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Sui JSON-RPC Reference

Version: 1.41.2

Coin Query API

suix_getAllBalances

Return the total coin balance for all coin type, owned by the address owner.

Parameters

Name<Type>	Required	Description
owner< SuiAddress >	Yes	The owner's Sui address

Result

```
Vec<Balance><[ Balance ]>
```

Example

Gets all balances for the address in the request.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_getAllBalances",
  "params": [
    "0x94f1a597b4e8f709a396f7f6b1482bdcd65a673d111e492"
  ]
}
```

Response

Sui JSON-RPC Reference

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```
        "coinType": "0x2::sui::SUI",
        "coinObjectCount": 15,
        "totalBalance": "3000000000",
        "lockedBalance": {}
    }
],
"id": 1
}
```

suix_getAllCoins

Return all Coin objects owned by an address.

Parameters

Name<Type>	Required	Description
owner< SuiAddress >	Yes	The owner's Sui address
cursor< ObjectID >	No	Optional paging cursor
limit< uint >	No	Maximum number of items per page

Result

CoinPage< Page_for_Coin_and_ObjectID >

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Required	Description
data<[Coin]>	Yes	
hasNextPage< Boolean >	Yes	

nextCursor<
ObjectID | null > No

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`limit` amount of results per page.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_getAllCoins",  
  "params": [  
    "0x41f5975e3c6bd5c95f041a8493ad7e9934be26e69152d2c  
    "0x2564cd31a71cf9833609b111436d8f0f47b7f8b9927ec3f  
    3  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "data": [  
      {  
        "coinType": "0x2::sui::SUI",  
        "coinObjectId": "0x91825debff541cf4e08b5c5f729",  
        "version": "103626",  
        "digest": "7dp5WtTmtGp83EXYYFMzjBJRFeSgR67AzqM",  
        "balance": "2000000000",  
        "previousTransaction": "9wFFUVhjbbh4twkyUse1Qx",  
      },  
      {  
        "coinType": "0x2::sui::SUI",  
        "coinObjectId": "0x48a53f22e2e901ea2a5bf44fdd5",  
        "version": "103626",  
        "digest": "9xLdMXezY8d1vRA2TtN6pYiavvv2EVKHwNr",  
      }  
    ]  
  }  
}
```

suix_getBalance

Return the total coin balance for one coin type, owned by the address owner.

Parameters

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default to 0x2::sui::SUI if not specified.

Result

Balance< Balance >

Parameter	Require	Description
d		

coinObjectCount<
uint >

Yes

coinType< string >

Yes

lockedBalance<
BigInt_for_uint128
>

Yes

totalBalance<
BigInt_for_uint128
>

Yes

Example

Gets the balance of the specified type of coin for the address in the request.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_getBalance",  
  "params": [  
    "0x51ceab2edc89f74730e683eb65578cb3bc9237ba6fca0  
    "0x168da5bf1f48dafc111b0a488fa454aca95e0b5e::usdc:  
  ]  
}
```

Sui JSON-RPC Reference

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```
    "lockedBalance": 1,
},
"id": 1
}
```

suix_getCoinMetadata

Return metadata (e.g., symbol, decimals) for a coin. Note that if the coin's metadata was wrapped in the transaction that published its marker type, or the latest version of the metadata object is wrapped or deleted, it will not be found.

Parameters

Name<Type>	Required	Description
coin_type< string >	Yes	Type name for the coin (e.g., 0x168da5bf1f48dafc111b0a488fa454aca95e0b5e::usdc::USDC)

Result

SuiCoinMetadata< SuiCoinMetadata >

Parameter	Required	Description
decimals< uint8 >	Yes	Number of decimal places the coin uses.
description< string >	Yes	Description of the token
iconUrl< [string,null] >	No	URL for the token logo
id< ObjectID null >	No	Object id for the CoinMetadata object
name< string >	Yes	Name for the token

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```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_getCoinMetadata",
  "params": [
    "0x168da5bf1f48dafc111b0a488fa454aca95e0b5e::usdc"
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "decimals": 9,
    "name": "Usdc",
    "symbol": "USDC",
    "description": "Stable coin.",
    "iconUrl": null,
    "id": "0x6d907beaa3a49db57bdfdb3557e6d405cbf01c293
  },
  "id": 1
}
```

suix_getCoins

Return all Coin<coin_type> objects owned by an address.

Parameters

Name<Type>	Required	Description
owner< SuiAddress >	Yes	The owner's Sui address
coin_type< string >	No	Optional type name for the coin (e.g., 0x168da5bf1f48dafc111b0a488fa454aca95e0b5e::usdc::USDC),

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Result

CoinPage< Page_for_Coin_and_ObjectID >

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Require	Description
<code>d</code>		
<code>data<[Coin]></code>	Yes	
<code>hasNextPage< Boolean ></code>	Yes	
<code>nextCursor< ObjectID null ></code>	No	

Example

Gets all SUI coins owned by the address provided. Return a paginated list of `limit` results per page. Similar to `suix_getAllCoins`, but provides a way to filter by coin type.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_getCoins",  
  "params": [  
    "0xd62ca040aba24f862a763851c54908cd2a0ee7d709c11b9  
    "0x2::sui::SUI",  
    "0xe5c651321915b06c81838c2e370109b554a448a78d3a562  
    3  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",
```

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```
"digest": "Lw5vZJ1ux1n413rekFnnuQ1uezbgseny",  
  "balance": "200000000",  
  "previousTransaction": "HSein75AFXgdsnbABWLQ5m",  
},  
{  
  "coinType": "0x2::sui::SUI",  
  "coinObjectId": "0x47dfa99496428c65b2054ad7db1",  
  "version": "103626",  
  "digest": "AfaFe7ZfiJ5dWV6VAv2LhtvBFhcABkvvdvwE",
```

suix_getTotalSupply

Return total supply for a coin

Parameters

Name<Type>	Required	Description
coin_type< string >	Yes	Type name for the coin (e.g., 0x168da5bf1f48dafc111b0a488fa454aca95e0b5e::usdc::USDC)

Result

Supply< Supply >

Parameter	Required	Description
value< BigInt_for_uint64 >	Yes	

Example

Gets total supply for the type of coin provided.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,
```

```
"method": "suix_getTotalSupply",
"params": [
    "0x0a52124e2d53af3bef79596000fa51761ad155441a1h73h
```

Sui JSON-RPC Reference

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```
{
  "jsonrpc": "2.0",
  "result": {
    "value": "12023692"
  },
  "id": 1
}
```

Extended API

suix_getDynamicFieldObject

Return the dynamic field object information for a specified object

Parameters

Name<Type>	Required	Description
parent_object_id< ObjectID >	Yes	The ID of the queried parent object
name< DynamicFieldName >	Yes	The Name of the dynamic field

Result

SuiObjectResponse< SuiObjectResponse >

Parameter	Require	Description
data< ObjectData null >	No	
error< ObjectResponseError >	No	

Sui JSON-RPC Reference

Version: 1.41.2

Response

suix_getDynamicFields

Return the list of dynamic field objects owned by an object.

Parameters

Name<Type>	Required	Description
------------	----------	-------------

parent_object_id< Yes The ID of the parent object
ObjectID >

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specifies.

limit< uint > No Maximum item returned per page, default to [QUERY_MAX_RESULT_LIMIT] if not specified.

Result

DynamicFieldPage< Page_for_DynamicFieldInfo_and_ObjectID >

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Require	Description
-----------	---------	-------------

d

`data<[`
DynamicFieldInfo Yes
 `]>`

`hasNextPage<`
Boolean Yes

`nextCursor<`
ObjectID | null No

Example

Gets dynamic fields for the object the request provides in a paginated list of `limit` dynamic field results per page. The default limit is 50.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_getDynamicFields",
```

```
"params": [  
    "0xfcfd10bca4d517e9452ad5486d69ee482b758c2399039dbb  
    "0x3ddeaf0f8c3da994d9ead562ce76e36fdef6a382da344930
```

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```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "data": [  
      {  
        "name": {  
          "type": "0x0000000000000000000000000000000000000000000000000000000000000000",  
          "value": "some_value"  
        },  
        "bcsEncoding": "base64",  
        "bcsName": "FDB40To6dGVzdDo6VGVzdEZpZwXk",  
        "type": "DynamicField",  
        "objectType": "test",  
        "objectId": "0x82b2fd67344691abd0efc771941b948",  
        "version": 1,  
        "digest": "P2fGrUFbsF576cFxXYXrp1PskZHo2XKvbEo"  
      }  
    ]  
  }  
}
```

suix_getOwnedObjects

Return the list of objects owned by an address. Note that if the address owns more than `QUERY_MAX_RESULT_LIMIT` objects, the pagination is not accurate, because previous page may have been updated when the next page is fetched. Please use `suix_queryObjects` if this is a concern.

Parameters

Name<Type>	Required	Description
address< SuiAddress >	Yes	The owner's Sui address
query< ObjectResponseQuer y >	No	The objects query criteria.
cursor< ObjectID >	No	An optional paging cursor. If provided, the query will start from the next item after the specified cursor. Default to start from the first item if not specified.

limit< uint >

No

Max number of items returned per page, default to

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`ObjectsPage< Page_for_SuiObjectResponse_and_ObjectID >`

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Require	Description
<code>d</code>		

`data<[SuiObjectResponse]>` Yes

`hasNextPage< Boolean >` Yes

`nextCursor< ObjectID | null >` No

Example

Returns all the objects the address provided in the request owns and that match the filter. By default, only the digest value is returned, but the request returns additional information by setting the relevant keys to true. A cursor value is also provided, so the list of results begin after that value.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_getOwnedObjects",
  "params": [
    "0x0cd4bb4d4f520fe9bbf0cf1cebe3f2549412826c3c9261b
    {
      "filter": {
        "MatchAll": [
          {
            "StructType": "0x2::coin::Coin<0x2::sui::S
          },
          {
            "StructType": "0x2::sui::ObjectID"
          }
        ]
      }
    }
  ]
}
```

```
"AddressOwner": "0x0cd4bb4d4f520fe9bbf0cf1
```

```
},
```

```
,
```

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```
        "data": [
            {
                "data": {
                    "objectId": "0xd87765d1aadec2db8cc24c312542c",
                    "version": "13488",
                    "digest": "8qCvxDHh5LtDfF95Ci9G7vvQN2P6y4v55",
                    "type": "0x2::coin::Coin<0x2::sui::SUI>",
                    "owner": {
                        "AddressOwner": "0x0cd4bb4d4f520fe9bbf0cf1"
                    },
                    "previousTransaction": "kniF9zCBVYevxq3ZmtKx",
                    "storageRebate": "100"
                }
            }
        ]
```

suix_queryEvents

Return list of events for a specified query criteria.

Parameters

Name<Type>	Required	Description
query< EventFilter >	Yes	The event query criteria. See Event filter documentation for examples.
cursor< EventID >	No	Optional paging cursor
limit< uint >	No	Maximum number of items per page, default to [QUERY_MAX_RESULT_LIMIT] if not specified.
descending_order< Boolean >	No	Query result ordering, default to false (ascending order), oldest record first.

Result

```
EventPage< Page_for_Event_and_EventID >
```

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if

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hasNextPage< Boolean > Yes

nextCursor< EventID | null > No

Example

Returns the events for a specified query criteria.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_queryEvents",
  "params": [
    {
      "MoveModule": {
        "package": "0x9c76d5157eaa77c41a7bfda8db98a8e8",
        "module": "test"
      }
    },
    {
      "txDigest": "EnySDWe22mnp35umt47kifqXvvchBqTzAoy",
      "eventSeq": "1"
    },
    100,
    false
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "data": [
      {
        "id": {
          "txDigest": "FUMhRSj76es8MYeaRYeaBnppk56cuEe",
          "eventSeq": "1"
        },
        "packageId": "0xd3d707164b2a378eee639ebc269087"
      }
    ]
  }
}
```

```
"transactionModule": "test",
"sender": "0x84bd999f9ff7a1804872957fafaf528628
"type": "0x3::test::Test<0x3::test::Test>"
```

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Return list of transactions for a specified query criteria.

Parameters

Name<Type>	Required	Description
query< TransactionBlockRes ponseQuery >	Yes	The transaction query criteria.
cursor< TransactionDigest >	No	An optional paging cursor. If provided, the query will start from the next item after the specified cursor. Default to start from the first item if not specified.
limit< uint >	No	Maximum item returned per page, default to QUERY_MAX_RESULT_LIMIT if not specified.
descending_order< Boolean >	No	Query result ordering, default to false (ascending order), oldest record first.

Result

```
TransactionBlocksPage<
Page_for_TransactionBlockResponse_and_TransactionDigest >
```

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Require	Description
data<[TransactionBlockR esponse]>	Yes	

hasNextPage< Yes
Boolean >

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Example

Returns the transaction digest for specified query criteria.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_queryTransactionBlocks",
  "params": [
    {
      "filter": {
        "InputObject": "0x93633829fcba6d6e0ccb13d3dbfe"
      },
      "options": null
    },
    "HxidAfFfyrr4kXSiWeVq1J6Tk526YUVDoSUY5PSnS4tEJ",
    100,
    false
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "data": [
      {
        "digest": "GUPcK4cmRmgsTFr52ab9f6fnzNVg3Lz6hF2"
      },
      {
        "digest": "B2iV1SVbBjgTKfbJKPQrvTT6F3kNdekFuBw"
      },
      {
        "digest": "8QrPa4x9iNG5r2zQfmeH8pJoVjjtq9AGzp8"
      },
      {
        "digest": "3nek86HEjXZ7K3EtrAcBG4wMrCS21gqr8Bq"
      }
    ]
  }
}
```

suix_resolveNameServiceAddress

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name< string > Yes The name to resolve

Result

SuiAddress< SuiAddress >

Example

Returns the resolved address for the name the request provides.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_resolveNameServiceAddress",  
  "params": [  
    "example.sui"  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": "0xd22bbb46f892c42d9ec0ae4de93e02c75973a51  
  "id": 1  
}
```

suix_resolveNameServiceNames

Return the resolved names given address, if multiple names are resolved, the first one is the primary name.

Parameters

Name <Type>

Required Description

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Address <String>

No

Result

Page<String, ObjectID>< Page_for_String_and_ObjectID >

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Require	Description
-----------	---------	-------------

d

data<[string]>	Yes
------------------	-----

hasNextPage< Boolean >	Yes
------------------------	-----

nextCursor< ObjectID null >	No
-------------------------------	----

Example

Returns the SuiNS name for the address the request provides. Currently, the API returns only the first name in cases where there are multiple. Future support will use the cursor ID and limit values in the request to control pagination of the response for addresses with multiple names.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_resolveNameServiceNames",  
  "params": [  
    "0x38b3186a7bb26a1ab2c982a0a9b482aa70f5a010ffffc60f  
    "0x5cd6fa76ed1d18f05f15e35075252ddec4fb83621d55952  
    3  
  ]  
}
```

