

Forum:[Hack Forums](#)

Thread: [OMC RPC server ruby gem.](#)

severos - March 25, 2015, 11:39 am

I want to try doing some OMC related project, but due to the fact that the only API for OMC is provided by omnicha.in and is going to change "soon" with no estimates, I thought of hosting omnicoind RPC server on machine, after looking around a bit, I found there's a ruby gem for bitcoind JSON RPC server[here](#).

So I thought of using it, but I'd like to ask if there would be any problems since it's different algorithm of mining, addresses and keys are different too.

Also does anyone know if there's a place with full list of API provided by JSON RPC server of omnicoind ??

I might write as well try to write a REST API for OMC as practice on using Sinatra.

Thanks in advance.

Doctor Blue - March 25, 2015, 12:51 pm

(Mar 25, 2015 11:39 AM)severos Wrote: [\[CITE\]](#) I want to try doing some OMC related project, but due to the fact that the only API for OMC is provided by omnicha.in and is going to change "soon" with no estimates, I thought of hosting omnicoind RPC server on machine, after looking around a bit, I found there's a ruby gem for bitcoind JSON RPC server[here](#).

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Also does anyone know if there's a place with full list of API provided by JSON RPC server of omnicoind ??

I might write as well try to write a REST API for OMC as practice on using Sinatra.

Thanks in advance.

You can run "omnicoind help" to get a list of available commands. As for differences, the main differences are probably those:

- 1) Mining is done with Scrypt instead of SHA 256
- 2) The address version byte is 0x73 instead of 0x00
- 3) New addresses are generated to receive change outputs

You can use whatever Bitcoin API script you feel like, most of them work with Omnicoin out of the box.

severos - March 25, 2015, 9:51 pm

I've build OmniCoind and tried running:

```
./OmniCoind help
```

waited for half an hour and nothing showing in the terminal, but I can clearly see the process running in system monitor :/

Doctor Blue - March 26, 2015, 12:03 pm

(Mar 25, 2015 09:51 PM)severos Wrote: [\[CITE\]](#) I've build OmniCoind and tried running:

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Odd...

Well here you go:

Code addmultisigaddress <nrequired> <["key","key"]> [account]
addnode <node> <add|remove|onetry>
backupwallet <destination>
createmultisig <nrequired> <["key","key"]>
createrawtransaction [{"txid":txid,"vout":n},...] {address:amount,...}
decoderawtransaction <hex string>
dumpprivkey <OmniCoinaddress>
encryptwallet <passphrase>
getaccount <OmniCoinaddress>
getaccountaddress <account>
getaddednodeinfo <dns> [node]
getaddressesbyaccount <account>
getbalance [account] [minconf=1]
getbestblockhash
getblock <hash> [verbose=true]
getblockcount
getblockhash <index>
getblocktemplate [params]
getconnectioncount
getdifficulty
getgenerate
gethashespersec
getinfo
getmininginfo
getnetworkhashps [blocks] [height]
getnewaddress [account]
getpeerinfo
getrawmempool
getrawtransaction <txid> [verbose=0]
getreceivedbyaccount <account> [minconf=1]
getreceivedbyaddress <OmniCoinaddress> [minconf=1]
gettransaction <txid>
gettxout <txid> <n> [includemempool=true]
gettxoutsetinfo
getwork [data]
getworkex [data, coinbase]
help [command]
importprivkey <OmniCoinprivkey> [label] [rescan=true]
keypoolrefill
listaccounts [minconf=1]
listaddressgroupings
listlockunspent
listreceivedbyaccount [minconf=1] [includeempty=false]
listreceivedbyaddress [minconf=1] [includeempty=false]
listsinceblock [blockhash] [target-confirmations]
listtransactions [account] [count=10] [from=0]
listunspent [minconf=1] [maxconf=999999] ["address",...]
lockunspent unlock? [array-of-Objects]
move <fromaccount> <toaccount> <amount> [minconf=1] [comment]
sendfrom <fromaccount> <toOmniCoinaddress> <amount> [minconf=1] [comment] [comment-to]
sendmany <fromaccount> {address:amount,...} [minconf=1] [comment]
sendrawtransaction <hex string>

sendtoaddress <OmniCoinaddress> <amount> [comment] [comment-to]
setaccount <OmniCoinaddress> <account>
setgenerate <generate> [genproclimit]
setmininput <amount>
settxfee <amount>
signmessage <OmniCoinaddress> <message>
signrawtransaction <hex string> [{"txid":txid,"vout":n,"scriptPubKey":hex,"redeemScript":hex},...]
[<privatekey1>,...] [sighashtype="ALL"]
stop
submitblock <hex data> [optional-params-obj]
validateaddress <OmniCoinaddress>
verifychain [check level] [num blocks]
verifymessage <OmniCoinaddress> <signature> <message>

Dave Skylark - March 26, 2015, 3:54 pm

All you have to do is: cd /root/.Omnicoin and then run Omnicoin help

It also depends on where you've installed it.

severos - March 27, 2015, 4:32 am

(Mar 26, 2015 12:03 PM)Doctor Blue Wrote: [\[CITE\]](#) Odd...

