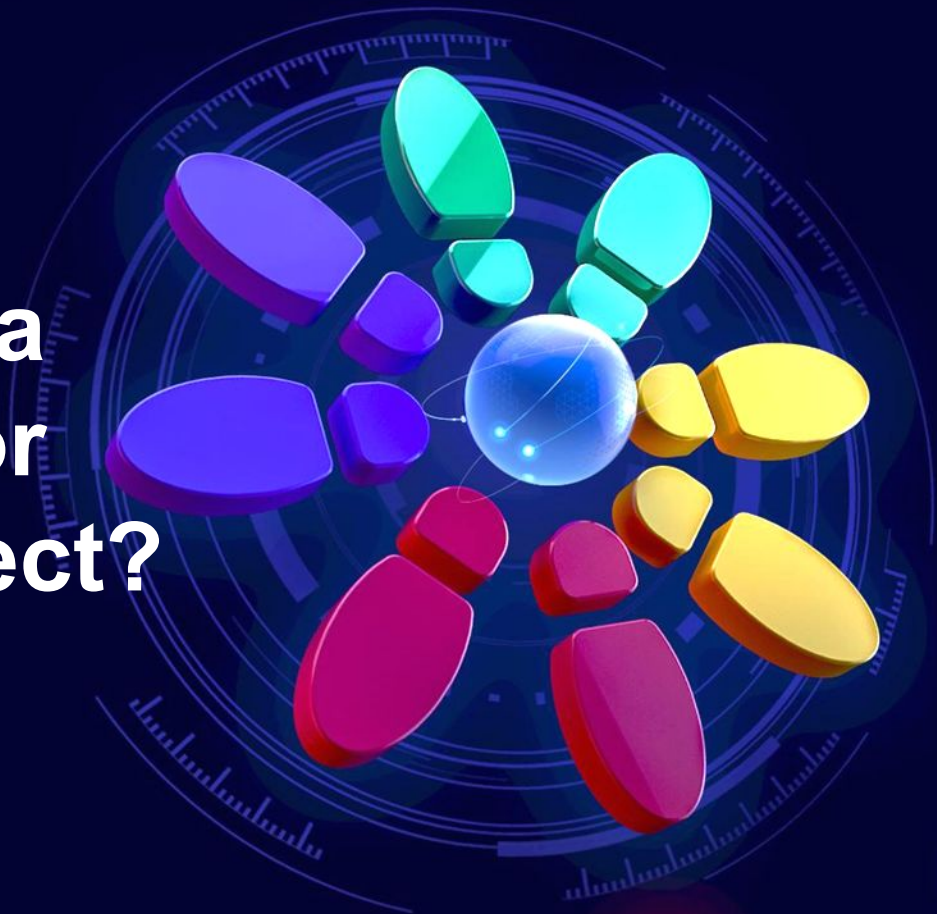




How to choose a data provider for your web3 project?

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 @Navy_Tse



About Me

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- Twitter: @Navy_Tse



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分类	示例
数据应用	Nansen, Messari, Scan, Debank...
数据平台	Footprint, Dune, Flipside...
数据节点	Infura, Quicknode, Infstones, Alchemy...

Key factors in choosing a data provider



价格?

数据需求?

数据质量?

数据覆盖度?

成本

时间成本

低门槛

数据兼容

灵活定制

- 低门槛: 你能够用你熟悉的方式得到解决方案。
- 兼容性: 与你现有系统、技术架构、数据格式兼容, 一站式与自己的私有数据兼容 对接。
- 灵活定制: 标准产品不能满足的时候, 能便捷的自定义解决方案, 同时获得好的技术支持, 个性化需求能得到及时回应和处理。

Scenario and case sharing - scan

比如查看链上原始数据，比如单笔交易的状态和明细数据，可以用Scan。能简单快速查看特定交易涉及的数据

OverviewInternal TxnsLogs (30)StateComments

Transaction Hash:0x625aacd0a21ec4e62112e6dfa3dc3cb42bc2bdee375e2a38949aa66d1d5b179d

Status:Success

Block:1638379925 Block Confirmations

Timestamp:5 mins ago (Jan-11-2023 01:14:35 PM +UTC)Confirmed within 6 secs

Transaction Action:

Sale: 15 NFTs For 3.6458 Ether On OpenSea

Transfer of HoshiboshiAr... (Hoshib...) From 0x2c0c2aa73e2800a83e... To 0xf09fd8a02519e4252e...
1 of Token ID [732]

Transfer of HoshiboshiAr... (Hoshib...) From 0x1cbaafea429dd0fcb7... To 0xf09fd8a02519e4252e...
1 of Token ID [645]

Transfer of HoshiboshiAr... (Hoshib...) From 0x121aae2c90ed0e1ccb... To 0xf09fd8a02519e4252e...
1 of Token ID [479]

Transfer of HoshiboshiAr... (Hoshib...) From 0x597d79c140590c64a2... To 0xf09fd8a02519e4252e...
1 of Token ID [580]

Transfer of HoshiboshiAr... (Hoshib...) From 0xb15d8dfed0060f0cd80... To 0xf09fd8a02519e4252e...

Scroll for more

Sponsored:

From:0xf09fd8a02519e4252e65738dd57092173ea7ad

Interacted With (To):Contract 0x000000000006c3852cbe3e08e8df289169ede581 (Seaport 1.1)
TRANSFER 0.2151 Ether From Seaport... To 0x121aaec0e0e1cc0b134...
TRANSFER 0.2151 Ether From Seaport... To 0x597d79c140590c64a29191...
TRANSFER 0.216 Ether From Seaport... To 0xb15d8dfed0060f0cd80b1b0...
TRANSFER 0.216 Ether From Seaport... To 0x1009e55de1316ba7c624...
TRANSFER 0.216 Ether From Seaport... To 0x2d7bc51199f49f7341521e...
TRANSFER 0.2187 Ether From Seaport... To 0x4334cdeb036b102829e4b6...
TRANSFER 0.2196 Ether From Seaport... To 0x6c27609d57829857341235...
TRANSFER 0.2205 Ether From Seaport... To 0xf178a38b49593a1094860...
TRANSFER 0.2214 Ether From Seaport... To 0x4079b2d3a39d5b9ecb07a...

Scenario and case sharing - scan

使用Scan会有哪些限制？

- 汇总数据: 比如你想看 Opensea某一天的交易量
- 时间序列数据: 比如你想看 Opensea历史交易量趋势
- 跨链数据: 比如你想看 Opensea在Ethereum和Solana的历史交易量趋势
- 高级搜索功能: 比如你想看某个 NFT的所有转账历史以及在各大 Marketplace上的交易数据

Scenario and case sharing - RPC Provider

- 有研发团队以及大数据背景, 有能力自建数据索引, 处理以及存储等过程, 去搭建数仓或者应用。
- 基于链底层数据, 搭建实时交易或者实时分析应用

节点服务商	QuickNode	Infstone	Alchemy	Infura	ChainStack	Ankr	GetBlock	BlockDaemon
支持公链数量	12	11	5	8	13	12	39	53
Ethereum	1	1	1	1	1	1	1	1
BSC	1	1	0	0	1	1	1	0
Solana	1	1	0	0	1	1	1	1
Bitcoin	1	0	0	0	1	0	1	1
Optimism	1	0	1	1	0	0	1	0
Fantom	1	0	0	0	1	1	1	0
Terra	1	0	0	0	0	0	1	1
Arbitrum	1	0	1	1	0	1	1	0
Algorand	1	0	0	0	0	0	0	1
Gnosis	1	0	0	0	0	0	1	0
Polygon	1	1	1	1	1	1	1	0
Celo	1	0	0	0	0	1	0	1
Bitcoin Cash	0	0	0	0	0	0	1	1
XRP	0	0	0	0	0	0	1	1
Polkadot	0	0	0	0	0	0	1	1
EOS	0	0	0	0	0	0	1	0
Litecoin	0	0	0	0	0	0	1	0
Cardana	0	0	0	0	0	0	1	1
Near	0	0	0	1	0	1	1	1
Tron	0	0	0	0	0	0	1	0
Monero	0	0	0	0	0	0	1	0
Avalanche	0	0	0	0	1	1	1	1
Kusama	0	0	0	0	0	0	1	1
NEM	0	0	0	0	0	0	1	0

Scenario and case sharing - RPC Provider



以Quicknode为例

eth/v2/beacon/blocks/{block_id}

eth_blockNumber

eth_call

eth_chainId

eth_estimateGas

eth_gasPrice

eth_getBalance

eth_getBlockByHash

eth_getBlockByNumber

eth_getBlockReceipts

eth_getBlockTransactionCountByHash

eth_getBlockTransactionCountByNumber

eth_getCode

eth_getFilterChanges

eth_getFilterLogs

eth_getLogs

eth_getStorageAt

eth_getTransactionByBlockHashAndIndex

eth_getTransactionByBlockNumberAndIndex

Transactionposition - Quantity.

type - String.

error - String.