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```
],
  "nextCursor": "0x5cd6fa76ed1d18f05f15e35075252ddec",
  "hasNextPage": false
},
  "id": 1
}
```

suix_subscribeEvent

Subscribe to a stream of Sui event

Parameters

Name<Type>	Required	Description
filter< EventFilter >	Yes	The filter criteria of the event stream. See Event filter documentation for examples.

Result

SuiEvent< Event >

Parameter	Required	Description
id< EventID >	Yes	Sequential event ID, ie (transaction seq number, event seq number). 1) Serves as a unique event ID for each fullnode 2) Also serves to sequence events for the purposes of pagination and querying. A higher id is an event seen later by that fullnode. This ID is the "cursor" for event querying.
packageId<	Yes	Move package where this

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<code>Bigint_for_uint64 null ></code>	NO	milliseconds since epoch (1/1/1970)
<code>transactionModule < string ></code>	Yes	Move module where this event was emitted.
<code>type< string ></code>	Yes	Move event type.

`suix_subscribeTransaction`

Subscribe to a stream of Sui transaction effects

Parameters

Name<Type>	Required	Description
<code>filter< TransactionFilter ></code>	Yes	

Result

`SuiTransactionBlockEffects< TransactionBlockEffects >`

Governance Read API

`suix_getCommitteeInfo`

Return the committee information for the asked epoch.

Parameters

Name<Type>	Required	Description
<code>epoch< Bigint_for_uint64 ></code>	No	The epoch of interest. If None, default to the latest epoch

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epoch<
BigInt_for_uint64 > Yes

```
validators<[  
    AuthorityPublicKey  
    Bytes,           Yes  
    BigInt_for_uint64  
>
```

Example

Gets committee information for epoch 5000.

Request

```
{  
    "jsonrpc": "2.0",  
    "id": 1,  
    "method": "suix_getCommitteeInfo",  
    "params": [  
        "5000"  
    ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "epoch": "5000",  
    "validators": [  
      [  
        "jc/20VUECmVvSBmxMRG1LFDGqGunLzlfuv4uw4R9HoFA5  
        "2500"  
      ],  
      [  
        "mfJe9h+AMrkUY2RgmCxexvE07x3a52ZX8sv+wEV8jQlzd  
        "2500"  
      ],  
      [  
    ]  
  }  
}
```

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None

Result

SuiSystemStateSummary< SuiSystemStateSummary >

This is the JSON-RPC type for the SUI system state object. It flattens all fields to make them top-level fields such that it has minimum dependencies to the internal data structures of the SUI system state type.

Parameter	Required	Description
activeValidators<[SuiValidatorSummary]>	Yes	The list of active validators in the current epoch.
atRiskValidators<[SuiAddress, BigInt_for_uint64]>	Yes	Map storing the number of epochs for which each validator has been below the low stake threshold.
epoch< BigInt_for_uint64 >	Yes	The current epoch ID, starting from 0.
epochDurationMs< BigInt_for_uint64 >	Yes	The duration of an epoch, in milliseconds.
epochStartTimestampMs< BigInt_for_uint64 >	Yes	Unix timestamp of the current epoch start
inactivePoolsId< ObjectID >	Yes	ID of the object that maps from a staking pool ID to the inactive validator that has that pool as its staking pool.
inactivePoolsSize< BigInt_for_uint64 >	Yes	Number of inactive staking pools.

maxValidatorCount

Maximum number of active validators at any moment. We

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BigInt_for_uint64 >

a validator.

pendingActiveValidatorsId< ObjectID >

Yes

ID of the object that contains the list of new validators that will join at the end of the epoch.

pendingActiveValidatorsSize< BigInt_for_uint64 >

Yes

Number of new validators that will join at the end of the epoch.

pendingRemovals< [BigInt_for_uint64]>

Yes

Removal requests from the validators. Each element is an index pointing to [active_validators](#).

protocolVersion< BigInt_for_uint64 >

Yes

The current protocol version, starting from 1.

referenceGasPrice < BigInt_for_uint64 >

Yes

The reference gas price for the current epoch.

safeMode< Boolean >

Yes

Whether the system is running in a downgraded safe mode due to a non-recoverable bug. This is set whenever we failed to execute `advance_epoch`, and ended up executing `advance_epoch_safe_mode`. It can be reset once we are able to successfully execute `advance_epoch`.

safeModeComputationRewards< BigInt_for_uint64 >

Yes

Amount of computation rewards accumulated (and not yet distributed) during safe mode.

safeModeNonRefundableStorageFee < BigInt_for_uint64 >

Yes

Amount of non-refundable storage fee accumulated during safe mode.

safeModeStorageRebates<BigInt_for_uint64>	Yes	Amount of storage rebates accumulated (and not yet
---	-----	--

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stakeSubsidyBalance<BigInt_for_uint64>	Yes	Balance of SUI set aside for stake subsidies that will be drawn down over time.
stakeSubsidyCurrentDistributionAmount<BigInt_for_uint64>	Yes	The amount of stake subsidy to be drawn down per epoch. This amount decays and decreases over time.
stakeSubsidyDecrEaseRate<uint16>	Yes	The rate at which the distribution amount decays at the end of each period. Expressed in basis points.
stakeSubsidyDistributionCounter<BigInt_for_uint64>	Yes	This counter may be different from the current epoch number if in some epochs we decide to skip the subsidy.
stakeSubsidyPeriodLength<BigInt_for_uint64>	Yes	Number of distributions to occur before the distribution amount decays.
stakeSubsidyStartEpoch<BigInt_for_uint64>	Yes	The starting epoch in which stake subsidies start being paid out
stakingPoolMappingsId<ObjectID>	Yes	ID of the object that maps from staking pool's ID to the sui address of a validator.
stakingPoolMappingsSize<BigInt_for_uint64>	Yes	Number of staking pool mappings.
storageFundNonRefundableBalance < BigInt_for_uint64 >	Yes	The non-refundable portion of the storage fund coming from storage reinvestment, non-refundable storage rebates and any leftover staking rewards.

storageFundTotalObjectStorageRebat
Yes

The storage rebates of all the objects on-chain stored in the

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totalStake<BigInt_for_uint64 >	Yes	Total amount of stake from all active validators at the beginning of the epoch.
validatorCandidateId< ObjectID >	Yes	ID of the object that stores proactive validators, mapping their addresses to their <code>Validator</code> structs.
validatorCandidateSize< BigInt_for_uint64 >	Yes	Number of proactive validators.
validatorLowStakeGracePeriod< BigInt_for_uint64 >	Yes	A validator can have stake below <code>validator_low_stake_threshold</code> for this many epochs before being kicked out.
validatorLowStakeThreshold< BigInt_for_uint64 >	Yes	Validators with stake amount below <code>validator_low_stake_threshold</code> are considered to have low stake and will be escorted out of the validator set after being below this threshold for more than <code>validator_low_stake_grace_period</code> number of epochs.
validatorReportRecords<[SuiAddress, array]>	Yes	A map storing the records of validator reporting each other.
validatorVeryLowStakeThreshold< BigInt_for_uint64 >	Yes	Validators with stake below <code>validator_very_low_stake_threshold</code> will be removed immediately at epoch change, no grace period.

Example

Request

Sui JSON-RPC Reference

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```
    "params": []  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": "some_system_state",  
  "id": 1  
}
```

suix_getReferenceGasPrice

Return the reference gas price for the network

Parameters

None

Result

```
BigInt<u64>< BigInt_for_uint64 >
```

Example

Gets reference gas price information for the network.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "suix_getReferenceGasPrice",  
  "params": []  
}
```

Sui JSON-RPC Reference

Version: 1.41.2

suix_getStakes

Return all [DelegatedStake].

Parameters

Name<Type>	Required	Description
owner< SuiAddress >	Yes	

Result

Vec<DelegatedStake><[DelegatedStake]>

Example

Returns the staking information for the address the request provides.

Request

```
{  
    "jsonrpc": "2.0",  
    "id": 1,  
    "method": "suix_getStakes",  
    "params": [  
        "0x3befb84f03a24386492bd3b05b1fd386172eb450e5059ce  
    ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": [  
    {
```

```
"validatorAddress": "0x9a95cf69368e31b4dbe8ee9bd  
"stakingPool": "0xb4eeb46b70f0bebcae832aeeef9f7c5  
"stakes": [
```

Sui JSON-RPC Reference

Version: 1.41.2

```
        "estimatedReward": "520000000"
```

```
},
```

```
{
```

```
"staked_sui_ids": "0x6a8e0f8fea6fda5488462e58724c034462b6064a08845  
0x754eb2eed23e6c6bb32c89fe1f21ab588374445e72e04
```

suix_getStakesByIds

Return one or more [DelegatedStake]. If a Stake was withdrawn its status will be Unstaked.

Parameters

Name<Type>	Required	Description
staked_sui_ids<[ObjectID]>	Yes	

Result

```
Vec<DelegatedStake><[ DelegatedStake ]>
```

Example

Returns the staking information for the address the request provides.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "suix_getStakesByIds",
  "params": [
    [
      "0x6a8e0f8fea6fda5488462e58724c034462b6064a08845
      "0x754eb2eed23e6c6bb32c89fe1f21ab588374445e72e04
    ]
  ]
}
```

Sui JSON-RPC Reference

Version: 1.41.2

```
{
    "stakedSuiId": "0x6a8e0f8fea6fda5488462e58724c",
    "stakeRequestEpoch": "62",
    "stakeActiveEpoch": "63",
    "principal": "200000000000",
    "status": "Active",
    "estimatedReward": "520000000"
},
{
    "stakedSuiId": "0x754eb2eed23e6c6bb32c89fe1f21",
    "stakeRequestEpoch": "244".
}
```

`suix_getValidatorsApy`

Return the validator APY

Parameters

None

Result

`ValidatorApy< ValidatorApy >`

Parameter	Required	Description
<code>apys<[ValidatorApy]></code>	Yes	
<code>epoch< BigInt_for_uint64 ></code>	Yes	

Example

Gets the APY for all validators.

Request

```
{
    "jsonrpc": "2.0",
    "id": 1,
```

```
"method": "suix_getValidatorsApy",
"params": []
```

Sui JSON-RPC Reference

Version: 1.41.2

```
1. {
  "result": {
    "apys": [
      {
        "address": "0x27838b06db0346808ffb0676099de040",
        "apy": 0.06
      },
      {
        "address": "0x4be9913b6697a5e83e02e2a0fc747057",
        "apy": 0.02
      },
      {
        "address": "0x5612581eba57eb7e594b809ccceec2b",
        "apy": 0.05
      }
    ]
  }
}
```

Move Utils

sui_getMoveFunctionArgTypes

Return the argument types of a Move function, based on normalized Type.

Parameters

Name<Type>	Required	Description
package< ObjectID >	Yes	
module< string >	Yes	
function< string >	Yes	

Result

```
Vec<MoveFunctionArgType><[ MoveFunctionArgType ]>
```

Example

Returns the argument types for the package and function the request provides.

Sui JSON-RPC Reference

Version: 1.41.2

```
method : "sui_getNormalizedArgTypes",
"params": [
    "0x9c4eb6769ca8b6a23efeb7298cf0a8d0b837b78749c2cfc
    "suifrens",
    "mint"
]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": [
    {
      "Object": "ByMutableReference"
    },
    "Pure",
    "Pure",
    {
      "Object": "ByValue"
    },
    {
      "Object": "ByImmutableReference"
    },
    {
      "Object": "ByValue"
    }
].
```

sui_getNormalizedMoveFunction

Return a structured representation of Move function

Parameters

Name<Type>	Required	Description
------------	----------	-------------

package< ObjectID > Yes

module_name< string > Yes

```
function_name<      Yes  
string >
```

Sui JSON-RPC Reference

Version: 1.41.2

Parameter	Require	Description
d		

```
isEntry< Boolean >  Yes
```

```
parameters<[  
SuiMoveNormalize  Yes  
dType ]>
```

```
return<[  
SuiMoveNormalize  Yes  
dType ]>
```

```
typeParameters<[  
SuiMoveAbilitySet  Yes  
]>
```

```
visibility<  
SuiMoveVisibility >  Yes
```

Example

Returns the structured representation of the function the request provides.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "sui_getNormalizedMoveFunction",
  "params": [
    "0x1639f3606a53f61f3a566963b3eac49fe3bb57d304a454e",
    "moduleName",
    "functionName"
  ]
}
```

Response

```
{  
  "jsonrpc": "2.0",
```

Sui JSON-RPC Reference

Version: 1.41.2

```
  "Store",  
  "Key"  
]  
}  
],  
"parameters": [  
  "U64"  
],  
"return": [
```

sui_getNormalizedMoveModule

Return a structured representation of Move module

Parameters

Name<Type>	Required	Description
package< ObjectID >	Yes	
module_name< string >	Yes	

Result

SuiMoveNormalizedModule< SuiMoveNormalizedModule >

Parameter	Required	Description
address< string >	Yes	
enums< SuiMoveNormalized dEnum >		
exposedFunctions < SuiMoveNormalized dFunction >	Yes	
fileFormatVersion< uint32 >	Yes	

```
friends<[  
SuiMoveModuleId Yes
```

Sui JSON-RPC Reference

Version: 1.41.2

Example

Gets a structured representation of the Move module for the package in the request.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getNormalizedMoveModule",  
  "params": [  
    "0x800105867da4655eca6d9eb1258bfd1ad92af329a07781e  
    "module"  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "fileFormatVersion": 6,  
    "address": "0x0047d5fa0a823e7d0ff4d55c32b09995a0ae",  
    "name": "module",  
    "friends": [],  
    "structs": {},  
    "exposedFunctions": {}  
  },  
  "id": 1  
}
```

sui_getNormalizedMoveModulesByPackage

Return structured representations of all modules in the given package

Parameters

Sui JSON-RPC Reference

Version: 1.41.2

Example

Gets structured representations of all the modules for the package in the request.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getNormalizedMoveModulesByPackage",  
  "params": [  
    "0xc95b9e341bc3aba1654bdbad707dcd773bd6309363447ef  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "fileFormatVersion": 6,  
    "address": "0x61630d3505f8905a0f4d42c6ff39a78a6ba2",  
    "name": "module",  
    "friends": [],  
    "structs": {},  
    "exposedFunctions": {}  
  },  
  "id": 1  
}
```

sui_getNormalizedMoveStruct

Return a structured representation of Move struct

Parameters

Name<Type>	Required	Description
------------	----------	-------------

```
{  
  "jsonrpc": "2.0",
```

Sui JSON-RPC Reference

Version: 1.41.2

```
},  
  "typeParameters": [],  
  "fields": []  
},  
  "id": 1  
}
```

Read API

sui_getChainIdentifier

Return the first four bytes of the chain's genesis checkpoint digest.

Parameters

None

Result

```
String< string >
```

Example

Gets the identifier for the chain receiving the POST.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getChainIdentifier",  
  "params": []  

```

Response

```
{  
  "jsonrpc": "2.0",
```

Sui JSON-RPC Reference

Version: 1.41.2

sui_getCheckpoint

Return a checkpoint

Parameters

Name<Type>	Required	Description
id< CheckpointId >	Yes	Checkpoint identifier, can use either checkpoint digest, or checkpoint sequence number as input.

