Monero Wallet and Daemon Data Model Guideline

based on Monero Core v0.14.0.0

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Reference implementation: https://github.com/monero-ecosystem/monero-javascript

Document source: https://github.com/monero-ecosystem/monero-javascript/blob/master/monero-model.xml

This document's source can be edited using: https://www.draw.io/

MoneroBlock

header: MoneroBlockHeader

hex: string

coinbase_tx: MoneroTx

txs: list<MoneroTx>

tx_ids: list<string>

MoneroDaemonInfo

version: string

num_alt_blocks: int

block_size_limit: int

block_size_median: int

block_weight_limit: int

block_weight_median: int

bootstrap_daemon_address: string

difficulty: int

cumulative_difficulty: int

free_space: int

num_offline_peers: int

num_online_peers: int

height: int

height_without_bootstrap: int

network_type: MoneroNetworkType

is_offline: boolean

num_incoming_connections: int

num_outgoing_connections: int

num_rpc_connections: int

start_timestamp: int

target: int

target_height: int

top_block_id: string

num_txs: int

num_txs_pool: int

was_bootstrap_ever_used: boolean

database_size: int

update_available: boolean

MoneroBlockHeader

id: string

height: int

timestamp: long

size: long

weight: long

long_term_weight: int

depth: long

difficulty: long

cumulative_difficulty: long

major_version: int

minor_version: int

nonce: long

num_txs: int

orphan_status: boolean

prev_id: string

reward: BigInteger

pow_hash: string

MoneroOutput

tx: MoneroTx

key_image: MoneroKeyImage

amount: BigInteger

index: int

ring_output_indices: list<int>

stealth_public_key: string

MoneroKeyImage

hex: string

signature: string

<<enumeration>>
MoneroNetworkType

mainnet: 0

testnet: 1

stagenet: 2

MoneroTx

block: MoneroBlock

height: int

id: string

version: string

is_coinbase: boolean

payment_id: string

fee: BigInteger

mixin: integer

do_not_relay: boolean

is_relayed: boolean

is_confirmed: boolean

in_tx_pool: boolean

num_confirmations: int

num_estimated_blocks_until_confirmed: int

unlock_time: int

last_relayed_timestamp: int

received_timestamp: int

is_double_spend: boolean

key: string

hex: string

pruned_hex: string

prunable_hex: string

prunable_hash: string

size: int

weight: int

vins: list<MoneroOutput>

vouts: list<MoneroOutput>

output_indices: list<int>

metadata: string

common_tx_sets: ?

extra: list<int>

rct_signatures: list<string>

rct_sig_prunable: TODO

is_kept_by_block: boolean

is_failed: boolean

last_failed_height: int

MoneroDaemonSyncInfo

height: int

connections: list<MoneroDaemonConnection>

spans: list<MoneroDaemonConnectionSpan>

target_height: int

next_needed_pruning_seed: int

overview: ?

MoneroHardForkInfo

earliest_height: int

is_enabled: boolean

state: int

threshold: int

version: string

num_votes: int

window: int

voting: int

MoneroSubmitTxResult

is_good: boolean

is_relayed: boolean

is_double_spend: boolean

is_fee_too_low: boolean

is_mixin_too_low: boolean

has_invalid_input: boolean

has_invalid_output: boolean

is_rct: boolean

is_overspend: boolean

is_too_big: boolean

reason: string

MoneroCoinbaseTxSum

emission_sum: BigInteger

fee_sum: BigInteger

MoneroDaemonConnection

peer: MoneroDaemonPeer

id: string

avg_download: int

avg_upload: int

current_download: int

current_upload: int

height: int

is_incoming: boolean

live_time: long

is_local_ip: boolean

is_local_host: boolean

num_receives: int

num_sends: int

receive_idle_time: long

send_idle_time: long

state: string

num_support_flags: int

MoneroTxPoolStats

num_txs: int

num_not_relayed: int

num_failing: int

num_double_spends: int

num_10m: int

fee_total: BigInteger

bytes_max: int

bytes_med: int

bytes_min: int

bytes_total: int

histo: ?

