Archive Product v0.2 (updated 2021-12-06)

Blocknative logs all mempool transactions from nodes in multiple geographical regions for the Ethereum mainnet blockchain. The Archive contains historic events for transactions:

- entering the mempool

- denied entry into the mempool (rejection with reason)

- exiting the mempool (eviction with reason)

- replacing existing mempool transaction (speedup or cancel)

- finalized on chain (confirmed or failed)

Data Schema

Aa Field Name	≡ Description	≡ Data Type	≡ Examples
detecttime	timestamp that transaction was detected in mempool	TIMESTAMP	`2020-03-12 00:00:00.409000`
hash	unique identifier hash for a given transaction	VARCHAR (66)	`0x6b4104838fd153b2d1ab705737843f5ea99666794391dd52653960970dc7e5ef`
status	status of the transaction	VARCHAR (66)	`pending speedup cancel failed stuck dropped confirmed` `evicted` `rejected`
region	the geographic region for the node that detected the transaction	VARCHAR (66)	`us-east-1 eu-central-1 ap-southeast-1`
reorg	refers to the blockhash of the reorg, if there was one	VARCHAR (66)	`0xf2ec4b2a7b951e4400e99d1171c4fb875fd388b15b6cb97bf5ad1c8dbea3a73a`
replace	if the transaction was replaced (speedup/cancel) the tx hash of the replacement	VARCHAR (66)	`0xcea6244a7f0a7c2630085ca3e47e1ecfc28a5c03a08a8f3ec5f43fbef3d83dd5`
curblocknumber	the block number the event was detected in	NUMERIC (18)	`12429202`
failurereason	if a transaction failed, this field provide contextual information	VARCHAR (66)	`Reverted: ""UniswapV2Router: INSUFFICIENT_OUTPUT_AMOUNT""`
blockspending	if a transaction was finalized (confirmed, failed), this refers to the number of blocks that the transaction was waiting to get on chain	INT	`2`

Field Name	Description	Data Type	Examples
timepending	if a transaction was finalized (confirmed, failed), this refers to the time in milliseconds that the transaction was waiting to get on chain	BIGINT	`4678`
nonce	a unique number which counts the number of transactions sent from a given address.	NUMERIC (38)	`27744`
gas	every ETH tx has a fee to incentivize miners to conduct a on the blockchain. this is referred to as "gas" in the ETH network. Gas is denominated in gwei (or 0.000000001 ETH). txs with more gas are executed more quickly.	NUMERIC (38)	`55588`
gasprice	The price offered to the miner to purchase gas (denominated in gwei)	NUMERIC (38)	`1200000000`
value	the amount of ETH (denominated in gwei) transferred	NUMERIC (38)	`147940000000000`
toaddress	destination of a given tx	VARCHAR (42)	`0x501c885e8f519feeb1a8f9429ea586ebd378b549`
fromaddress	source/initiator of a given tx	VARCHAR (42)	`0xf974334a62b3aab3e2b5509f65b9b2141d8efa03`
input	additional data that can be attached to a transaction. This field can be used to tell a smart contract to execute a function	VARCHAR (65535)	`0xa9059cbb00000000000000000000000000955a0ef4e120528f8486c04c97388d530cfbf239000000000000000000000`
network	the specific eth network used	VARCHAR (32)	`bsc-main goerli kovan main rinkeby ropsten xdai`
type	Post EIP-1559, this indicates how the gas parameters are submitted to the network: type 0 - legacy type 2 - using maxpriorityfeepergas and maxfeepergas	INT	`0` `1` `2`

Field Name	Description	Data Type	Examples
maxpriorityfeepergas	the ceiling value for a possible tip to the miner. the actual tip paid can be lower if (maxfee - basefee) < maxpriorityfee. denominated in gwei.	NUMERIC (38)	`111373960022`
maxfeepergas	the maximum possible gas that a sender is willing to pay including basefee and tip. must be lower than the maxpriorityfeepergas. denominated in gwei.	NUMERIC (38)	`111373960022`
basefeepergas	This is the gas price that is paid and burned in order to be set. the basefee is algorithmically determined. denominated in gwei.	NUMERIC (38)	`111373960022`
dropreason	if the transaction was dropped from the mempool, this describes the contextual reason for the drop	VARCHAR (26)	`unexecutable-txs unpayable-txs replaced-txs account-cap-txs old-txs underpriced-txs low-nonc`
rejectionreason	if the tansaction was rejected from the mempool, this describes the contextual reason for the rejection	VARCHAR (64)	`exceeds block gas limit insufficient funds for gas * price + value intrinsic gas too low non transaction underpriced`