Result

Checkpoint< Checkpoint >

Parameter	Required	Description
checkpointCommitments<[CheckpointCommitment]>	Yes	Commitments to checkpoint state
digest< CheckpointDigest >	Yes	Checkpoint digest
endOfEpochData< EndOfEpochData null >	No	Present only on the final checkpoint of the epoch.
epoch< BigInt_for_uint64 >	Yes	Checkpoint's epoch ID
epochRollingGasCostSummary< GasCostSummary >	Yes	The running total gas costs of all transactions included in the current epoch so far until this checkpoint.

networkTotalTransactions<

Yes

Total number of transactions committed since genesis,

Sui JSON-RPC Reference

Version: 1.41.2

sequenceNumber<BigInt_for_uint64 >	Yes	Checkpoint sequence number
timestampMs<BigInt_for_uint64 >	Yes	Timestamp of the checkpoint - number of milliseconds from the Unix epoch Checkpoint timestamps are monotonic, but not strongly monotonic - subsequent checkpoints can have same timestamp if they originate from the same underlining consensus commit
transactions<[TransactionDigest]>	Yes	Transaction digests
validatorSignature < Base64 >	Yes	Validator Signature

Example

Gets checkpoint information for the checkpoint ID in the request.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getCheckpoint",  
  "params": [  
    "1000"  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",
```

```
"result": {  
    "epoch": "5000",  
    "sequenceNumber": "1000"  
}
```

Sui JSON-RPC Reference

Version: 1.41.2

```
    "storageRebate": "0",  
    "nonRefundableStorageFee": "0"  
},  
"timestampMs": "1676911928",  
"transactions": [  
]
```

sui_getCheckpoints

Return paginated list of checkpoints

Parameters

Name<Type>	Required	Description
cursor< BigInt_for_uint64 >	No	An optional paging cursor. If provided, the query will start from the next item after the specified cursor. Default to start from the first item if not specified.
limit< uint >	No	Maximum item returned per page, default to [QUERY_MAX_RESULT_LIMIT_CHECKPOINTS] if not specified.
descending_order< Boolean >	Yes	Query result ordering, default to false (ascending order), oldest record first.

Result

```
CheckpointPage< Page_for_Checkpoint_and_BigInt_for_uint64 >
```

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Parameter	Required	Description
d		

```
data<[ Checkpoint    Yes  
 ]>
```

Sui JSON-RPC Reference

Version: 1.41.2

Example

Gets a paginated list in descending order of all checkpoints starting at the provided cursor. Each page of results has a maximum number of checkpoints set by the provided limit.

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getCheckpoints",  
  "params": [  
    "1004",  
    4,  
    false  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "data": [  
      {  
        "epoch": "5000",  
        "sequenceNumber": "1005",  
        "digest": "9zA7Q9Ka1ykvYjSQGhQCdCf32FZkcWNWx7L",  
        "networkTotalTransactions": "792385",  
        "previousDigest": "8BLFxLTjWZ2KqaGc3FjR1o9aL6k",  
        "epochRollingGasCostSummary": {  
          "computationCost": "0",  
          "storageCost": "0",  
          "storageRebate": "0",  
          "nonRefundableStorageFee": "0"  
        },  
        "timestampMs": "1676911928"  
      }  
    ]  
  }  
}
```

sui aetEvents

Sui JSON-RPC Reference

Version: 1.41.2

transaction_digest< Yes The event query criteria.
TransactionDigest >

Result

Vec<SuiEvent><[Event]>

Example

Returns the events the transaction in the request emits.

Request

```
{  
    "jsonrpc": "2.0",  
    "id": 1,  
    "method": "sui_getEvents",  
    "params": [  
        "11a72GCQ5hGNpWGh2QhQkkusTEGS6EDqifJqxr7nSYX"  
    ]  
}
```

Response

```
        "test": "example value"  
    },
```

Sui JSON-RPC Reference

Version: 1.41.2

Parameters

None

Result

```
BigInt<u64>< BigInt_for_uint64 >
```

Example

Gets the sequence number for the latest checkpoint.

Request

```
{  
    "jsonrpc": "2.0",  
    "id": 1,  
    "method": "sui_getLatestCheckpointSequenceNumber",  
    "params": []  
}
```

Response

```
{  
    "jsonrpc": "2.0",  
    "result": "507021",  
    "id": 1  
}
```

sui_getObject

Return the object information for a specified object

Parameters

Name<Type>	Required	Description
------------	----------	-------------

object_id< ObjectID> Yes The ID of the queried object

Sui JSON-RPC Reference

Version: 1.41.2

SuiObjectResponse< SuiObjectResponse >

Parameter	Require	Description
data< ObjectData null >	No	
error< ObjectResponseError null >	No	

Example

Gets Object data for the ID in the request.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "sui_getObject",
  "params": [
    "0x53e4567ccafa5f36ce84c80aa8bc9be64e0d5ae79688427
    {
      "showType": true,
      "showOwner": true,
      "showPreviousTransaction": true,
      "showDisplay": false,
      "showContent": true,
      "showBcs": false,
      "showStorageRebate": true
    }
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "data": {
```

```
"objectId": "0x53e4567ccafa5f36ce84c80aa8bc9be64  
"version": "1",  
"digest": "33K57Y13RvibvYaHUEnO10XmmhbtrEwn19qD
```

Sui JSON-RPC Reference

Version: 1.41.2

```
"content": {  
    "dataType": "moveObject",  
    "type": "0x2::coin::Coin<0x2::sui::SUI>",  
    "hasPublicTransfer": true
```

sui_getProtocolConfig

Return the protocol config table for the given version number. If the version number is not specified, If none is specified, the node uses the version of the latest epoch it has processed.

Parameters

Name<Type>	Required	Description
version<BigInt_for_uint64 >	No	An optional protocol version specifier. If omitted, the latest protocol config table for the node will be returned.

Result

ProtocolConfigResponse< ProtocolConfig >

Parameter	Required	Description
attributes< Boolean >	Yes	
featureFlags< Boolean >	Yes	
maxSupportedProtocolVersion< ProtocolVersion >	Yes	
minSupportedProtocolVersion< ProtocolVersion >	Yes	

```
protocolVersion<     Yes  
ProtocolVersion >
```

Sui JSON-RPC Reference

Version: 1.41.2

processes a

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getProtocolConfig",  
  "params": [  
    6  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "minSupportedProtocolVersion": "1",  
    "maxSupportedProtocolVersion": "72",  
    "protocolVersion": "6",  
    "featureFlags": {  
      "accept_zklogin_in_multisig": false,  
      "advance_epoch_start_time_in_safe_mode": true,  
      "advance_to_highest_supported_protocol_version":  
      "allow_receiving_object_id": false,  
      "authority_capabilities_v2": false,  
      "ban_entry_init": false,  
      "bridge": false,  
      "commit_root_state_digest": false,  
      "consensus_distributed_vote_scoring_strategy": f  
      "consensus_linearize_subdag_v2": false.  
    }  
  }  
}
```

sui_getTotalTransactionBlocks

Return the total number of transaction blocks known to the server.

Parameters

None

Sui JSON-RPC Reference

Version: 1.41.2

Request

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getTotalTransactionBlocks",  
  "params": []  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": "2451485",  
  "id": 1  
}
```

sui_getTransactionBlock

Return the transaction response object.

Parameters

Name<Type>	Required	Description
digest< TransactionDigest >	Yes	The digest of the queried transaction
options< TransactionBlockResponseOptions >	No	Options for specifying the content to be returned

Result

SuiTransactionBlockResponse< TransactionBlockResponse >

Parameter	Require d	Description
-----------	--------------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

checkpoint< BigInt_for_uint64 null >	No	and hence finalized. This is only returned in the read api, not in the transaction execution api.
confirmedLocalEx ecution< [boolean,null] >	No	
digest< TransactionDigest >	Yes	
effects< TransactionBlockE ffects null >	No	
errors<[string]>	No	
events< Event [array,null] >	No	
objectChanges< ObjectChange [array,null] >	No	
rawEffects<[string]>	No	
rawTransaction< Base64 >	No	BCS encoded [SenderSignedData] that includes input object references returns empty array if <code>show_raw_transaction</code> is false
timestampMs< BigInt_for_uint64 null >	No	
transaction< TransactionBlock null >	No	Transaction input data

Example

Sui JSON-RPC Reference

Version: 1.41.2

```
{  
  "jsonrpc": "2.0",  
  "id": 1,  
  "method": "sui_getTransactionBlock",  
  "params": [  
    "Hay2tj3GcDYcE3AMHrej5WDsHGPVAYsegcubixLUvXUF",  
    {  
      "showInput": true,  
      "showRawInput": false,  
      "showEffects": true,  
      "showEvents": true,  
      "showObjectChanges": false,  
      "showBalanceChanges": false,  
      "showRawEffects": false  
    }  
  ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "digest": "Hay2tj3GcDYcE3AMHrej5WDsHGPVAYsegcubixLUvXUF",  
    "transaction": {  
      "data": {  
        "messageVersion": "v1",  
        "transaction": {  
          "kind": "ProgrammableTransaction",  
          "inputs": [  
            {  
              "type": "pure",  
              "valueType": "address",  
              "value": "0x8196d048b7a6d04c8edc89579d86",  
            },  
            {  
              "type": "object",  
              "valueType": "object",  
              "value": "0x8196d048b7a6d04c8edc89579d86",  
            }  
          ]  
        }  
      }  
    }  
  }  
}
```

sui_multiGetObjects

Return the object data for a list of objects

Parameters

Sui JSON-RPC Reference

Version: 1.41.2

Result

```
Vec<SuiObjectResponse><[ SuiObjectResponse ]>
```

Example

Gets objects by IDs.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "sui_multiGetObjects",
  "params": [
    [
      "0x504d411325e3c7f89d412044fe99007efb0f94f1e64d2
      "0x23618df6438d21a48040e6bb568caf13246bd847c604
      "0x8b95b4eaa9fd3b22b43f6b2c8e92090bd6d16522a6fd4
      "0x3fbbd3ebef7dbcc7b02346cdf05674452cc61f316af5d
      "0x9b5cd5df0df2a168259b7115a41ccc0a372b6fd0026e0
    ],
    {
      "showType": true,
      "showOwner": true,
      "showPreviousTransaction": true,
      "showDisplay": false
    }
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": [
    {
      "data": {
        "objectId": "0x504d411325e3c7f89d412044fe99007",
        "version": "1",
        "digest": "AibMqH69gKT5t7rVTsDZFy2X5iHtoNDobKa",
        "type": "0x2::coin::Coin<0x2::sui::SUI>",
        "owner": {
          "AddressOwner": "0xe8070b5f56bb10bafa0e2261d"
        },
        "balance": 1
      }
    }
  ]
}
```

```
"previousTransaction": "2QwXW3qzMEZPAyyP9VHtXb",
"storageRebate": "100",
"content": "
```

Sui JSON-RPC Reference

Version: 1.41.2

an error if the input contains any duplicate or the input size exceeds QUERY_MAX_RESULT_LIMIT

Parameters

Name<Type>	Required	Description
digests<[TransactionDigest]>	Yes	A list of transaction digests.
options< TransactionBlockResponseOptions >	No	Config options to control which fields to fetch

Result

```
Vec<SuiTransactionBlockResponse><[
    TransactionBlockResponse ]>
```

Example

Returns the transaction data for specified digest.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "sui_multiGetTransactionBlocks",
  "params": [
    [
      "CKzxe1mN72xVrq5BadAzVu1Lk61AYzuRSEQ3zWK2zbGs",
      "2jinTmZQ8aModigpcbYcKELwRrTcqosbMmqsiEopvMy9",
      "BCyCzV64UgrX5vr2kdtzhrojLwaZ9gasnhVV8TQeY1EA"
    ],
    {
      "showInput": true,
      "showRawInput": false,
      "showEffects": true,
      "showEvents": true,
      "showObjectChanges": false,
    }
  ]
}
```

Response

Sui JSON-RPC Reference

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```
        "transaction": {
            "data": {
                "messageVersion": "v1",
                "transaction": {
                    "kind": "ProgrammableTransaction",
                    "inputs": [
                        {
                            "type": "pure",
                            "valueType": "address",
                            "value": "0x7a8e9a0d074f90fddb42cd928f"
                        },
                    ]
                }
            }
        }
```

sui_tryGetPastObject

Note there is no software-level guarantee/SLA that objects with past versions can be retrieved by this API, even if the object and version exists/existed. The result may vary across nodes depending on their pruning policies. Return the object information for a specified version

Parameters

Name<Type>	Required	Description
object_id< ObjectID >	Yes	The ID of the queried object
version< SequenceNumber2 >	Yes	The version of the queried object. If None, default to the latest known version
options< ObjectDataOptions >	No	Options for specifying the content to be returned

Result

`SuiPastObjectResponse< ObjectRead >`

Example

Gets Past Object data.

