Overview of

Monero Wallet and Daemon Interfaces and Types

based on Monero Core v0.14.0.0

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JavaScript reference implementation: https://github.com/monero-ecosystem/monero-javascript

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

Document source created and modifiable using: https://www.draw.io/

MoneroDaemon
isTrusted(): boolean
getHeight(): uint
getBlockId(height): string
getBlockTemplate(walletAddress, reserveSize): MoneroBlockTemplate
getLastBlockHeader(): MoneroBlockHeader
getBlockHeaderById(blockId): MoneroBlockHeader
getBlockHeaderByHeight(height): MoneroBlockHeader
getBlockHeadersByRange(startHeight, endHeight): list<MoneroBlockHeader>
getBlockById(blockId): MoneroBlock
getBlocksById(blockIds, startHeight, prune): list<MoneroBlock>
getBlockByHeight(height): MoneroBlock
getBlocksByHeight(heights): list<MoneroBlock>
getBlocksByRange(startHeight, endHeight): list<MoneroBlock>
getBlockIds(blockIds, startHeight): list<string>
getTx(txId, prune): MoneroTx
getTxs(txIds, prune): list<MoneroTx>
getTxHex(txId, prune): string
getTxHexes(txIds, prune): list<string>
getCoinbaseTxSum(height, numBlocks): MoneroCoinbaseTxSum
getFeeEstimate(graceBlocks): BigInteger
submitTxHex(txHex, doNotRelay): MoneroSubmitTxResult
relayTxById(txId): string
relayTxsById(txIds): list<string>
getTxPool(): list<MoneroTx>
getTxPoolIds(): list<string>
getTxPoolBacklog(): list<MoneroTxBacklogEntry>
getTxPoolStats(): MoneroTxPoolStats
flushTxPool(ids): list<string>
getSpentStatus(keyImage): MoneroKeyImageSpentStatus
getSpentStatuses(keyImages): list<MoneroKeyImageSpentStatus>
getOutputs(outputs): list<MoneroOutput>
getOutputHistogram(amounts, minCount, maxCount, isUnlocked, recentCutoff): list<MoneroOutputHistogramEntry>
getOutputDistribution(amounts, cumulative, startHeight, endHeight): list<MoneroOutputDistributionEntry>
getInfo(): MoneroDaemonInfo
getSyncInfo(): MoneroDaemonSyncInfo
getHardForkInfo(): MoneroDaemonHardForkInfo
getAltChains(): list<MoneroAltChain>
getAltBlockIds(): list<string>

