

# FAQs

## Conflux FAQs

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# Common FAQs

```
cfx_getTransactionByHash    transaction    status = 0
```

```
Invalid parameters: request, data: "network prefix
unexpected: ours cfx, got cfxtest"
```

cfx\_call

?, ?

Couflux      Chainlink

chainlink

# Conflux Oracle

- Witnet

## API

ConfluxScan    OPENAPI    1W

## Conflux

Next One

## Conflux ?

Conflux epoch epoch 0 epoch epoch

1. `cfx_getBlocksByEpoch`      epoch      hash
2. `cfx_getBlockByHash`

1.               blockHash       hash
2.   tx.status     0x0   0x1               null   0x2

Note:               latest\_confirm   latest\_state               pivot chain switch       .

# Pending TX

Pending TX FAQs

Pending TX

# What is Pending TX

Fluent

Pending

[Screen Shot 2022-06-04 at 11.50.17.png](#)

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[Screen Shot 2022-06-04 at 11.50.32.png](#)

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SDK

Receipt

ConfluxScan

[pending.png](#)

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- 
- 
- 
- 

## Pending

- 
- 
- 
- 

[Screen Shot 2022-06-11 at 17.23.20.png](#)

Image not found or type unknown **hash not found.**



Pending TX

# Pending

Pending

Pending

Pending

## Pending

Conflux

Pending

Pending

1. nonce
2.
3. gasPrice gasPrice

nonce

Conflux 

nonce

 , nonce nonce nonce 0

- nonce 0
- nonce 0 nonce 1
- 1-10 nonce 11

nonce 11 nonce 15 pending nonce 11-14

Conflux 1k 1CFX

value + gasPrice \* gas + storageLimit / 1024

to Sponsor value

gasPrice

gasPrice

 gasPrice



gasPrice Pending

Conflux 1GDrip ce

1GDrip = 1e9 Drip

# cfx\_getAccountPendingTransactions

Conflux node RPC [cfx\\_getAccountPendingTransactions](#) Pending Pending

```
// Request
curl -X POST --data
'{"jsonrpc": "2.0", "method": "cfx_getAccountPendingTransactions", "params": [ "cfx: aan02vpwvz8crpa1n10j17ufceefptdc2yzkagxk5u"], "id": 1}' -H "Content-Type: application/json" localhost:12539

// Response
{
  "jsonrpc": "2.0",
  "result": {
    "firstTxStatus": {
      "pending": "futureNonce"
    },
    "pendingCount": "0x1",
    // Reference transaction example
    "pendingTransactions": [
      {
        "...": "..."
      }
    ]
  },
  "id": "15922956697249514502"
}
```

firstTxStatus Pending Pending

- pending: futureNonce nonce
- pending: notEnoughCash
- ready gasPrice

RPC Pending Pending GC

ConfluxScan

Pending

ConfluxScan

tab

Pending

[scan-pending-entry.jpeg](#)

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Pending

Pending

Pending

[scan-pending-tx-list.jpeg](#)

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- Wrong nonce
- Insufficient balance
- Ready to pack

Scan

cfx\_getAccountPendingTransactions

Pending

Pending

Conflux

Pending TX

Pending

[Screen Shot 2022-06-15 at 10.59.02.png](#)

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Pending

Pending

hash

Pending

RPC

Scan

RPC

Scan

Pending

Pending

has

gas, gasPrice, storageLimit)

(balance, nonce)

Pending

getTransactionByHash

.