Sui JSON-RPC Reference

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```

4,
{
    "showType": true,
    "showOwner": true,
    "showPreviousTransaction": true,
    "showDisplay": false,
    "showContent": true,
    "showBcs": false,
    "showStorageRebate": true
}
1

```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "status": "VersionFound",
    "details": {
      "objectId": "0x11af4b844ff94b3fbef6e36b518da3ad4",
      "version": "4",
      "digest": "5VPAwDXy3BL72ehFc7gSJoz27ahMd6spUg5Yw",
      "type": "0x2::coin::Coin<0x2::sui::SUI>",
      "owner": {
        "AddressOwner": "0x3568c40e814d9d5396d23087a0f"
      },
      "previousTransaction": "5jQByoouHBwaico5pQB73Gdb",
      "storageRebate": "100",
      "content": {
        "dataType": "moveObject",
        "tvne": "0x2::coin::Coin<0x2::sui::SUI>."
      }
    }
  }
}
```

sui_tryMultiGetPastObjects

Note there is no software-level guarantee/SLA that objects with past versions can be retrieved by this API, even if the object and version exists/existed. The result may vary across nodes depending on their pruning policies. Return the object information for a specified version

Parameters

Name<Type>	Required	Description
------------	----------	-------------

<code>past_objects<[</code>	<code>Yes</code>	A vector of object and versions to be queried
<code>GetPastObjectReque</code>		

Sui JSON-RPC Reference

Version: 1.41.2

Request

```
Vec<SuiPastObjectResponse><[ ObjectRead ]>
```

Example

Gets Past Object data for a vector of objects.

Request

```
{
  "jsonrpc": "2.0",
  "id": 1,
  "method": "sui_tryMultiGetPastObjects",
  "params": [
    [
      {
        "objectId": "0xceaf9ee4582d3a233101e322a22cb2a",
        "version": "4"
      },
      {
        "objectId": "0x47866ff92885a3c21a7703f564721c1",
        "version": "12"
      }
    ],
    {
      "showType": true
    }
  ]
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": [
    {
      "status": "VersionFound",
      "details": {
        "objectId": "0xceaf9ee4582d3a233101e322a22cb2a",
        "version": "4",
        "digest": "CE9bNT96Sa2BxQQH2id4PRxTgW5TW7zm6VV",
        "type": "0x2::coin::Coin<0x2::sui::SUI>",
        "owner": {
          "AddressOwner": "0x54b3c61936f77fcfdcaa213c2f"
        }
      }
    }
  ]
}
```

```
  },
  "previousTransaction": "hvBGBXvKvhC7XYgVPujiL
  "storageRebate": "100"
```

Sui JSON-RPC Reference

Version: 1.41.2

unsafe_batchTransaction

Create an unsigned batched transaction.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
single_transaction_params<[RPCTransactionRequestParams]>	Yes	List of transaction request parameters
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget
txn_builder_mode< SuiTransactionBlockBuilderMode >	No	Whether this is a regular transaction or a Dev Inspect Transaction

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction

Sui JSON-RPC Reference

Version: 1.41.2

Create an unsigned transaction to merge multiple coins into one coin.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
primary_coin< ObjectID >	Yes	The coin object to merge into, this coin will remain after the transaction
coin_to_merge< ObjectID >	Yes	The coin object to be merged, this coin will be destroyed, the balance will be added to primary_coin
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type

tag, as base-64 encoded string.

Sui JSON-RPC Reference

Version: 1.41.2

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
package_object_id< ObjectID >	Yes	The Move package ID, e.g. <code>0x2</code>
module< string >	Yes	The Move module name, e.g. <code>pay</code>
function< string >	Yes	The move function name, e.g. <code>split</code>
type_arguments<[TypeTag]>	Yes	The type arguments of the Move function
arguments<[SuiJsonValue]>	Yes	The arguments to be passed into the Move function, in SuiJsonValue format
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget
execution_mode< SuiTransactionBlockBuilderMode >	No	Whether this is a Normal transaction or a Dev Inspect Transaction. Default to be <code>SuiTransactionBlockBuilderMode::Commit</code> when it's None.

Result

`TransactionBlockBytes< TransactionBlockBytes >`

Parameter	Required	Description
txBytes< Base64 >	Yes	data bytes without its type tag, as base-64 encoded string.

Sui JSON-RPC Reference

Version: 1.41.2

unsafe_pay

Send `Coin< T >` to a list of addresses, where `T` can be any coin type, following a list of amounts. The object specified in the `gas` field will be used to pay the gas fee for the transaction. The gas object can not appear in `input_coins`. If the gas object is not specified, the RPC server will auto-select one.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
input_coins<[ObjectID]>	Yes	The Sui coins to be used in this transaction
recipients<[SuiAddress]>	Yes	The recipients' addresses, the length of this vector must be the same as amounts.
amounts<[BigInt_for_uint64]>	Yes	The amounts to be transferred to recipients, following the same order
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

Sui JSON-RPC Reference

Version: 1.41.2

InputObjectKind]>

transaction

txBytes< Base64 > Yes

BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_payAllSui

Send all SUI coins to one recipient. This is for SUI coin only and does not require a separate gas coin object. Specifically, what pay_all_sui does are: 1. accumulate all SUI from input coins and deposit all SUI to the first input coin 2. transfer the updated first coin to the recipient and also use this first coin as gas coin object. 3. the balance of the first input coin after tx is sum(input_coins) - actual_gas_cost. 4. all other input coins other than the first are deleted.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
input_coins<[ObjectID]>	Yes	The Sui coins to be used in this transaction, including the coin for gas payment.
recipient< SuiAddress >	Yes	The recipient address,
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
txBytes< Base64 >	Yes	data bytes without its type tag, as base-64 encoded string.

Sui JSON-RPC Reference

Version: 1.41.2

unsafe_paySui

Send SUI coins to a list of addresses, following a list of amounts. This is for SUI coin only and does not require a separate gas coin object. Specifically, what pay_sui does are: 1. debit each input_coin to create new coin following the order of amounts and assign it to the corresponding recipient. 2. accumulate all residual SUI from input coins left and deposit all SUI to the first input coin, then use the first input coin as the gas coin object. 3. the balance of the first input coin after tx is sum(input_coins) - sum(amounts) - actual_gas_cost 4. all other input coins other than the first one are deleted.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
input_coins<[ObjectID]>	Yes	The Sui coins to be used in this transaction, including the coin for gas payment.
recipients<[SuiAddress]>	Yes	The recipients' addresses, the length of this vector must be the same as amounts.
amounts<[BigInt_for_uint64]>	Yes	The amounts to be transferred to recipients, following the same order
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

Sui JSON-RPC Reference

Version: 1.41.2

`InputObjectKind]>` transaction

`txBytes< Base64 >` Yes

BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_publish

Create an unsigned transaction to publish a Move package.

Parameters

Name<Type>	Required	Description
<code>sender< SuiAddress ></code>	Yes	The transaction signer's Sui address
<code>compiled_modules<[Base64]></code>	Yes	The compiled bytes of a Move package
<code>dependencies<[ObjectID]></code>	Yes	A list of transitive dependency addresses that this set of modules depends on.
<code>gas< ObjectID ></code>	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
<code>gas_budget< BigInt_for_uint64 ></code>	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description

gas<[ObjectRef]> Yes

the gas objects to be used

Sui JSON-RPC Reference

Version: 1.41.2

unsafe_requestAddStake

Add stake to a validator's staking pool using multiple coins and amount.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
coins<[ObjectID]>	Yes	Coin<SUI> object to stake
amount< BigInt_for_uint64 >	No	Stake amount
validator< SuiAddress >	Yes	The validator's Sui address
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction

Sui JSON-RPC Reference

Version: 1.41.2

Withdraw stake from a validator's staking pool.

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
staked_sui< ObjectID >	Yes	StakedSui object ID
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_splitCoin

Create an unsigned transaction to split a coin object into multiple coins.

Parameters

Name<Type>

Required

Description

Sui JSON-RPC Reference

Version: 1.41.2

split_amounts<[BigInt_for_uint64]>	Yes	The amounts to split out from the coin
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one from the signer's possession if not provided
gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_splitCoinEqual

Create an unsigned transaction to split a coin object into multiple equal-size coins.

Parameters

Name<Type>

Required

Description

signer< SuiAddress >	Yes
----------------------	-----

The transaction signer's Sui address

coin_object_id< ObjectID >	Yes	The coin object to be split
----------------------------	-----	-----------------------------

Sui JSON-RPC Reference

Version: 1.41.2

gas_budget< BigInt_for_uint64 >	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

Result

TransactionBlockBytes< TransactionBlockBytes >

Parameter	Required	Description
gas<[ObjectRef]>	Yes	the gas objects to be used
inputObjects<[InputObjectKind]>	Yes	objects to be used in this transaction
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_transferObject

Create an unsigned transaction to transfer an object from one address to another. The object's type must allow public transfers

Parameters

Name<Type>	Required	Description
signer< SuiAddress >	Yes	The transaction signer's Sui address
object_id< ObjectID >	Yes	The ID of the object to be transferred
gas< ObjectID >	No	Gas object to be used in this transaction, node will pick one

Sui JSON-RPC Reference

Version: 1.41.2

Result

`TransactionBlockBytes< TransactionBlockBytes >`

Parameter	Required	Description
<code>gas<[ObjectRef]></code>	Yes	the gas objects to be used
<code>inputObjects<[InputObjectKind]></code>	Yes	objects to be used in this transaction
<code>txBytes< Base64 ></code>	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

unsafe_transferSui

Create an unsigned transaction to send SUI coin object to a Sui address. The SUI object is also used as the gas object.

Parameters

Name<Type>	Required	Description
<code>signer< SuiAddress ></code>	Yes	The transaction signer's Sui address
<code>sui_object_id< ObjectId ></code>	Yes	The Sui coin object to be used in this transaction
<code>gas_budget< BigInt_for_uint64 ></code>	Yes	The gas budget, the transaction will fail if the gas cost exceed the budget
<code>recipient< SuiAddress ></code>	Yes	The recipient's Sui address

amount< BigInt_for_uint64 >	No	The amount to be split out and transferred
-----------------------------	----	--

Sui JSON-RPC Reference

Version: 1.41.2

Parameter	Required	Description
gas< [ObjectRef] >	Yes	the gas objects to be used
inputObjects< [InputObjectKind] >	Yes	objects to be used in this transaction
txBytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

Write API

sui_devInspectTransactionBlock

Runs the transaction in dev-inspect mode. Which allows for nearly any transaction (or Move call) with any arguments. Detailed results are provided, including both the transaction effects and any return values.

Parameters

Name<Type>	Required	Description
sender_address< SuiAddress >	Yes	
tx_bytes< Base64 >	Yes	BCS encoded TransactionKind(as opposed to TransactionData, which include gasBudget and gasPrice)
gas_price< BigInt_for_uint64 >	No	Gas is not charged, but gas usage is still calculated. Default to use reference gas price
epoch< BigInt_for_uint64 >	No	The epoch to perform the call. Will be set from the system state

additional args<

No

Additional arguments includind

Sui JSON-RPC Reference

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DevInspectResults< DevInspectResults >

The response from processing a dev inspect transaction

Parameter	Require d	Description
effects< TransactionBlockE ffects >	Yes	<p>Summary of effects that likely would be generated if the transaction is actually run.</p> <p>Note however, that not all dev-inspect transactions are actually usable as transactions so it might not be possible actually generate these effects from a normal transaction.</p>
error< [string,null] >	No	Execution error from executing the transactions
events<[Event]>	Yes	Events that likely would be generated if the transaction is actually run.
rawEffects<[string]>	No	The raw effects of the transaction that was dev inspected.
rawTxnData<[string]>	No	The raw transaction data that was dev inspected.
results< SuiExecutionResult [array,null] >	No	Execution results (including return values) from executing the transactions

Example

Runs the transaction in dev-inspect mode. Which allows for nearly any transaction (or Move call) with any arguments. Detailed results are provided, including both the transaction effects and any return values.

Sui JSON-RPC Reference

Version: 1.41.2

```
    "gasUsed": {
      "computationCost": "1000",
      "storageCost": "8888",
      "storageRebate": "null"
    }
}
```

Response

```
{
  "jsonrpc": "2.0",
  "result": {
    "effects": {
      "messageVersion": "v1",
      "status": {
        "status": "success"
      },
      "executedEpoch": "0",
      "gasUsed": {
        "computationCost": "100",
        "storageCost": "100",
        "storageRebate": "10",
        "nonRefundableStorageFee": "0"
      },
      "transactionDigest": "76gyHCK7FRrGACRqXM7Ybj5uJL",
      "mutated": [
        "AAAACABIXLMODJCOVII8DZ1TEat4QZZnjePygvp15TAQDIII7I"
      ]
    }
  }
}
```

sui_dryRunTransactionBlock

Return transaction execution effects including the gas cost summary, while the effects are not committed to the chain.

Parameters

Name<Type>	Required	Description
------------	----------	-------------

tx_bytes< Base64 >	Yes
--------------------	-----

Result

DryRunTransactionBlockResponse<
DrvRunTransactionBlockResponse >

Sui JSON-RPC Reference

Version: 1.41.2

effects<	
TransactionBlockE	Yes
ffects >	
events<[Event]>	Yes
input<	
TransactionBlockD	Yes
ata >	
objectChanges<[
ObjectChange]>	Yes

Example

Dry runs a transaction block to get back estimated gas fees and other potential effects.

Request

```
{  
    "jsonrpc": "2.0",  
    "id": 1,  
    "method": "sui_dryRunTransactionBlock",  
    "params": [  
        "AAACACB7qR3cfnF89wjJNwYPBASHNuwz+xdG2Zml5YzVxnftg  
    ]  
}
```

Response

```
{  
  "jsonrpc": "2.0",  
  "result": {  
    "digest": "DNTx7EmGqSywGbnSC1CKoqmBFEXGvApXpRVt6bU  
    "transaction": {  
      "data": {  
        "messageVersion": "v1",  
        "transaction": {  
          "kind": "ProgrammableTransaction",
```

```
"inputs": [  
  {  
    "type": "none"  
  }  
]
```

Sui JSON-RPC Reference

Version: 1.41.2

sui_executeTransactionBlock

Execute the transaction and wait for results if desired. Request types: 1. WaitForEffectsCert: waits for TransactionEffectsCert and then return to client. This mode is a proxy for transaction finality. 2.

WaitForLocalExecution: waits for TransactionEffectsCert and make sure the node executed the transaction locally before returning the client.