getDownloadLimit(): uint

setDownloadLimit(limit): void

resetDownloadLimit(): uint

getUploadLimit(): uint

setUploadLimit(limit): void

resetUploadLimit(): uint

getKnownPeers(): list<MoneroDaemonPeer>

getConnections(): list<MoneroDaemonConnection>

setOutgoingPeerLimit(limit): void

setIncomingPeerLimit(limit): void

getPeerBans(): list<MoneroBan>

setPeerBan(ban): void

setPeerBans(bans): void

startMining(address, numThreads, isBackground, ignoreBattery): void

stopMining(): void

getMiningStatus(): MoneroMiningStatus

submitBlock(blockBlob): void

submitBlocks(blockBlobs): void

checkForUpdate(path): MoneroDaemonUpdateCheckResult

downloadUpdate(path): MoneroDaemonDownloadUpdateResult

stop(): void

MoneroBlock

header: MoneroBlockHeader

hex: string

coinbase_tx: MoneroTx

txs: list<MoneroTx>

tx_ids: list<string>

MoneroDaemonInfo

version: string

num_alt_blocks: uint

block_size_limit: uint

block_size_median: uint

block_weight_limit: uint

block_weight_median: uint

bootstrap_daemon_address: string

difficulty: uint

cumulative_difficulty: uint

free_space: uint

num_offline_peers: uint

num_online_peers: uint

height: uint

height_without_bootstrap: uint

network_type: MoneroNetworkType

is_offline: boolean

num_incoming_connections: uint

num_outgoing_connections: uint

num_rpc_connections: uint

start_timestamp: uint

target: uint

target_height: uint

top_block_id: string

num_txs: uint

num_txs_pool: uint

was_bootstrap_ever_used: boolean

database_size: uint

update_available: boolean

MoneroBlockHeader

id: string

height: uint

timestamp: long

size: long

weight: long

long_term_weight: uint

depth: long

difficulty: long

cumulative_difficulty: long

major_version: uint

minor_version: uint

nonce: long

num_txs: uint

orphan_status: boolean

prev_id: string

reward: BigInteger

pow_hash: string

MoneroOutput

tx: MoneroTx

key_image: MoneroKeyImage

amount: BigInteger

index: uint

ring_output_indices: list<uint>

stealth_public_key: string

MoneroKeyImage

hex: string

signature: string

<<enumeration>> MoneroKeyImageSpentStatus

not_spent: 0

confirmed: 1

tx_pool: 2

MoneroTx

block: MoneroBlock

height: uint

id: string

version: string

is_coinbase: boolean

payment_id: string

fee: BigInteger

mixin: uint

do_not_relay: boolean

is_relayed: boolean

is_confirmed: boolean

in_tx_pool: boolean

num_confirmations: uint

num_estimated_blocks_until_confirmed: uint

unlock_time: uint

last_relayed_timestamp: uint

received_timestamp: uint

is_double_spend: boolean

key: string

hex: string

pruned_hex: string

prunable_hex: string

prunable_hash: string

size: uint

weight: uint

vins: list<MoneroOutput>

vouts: list<MoneroOutput>

output_indices: list<uint>

metadata: string

common_tx_sets: ?

extra: list<uint>

rct_signatures: list<string>

rct_sig_prunable: TODO

is_kept_by_block: boolean

is_failed: boolean

last_failed_height: uint

MoneroDaemonSyncInfo

height: uint

connections: list<MoneroDaemonConnection>

spans: list<MoneroDaemonConnectionSpan>

target_height: uint

next_needed_pruning_seed: uint

overview: ?

MoneroHardForkInfo

earliest_height: uint

is_enabled: boolean

state: uint

threshold: uint

version: string

num_votes: uint

window: uint

voting: uint

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

<<enumeration>> MoneroNetworkType

mainnet: 0

testnet: 1

stagenet: 2

MoneroDaemonConnection

peer: MoneroDaemonPeer

id: string

avg_download: uint

avg_upload: uint

current_download: uint

current_upload: uint

height: uint

is_incoming: boolean

live_time: long

is_local_ip: boolean

is_local_host: boolean

num_receives: uint

num_sends: uint

receive_idle_time: long

send_idle_time: long

state: string

num_support_flags: uint

MoneroTxPoolStats

num_txs: uint

num_not_relayed: uint

num_failing: uint

num_double_spends: uint

num_10m: uint

fee_total: BigInteger

bytes_max: uint

bytes_med: uint

bytes_min: uint

bytes_total: uint

histo: ?