Pending TX

# Pending

Pending Pending

## futureNonce

nonce Pending nonce

Pending

## notEnoughCash

Pending from CFX

•  
•

## gasPrice

nonce 

gasPrice

 Pending

nonce gasPrice (Fluent nonce gasPrice) ( SDK nonc

Conflux gasPrice 1GDrip

[WechatIMG250.jpeg](#)

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[WechatIMG251.jpeg](#)

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Pending TX

# FAQs

nonce

GC

nonce

nonce

Pending

estimate

gas storageLimit

sendRawTransaction

# Can not estimate: NotEnoughCash

Can not estimate: transaction execution failed, all gas will be charged (execution error: NotEnoughCash { required: xx, got: xx, actual\_gas\_cost: xx, max\_storage\_limit\_cost: xx })

from  
gasPrice gas storageLimit from .

cfx\_estimateGasAndCollateral ( v2.0 from from balance value -  
estimate :

```
{
  "code": -32015,
  "message": "Can not estimate: transaction execution failed, all gas will be charged (execution error: NotEnoughCash { required: 18014398509481983999023437515000000, got: 0, actual_gas_cost: 0, max_storage_limit_cost: 180143985094819839990234375000000000 })",
  "data":
    "0x4e6f74456e6f75676843617368207b20726571756972656443a2031383031343339383530393438313938333939393032333433373531353030303030302c20676f743a20302c2061637475616c5f6761735f636f73743a20302c206d61785f73746f726167655f6c696d69745f636f73743a203138303134333938353039343831393833393939303233343337353030303030303030207d"
}
```

estimate balance pending cfx\_estimateGasAndCollateral

- 1. gasPrice: 1 Drip
- 2. gas: 1500w

v2.0.2 gasPrice 1GDrip

1.

2.

3.
- gas, gasPrice, storageLimit

storageLimit

sponsor
- upperBound

SponsorWhitelistControl

- to

NotEnoughCash
1.

2.
- from

gasFee(gasPrice \* gas)

(upperbound),

1.

2.

3.
- gasPrice 1Drip

SDK js go java SDK case

upperbound 0.05 CFX 1GDrip

# Estimation isn't accurate: transaction is reverted

`cfx_estimateGasAndCollateral` `gas` `storageLimit` `Estimation isn't accurate: age`  
`transaction is reverted`

```
{
  "code": -32015,
  "message": "Estimation isn't accurate: transaction is reverted. Innermost error is at CFX: TYPE. CONTRACT: ACDUZTJBPM9PPP9F0K5VT3PJU0EJUDNHP2ZM7WS35N: Vm reverted. .",
  "data": "CFX: TYPE. CONTRACT: ACDUZTJBPM9PPP9F0K5VT3PJU0EJUDNHP2ZM7WS35N: Vm reverted. \nCFX: TYPE. CONTRACT: ACD5E6SPRGMDVG15FDXF2B8AH7DAN7GMZAGXA10EPZ: Vm reverted. "
}
```

`reverted`

NFT

message

RPC

NFT 1155

Estimation isn't accurate: transaction is reverted: `ERC1155: insufficient balance for transfer`.  
Innermost error is at xxxx: Vm reverted. ERC1155: insufficient balance for transfer

- [estimate](#)



# Can not estimate: transaction execution failed

estimateCan not estimate: transaction execution failed, all gas will be charged

## ConflictAddress(0xxxxxx)

```
{
  "code": -32015,
  "message": "Can not estimate: transaction execution failed, all gas will be charged
(execution error: VmError(ConflictAddress(0x87e69792aab04a1e54faa54b41a688335199c1bb)))",
  "data": "VmError(ConflictAddress(0x87e69792aab04a1e54faa54b41a688335199c1bb))"
}
```

	data	estimate	nonce	nonce	0
estimate	nonce	nonce	.		

## BadInstruction { instruction: 214 }

```
{
  "code": -32015,
  "message": "Can not estimate: transaction execution failed, all gas will be charged
(execution error: VmError(BadInstruction { instruction: 214 }))",
  "data": "VmError(BadInstruction { instruction: 214 })"
}
```

data

# VmError(OutOfGas)

```
{
  "jsonrpc": "2.0",
  "error": {
    "code": -32602,
    "message": "Can not estimate: transaction execution failed, all gas will be charged
(execution error: VmError(OutOfGas))"
  },
  "id": "15922956697249514502"
}
```

gas imate

OutOfGas

gas

gas ( ) .

