

Object

An object in Sui is a package (set of Move bytecode modules) or object (typed data structure with fields) with additional metadata detailing its id, version, transaction digest, owner field indicating how this object can be accessed.

```
type Object implements IObject, IOwner {
  address: SuiAddress!
  objects(
    first: Int
    after: String
    last: Int
    before: String
    filter: ObjectFilter
  ): MoveObjectConnection!
  balance(
    type: String
  ): Balance
  balances(
    first: Int
    after: String
    last: Int
    before: String
  ): BalanceConnection!
  coins(
    first: Int
    after: String
    last: Int
    before: String
    type: String
  ): CoinConnection!
  stakedSuis(
    first: Int
    after: String
    last: Int
    before: String
  ): StakedSuiConnection!
  defaultSuinsName(
    format: DomainFormat
  ): String
  suinsRegistrations(
    first: Int
    after: String
    last: Int
    before: String
  ): SuinsRegistrationConnection!
  version: UInt53!
  status: ObjectKind!
```

```

digest: String
owner: ObjectOwner
previousTransactionBlock: TransactionBlock
storageRebate: BigInt
receivedTransactionBlocks(
  first: Int
  after: String
  last: Int
  before: String
  filter: TransactionBlockFilter
  scanLimit: Int
): TransactionBlockConnection!
bcs: Base64
display: [DisplayEntry!]
dynamicField(
  name: DynamicFieldName!
): DynamicField
dynamicObjectField(
  name: DynamicFieldName!
): DynamicField
dynamicFields(
  first: Int
  after: String
  last: Int
  before: String
): DynamicFieldConnection!
asMoveObject: MoveObject
asMovePackage: MovePackage
}

```

Fields

Object.address • **SuiAddress!** **non-null** **scalar**

Object.objects • **MoveObjectConnection!** **non-null** **object**

Objects owned by this object, optionally **filter**-ed.

Object.objects.first • **Int** **scalar**

Object.objects.after • **String** **scalar**

Object.objects.last • **Int** **scalar**

Object.objects.before • **String** **scalar**

Object.objects.filter • **ObjectFilter** **input**

Object.balance • **Balance** **object**

Total balance of all coins with marker type owned by this object. If type is not supplied, it defaults to

`0x2::sui::SUI`.

`Object.balance.type`. `String` scalar

`Object.balances`. `BalanceConnection!` non-null object

The balances of all coin types owned by this object.

`Object.balances.first`. `Int` scalar

`Object.balances.after`. `String` scalar

`Object.balances.last`. `Int` scalar

`Object.balances.before`. `String` scalar

`Object.coins`. `CoinConnection!` non-null object

The coin objects for this object.

`type` is a filter on the coin's type parameter, defaulting to `0x2::sui::SUI`.

`Object.coins.first`. `Int` scalar

`Object.coins.after`. `String` scalar

`Object.coins.last`. `Int` scalar

`Object.coins.before`. `String` scalar

`Object.coins.type`. `String` scalar

`Object.stakedSuis`. `StakedSuiConnection!` non-null object

The `0x3::staking_pool::StakedSui` objects owned by this object.

`Object.stakedSuis.first`. `Int` scalar

`Object.stakedSuis.after`. `String` scalar

`Object.stakedSuis.last`. `Int` scalar

`Object.stakedSuis.before`. `String` scalar

`Object.defaultSuinsName`. `String` scalar

The domain explicitly configured as the default domain pointing to this object.

`Object.defaultSuinsName.format`. `DomainFormat` `enum`

`Object.suinsRegistrations`. `SuinsRegistrationConnection!`

non-null

object

The SuinsRegistration NFTs owned by this object. These grant the owner the capability to manage the associated domain.

`Object.suinsRegistrations.first`. `Int` `scalar`

`Object.suinsRegistrations.after`. `String` `scalar`

`Object.suinsRegistrations.last`. `Int` `scalar`

`Object.suinsRegistrations.before`. `String` `scalar`

`Object.version`. `UInt53!` **non-null** **scalar**

`Object.status`. `ObjectKind!` **non-null** **enum**

The current status of the object as read from the off-chain store. The possible states are: NOT_INDEXED, the object is loaded from serialized data, such as the contents of a genesis or system package upgrade transaction. LIVE, the version returned is the most recent for the object, and it is not deleted or wrapped at that version. HISTORICAL, the object was referenced at a specific version or checkpoint, so is fetched from historical tables and may not be the latest version of the object. WRAPPED_OR_DELETED, the object is deleted or wrapped and only partial information can be loaded."

`Object.digest`. `String` **scalar**

32-byte hash that identifies the object's current contents, encoded as a Base58 string.