histo_98pc: uint

oldest_timestamp: uint

last_failed_id: string

max_used_block_height: uint

max_used_block_id: string

signatures: list<string>

MoneroDaemonPeer

id: string

address: string

host: string

port: uint

is_online: boolean

last_seen_timestamp: uint

pruning_seed: uint

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: uint

prev_id: string

reserved_offset: uint

MoneroMiningStatus

is_active: boolean

is_background: boolean

address: string

speed: uint

num_threads: uint
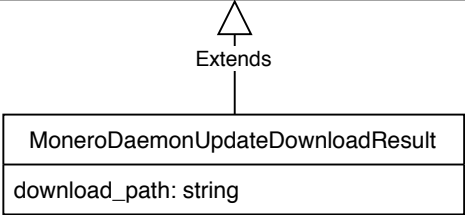
MoneroAltChain

block_ids: list<string>

difficulty: long

height: uint

length: uint

main_chain_parent_block_id: string

MoneroDaemonUpdateCheckResult

is_update_available: boolean

version: string

hash: string

auto_uri: string

user_uri: string

MoneroOutputHistogramEntry

amount: BigInteger

num_instances: uint

num_unlocked_instances: uint

num_recent_instances: uint

MoneroCoinbaseTxSum

emission_sum: BigInteger

fee_sum: BigInteger

Extends

MoneroDaemonUpdateDownloadResult

download_path: string

MoneroWallet
getSeed(): string
getMnemonic(): string
getPublicViewKey(): string
getPrivateViewKey(): string
getLanguages(): list<string>
getHeight(): uint
getChainHeight(): uint
getPrimaryAddress(): string
getIntegratedAddress(paymentId): MoneroIntegratedAddress
decodeIntegratedAddress(integratedAddress): MoneroIntegratedAddress
sync(startHeight, endHeight, onProgress): MoneroSyncResult
isMultisigImportNeeded(): boolean
getAccounts(includeSubaddresses): list<MoneroAccount>
getAccount(accountIdx, includeSubaddresses): MoneroAccount
createAccount(label): MoneroAccount
getSubaddresses(accountIdx, subaddressIndices): list<MoneroSubaddress>
getSubaddress(accountIdx, subaddressIdx): MoneroSubaddress
createSubaddress(accountIdx, label): MoneroSubaddress
getAddress(accountIdx, subaddressIdx): string
getAddressIndex(address): uint
getBalance(accountIdx, subaddressIdx): BigInteger
getUnlockedBalance(accountIdx, subaddressIdx): BigInteger
getTxs(config): list<MoneroWalletTx>
getTransfers(config): list<MoneroTransfer>
getVouts(config): list<MoneroWalletOutput>
getKeyImages(): list<MoneroKeyImage>
importKeyImages(keyImages): MoneroKeyImageImportResult
getNewKeyImagesFromLastImport(): list<MoneroKeyImage>
send(configOrAddress, sendAmount, priority, mixin): MoneroWalletTx
sendSplit(configOrAddress, sendAmount, priority, mixin): MoneroWalletTx
sweepWallet(address): list<MoneroWalletTx>
sweepAccount(accountIdx, address): list<MoneroWalletTx>
sweepSubaddress(accountIdx, subaddressIdx, address): list<MoneroWalletTx>
sweepUnlocked(config): list<MoneroWalletTx>
sweepDust(doNotRelay): list<MoneroWalletTx>
sweepOutput(configOrAddress, keyImage, priority, mixin): list<MoneroWalletTx>
relayTx(txMetadata): MoneroWalletTx
relayTxs(txMetadatas): list<MoneroWalletTx>

Wallet Interface 2/2

getTxNote(txId): string
setTxNote(txId, note): void
getTxNotes(txIds): list<string>
setTxNotes(txIds, notes): void
sign(msg): string
verify(msg, address, signature): boolean
getTxKey(txId): string
checkTxKey(txId, txKey, address): MoneroCheckTx
getTxProof(txId, address, message): string
checkTxProof(txId, address, message, signature): MoneroCheckTx
getSpendProof(txId, message): string
checkSpendProof(txId, message, signature): boolean
getReserveProofWallet(message): string
getReserveProofAccount(accountIdx, amount, message): string
checkReserveProof(address, message, signature): MoneroCheckReserve
getAddressBookEntries(entryIndices): list<MoneroAddressBookEntry>
addAddressBookEntry(address, description, paymentId): uint
deleteAddressBookEntry(entryIdx): void
getTxProof(txId, address, message): string
tagAccounts(tag, accountIndices): void
untagAccounts(accountIndices): void
getAccountTags(): list<MoneroAccountTag>
setAccountTagLabel(tag, label): void
createPaymentUri(sendConfig): string
parsePaymentUri(uri): MoneroSendConfig
getOutputsHex(): string
importOutputsHex(outputsHex): uint
setAttribute(key, val): void
getAttribute(key): string
startMining(numThreads, backgroundMining, ignoreBattery): void
stopMining(): void

Wallet Types 1/1

MoneroAccount

index: uint

primary_address: string

label: string

balance: BigInteger

unlocked_balance: BigInteger

subaddresses: list<MoneroSubaddress>

MoneroAccountTag

tag: string

label: string

account_indices: list<int>

MoneroAddressBookEntry

index: uint

address: string

payment_id: string

description: string

MoneroIntegratedAddress

standard_address: string

payment_id: string

integrated_address: string

MoneroSubaddress

account_index: uint

index: uint

address: string

label: string

balance: BigInteger

unlocked_balance: BigInteger

num_unspent_outputs: uint

is_used: boolean

MoneroDestination

address: string

amount: BigInteger

MoneroWalletOutput extends MoneroOutput

account_index: uint

subaddress_index: uint

is_spent: boolean

<<enumeration>> MoneroSendPriority

default: 0

unimportant: 1

normal: 2

elevated: 3

MoneroWalletTx extends MoneroTx

incoming_amount: BigInteger

outgoing_amount: BigInteger

incoming_transfers: list<MoneroTransfer>

outgoing_transfer: MoneroTransfer

note: string

MoneroTransfer

tx: MoneroWalletTx

is_outgoing: boolean

is_incoming: boolean

address: string

account_index: uint

subaddress_index: uint

amount: BigInteger

destinations: list<MoneroDestination>

MoneroSyncResult

num_blocks_fetched: uint

received_money: boolean

MoneroKeyImageImportResult

height: uint

spent_amount: BigInteger

unspent_amount: BigInteger

MoneroCheck

is_good: boolean

Extends

Extends

MoneroCheckReserve

spent_amount: BigInteger

total_amount: BigInteger

MoneroCheckTx

in_tx_pool: boolean

num_confirmations: uint

received_amount: BigInteger