The local execution makes sure this node is aware of this transaction when client fires subsequent queries. However if the node fails to execute the transaction locally in a timely manner, a bool type in the response is set to false to indicated the case. request_type is default to be `WaitForEffectsCert` unless options.show_events or options.show_effects is true

Parameters

Name<Type>	Required	Description
tx_bytes< Base64 >	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.
signatures<[Base64]>	Yes	A list of signatures (<code>flag signature pubkey</code> bytes, as base-64 encoded string). Signature is committed to the intent message of the transaction data, as base-64 encoded string.
options< TransactionBlockResponseOptions >	No	Options for specifying the content to be returned
request_type< ExecuteTransactionRequestType >	No	The request type, derived from <code>SuiTransactionBlockResponseOptions</code> if None

Result

```
SuiTransactionBlockResponse< TransactionBlockResponse >
```

Parameter	Require d	Description
-----------	--------------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

checkpoint< BigInt_for_uint64 null >	No	and hence finalized. This is only returned in the read api, not in the transaction execution api.
confirmedLocalEx ecution< [boolean,null] >	No	
digest< TransactionDigest >	Yes	
effects< TransactionBlockE ffects null >	No	
errors<[string]>	No	
events< Event [array,null] >	No	
objectChanges< ObjectChange [array,null] >	No	
rawEffects<[string]>	No	
rawTransaction< Base64 >	No	BCS encoded [SenderSignedData] that includes input object references returns empty array if <code>show_raw_transaction</code> is false
timestampMs< BigInt_for_uint64 null >	No	
transaction< TransactionBlock null >	No	Transaction input data

Example

Sui JSON-RPC Reference

Version: 1.41.2

```
"jsonrpc": "2.0",
"id": 1,
"method": "sui_executeTransactionBlock",
"params": [
    "AAACACBqEB6a0vXIBwES+Ahkizbvv43uihqC3kbZUE6WoRCKF
    [
        "AKD4XdltkCyBi1Heb4EJJ3lzuV3F4u7+CYeaE+Fd7qXpaT1
    ],
    {
        "showInput": true,
        "showRawInput": true,
        "showEffects": true,
        "showEvents": true,
        "showObjectChanges": true,
        "showBalanceChanges": true,
        "showRawEffects": false
    }
]
```

Response

```
{
    "jsonrpc": "2.0",
    "result": {
        "digest": "Gx7V6EteEAqSsptc1kbi1nUEMP7mhr4qV2cYS7J
        "transaction": {
            "data": {
                "messageVersion": "v1",
                "transaction": {
                    "kind": "ProgrammableTransaction",
                    "inputs": [
                        {
                            "type": "pure",
                            "valueType": "address",
                            "value": "0x6a101e9a3af5c8070112f808648b
                        },
                        {
                            "type": "object"
                        }
                    ]
                }
            }
        }
    }
}
```

Component schemas

Authenticator

One of

Sui JSON-RPC Reference

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SingleOwner	SuiAddress	Yes	
-------------	----------------------------	-----	--

▶ Toggle raw JSON

AuthorityPublicKeyBytes

Defines the compressed version of the public key that we pass around in Sui

[Base64](#)

▶ Toggle raw JSON

Balance

Property	Type	Req?	Description
coinObjectCount	integer	Yes	
coinType	string	Yes	
lockedBalance	object	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

totalBalance	BigInt_for_uint128	Yes	
--------------	------------------------------------	-----	--

► [Toggle raw JSON](#)

BalanceChange

[Object](#)

Property	Type	Req?	Description
amount	string	Yes	The amount indicate the balance value changes, negative amount means spending coin value and positive means receiving coin value.
coinType	string	Yes	
owner	Owner	Yes	Owner of the balance change

► [Toggle raw JSON](#)

Base58

[String](#)

► Toggle raw JSON

Sui JSON-RPC Reference

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String

► Toggle raw JSON

BigInt_for_uint128

String

► Toggle raw JSON

BigInt_for_uint16

String

► Toggle raw JSON

BigInt_for_uint32

String

► Toggle raw JSON

BigInt_for_uint64

String

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

String

► Toggle raw JSON

Bn254FrElement

A struct that stores a Bn254 Fr field element as 32 bytes.

String

► Toggle raw JSON

Checkpoint

Object

Property	Type	Req?	Description
checkpointCommitments	array	Yes	Commitments to checkpoint state
digest	CheckpointDigest	Yes	Checkpoint digest

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

epoch	BigInt_for_uint64	Yes	Checkpoint's epoch ID
epoch Rolling GasCostSum mary	GasCostSummary	Yes	The running total gas costs of all transactions included in the current epoch so far until this checkpoint.
networkTotalTransactions	BigInt_for_uint64	Yes	Total number of transactions committed since genesis, including those in this checkpoint.
previousDigest	CheckpointDigest null	No	Digest of the previous checkpoint
sequenceNumber	BigInt_for_uint64	Yes	Checkpoint sequence number
timestampMs	BigInt_for_uint64	Yes	Timestamp of the checkpoint - number of milliseconds from the Unix epoch Checkpoint timestamps are monotonic, but not strongly monotonic - subsequent checkpoints can have same timestamp if they originate from the same underlining consensus commit
transactions	array	Yes	Transaction digests

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

▶ Toggle raw JSON

CheckpointCommitment

One of

Object

Property	Type	Req?	Description
ECM HLive ObjectSetDigest	ECM HLive ObjectSetDigest	Yes	

▶ Toggle raw JSON

CheckpointDigest

Representation of a Checkpoint's digest

[Digest](#)

▶ Toggle raw JSON

CheckpointId

Any of

Sui JSON-RPC Reference

Version: 1.41.2

Claim

A claim consists of value and index_mod_4.

Object

Property	Type	Req?	Description
index Mod4	integer	Yes	
value	string	Yes	

► Toggle raw JSON

Coin

Object

Property	Type	Req?	Description
balance	BigInt_for_uin t64	Yes	
coinObjectID	ObjectID	Yes	
coinType	string	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

saction	gest		
version	SequenceNumber	Yes	

▶ Toggle raw JSON

CommitteeInfo

RPC representation of the [Committee] type.

Object

Property	Type	Req?	Description
epoch	BigInt_for_uint64	Yes	
validators	array	Yes	

▶ Toggle raw JSON

CompressedSignature

Unlike [enum Signature], [enum CompressedSignature] does not contain public key.

One of

Object

Sui JSON-RPC Reference

Version: 1.41.2

Object

Property	Type	Req?	Description
Secp256k1	Base64	Yes	

Object

Property	Type	Req?	Description
Secp256r1	Base64	Yes	

Object

Property	Type	Req?	Description
ZkLogin	ZkLoginAuthenticatorAsBytes	Yes	

▶ Toggle raw JSON

ConsensusCommitDigest

Digest

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Uses an enum to allow for future expansion of the ConsensusDeterminedVersionAssignments.

One of

Object

Property	Type	Req?	Description
CanceledTransactions	array	Yes	

Object

Property	Type	Req?	Description
CanceledTransactionsV2	array	Yes	

► Toggle raw JSON

Data

One of

Sui JSON-RPC Reference

Version: 1.41.2

	dataT ype	["mov eObje ct"]	Yes	
	fields	Move Struc t	Yes	
	hasP ublic Trans fer	boole an	Yes	
	type	string	Yes	

Prop erty	Type	Req?	Description
dataT ype	string enum ["pack age"]	Yes	
disas semb led	objec t	Yes	
Additi onal prope rties	true		

► Toggle raw JSON

DelegatedStake

Sui JSON-RPC Reference

Version: 1.41.2

stakes	array	Yes	
stakingPool	ObjectID	Yes	Staking pool object id.
validatorAddress	SuiAddress	Yes	Validator's Address.

► [Toggle raw JSON](#)

DevInspectArgs

Additional arguments supplied to dev inspect beyond what is allowed in today's API.

Object

Property	Type	Req?	Description
gasBudget	BigInt_for_uint64 null	No	The gas budget for the transaction.
gasObjects	array null	No	The gas objects used to pay for the transaction.
gasSponsor	SuiAddress null	No	The sponsor of the gas for the transaction, might be different from the sender.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

skipChecks	boolean null	No	Whether to skip transaction checks for the transaction.
------------	----------------	----	---

▶ Toggle raw JSON

DevInspectResults

The response from processing a dev inspect transaction

Object

Property	Type	Req?	Description
effects	TransactionBlockEffects	Yes	Summary of effects that likely would be generated if the transaction is actually run. Note however, that not all dev-inspect transactions are actually usable as transactions so it might not be possible actually generate these effects from a normal transaction.
error	string null	No	Execution error from executing the transactions
events	array	Yes	Events that likely would be generated if the transaction is actually run.
rawEffects	array	No	The raw effects of the transaction that was dev inspected.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

	null		executing the transactions
--	------	--	----------------------------

► Toggle raw JSON

Digest

A representation of a 32 byte digest

[Base58](#)

► Toggle raw JSON

DisplayFieldsResponse

[Object](#)

Property	Type	Req?	Description
data	object null	No	
error	Object Response or null	No	

► Toggle raw JSON

DryRunTransactionBlockResponses

Sui JSON-RPC Reference

Version: 1.41.2

ty	type	req:	Description
balanceChanges	array	Yes	
effects	TransactionBlockEffects	Yes	
events	array	Yes	
input	TransactionBlockData	Yes	
objectChanges	array	Yes	

► Toggle raw JSON

DynamicFieldInfo

Object

Property	Type	Req?	Description
digest	ObjectDigest	Yes	
name	DynamicField	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

objectType	string	Yes	
type	Dynam icField Type	Yes	
version	Seque nceNu mber2	Yes	

One of

Object

Property	Type	Req?	Description
bcsEncoding	string enum ["base64"]	Yes	
bcsName	Base64	Yes	

Object

Property	Type	Req?	Description
bcsEncoding	string enum ["base58"]	Yes	

Property

Type

Req?

Description

Sui JSON-RPC Reference

Version: 1.41.2

DynamicFieldName

Object

Property	Type	Req?	Description
type	string	Yes	
value	true	Yes	

▶ Toggle raw JSON

DynamicFieldType

String enum ["DynamicField" | "DynamicObject"]

▶ Toggle raw JSON

ECMHLiveObjectSetDigest

The Sha256 digest of an EllipticCurveMultisetHash committing to the live object set.

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Ed25519SuiSignature

Base64

► Toggle raw JSON

EndOfEpochData

Object

Property	Type	Req?	Description
epochCommitments	array	Yes	Commitments to epoch specific state (e.g. live object set)
nextEpochCommittee	array	Yes	next_epoch_committee is `Some` if and only if the current checkpoint is the last checkpoint of an epoch. Therefore next_epoch_committee can be used to pick the last checkpoint of an epoch, which is often useful to get epoch level summary stats like total gas cost of an epoch, or the total number of transactions from genesis to the end of an epoch. The committee is stored as a vector of validator pub key and stake pairs. The vector should be

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

tocollVersion	on	that starts immediately after this checkpoint.
---------------	----	--

▶ Toggle raw JSON

Event

Object

Property	Type	Req?	Description
id	EventID	Yes	Sequential event ID, ie (transaction seq number, event seq number). 1) Serves as a unique event ID for each fullnode 2) Also serves to sequence events for the purposes of pagination and querying. A higher id is an event seen later by that fullnode. This ID is the "cursor" for event querying.
package	ObjectID	Yes	Move package where this event was emitted.
parsedJson		Yes	Parsed json value of the event
sender	SuiAddress	Yes	Sender's Sui address.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

transactionModule	string	Yes	Move module where this event was emitted.
type	string	Yes	Move event type.

One of

Object

Property	Type	Req?	Description
bcs	Base 64	Yes	
bcsEncoding	string enum ["base64"]	Yes	

Object

Property	Type	Req?	Description
bcs	Base 58	Yes	
bcsEncoding	string enum ["base58"]	Yes	

Sui JSON-RPC Reference

Version: 1.41.2

Object

Return all events.

Property	Type	Req?	Description
All	array	Yes	

Object

Return events that match any of the given filters. Only supported on event subscriptions.

Property	Type	Req?	Description
Any	array	Yes	

Object

Query by sender address.

Property	Type	Req?	Description
Sender	SuiAddress	Yes	

Object

Return events emitted by the given transaction.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object

Return events emitted in a specified Move module. If the event is defined in Module A but emitted in a tx with Module B, query `MoveModule` by module B returns the event. Query `MoveEventModule` by module A returns the event too.

Property	Type	Req?	Description
MoveModule	object	Yes	
Property	Type	Req?	Description
module	string	Yes	the module name
package	OBJEC _T D	Yes	the Move package ID

Object

Return events with the given Move event struct name (struct tag). For example, if the event is defined in

`0xabcd::MyModule`, and named `Foo`, then the struct tag is `0xabcd::MyModule::Foo`.

Sui JSON-RPC Reference

Version: 1.41.2

Type

Object

Return events with the given Move module name where the event struct is defined. If the event is defined in Module A but emitted in a tx with Module B, query `MoveEventModule` by module A returns the event. Query `MoveModule` by module B returns the event too.

Property	Type	Req?	Description
Move Event Module	object	Yes	

Property	Type	Req?	Description
module	string	Yes	the module name
package	ObjectID	Yes	the Move package ID

Object

Return events emitted in [start_time, end_time] interval

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
endTime	BigInt or UInt64	Yes	right endpoint of time interval, milliseconds since epoch, exclusive
startTime	BigInt or UInt64	Yes	left endpoint of time interval, milliseconds since epoch, inclusive

▶ Toggle raw JSON

EventID

Unique ID of a Sui Event, the ID is a combination of transaction digest and event seq number.

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

txDigest	actionDigest	Yes	
----------	--------------	-----	--

▶ Toggle raw JSON

ExecuteTransactionRequestType

String enum ["WaitForEffectsCert" |
"WaitForLocalExecution"]

▶ Toggle raw JSON

ExecutionStatus

One of

Object

Property	Type	Req?	Description
status	string enum ["success"]	Yes	

Object

Property

Type

Req?