Code Examples:

web3py

</> curl

ethers

eth.rb

```
1 from web3 import HTTPProvider
2
3 client = HTTPProvider('http://sample-endpoint-name.network.quicknode.pro/token-go
4 result = client.make_request('trace_block', ['0xccb93d'])
5 print(result)
6
```

Ready to get started?















Create a free account

Scenario and case sharing - RPC Provider

使用RPC Provider 会有哪些限制？

- 数据可读性差: 比如你想看某个游戏NFT的交易量
- 缺乏结构化数据: 比如细分领域的数据, 像 GameFi用户数据, 新增, 留存用户等。
- 全量历史数据: 比如某个游戏历史上所有的token交易量

Scenario and case sharing - Data Platform

<input type="checkbox"/>	Name	Logo	Category	Website	Twitter
<input type="checkbox"/>	 BigQuery		Blockchain Data Warehous...	https://console.cloud.google.com/mar...	@GoogleCloud
2	Chainbase		Blockchain Data Warehous...	https://chainbase.online/	@ChainbaseOnline
3	Dune		Blockchain Data Warehous...	https://dune.com/home	@DuneAnalytics
4	Flipside		Blockchain Data Warehous...	https://flipsidecrypto.xyz/	@flipsidecrypto
5	Footprint		Blockchain Data Warehous...	https://www.footprint.network/	@Footprint_Data
6	GeniiData		Blockchain Data Warehous...	https://geniidata.com/	@geniidata
7	Luabase		Blockchain Data Warehous...	https://luabase.com/	@onluabase
8	Numia		Blockchain Data Warehous...	https://numia.xyz/	@NumiaData
9	Space and Time		Blockchain Data Warehous...	https://www.spaceandtime.io/	@SpaceandTimeDB
10	Spice		Blockchain Data Warehous...	https://spice.xyz/	@spice_ai
11	Stacks on Chain		Blockchain Data Warehous...	https://stacksonchain.com/	@anononchain
12	Transpose		Blockchain Data Warehous...	https://www.transpose.io/	@TransposeData
13	Zettablock		Blockchain Data Warehous...	https://www.zettablock.com/	@ZettaBlockHQ

下面以Footprint Analytics为例，怎样为Developer提供更好的解决方案

Most Comprehensive Coverage of Chains and Domains



Footprint Analytics provides a comprehensive, timely and accurate overview of the full blockchain ecosystem