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getblocktemplate [params]
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getdifficulty
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gethashespersec
getinfo
getmininginfo
getnetworkhashps [blocks] [height]
getnewaddress [account]
getpeerinfo
getrawmempool
getrawtransaction <txid> [verbose=0]
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getreceivedbyaddress <OmniCoinaddress> [minconf=1]

```

gettransaction <txid>
gettxout <txid> <n> [includemempool=true]
gettxoutsetinfo
getwork [data]
getworkex [data, coinbase]
help [command]
importprivkey <OmniCoinprivkey> [label] [rescan=true]
keypoolrefill
listaccounts [minconf=1]
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listlockunspent
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signrawtransaction <hex string> [{"txid":txid,"vout":n,"scriptPubKey":hex,"redeemScript":hex},...]
[<privatekey1>,...] [sighashtype="ALL"]
stop
submitblock <hex data> [optional-params-obj]
validateaddress <OmniCoinaddress>
verifychain [check level] [num blocks]
verifymessage <OmniCoinaddress> <signature> <message>

```

Thanks for the list, I found that I can get the list by typing `./Omnicoin -server help` but had to start the server first, also it seems the list is a bit different from [this list](#), just couple missing calls.

I've tried couple gems for using the RPC server and it seems they somehow don't work, not sure if it's the gem broken (last update was like a year ago) or the connection to server had some problems (which is kinda hard since the server is running and responded to ping requests), guess I'll just wait for omnicha.in to get updated and use their api.

Alex™ - March 27, 2015, 4:36 am

(Mar 27, 2015 04:32 AM)severos Wrote: [CITE](#) Thanks for the list, I found that I can get the list by typing `./Omnicoin -server help` but had to start the server first, also it seems the list is a bit different from [this list](#), just couple missing calls.

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Can you connect via RPC in your browser? (you need to allow your IP in the config)

Also; `omnicoin -daemon`

Doctor Blue - March 27, 2015, 4:42 am

(Mar 27, 2015 04:32 AM)severos Wrote: [\[CITE\]](#) Thanks for the list, I found that I can get the list by typing `./Omnicoin -server help` but had to start the server first, also it seems the list is a bit different from [this list](#), just couple missing calls.

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Yeah, I forgot that I had `server=1` in the config and the daemon running.

Omnicoin is behind Bitcoin so we're missing a few features, which is why I didn't refer you to that page :)

severos - March 27, 2015, 6:26 am

(Mar 27, 2015 04:36 AM)Alex™ Wrote: [\[CITE\]](#) Can you connect via RPC in your browser? (you need to allow your IP in the config)

Also; `omnicoin -daemon`

I guess I can connect and it's on my local machine.

I mean sending ping it gives response, and when I tried `curl 127.0.0.1` it gave me "Empty reply from sever"

Doctor Blue - March 27, 2015, 8:26 am

(Mar 27, 2015 06:26 AM)severos Wrote: [\[CITE\]](#) I guess I can connect and it's on my local machine. I mean sending ping it gives response, and when I tried `curl 127.0.0.1` it gave me "Empty reply from sever"

Remember that the Omnicoin RPC is listening on port 4873.

Alex™ - March 27, 2015, 8:28 am

(Mar 27, 2015 06:26 AM)severos Wrote: [\[CITE\]](#) I guess I can connect and it's on my local machine. I mean sending ping it gives response, and when I tried `curl 127.0.0.1` it gave me "Empty reply from sever"

Your're just pinging port 80.

`curl http://{youruser}:{yourpass}@127.0.0.1:4873/`

severos - March 27, 2015, 8:46 am

I forgot to mention that I did set the server to port 9999 (because I didn't know which one was the default) and ping/curl the port 9999, and it was giving me empty response.

I've just tried doing it again with default url and added `http://` and the result from curl was:

```
{"result":null,"error":{"code":-32700,"message":"Parse error"},"id":null}
```

does this error mean there's something wrong with connection? or it's just that curl doesn't understand omnicoin server or what?

Alex™ - March 27, 2015, 8:52 am

(Mar 27, 2015 08:46 AM)severos Wrote: [\[CITE\]](#) I forgot to mention that I did set the server to port 9999 (because I didn't know which one was the default) and ping/curl the port 9999, and it was giving me empty response.

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does this error mean there's something wrong with connection? or it's just that curl doesn't understand omnicoin server or what?

Nah, pretty sure that means everything's working fine. (about 95% sure)

Doctor Blue - March 27, 2015, 12:16 pm

(Mar 27, 2015 08:46 AM)severos Wrote: [\[CITE\]](#) I forgot to mention that I did set the server to port 9999 (because I didn't know which one was the default) and ping/curl the port 9999, and it was giving me empty response.

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does this error mean there's something wrong with connection? or it's just that curl doesn't understand omnicoind server or what?

It says parse error because you didn't give it a message body (command).

severos - March 27, 2015, 9:15 pm

(Mar 27, 2015 12:16 PM)Doctor Blue Wrote: [\[CITE\]](#) It says parse error because you didn't give it a message body (command).

So it's working right? then I guess the gem I used is out dated :/

Abraham Lincoln - March 27, 2015, 9:17 pm

(Mar 27, 2015 09:15 PM)severos Wrote: [\[CITE\]](#) So it's working right? then I guess the gem I used is out dated :/

Yes, it appears to be working just fine.

severos - April 1, 2015, 1:39 am

Another question, I have both omnicoind and omni wallet, do they share the same block chain? or each one have it's own chain file? if it's the later is it possible to make them share same file? and how do I know omnicoind have finished updating the chain?

Thanks in advance.

Doctor Blue - April 1, 2015, 2:55 am

(Apr 1, 2015 01:39 AM)severos Wrote: [\[CITE\]](#) Another question, I have both omnicoind and omni wallet, do they share the same block chain? or each one have it's own chain file? if it's the later is it possible to make them share same file? and how do I know omnicoind have finished updating the chain?

Thanks in advance.

If you don't manually set a different data directory or configuration file for one of them, then they should use the same.

Keep in mind that the wallet cannot read the blockchain while omnicoind is doing it.