estimate

gas

OutOfGas

gas

tx

# SendRawTx: Invalid parameters: tx

Invalid parameters: tx      RPC

Transaction {?} is discarded due to out of balance, needs {?} but account balance is {?}

conflux-rust v2.0.2      cfx\_sendRawTransaction      tx.from      value + gasFee + storageC

## nonce

nonce

tx already exist

nonce

Tx with same nonce already inserted

nonce

Transaction 0xxx is discarded due to a too stale nonce

nonce      nonce      nonce

Transaction 0xxx is discarded due to in too distant future

nonce      nonce      current nonce - current nonce + 2000      nonce

## gasPrice

## ZeroGasPrice

gasPrice 0 gasPrice 0.

transaction gas price 1000000 less than the minimum value 1000000000

conflux-rust v2.0.2 gasPrice 1GDrip 9 0 gasPrice

## gas

gas

NotEnoughBaseGas { required: 21000, got: 2000 }

gas 21000

transaction gas 20000000 exceeds the maximum value 15000000, the half of pivot block gas limit

gas 1500w

EpochHeightOutOfBound { block\_height: 53800739, set: 0, transaction\_epoch\_bound: 100000 }

epochHeight 10w epoch

Unsupported receiver address type

ChainIdMismatch { expected: 1, got: 2 }

chainId chainId

RlpIncorrectListLen

Rlp

Can not recover pubkey for Ethereum like tx

txpool is full

Failed imported to deferred pool: Transaction Pool is full

Request rejected due to still in the catch up mode.

catch up

Failed to read account\_cache from storage: {}

RPC [tx\\_sendRawTransaction](#) error

# JS-SDK: Method not found

js-conflux-sdk

from

wallet

```
conflux.wallet.addPrivatekey("your account private key");
```



kvdb\_rocksdb - DB has been previously marked as corrupted, attempting repair

Err value: PKCS#8 cryptographic error

[Screen Shot 2022-06-14 at 11.40.23.png](#)

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pos\_key

window            ExecutionContext exists for cur\_era\_genesis  
core\src\block\_data\_manager\mod.rs

Windows

[WechatIMG6266.jpeg](#)

Image not found or type unknown

archive tool

Mac            Release binary

Mac

Github Release



```

clear_state.sh hydra.toml log.yaml start.bat testnet.toml
→ conflux_mac_x64_v2.0.2 git:(master) x ./start.sh
./start.sh: line 3: 74354 Killed: 9                  ./conflux --config testnet.toml 2> stderr.txt
→ conflux_mac_x64_v2.0.2 git:(master) x ./start.sh
./start.sh: line 3: 74387 Abort trap: 6                  ./conflux --config testnet.toml 2> stderr.txt
→ conflux_mac_x64_v2.0.2 git:(master) x ./start.sh
dyld: Symbol not found: __ZTTNS3__118basic_stringstreamIcNS_11char_traitsIcEENS_9allocatorIcEEEE
Referenced from: /Users/zhouchao/Desktop/conflux-rust/conflux_mac_x64_v2.0.2/./conflux (which was built for Mac OS X 12.0)
Expected in: /usr/lib/libc++.1.dylib
in /Users/zhouchao/Desktop/conflux-rust/conflux_mac_x64_v2.0.2/./conflux
./start.sh: line 3: 74414 Abort trap: 6                  ./conflux --config testnet.toml
→ conflux_mac_x64_v2.0.2 git:(master) x

```

Host                      OSX 12

Mac                                      M1   x86

failed to start full client: Os { code: 6, kind: Uncategorized, message: "No such device or address" }

docker                      pos\_key

## Fullnode state

Fullnode 10w Epoch state Fullnode 250G, 400G

## Archive node

Archive node 500G 800G-1T

Conflux Linux server 4 16G Fullnode 500G Archive node 1T

1. Github Release
2. conflux-rust docker
- 3.

## Core RPC eSpace RPC

Core HTTP 12537. eSpace HTTP 8545.