`Object.owner`. `ObjectOwner` **union**

The owner type of this object: Immutable, Shared, Parent, Address Immutable and Shared Objects do not have owners.

`Object.previousTransactionBlock`. `TransactionBlock`

object

The transaction block that created this version of the object.

`Object.storageRebate`. `BigInt` **scalar**

The amount of SUI we would rebate if this object gets deleted or mutated. This number is recalculated based on the present storage gas price.

`Object.receivedTransactionBlocks` • `TransactionBlockConnection!` **non-null** **object**

The transaction blocks that sent objects to this object.

`scanLimit` restricts the number of candidate transactions scanned when gathering a page of results. It is required for queries that apply more than two complex filters (on function, kind, sender, recipient, input object, changed object, or ids), and can be at most `serviceConfig.maxScanLimit`.

When the scan limit is reached the page will be returned even if it has fewer than `first` results when paginating forward (`last` when paginating backwards). If there are more transactions to scan, `pageInfo.hasNextPage` (or `pageInfo.hasPreviousPage`) will be set to `true`, and `PageInfo.endCursor` (or `PageInfo.startCursor`) will be set to the last transaction that was scanned as opposed to the last (or first) transaction in the page.

Requesting the next (or previous) page after this cursor will resume the search, scanning the next `scanLimit` many transactions in the direction of pagination, and so on until all transactions in the scanning range have been visited.

By default, the scanning range includes all transactions known to GraphQL, but it can be restricted by the `after` and `before` cursors, and the `beforeCheckpoint`, `afterCheckpoint` and `atCheckpoint` filters.

`Object.receivedTransactionBlocks.first` • `Int` **scalar**

`Object.receivedTransactionBlocks.after` • `String` **scalar**

`Object.receivedTransactionBlocks.last` • `Int` **scalar**

`Object.receivedTransactionBlocks.before` • `String` **scalar**

`Object.receivedTransactionBlocks.filter` • `TransactionBlockFilter` **input**

`Object.receivedTransactionBlocks.scanLimit` • `Int` **scalar**

`Object.bcs` • `Base64` **scalar**

The Base64-encoded BCS serialization of the object's content.

`Object.display` • `[DisplayEntry!]` **list** **object**

The set of named templates defined on-chain for the type of this object, to be handled off-chain. The server substitutes data from the object into these templates to generate a display string per template.

`Object.dynamicField` • `DynamicField` **object**

Access a dynamic field on an object using its name. Names are arbitrary Move values whose type have `copy`, `drop`, and `store`, and are specified using their type, and their BCS contents, Base64

encoded.

Dynamic fields on wrapped objects can be accessed by using the same API under the Owner type.

`Object.dynamicField.name`. `DynamicFieldName!` `non-null` `input`

`Object.dynamicObjectField`. `DynamicField` `object`

Access a dynamic object field on an object using its name. Names are arbitrary Move values whose type have `copy`, `drop`, and `store`, and are specified using their type, and their BCS contents, Base64 encoded. The value of a dynamic object field can also be accessed off-chain directly via its address (e.g. using `Query.object`).

Dynamic fields on wrapped objects can be accessed by using the same API under the Owner type.

`Object.dynamicObjectField.name`. `DynamicFieldName!` `non-null` `input`

`Object.dynamicFields`. `DynamicFieldConnection!` `non-null`
`object`

The dynamic fields and dynamic object fields on an object.

Dynamic fields on wrapped objects can be accessed by using the same API under the Owner type.

`Object.dynamicFields.first`. `Int` `scalar`

`Object.dynamicFields.after`. `String` `scalar`

`Object.dynamicFields.last`. `Int` `scalar`

`Object.dynamicFields.before`. `String` `scalar`

`Object.asMoveObject`. `MoveObject` `object`

Attempts to convert the object into a MoveObject

`Object.asMovePackage`. `MovePackage` `object`

Attempts to convert the object into a MovePackage

Interfaces

`IObject` `interface`

Interface implemented by on-chain values that are addressable by an ID (also referred to as its address). This includes Move objects and packages.

`IOwner` `interface`

Interface implemented by GraphQL types representing entities that can own objects. Object owners are identified by an address which can represent either the public key of an account or another object. The same address can only refer to an account or an object, never both, but it is not possible to know which up-front.

Returned By

`multiGetObjects` query . `object` query

Member Of

`GasEffects` object . `ObjectChange` object . `ObjectConnection` object . `ObjectEdge` object . `OwnedOrImmutable` object . `Owner` object . `Receiving` object . `SharedObjectRead` object

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