histo_98pc: int

oldest_timestamp: int

last_failed_id: string

max_used_block_height: int

max_used_block_id: string

signatures: list<string>

MoneroDaemonPeer

id: string

address: string

host: string

port: int

is_online: boolean

last_seen_timestamp: int

pruning_seed: int

MoneroBan

host: string

ip: string

is_banned: boolean

seconds: long

MoneroBlockTemplate

block_template_blob: string

block_hashing_blob: string

difficulty: long

expected_reward: BigInteger

height: int

prev_id: string

reserved_offset: int

MoneroMiningStatus

is_active: boolean

is_background: boolean

address: string
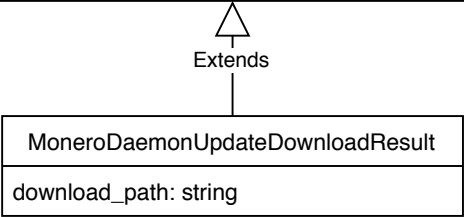
speed: int

num_threads: int

Daemon Data Model 3/3

MoneroAltChain
block_ids: list<string>
difficulty: long
height: int
length: int
main_chain_parent_block_id: string

MoneroDaemonUpdateCheckResult
is_update_available: boolean
version: string
hash: string
auto_uri: string
user_uri: string

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Extends

MoneroDaemonUpdateDownloadResult
download_path: string

MoneroOutputHistogramEntry
amount: BigInteger
num_instances: int
num_unlocked_instances: int
num_recent_instances: int

MoneroAccount

index: int

primary_address: string

label: string

balance: BigInteger

unlocked_balance: BigInteger

subaddresses: list<MoneroSubaddress>

MoneroSubaddress

account_index: int

index: int

address: string

label: string

balance: BigInteger

unlocked_balance: BigInteger
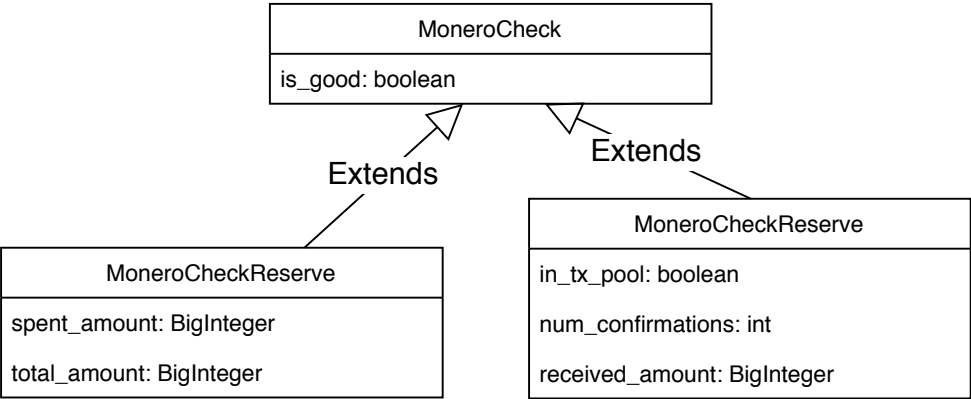
num_unspent_outputs: int

is_used: boolean

**<<enumeration>>
MoneroSendPriority**

default: 0

unimportant: 1

normal: 2

elevated: 3

MoneroAccountTag

tag: string

label: string

account_indices: list<int>

MoneroWalletTx extends MoneroTx

incoming_amount: BigInteger

outgoing_amount: BigInteger

incoming_transfers: list<MoneroTransfer>

outgoing_transfer: MoneroTransfer

note: string

MoneroAddressBookEntry

index: int

address: string

payment_id: string

description: string

MoneroDestination

address: string

amount: BigInteger

MoneroTransfer

tx: MoneroWalletTx

is_outgoing: boolean

is_incoming: boolean

address: string

account_index: int

subaddress_index: int

amount: BigInteger

destinations: list<MoneroDestination>

MoneroWalletOutput extends MoneroOutput

account_index: int

subaddress_index: int

is_spent: boolean

MoneroIntegratedAddress

standard_address: string

payment_id: string

integrated_address: string

MoneroCheck

is_good: boolean

Extends

Extends

MoneroCheckReserve

spent_amount: BigInteger

total_amount: BigInteger

MoneroCheckReserve

in_tx_pool: boolean

num_confirmations: int

received_amount: BigInteger

MoneroKeyImageImportResult

height: int

spent_amount: BigInteger

unspent_amount: BigInteger