## ERROR IO Worker #2 cfxcore::con - Fail to recover state\_valid

```
6d8c63a923727f077b8e0b5 }
2022-06-24T03:42:51.047648653+00:00 INFO IO Worker #2 cfxcore::syn - start phase "CatchUpFillBlockBodyPhase"
2022-06-24T03:42:51.047680265+00:00 ERROR IO Worker #2 cfxcore::con - Fail to recover state_valid, 可以通过设置 block/epoch 范
2022-06-24T03:42:51.047701032+00:00 INFO IO Worker #2 cfxcore::syn - start phase "CatchUpSyncBlockPhase"
2022-06-24T03:42:51.047740985+00:00 INFO IO Worker #2 cfxcore::syn - Catch-up mode: true, latest epoch: 0 missing_bodies: 0
```

## INFO COW copy failed, check file system support

INFO Background Snapshott cfx\_storage: - COW copy failed, check file system support. Command "cp" "-R" "--reflink=always"

Copy on write

COW

additional\_maintained\_snapshot\_count 50

Conflux IP

IP

,

## failed to calculate mempool broadcast RTT: SystemTimeError(1.2762543s)

```
details = '''panicked at 'failed to calculate mempool broadcast RTT:
SystemTimeError(1.2762543s)', core\src\pos\mempool\shared_mempool\peer_manager.rs: 400: 18'''
backtrace = '''
    0:      0x7ff737fa5645 - backtrace::backtrace::trace::hab5abe5046f447b5
    1:      0x7ff737fa4aac - backtrace::capture::Backtrace::new::hd9f1f4afb992e4d5
    2:      0x7ff73781b172 - crash_handler::setup_panic_handler::he3eed2ba07c7a235
    3:      0x7ff7380d6cf6 - std::panicking::rust_panic_with_hook
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\std\src\panicking.rs: 610
    4:      0x7ff7380d6afb - std::panicking::begin_panic_handler::closure$0
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\std\src\panicking.rs: 502
    5:      0x7ff7380d4377 -
std::sys_common::backtrace::__rust_end_short_backtrace<std::panicking::begin_panic_handler::closure$0, never$>
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\std\src\sys_common\backtrace.rs: 139
    6:      0x7ff7380d67f9 - std::panicking::begin_panic_handler
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\std\src\panicking.rs: 498
    7:      0x7ff7384c8e10 - core::panicking::panic_fmt
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\core\src\panicking.rs: 116
    8:      0x7ff7384c8f23 - core::result::unwrap_failed
                        at
/rustc/9d1b2106e23b1abd32fce1f17267604a5102f57a\library\core\src\result.rs: 1690
    9:      0x7ff7374fcb6f -
cfxcore::pos::mempool::shared_mempool::peer_manager::PeerManager::process_broadcast_ack::h66a5c6263f1cb4c5
   10:      0x7ff7374f5e19 -
```

```

cfxcore::pos::mempool::shared_mempool::coordinator::coordinator::{{closure}}::h6c1ff8196b71855
b
11:      0x7ff737543216 - std::panicking::try::hd909c3032f511b0c
12:      0x7ff73776aca6 -
tokio::runtime::task::harness::Harness<T, S>::complete::hf2bbf17ca3ded03d
13:      0x7ff73775b7ee -
tokio::runtime::task::harness::Harness<T, S>::poll::h0348d72954fb7fe3
14:      0x7ff7379a174f - std::thread::local::LocalKey<T>::with::h1b1b4832535dd8eb
15:      0x7ff7379a0508 -
tokio::runtime::thread_pool::worker::Context::run::h1871366c06b8b19b
16:      0x7ff73799f313 -
tokio::runtime::thread_pool::worker::Context::run::h1871366c06b8b19b
17:      0x7ff737997b08 - tokio::macros::scoped_tls::ScopedKey<T>::set::h72c7679a82ac49e7
18:      0x7ff73799ee3a - tokio::runtime::thread_pool::worker::run::he96293bdc96c9c85
19:      0x7ff7379a25d5 - tokio::runtime::task::core::CoreStage<T>::poll::hfebd390d78b509ef
20:      0x7ff7379a6036 - std::panicking::try::h2cdf9794da6da4e
21:      0x7ff7379a4150 -
tokio::runtime::task::harness::Harness<T, S>::poll::h32aca2917e8ece97
22:      0x7ff737994efc - tokio::runtime::blocking::pool::Inner::run::h50dc8a99eae64ddb
23:      0x7ff737990855 -
std::sys_common::backtrace::__rust_begin_short_backtrace::hd7f858c23b97e5cf
24:      0x7ff7379a1203 - <&T as core::fmt::Debug>::fmt::hd9ffef8910ae9eb8
25:      0x7ff7380dd69c - alloc::boxed::impl$44::call_once
                        at
/rustc/9d1b2106e23b1abd32f1f17267604a5102f57a/library/alloc/src/boxed.rs:1854
26:      0x7ff7380dd69c - alloc::boxed::impl$44::call_once
                        at
/rustc/9d1b2106e23b1abd32f1f17267604a5102f57a/library/alloc/src/boxed.rs:1854
27:      0x7ff7380dd69c - std::sys::windows::thread::impl$0::new::thread_start
                        at
/rustc/9d1b2106e23b1abd32f1f17267604a5102f57a/library/std/src/sys/windows/thread.rs:58
28:      0x7ffc35637034 - BaseThreadInitThunk
29:      0x7ffc36822651 - RtlUserThreadStart

