- > 50k USD in ERC20s
- Mainly NFTs

All Dapper contracts sorted by number of ETH stored

n	address	eth_amount
1	https://etherscan.io/address/0x6b4b2a36a17c41b47ebd4f874fff825d7deb00df	83.55
2	https://etherscan.io/address/0xa9ae974a846a1fc5b50e7a8a4c1250f0fd9993e2	33.32
3	https://etherscan.io/address/0x77ba78c10efb5100ce93e611f01e272f1b9ced84	19.88
4	https://etherscan.io/address/0x1d737dda74fdfb47d909794432ec65561668dc88	13.12
5	https://etherscan.io/address/0x2ac8999c2f11d8e190e243b7ac2483733c0f0e3c	11.37
6	https://etherscan.io/address/0x7c3bb14481d04929b56ee2fa90f9a2e16ff6c091	10.00
7	https://etherscan.io/address/0xfbcc2f150553a4cb539ea4fe68edd8cbcba58ef8	9.53
8	https://etherscan.io/address/0xcf7792955f53da1df2e7f4b5d3ff66e1addf132e	8.33
9	https://etherscan.io/address/0x0380796a0807ef0652e217ea96489eca4215c3ca	8.33
10	https://etherscan.io/address/0xc855e930878871f5af7263831c983deecdfb1b9b	7.59

All Dapper contracts sorted by number of transactions

n address transactions https://etherscan.io/address/0xebaa45cc86d8d4b8ebcf92d6f7d0bac977fea576 23,787 https://etherscan.io/address/0x84ae8708798c74ef8d00f540c4012963955106ff 12,791 https://etherscan.io/address/0xacf66693dbb2f624df9077d97274b2acd6fd2c25 12,306 https://etherscan.io/address/0x9e50ed2154dd9f5d8dacb8c44df100c89b9fd378 10,699 https://etherscan.io/address/0x33b08550a9de04cc3c75d8af9b43a8372916e0e7 9.737 https://etherscan.io/address/0xc68f1fbc1d32cb878af05c1603d2123fc765ac3b 9,337 https://etherscan.io/address/0x7045c87eb8e63b68c5256c6648f7605f5c20b6e0 7,944 https://etherscan.io/address/0x8c3dffab3cc45fb09410dedfc23446dab0a4b3b6 7,781 https://etherscan.io/address/0x37ca19f8d7c5b7ba854c3ea678a9ee27bb05d72b 7,118 https://etherscan.io/address/0xe570e5f12808f26f9d8af967e5ff2307ae5c7c77

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Links to all data sources: http://bit.ly/dune_wallets



Data points to look at in the future

- Transaction types
 - ETH transfers
 - ERC20 token transfers
 - Contract/ dapp interactions
- Retention and frequency of use
- Other asset types
 - o ERC721
 - o ERC1155
- Compare activity of smart contract wallets to EOAs
- ..

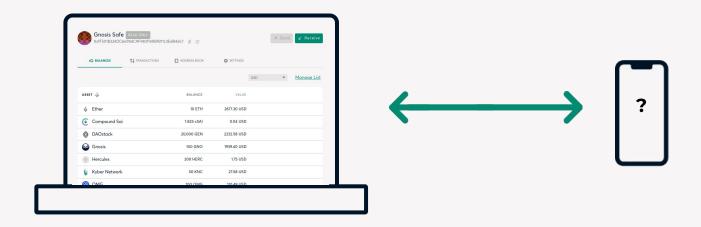
How popular are smart contract wallets, really?

	ETH stored	Contracts with >= 1ETH	Contracts with >= 10txs	No. of transactions	ERC20 token value
Gnosis Multisig	1.2M	264	449	40,059	> 500M USD
Gnosis Safe	83,960	140	192	10,787	> 2M USD
Argent	10,425	505	825	36,434	> 2M USD
Dapper	546	460	1,799	501,190	> 50k USD

What are next steps for the Gnosis Safe?

Focus on Gnosis Safe Multisig (formerly Gnosis Safe for Teams)

- Flexible multi-signature interface
- Align current mobile app with functionality of the web interface



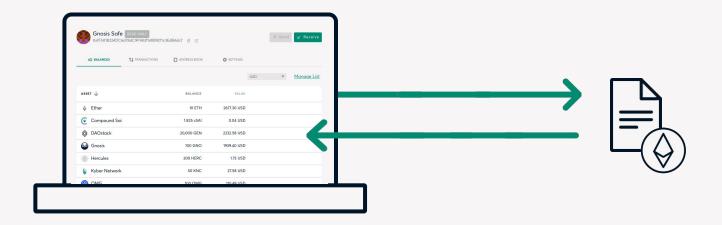
Dapp integrations for Gnosis Safe Multisig

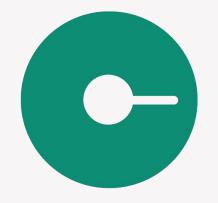
- Easier smart contract interactions
- Possibility for integrations for third party developers with Gnosis Safe interface



Contract proxy kit

- Attempt to unify used proxy contracts for interoperability
- Possibility for third party developers to leverage Gnosis Safe contracts in their own (d)apps





Thank you https://safe.gnosis.io