Description

Sui JSON-RPC Reference

Version: 1.41.2

s
"failure"]

▶ Toggle raw JSON

GasCostSummary

Summary of the charges in a transaction. Storage is charged independently of computation. There are 3 parts to the storage charges: `storage_cost`: it is the charge of storage at the time the transaction is executed. The cost of storage is the number of bytes of the objects being mutated multiplied by a variable storage cost per byte `storage_rebate`: this is the amount a user gets back when manipulating an object. The `storage_rebate` is the `storage_cost` for an object minus fees. `non_refundable_storage_fee`: not all the value of the object storage cost is given back to user and there is a small fraction that is kept by the system. This value tracks that charge.

When looking at a gas cost summary the amount charged to the user is `computation_cost + storage_cost - storage_rebate` and that is the amount that is deducted from the gas coins. `non_refundable_storage_fee` is collected from the objects being mutated/deleted and it is tracked by the system in storage funds.

Objects deleted, including the older versions of objects mutated, have the storage field on the objects added up to a pool of "potential rebate". This rebate then is reduced by the "nonrefundable rate" such that: `potential_rebate(storage cost of deleted/mutated objects) = storage_rebate + non_refundable_storage_fee`

[Object](#)

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

nonRefundableStorageFee	BigInt_for_uin64	Yes	The fee for the rebate. The portion of the storage rebate kept by the system.
storageCost	BigInt_for_uin64	Yes	Storage cost, it's the sum of all storage cost for all objects created or mutated.
storageRebate	BigInt_for_uin64	Yes	The amount of storage cost refunded to the user for all objects deleted or mutated in the transaction.

▶ Toggle raw JSON

GasData

Object

Property	Type	Req?	Description
budget	BigInt_for_uin64	Yes	
owner	SuiAddress	Yes	
payment	array	Yes	
price	BigInt_for_uin64	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

GenericSignature

Due to the incompatibility of [enum Signature] (which dispatches a trait that assumes signature and pubkey bytes for verification), here we add a wrapper enum where member can just implement a lightweight [trait AuthenticatorTrait]. This way MultiSig (and future Authenticators) can implement its own `verify`.

One of

Object

Property	Type	Req?	Description
MultiSig	MultiSig	Yes	

Object

Property	Type	Req?	Description
MultiSigLe ^{gacy}	MultiSigLe ^{gacy}	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
ZkLoginAuthenticator	ZkLoginAuthenticator	Yes	

Object

Property	Type	Req?	Description
PasskeyAuthenticator	PasskeyAuthenticator	Yes	

► Toggle raw JSON

GetPastObjectRequest

Object

Property	Type	Req?	Description
objectId	ObjectID	Yes	the ID of the queried object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

▶ Toggle raw JSON

Hex

Hex string encoding.

String

▶ Toggle raw JSON

InputObjectKind

One of

Object

Property	Type	Req?	Description
Move Package	ObjectID	Yes	

Object

Property	Type	Req?	Description
ImmOrOwnedMo	ObjectRef	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
Share dMov eObjec ct	objec t	Yes	
Property	Type	Req?	Description
id	O bj ec tl D	Yes	
ini tia l_s ha re d_ ve rsi on	Se qu en ce N u m be r2	Yes	
mut ab le	bo ol ea n	No	

► Toggle raw JSON

MoveCallParams

Sui JSON-RPC Reference

Version: 1.41.2

arguments	array	Yes	
function	string	Yes	
module	string	Yes	
packageObjectID	ObjectID	Yes	
typeArguments	array	No	

► Toggle raw JSON

MoveFunctionArgType

One of

String enum: ["Pure"]

Object

Property	Type	Req?	Description
Object	ObjectValueKind	Yes	

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

[MoveValue]

Object

Property	Type	Req?	Description
fields	object	Yes	
Additional properties	MoveValue		
type	string	Yes	

Object

► Toggle raw JSON

MoveValue

Any of

Integer<uint32> Minimum: 0

Boolean

SuiAddress

[MoveValue]

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
id	ObjectID	Yes	

MoveStruct

MoveValue | null

MoveVariant

► Toggle raw JSON

MoveVariant

Object

Property	Type	Req?	Description
fields	object	Yes	
Additio nal proper ties	MoveValue		
type	string	Yes	
variant	string	Yes	

► Toggle raw JSON

MultiSig

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
bitmap	integer	Yes	A bitmap that indicates the position of which public key the signature should be authenticated with.
multisig_pk	MultiSigPublicKey	Yes	The public key encoded with each public key with its signature scheme used along with the corresponding weight.
sigs	array	Yes	The plain signature encoded with signature scheme.

▶ [Toggle raw JSON](#)

MultiSigLegacy

Deprecated, use [struct MultiSig] instead. The struct that contains signatures and public keys necessary for authenticating a MultiSigLegacy.

[Object](#)

Property	Type	Req?	Description
bitmap	Base64	Yes	A bitmap that indicates the position of which public key the signature should be authenticated with.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

sigs	array	Yes	The plain signature encoded with signature scheme.
------	-------	-----	--

▶ Toggle raw JSON

MultiSigPublicKey

The struct that contains the public key used for authenticating a MultiSig.

Object

Property	Type	Req?	Description
pk_map	array	Yes	A list of public key and its corresponding weight.
threshold	integer	Yes	If the total weight of the public keys corresponding to verified signatures is larger than threshold, the MultiSig is verified.

▶ Toggle raw JSON

MultiSigPublicKeyLegacy

Deprecated, use [struct MultiSigPublicKey] instead. The struct that contains the public key used for authenticating a MultiSig.

Sui JSON-RPC Reference

Version: 1.41.2

threshold	integer	Yes	If the total weight of the public keys corresponding to verified signatures is larger than threshold, the MultiSig is verified.
-----------	---------	-----	---

▶ Toggle raw JSON

ObjectChange

ObjectChange are derived from the object mutations in the TransactionEffect to provide richer object information.

One of

Object

Module published

Property	Type	Req?	Description
digest	ObjectDigest	Yes	
modules	array	Yes	
packaged	ObjectID	Yes	
type	string enum [Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

version	Sequence Number
---------	-----------------

Yes

Object

Transfer objects to new address / wrap in another object

Property	Type	Req?	Description
digest	ObjectDigest	Yes	
objectID	ObjectID	Yes	
objectType	string	Yes	
recipient	Owner	Yes	
sender	SuiAddress	Yes	
type	string enum ["transfered"]	Yes	
version	Sequence Number	Yes	

Sui JSON-RPC Reference

Version: 1.41.2

digest	ObjectDigest	Yes
objectId	ObjectID	Yes
objectType	string	Yes
owner	Owner	Yes
previousVersion	SequenceNumber	Yes
sender	SuiAddress	Yes
type	string enum ["mutated"]	Yes
version	SequenceNumber	Yes

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
sender	SuiAddress	Yes	
type	string enum ["deleted"]	Yes	
version	SequenceNumber	Yes	

Object

Wrapped object

Property	Type	Req?	Description
objectId	ObjectID	Yes	
objectType	string	Yes	
sender	SuiAddress	Yes	
type	string enum ["wrapped"]	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object

New object creation

Property	Type	Req?	Description
digest	ObjectDigest	Yes	
objectId	ObjectID	Yes	
objectType	string	Yes	
owner	Owner	Yes	
sender	SuiAddress	Yes	
type	string enum ["created"]	Yes	
version	SequenceNumber	Yes	

▶ Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

bcs	ta null	No	default to be None unless SuiObjectDataOptions.show Bcs is set to true
content	Data null	No	Move object content or package content, default to be None unless SuiObjectDataOptions.show Content is set to true
digest	Object Digest	Yes	Base64 string representing the object digest
display	DisplayFieldsResponse null	No	The Display metadata for frontend UI rendering, default to be None unless SuiObjectDataOptions.show Content is set to true This can also be None if the struct type does not have Display defined See more details in < https://forums.sui.io/t/nft-object-display-proposal/4872 >
objectId	ObjectID	Yes	
owner	Owner null	No	The owner of this object. Default to be None unless SuiObjectDataOptions.show Owner is set to true
previousTransaction	TransactionDigest null	No	The digest of the transaction that created or last mutated this object. Default to be None unless SuiObjectDataOptions.show

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

storageRebate	for_uin t64 null	No	gets deleted. This number is re-calculated each time the object is mutated based on the present storage gas price.
type	string null	No	The type of the object. Default to be None unless SuiObjectDataOptions.showType is set to true
version	Seque nceNu mber	Yes	Object version.

▶ Toggle raw JSON

ObjectDataOptions

Object

Property	Type	Req?	Description
showBCS	boolean	No	Whether to show the content in BCS format. Default to be False
showContent	boolean	No	Whether to show the content(i.e., package content or Move struct content) of the object. Default to be False

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

showOwner	boolean	No	Whether to show the owner of the object. Default to be False
showPreviousTransaction	boolean	No	Whether to show the previous transaction digest of the object. Default to be False
showStorageRebate	boolean	No	Whether to show the storage rebate of the object. Default to be False
showType	boolean	No	Whether to show the type of the object. Default to be False

▶ Toggle raw JSON

ObjectDigest

Digest

▶ Toggle raw JSON

ObjectID

Hex

▶ Toggle raw JSON

ObjectRead

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
details	ObjectData	Yes	
status	string enum ["VersionFound"]	Yes	

Object

The object does not exist

Property	Type	Req?	Description
details	ObjectID	Yes	
status	string enum ["ObjectNotExist"]	Yes	

Object

The object is found to be deleted with this version

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

status	["ObjectDeleted"]	Yes	
--------	---------------------	-----	--

Object

The object exists but not found with this version

Property	Type	Req?	Description
details	array	Yes	
status	string enum ["VersionNotFound"]	Yes	

Object

The asked object version is higher than the latest

Property	Type	Req?	Description
details	object	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

as_ke_d_ve_rsi_on	Sequence[NumericalValue] (See below)	Yes	
lat_es_t_ver_si_on	Sequence[NumericalValue] (See below)	Yes	
obj_ej ect_i_d	Object (See below)	Yes	
status	string enum ["VersionTo oHigh"]	Yes	

► Toggle raw JSON

ObjectRef

Sui JSON-RPC Reference

Version: 1.41.2

digest	Object Digest	Yes	Base64 string representing the object digest
objectID	ObjectID	Yes	Hex code as string representing the object id
version	SequenceNumber	Yes	Object version.

▶ Toggle raw JSON

ObjectResponseError

One of

Object

Property	Type	Req?	Description
code	string enum ["notExists"]	Yes	
object_id	ObjectID	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

	eldNo tFoun d"]		
parent_object_id	ObjectID	Yes	

Object

Property	Type	Req?	Description
code	string enum ["deleted"]	Yes	
digest	ObjectDigest	Yes	Base64 string representing the object digest
object_id	ObjectID	Yes	
version	SequenceNumber2	Yes	Object version.

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object

Property	Type	Req?	Description
code	string enum ["displayError"]	Yes	
error	string	Yes	

▶ Toggle raw JSON

ObjectResponseQuery

Object

Property	Type	Req?	Description
filter	SuiObjectDataFilter null	No	If None, no filter will be applied
options	ObjectDataOptions null	No	config which fields to include in the response, by default only digest is included

▶ Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

"ByMutableReference" | "ByValue"]

▶ Toggle raw JSON

OwnedObjectRef

Object

Property	Type	Req?	Description
owner	Owner	Yes	
reference	Object Ref	Yes	

▶ Toggle raw JSON

Owner

One of

Object

Object is exclusively owned by a single address, and is mutable.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object is exclusively owned by a single object, and is mutable. The object ID is converted to SuiAddress as SuiAddress is universal.

Property	Type	Req?	Description
ObjectOwner	SuiAddress	Yes	

Object

Object is shared, can be used by any address, and is mutable.

Property	Type	Req?	Description
Shared	object	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

initial_shared_version	String enum: ["Immutable"]	Yes	The version at which the object became shared
------------------------	------------------------------	-----	---

Object is immutable, and hence ownership doesn't matter.

Object

Object is sequenced via consensus. Ownership is managed by the configured authenticator.

Note: wondering what happened to V1? Shared above was the V1 of consensus objects.

Property	Type	Req?	Description
consensusV2	object	Yes	

Property	Type	Req?	Description
authen	Authen	Yes	The authentication mode of the object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

tic at or	tic at or			
st art _v er si on	Se qu en ce N u m be r2	Yes	The version at which the object most recently became a consensus object. This serves the same function as 'initial_shared_verse n', except it may change if the object's Owner type changes.	

► Toggle raw JSON

Page_for_Checkpoint_and_BigInt_for_uint64

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Object

Proper ty	Type	Req?	Description
data	array	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

rsor	t64 null	No
------	------------	----

▶ Toggle raw JSON

Page_for_Coin_and_ObjectID

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Object

Property	Type	Req?	Description
data	array	Yes	
hasNextPage	boolean	Yes	
nextCursor	ObjectID null	No	

▶ Toggle raw JSON

Page_for_DynamicFieldInfo_and_ObjectID

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Sui JSON-RPC Reference

Version: 1.41.2

hasNextPage	boolean	Yes	
nextCursor	ObjectID null	No	

▶ Toggle raw JSON

Page_for_Event_and_EventID

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Property	Type	Req?	Description
data	array	Yes	
hasNextPage	boolean	Yes	
nextCursor	EventID null	No	

▶ Toggle raw JSON

Page_for_String_and_ObjectID

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if

`next_cursor` is `Some`, otherwise it will start from the first item.

Sui JSON-RPC Reference

Version: 1.41.2

data	array	Yes
hasNextPage	boolean	Yes
nextCursor	ObjectID null	No

► Toggle raw JSON

Page_for_SuiObjectResponse_and_ObjectID

`next_cursor` points to the last item in the page; Reading with `next_cursor` will start from the next item after `next_cursor` if `next_cursor` is `Some`, otherwise it will start from the first item.

Object

Property	Type	Req?	Description
data	array	Yes	
hasNextPage	boolean	Yes	
nextCursor	ObjectID null	No	

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Object

Property	Type	Req?	Description
data	array	Yes	
hasNextPage	boolean	Yes	
nextCursor	TransactionDigest null	No	

▶ Toggle raw JSON

PasskeyAuthenticator

An passkey authenticator with parsed fields. See field defition below. Can be initialized from [struct RawPasskeyAuthenticator].