```

API

# PoS

## PoS

pos\_config pos\_key .

# 101 FAQs

Conflux

# FAQs

## Conflux TPS

CFX	TPS	3000	ERC20 token	1000	TPS
Conflux	2	block	gasLimit	3000w	



# TX FAQs

200k

(gas) ?

(gas) 1500w

nonce gasPrice

ConfluxScan not found

gasPrice GC

## Conflux

Conflux 50-100 Epoch Epoch 1s

gas \* gasPrice, gasPrice Drip gas gas

1024 1CFX storageLimit

# Sponsor FAQs

upperbound

fasFee gas \* gasPrice, gas 2w-100w 1500w ,

upperBound 0.005-0.5 CFX.

CFX



NotEnoughCash

- 1.
- 2. upperbound
- 3.

Pending .

Sponsor

VmError(InternalContract(Zero sponsor balance is not allowed))

Sponsor tx.value

`status`      `Rec``outcomeStatus` )

- 0:
- 1:
- null:      (                      `status`      `null`      )

`receipt`   `txExecErrorMsg`

`VmError( OutOfGas)`

`gas`                      `gas`

`VmError( ExceedStorageLimit)`

`storageLimit`

`NotEnoughCash`

`Vm reverted, xxxx`

`require`              `require`              `message`

`VmError( BadInstruction`

`data`

`Vm reverted,`

# changlog

Error message changed since v1.1.4

## Trace returnData

receipt txExecErrorMsg transaction trace call/create result outcome fail trace  
returnData hex

# Vm reverted

transaction is reverted. Innermost error is at  
CFXTEST: TYPE. CONTRACT: ACEJ04GJ99EM49UG52E662HU5PFUAEGBDJ3YJJEMYN: Vm reverted. ., data =  
"CFXTEST: TYPE. CONTRACT: ACEJ04GJ99EM49UG52E662HU5PFUAEGBDJ3YJJEMYN: Vm reverted.

1. solidity

2. solidity
- require
- calldata ABI

require(msg.sender == owner);
- payable

# Common RPC errors

## cfx\_getEpochNumber

-32016 Error processing request: block\_number is missing for best\_hash

## RlpExpectedToBeList

Rlp                    eSpace                    1559                    eSpace                    155

```
{"code": -32602, "message": "Invalid parameters: raw", "data": "\"RlpExpectedToBeList\""}

```