Object

Property	Type	Req?	Description
authenticator_data	array	Yes	`authenticatorData` is a bytarray that encodes [Authenticator Data] (https://www.w3.org/TR/webauthn-2/#sctn-authenticator-data) structure returned by the

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

client_data_js on	string	Yes	encoded string of the client data which is passed to the authenticator by the client during the authentication request (see [CollectedClientData] (https://www.w3.org/TR/webauthn-2/#dictdef-collectedclientdata))
-------------------	--------	-----	--

▶ Toggle raw JSON

ProtocolConfig

Object

Property	Type	Req?	Description
attributes	object	Yes	
Additional properties			ProtocolConfigValue null
feature Flags	object	Yes	
Additional properties			boolean

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

minSupportedProtocolVersion	ProtocolVersion	Yes	
protocolVersion	ProtocolVersion	Yes	

▶ Toggle raw JSON

ProtocolConfigValue

One of

Object

Property	Type	Req?	Description
u16	BigInt_for_uint16	Yes	

Object

Property	Type	Req?	Description
u32	BigInt_for_	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
u64	BigInt_for_uint64	Yes	

Object

Property	Type	Req?	Description
f64	string	Yes	

Object

Property	Type	Req?	Description
bool	string	Yes	

► Toggle raw JSON

ProtocolVersion

BigInt_for_uint64

► Toggle raw JSON

PublicKey

Sui JSON-RPC Reference

Version: 1.41.2

Ed25 519	Base 64	Yes
-------------	------------	-----

Object

Property	Type	Req?	Description
Secp 256k1	Base 64	Yes	

Object

Property	Type	Req?	Description
Secp 256r1	Base 64	Yes	

Object

Property	Type	Req?	Description
ZkLo gin	ZkLo ginPu blicId entifi er	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

RPCTransactionRequestParams

One of

Object

Property	Type	Req?	Description
transferObj	TransferObjectParams	Yes	

Object

Property	Type	Req?	Description
moveCallIR	MoveCallParams	Yes	

▶ Toggle raw JSON

RawData

Sui JSON-RPC Reference

Version: 1.41.2

bcsBytes	Base64	Yes	
dataType	string enum ["moveObject"]	Yes	
hasPublicTransfer	boolean	Yes	
type	string	Yes	
version	SequenceNumber2	Yes	

Object

Property	Type	Req?	Description
dataType	string enum ["package"]	Yes	
id	ObjectID	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

onala l prop e rties	UpgradelInfo		
modu leMa p	objec t	Yes	
Additi onal prop erties	Base64		
type Origi nTabl e	array	Yes	
versi on	Sequ ence Num ber2	Yes	

► Toggle raw JSON

Secp256k1SuiSignature

[Base64](#)

► Toggle raw JSON

Secp256r1SuiSignature

[Base64](#)

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

► Toggle raw JSON

SequenceNumber2

[BigInt_for_uint64](#)

► Toggle raw JSON

Signature

One of

Object

Property	Type	Req?	Description
Ed25519S uiSig nature	Ed25519S uiSig nature	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object

Property	Type	Req?	Description
Secp256r1SuiSignature	Secp256r1 SuiSignature	Yes	

► Toggle raw JSON

Stake

Object

Property	Type	Req?	Description
principal	BigInt_for_uint64	Yes	
stakeActiveEpoch	BigInt_for_uint64	Yes	
stakeRequestEpoch	BigInt_for_uint64	Yes	
stakedSuiId	ObjectID	Yes	ID of the StakedSui receipt object.

Sui JSON-RPC Reference

Version: 1.41.2

status	string enum ["Pending"]	Yes
--------	---------------------------------------	-----

Object

Property	Type	Req?	Description
estimatedReward	BigInt <code>_for_</code> <code>uint64</code>	Yes	
status	string enum ["Active"]	Yes	

Object

Property	Type	Req?	Description
status	string enum ["Unstaked"]	Yes	

▶ Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
epoch	BigInt_for_uint64	Yes	
jwk	SuiJWK	Yes	
jwk_id	SuiJwkId	Yes	

► Toggle raw JSON

SuiAddress

[Hex](#)

► Toggle raw JSON

SuiArgument

An argument to a transaction in a programmable transaction block

One of

String enum: ["GasCoin"]

The gas coin. The gas coin can only be used by-ref, except for with [TransferObjects](#), which can use it by-value.

Object

Sui JSON-RPC Reference

Version: 1.41.2

Input	integer	Yes	
-------	---------	-----	--

Object

The result of another transaction (from
`ProgrammableTransactionBlock` transactions)

Property	Type	Req?	Description
Result	integer	Yes	

Object

Like a `Result` but it accesses a nested result. Currently, the only usage of this is to access a value from a Move call with multiple return values.

Property	Type	Req?	Description
NestedResult	array	Yes	

▶ Toggle raw JSON

SuiAuthenticatorStateExpire

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

▶ Toggle raw JSON

SuiCallArg

One of

Object

Property	Type	Req?	Description
type	string enum ["object"]	Yes	

Object

Property	Type	Req?	Description
type	string enum ["pure"]	Yes	
value	SuiJs onValue	Yes	
value Type	string null	No	

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
computation_charge	BigInt_for_uint64	Yes	
epoch	BigInt_for_uint64	Yes	
epoch_start_timeStamp_ms	BigInt_for_uint64	Yes	
storage_charge	BigInt_for_uint64	Yes	
storage_rebate	BigInt_for_uint64	Yes	

► Toggle raw JSON

SuiCoinMetadata

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
iconUrl	string null	No	URL for the token logo
id	ObjectID null	No	Object id for the CoinMetadata object
name	string	Yes	Name for the token
symbol	string	Yes	Symbol for the token

▶ Toggle raw JSON

SuiEndOfEpochTransactionKind

One of

String enum: ["AuthenticatorStateCreate" | "RandomnessStateCreate" | "CoinDenyListStateCreate"]

Object

Property	Type	Req?	Description
ChangeEpoch	SuiChangeEpoch	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

ire
e
Object

Property	Type	Req?	Description
BridgeStat	CheckpointDigest	Yes	

Object

Property	Type	Req?	Description
BridgeCommitteeUpdate	SequenceNumber2	Yes	

▶ Toggle raw JSON

SuiExecutionResult

Object

Property	Type	Req?	Description
mutableRefer	array	No	The value of any arguments that were mutably borrowed. Non-mut

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

► Toggle raw JSON

SuiJWK

Object

Property	Type	Req?	Description
alg	string	Yes	
e	string	Yes	
kty	string	Yes	
n	string	Yes	

► Toggle raw JSON

SuiJsonValue

► Toggle raw JSON

SuiJwkId

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

▶ Toggle raw JSON

SuiMoveAbility

String enum ["Copy" | "Drop" | "Store" | "Key"]

▶ Toggle raw JSON

SuiMoveAbilitySet

Object

Property	Type	Req?	Description
abilities	array	Yes	

▶ Toggle raw JSON

SuiMoveModuleId

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

▶ Toggle raw JSON

SuiMoveNormalizedEnum

Object

Property	Type	Req?	Description
abilities	SuiMoveAbilitySet	Yes	
typeParameters	array	Yes	
variants	object	Yes	
Additional properties	array		

▶ Toggle raw JSON

SuiMoveNormalizedField

Object

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

	dType	
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► Toggle raw JSON

SuiMoveNormalizedFunction

Object

Property	Type	Req?	Description
isEntry	boolean	Yes	
parameters	array	Yes	
return	array	Yes	
typeParameters	array	Yes	
visibility	SuiMoveVisibility	Yes	

► Toggle raw JSON

SuiMoveNormalizedModule

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Additio nal proper ties			SuiMoveNormalizedEnum
expose dFunc tions	object	Yes	
Additio nal proper ties			SuiMoveNormalizedFunction
fileFor matVer sion	integer	Yes	
friends	array	Yes	
name	string	Yes	
structs	object	Yes	
Additio nal proper ties			SuiMoveNormalizedStruct

► Toggle raw JSON

SuiMoveNormalizedStruct

Object

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
typeParameters	array	Yes	

▶ Toggle raw JSON

SuiMoveNormalizedType

One of

String enum: ["Bool" | "U8" | "U16" | "U32" | "U64" | "U128" | "U256" | "Address" | "Signer"]

Object

Property	Type	Req?	Description
Struct	object	Yes	

Property	Type	Req?	Description
address	string	Yes	
mod	string	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

rule	g		
name	string	Yes	
typeArguments	array	Yes	

Object

Property	Type	Req?	Description
Vector	SuiMoveNormalizedNameType	Yes	

Object

Property	Type	Req?	Description
Type Parameter	integer	Yes	

Object

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Object

Property	Type	Req?	Description
MutableReference	SuiMoveNormalizedNameType	Yes	

▶ Toggle raw JSON

SuiMoveStructTypeParameter

Object

Property	Type	Req?	Description
constraints	SuiMoveAbilitySet	Yes	
isPhantom	boolean	Yes	

▶ Toggle raw JSON

SuiMoveVisibility

Sui JSON-RPC Reference

Version: 1.41.2

suicallMethod

One of

Object

Property	Type	Req?	Description
MatchAll	array	Yes	

Object

Property	Type	Req?	Description
MatchAny	array	Yes	

Object

Property	Type	Req?	Description
MatchNone	array	Yes	

Object

Query by type a specified Package.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Query by type a specified Move module.

Property	Type	Req?	Description
Move Module	object	Yes	
Property	Type	Req?	Description
module	string	Yes	the module name
package	ObjectID	Yes	the Move package ID

Object

Query by type

Property	Type	Req?	Description
StructType	string	Yes	

Object

Sui JSON-RPC Reference

Version: 1.41.2

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Object

Property	Type	Req?	Description
ObjectOwner	ObjectID	Yes	

Object

Property	Type	Req?	Description
ObjectID	ObjectID	Yes	

Object

Property	Type	Req?	Description
ObjectIDs	array	Yes	

Object

Property	Type	Req?	Description
Version	BigInt_for_	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

SuiObjectResponse

Object

Property	Type	Req?	Description
data	Object Data null	No	
error	Object ResponseError null	No	

► Toggle raw JSON

SuiProgrammableMoveCall

The transaction for calling a Move function, either an entry function or a public function (which cannot return references).

Object

Property	Type	Req?	Description
arguments	array	No	The arguments to the function.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

e			function.
package	ObjectID	Yes	The package containing the module and function.
type_arguments	array	No	The type arguments to the function.

▶ Toggle raw JSON

SuiSystemStateSummary

This is the JSON-RPC type for the SUI system state object. It flattens all fields to make them top-level fields such that it has minimum dependencies to the internal data structures of the SUI system state type.

Object

Property	Type	Req?	Description
active Validators	array	Yes	The list of active validators in the current epoch.
atRisk Validators	array	Yes	Map storing the number of epochs for which each validator has been below the low stake threshold.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

epochDurationMs	BigInt_for_uint64	Yes	The duration of an epoch, in milliseconds.
epochStartTimestampMs	BigInt_for_uint64	Yes	Unix timestamp of the current epoch start
inactivePoolsId	ObjectID	Yes	ID of the object that maps from a staking pool ID to the inactive validator that has that pool as its staking pool.
inactivePoolsSize	BigInt_for_uint64	Yes	Number of inactive staking pools.
maxValidatorCount	BigInt_for_uint64	Yes	Maximum number of active validators at any moment. We do not allow the number of validators in any epoch to go above this.
minValidatorJoiningStake	BigInt_for_uint64	Yes	Lower-bound on the amount of stake required to become a validator.
pendingActiveValidatorsId	ObjectID	Yes	ID of the object that contains the list of new validators that will join at the end of the epoch.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

pendingRemovals	array	Yes	Removal requests from the validators. Each element is an index pointing to `active_validators`.
protocolVersion	BigInt_for_uint64	Yes	The current protocol version, starting from 1.
referenceGasPrice	BigInt_for_uint64	Yes	The reference gas price for the current epoch.
safeMode	boolean	Yes	Whether the system is running in a downgraded safe mode due to a non-recoverable bug. This is set whenever we failed to execute <code>advance_epoch</code> , and ended up executing <code>advance_epoch_safe_mode</code> . It can be reset once we are able to successfully execute <code>advance_epoch</code> .
safeModeComputationRewards	BigInt_for_uint64	Yes	Amount of computation rewards accumulated (and not yet distributed) during safe mode.
safeModeNonRefundableStorageFee	BigInt_for_uint64	Yes	Amount of non-refundable storage fee accumulated during safe mode.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

safeModeStorageRewards	BigInt_for_uint64	Yes	Amount of storage rewards accumulated (and not yet distributed) during safe mode.
stakeSubsidyBalance	BigInt_for_uint64	Yes	Balance of SUI set aside for stake subsidies that will be drawn down over time.
stakeSubsidyCurrentDistributionAmount	BigInt_for_uint64	Yes	The amount of stake subsidy to be drawn down per epoch. This amount decays and decreases over time.
stakeSubsidyDecayRate	integer	Yes	The rate at which the distribution amount decays at the end of each period. Expressed in basis points.
stakeSubsidyDistributionCounter	BigInt_for_uint64	Yes	This counter may be different from the current epoch number if in some epochs we decide to skip the subsidy.
stakeSubsidyPeriodLength	BigInt_for_uint64	Yes	Number of distributions to occur before the distribution amount decays.
stakeSubsidyStartEpoch	BigInt_for_uint64	Yes	The starting epoch in which stake subsidies start being paid out

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

stakingPoolMappingsSize	BigInt_for_uint64	Yes	Number of staking pool mappings.
storageFundNonRefundableBalance	BigInt_for_uint64	Yes	The non-refundable portion of the storage fund coming from storage reinvestment, non-refundable storage rebates and any leftover staking rewards.
storageFundTotalObjectStorageRebates	BigInt_for_uint64	Yes	The storage rebates of all the objects on-chain stored in the storage fund.
systemStateVersion	BigInt_for_uint64	Yes	The current version of the system state data structure type.
totalStake	BigInt_for_uint64	Yes	Total amount of stake from all active validators at the beginning of the epoch.
validatorCandidateSld	ObjectID	Yes	ID of the object that stores proactive validators, mapping their addresses to their `Validator` structs.
validatorCandidateSSize	BigInt_for_uint64	Yes	Number of proactive validators.
validatorLow	BigInt_for_uint64	Yes	A validator can have stake below

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

validatorLowStakeThresholdId	BigInt_for_uint64	Yes	amount below `validator_low_stake_threshold` are considered to have low stake and will be escorted out of the validator set after being below this threshold for more than `validator_low_stake_grace_period` number of epochs.
validatorReportRecords	array	Yes	A map storing the records of validator reporting each other.
validatorVeryLowStakeThreshold	BigInt_for_uint64	Yes	Validators with stake below `validator_very_low_stake_threshold` will be removed immediately at epoch change, no grace period.

▶ [Toggle raw JSON](#)

SuiTransaction

A single transaction in a programmable transaction block.

[One of](#)

[Object](#)

A call to either an entry or a public Move function

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

all

Object

`(Vec<forall T:key+store. T>, address)` It sends n-objects to the specified address. These objects must have store (public transfer) and either the previous owner must be an address or the object must be newly created.

Property	Type	Req?	Description
TransferObjects	array	Yes	

Object

`(&mut Coin<T>, Vec<u64>) → Vec<Coin<T>>` It splits off some amounts into a new coins with those amounts

Property	Type	Req?	Description
SplitCoins	array	Yes	

Object

`(&mut Coin<T>, Vec<Coin<T>>)` It merges n-coins into the first coin

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Publishes a Move package. It takes the package bytes and a list of the package's transitive dependencies to link against on-chain.

Property	Type	Req?	Description
Publis	array	Yes	

Object

Upgrades a Move package

Property	Type	Req?	Description
Upgr	array	Yes	

Object

`forall T: Vec<T> -> vector<T>` Given n-values of the same type, it constructs a vector. For non objects or an empty vector, the type tag must be specified.

Property	Type	Req?	Description
Make	array	Yes	

▶ Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Regular Sui transactions that are committed on chain

String enum: ["DevInspect"]

Simulated transaction that allows calling any Move function with arbitrary values.

► Toggle raw JSON

SuiValidatorSummary

This is the JSON-RPC type for the SUI validator. It flattens all inner structures to top-level fields so that they are decoupled from the internal definitions.

Object

Property	Type	Req?	Description
commissionRate	BigInt_for_uint64	Yes	
description	string	Yes	
exchangeRateId	ObjectID	Yes	ID of the exchange rate table object.
exchangeRatesSize	BigInt_for_uint64	Yes	Number of exchange rates in the table.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Url	string	Yes	
name	string	Yes	
netAddress	string	Yes	
networkPubkeyBytes	Base64	Yes	
nextEpochCommissionRate	BigInt_for_uint64	Yes	
nextEpochGasPrice	BigInt_for_uint64	Yes	
nextEpochNetAddress	string null	No	
nextEpochNetworkPubkeyBytes	Base64 null	No	
nextEpochP2pAddress	string null	No	
nextEpochPri	string null	No	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

ofOfPosition	4 null	No	
nextEpochProofOfPublicationBytes	Base64 4 null	No	
nextEpochStake	BigInt_for_uint64	Yes	
nextEpochWorkerAddress	string null	No	
nextEpochWorkerPubkeyBytes	Base64 4 null	No	
operationCapId	ObjectID	Yes	
p2pAddress	string	Yes	
pendingPoolTokenWithdraw	BigInt_for_uint64	Yes	Pending pool token withdrawn during the current epoch, emptied at epoch boundaries.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

pendingTotalSuiWithdraw	BigInt_for_uint64	Yes	Pending stake withdrawn during the current epoch, emptied at epoch boundaries.
poolTokenBalance	BigInt_for_uint64	Yes	Total number of pool tokens issued by the pool.
primaryAddress	string	Yes	
projectUrl	string	Yes	
proofOfPossessionBytes	Base64	Yes	
protocolPubkeyBytes	Base64	Yes	
rewardPool	BigInt_for_uint64	Yes	The epoch stake rewards will be added here at the end of each epoch.
stakingPoolActivationEpoch	BigInt_for_uint64 null	No	The epoch at which this pool became active.
stakingPoolDeactivation	BigInt_for_uint64	No	The epoch at which this staking pool ceased to be

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

stakingPoolSuiBalance	BigInt_for_uint64	Yes	The total number of SUI tokens in this pool.
suiAddress	SuiAddress	Yes	
votingPower	BigInt_for_uint64	Yes	
workerAddress	string	Yes	
workerPubkeyBytes	Base64	Yes	

▶ Toggle raw JSON

Supply

Object

Property	Type	Req?	Description
value	BigInt_for_uint64	Yes	

▶ Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
data	TransactionBlockData	Yes	
txSignatures	array	Yes	

▶ Toggle raw JSON

TransactionBlockBytes

Object

Property	Type	Req?	Description
gas	array	Yes	the gas objects to be used
inputObjects	array	Yes	objects to be used in this transaction
txBytes	Base64	Yes	BCS serialized transaction data bytes without its type tag, as base-64 encoded string.

▶ Toggle raw JSON

TransactionBlockData

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
gasData	GasData	Yes	
messageVersion	string enum ["v1"]	Yes	
sender	SuiAddress	Yes	
transaction	TransactionBlockKind	Yes	

▶ Toggle raw JSON

TransactionBlockEffects

One of

Object

The response from processing a transaction or a certified transaction

Property	Type	Req?	Description
created	array	No	ObjectRef and owner of new objects created.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

dependencies	array	No	digests this transaction depends on.
eventDigest	TransactionDigest null	No	The digest of the events emitted during execution, can be None if the transaction does not emit any event.
executedEpoch	BigInt_for_uint64	Yes	The epoch when this transaction was executed.
gasObject	OwnedObjectRef	Yes	The updated gas object reference. Have a dedicated field for convenient access. It's also included in mutated.
gasUsed	GasCostSummary	Yes	
messageVersion	string enum ["v1"]	Yes	
modifiedAtVersions	array	No	The version that every modified (mutated or deleted) object had before it was modified by this transaction.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

sharedObjects	array	No	the shared objects used in this transaction. Empty if no shared objects were used.
status	Execution Status	Yes	The status of the execution
transactionDigest	Transaction Digest	Yes	The transaction digest
unwrapped	array	No	ObjectRef and owner of objects that are unwrapped in this transaction. Unwrapped objects are objects that were wrapped into other objects in the past, and just got extracted out.
unwrappedTheDeleted	array	No	Object refs of objects previously wrapped in other objects but now deleted.
wrapped	array	No	Object refs of objects now wrapped in other objects.

► [Toggle raw JSON](#)

TransactionBlockEffectsModified

Sui JSON-RPC Reference

Version: 1.41.2

ty	type	Req:	Description
objectl d	Objectl D	Yes	
seque nceNu mber	Seque nceNu mber	Yes	

▶ Toggle raw JSON

TransactionBlockKind

One of

Object

A system transaction that will update epoch information on-chain.

Property	Type	Req?	Description
computatio n_cha rge	BigInt _for_ uint6 4	Yes	
epoch	BigInt _for_ uint6 4	Yes	
epoch_st art_tim	BigInt _for_	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

kind	enum ["ChangeEpoch"]	Yes	
storage_charge	BigInt_for_uint64	Yes	
storage_rebate	BigInt_for_uint64	Yes	

Object

A system transaction used for initializing the initial state of the chain.

Property	Type	Req?	Description
kind	string enum ["Genesis"]	Yes	
objects	array	Yes	

Object

A system transaction marking the start of a series of transactions scheduled as part of a checkpoint

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

epoch	<code>BigInt _for_ uint64</code>	Yes	
kind	<code>string enum ["ConsensusCommit" "Program"]</code>	Yes	
round	<code>BigInt _for_ uint64</code>	Yes	

Object

A series of transactions where the results of one transaction can be used in future transactions

Property	Type	Req?	Description
inputs	array	Yes	Input objects or primitive values
kind	<code>string enum ["ProgrammableTransaction"]</code>	Yes	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

actions	array	Yes	failure in any transaction will result in the failure of the entire programmable transaction block.
---------	-------	-----	---

Object

A transaction which updates global authenticator state

Property	Type	Req?	Description
epoch	BigInt_for_uint64	Yes	
kind	string enum ["AuthenticatorStateUpdate"]	Yes	
new_active_jwks	array	Yes	
round	BigInt_for_uint64	Yes	

Object

A transaction which updates global randomness state

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

kind	string enum ["Ran domn essSt ateU pdate "]	Yes	
rando m_by tes	array	Yes	
rando mnes s_rou nd	BigInt _for_ uint6 4	Yes	

Object

The transaction which occurs only at the end of the epoch

Property	Type	Req?	Description
kind	string enum ["End OfEp ochTr ansac tion"]	Yes	
trans actio ns	array	Yes	

Sui JSON-RPC Reference

Version: 1.41.2

	mest amp_ms	<code>--- uint6 4</code>	Yes	
	cons ensu s_com mmit_diges t	<code>Cons ensu sCom mitDigest</code>	Yes	
	epoch	<code>BigInt _for_ uint6 4</code>	Yes	
	kind	<code>string enum ["Con sens usCo mmit Prolo gueV 2"]</code>	Yes	
	round	<code>BigInt _for_ uint6 4</code>	Yes	

Property	Type	Req?	Description
com mit_t mest	<code>BigInt _for_</code>	Yes	

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

s_commit_digest	sCommitDigest	Yes	
consensus_determined_versions_assignments	ConsensusDeterminedVersionsAssignments	Yes	
epoch	BigInt_for_uint64	Yes	
kind	string enum ["ConsensusCommitProtocolVersion3"]	Yes	
round	BigInt_for_uint64	Yes	
sub_dag_index	BigInt_for_uint64 null	No	

Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
balanceChanges	array null	No	
checkpoint	BigInt_for_uint64 null	No	The checkpoint number when this transaction was included and hence finalized. This is only returned in the read api, not in the transaction execution api.
confirmedLocalExecution	boolean null	No	
digest	TransactionDigest	Yes	
effects	TransactionBlockEffects null	No	
errors	array	No	
events	array null	No	
objectChanges	array null	No	

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

rawTransaction	Base64	No	includes input object references returns empty array if `show_raw_transaction` is false
timestampMs	BigInt_for_uint64 null	No	
transaction	TransactionBlock null	No	Transaction input data

▶ Toggle raw JSON

TransactionBlockResponseOptions

Object

Property	Type	Req?	Description
showBalanceChanges	boolean	No	Whether to show balance_changes. Default to be False
showEffects	boolean	No	Whether to show transaction effects. Default to be False

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

showInput	boolean	No	transaction input data. Default to be False
showObjectChanges	boolean	No	Whether to show object_changes. Default to be False
showRawEffects	boolean	No	Whether to show raw transaction effects. Default to be False
showRawInput	boolean	No	Whether to show bcs-encoded transaction input data

▶ Toggle raw JSON

TransactionBlockResponseQuery

Object

Property	Type	Req?	Description
filter	TransactionFilter null	No	If None, no filter will be applied

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

	s null	
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► Toggle raw JSON

TransactionDigest

A transaction will have a (unique) digest.

[Digest](#)

► Toggle raw JSON

TransactionEventsDigest

[Digest](#)

► Toggle raw JSON

TransactionFilter

One of

Object

CURRENTLY NOT SUPPORTED. Query by checkpoint.

Property	Type	Req?	Description
Checkpoint	BigInt_for_	Yes	

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

Query by move function.

Property	Type	Req?	Description
Move Function	object	Yes	
Property	Type	Req?	Description
function	string null	No	
module	string null	No	
package	O bj ec tl D	Yes	

Object

Query by input object.

Property	Type	Req?	Description
----------	------	------	-------------

Sui JSON-RPC Reference

Version: 1.41.2

Query by changed object, including created, mutated and unwrapped objects.

Property	Type	Req?	Description
ChangedObject	ObjectID	Yes	

Object

Query for transactions that touch this object.

Property	Type	Req?	Description
AffectedObject	ObjectID	Yes	

Object

Query by sender address.

Property	Type	Req?	Description
FromAddress	SuiAddress	Yes	

Object

Query by recipient address.

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

Query by sender and recipient address.

Property	Type	Req?	Description
FromAndToAddress	object	Yes	
Property	Type	Req?	Description
from	SuiAddress	Yes	
to	SuiAddress	Yes	

Object

CURRENTLY NOT SUPPORTED. Query txs that have a given address as sender or recipient.

Property	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

Property	Type	Req?	Description
address	SuiAddress	Yes	

Object

Query by transaction kind

Property	Type	Req?	Description
transactionKind	string	Yes	

Object

Query transactions of any given kind in the input.

Property	Type	Req?	Description
transactionKindIn	array	Yes	

► Toggle raw JSON

TransferObjectParams

Sui JSON-RPC Reference

Version: 1.41.2

object_id	ObjectID	Yes	
recipient	SuiAddress	Yes	

► Toggle raw JSON

TypeOrigin

Identifies a struct and the module it was defined in

Object

Property	Type	Req?	Description
datatype_name	string	Yes	
module_name	string	Yes	
package	ObjectID	Yes	

► Toggle raw JSON

TypeTag

String

Sui JSON-RPC Reference

Version: 1.41.2

UpgraudInfo

Upgraded package info for the linkage table

Object

Property	Type	Req?	Description
upgraded_id	ObjectID	Yes	ID of the upgraded packages
upgraded_version	SequenceNumber2	Yes	Version of the upgraded package

► Toggle raw JSON

ValidatorApy

Object

Property	Type	Req?	Description
address	SuiAddress	Yes	
apy	number	Yes	

► Toggle raw JSON

ValidatorApys

Sui JSON-RPC Reference

Version: 1.41.2

apys	array	Yes	
epoch	BigInt_for_uin_t64	Yes	

► [Toggle raw JSON](#)

ZkLoginAuthenticator

An zk login authenticator with all the necessary fields.

Object

Property	Type	Req?	Description
inputs	ZkLoginInputs	Yes	
maxEpoch	integer	Yes	
userSignature	Signature	Yes	

► [Toggle raw JSON](#)

ZkLoginAuthenticatorAsBytes

► Toggle raw JSON

Sui JSON-RPC Reference

Version: 1.41.2

All inputs required for the zk login proof verification and other public inputs.

Object

Property	Type	Req?	Description
addressSeed	Bn254FrElement	Yes	
headerBase64	string	Yes	
issBase64Details	Claim	Yes	
proofPoints	ZkLoginProof	Yes	

► Toggle raw JSON

ZkLoginProof

The struct for zk login proof.

Object

Property	Type	Req?	Description
a	array	Yes	

Proper ty	Type	Req?	Description
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Sui JSON-RPC Reference

Version: 1.41.2

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ZkLoginPublicIdentifier

A wrapper struct to retrofit in [enum PublicKey] for zkLogin.
Useful to construct [struct MultiSigPublicKey].

[Base64](#)

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