24

Chains

700,000+

NFT Collections

17

NFT Marketplaces

1,987

GameFi Protocols

519

DeFi Protocols

108,005

Tokens

Chains



SOLANA



Marketplace



2.0



Aavegotchi



Cryptopunks



Walken



MAGIC EDEN



Rarible

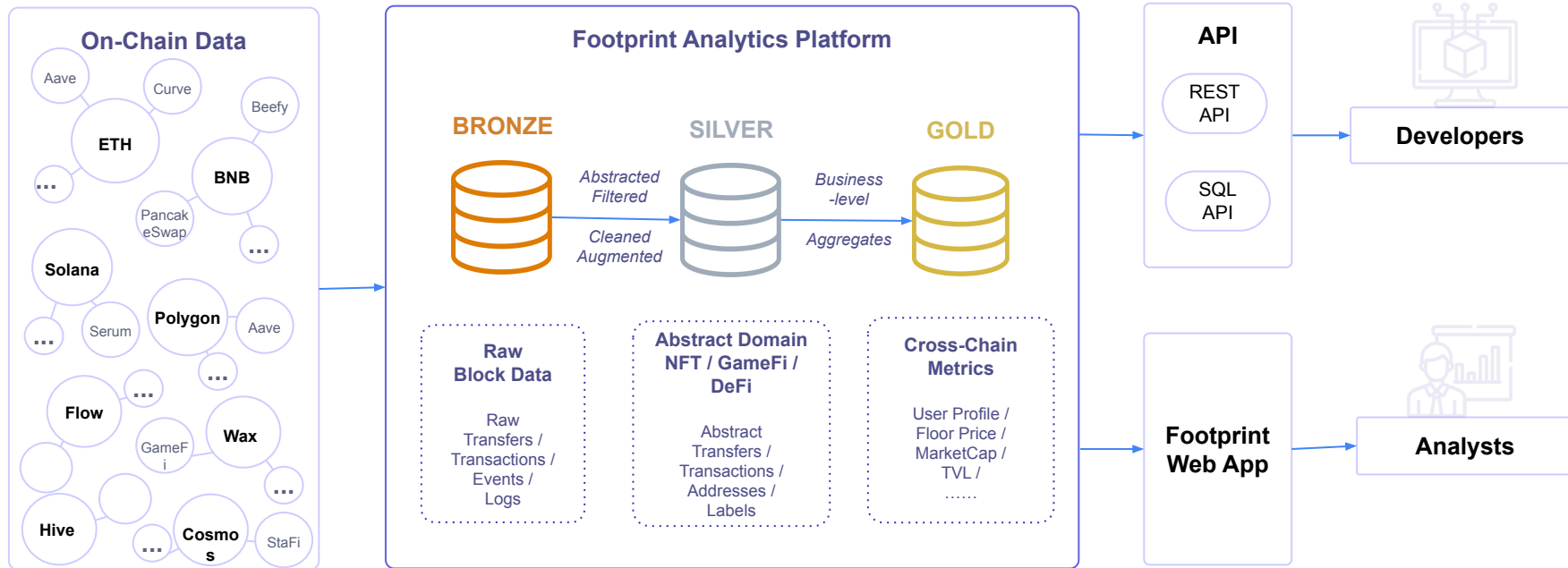


Decentraland



The Footprint Data Model: Versatile and Robust

Built for developers, by developers

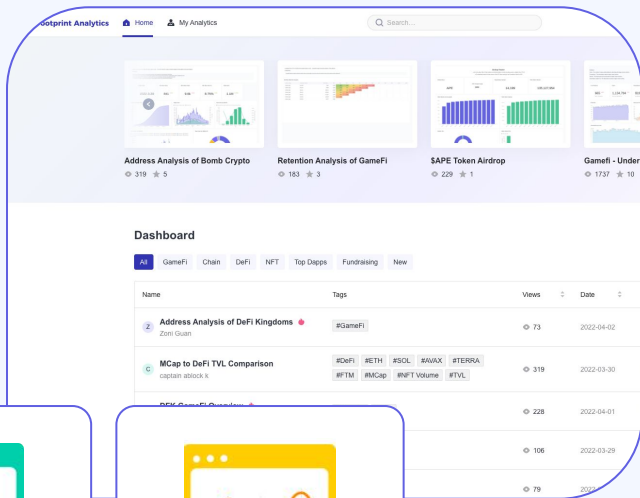


Preview and Visualize Data with Footprint Web App



Before programming the SQL API, you can debug your query on Footprint UI

Footprint Web App



SQL Query



No Code

Data API

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Power your Web3 projects and applications with unmatched data



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REST API

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0代码搭建你的应用 by Footprint Web APP —— 低门槛



案例分享

门槛



>



>



Footprint Analytics

- 0代码构建NFT Marketplace 分析应用：
<https://www.footprint.network/@0xLam/OpenSea>
- 0代码构建GameFi项目分析应用
: https://www.footprint.network/@Higi/Era7-Cards-NFT-Collections?game_name=era7-game-of-truth&collection=era7-cards&series_date=past90days
- 0代码构建用户画像分析系统
: https://www.footprint.network/@rogerD/Gamer-Profile?wallet_address=0x81e4fb0c64bf49f89b57f6648562fc9a791b2e92
- 0代码构建竞品分析框架
: https://www.footprint.network/@0xLam/Walken-vs-StepN?game_a=walken&game_b=stepn&chain=Solana

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以获取mutant-ape-yacht-club在各大NFT Marketplace的交易为例

(MAYC collection contract address:0x60E4d786628Fea6478F785A6d7e704777c86a7c6)



JUMP TO

GET STARTED

How to get API key

Introduction

REST API V2

- NFT
 - NFT transactions**
 - NFT transfers
 - NFT orders
 - NFT wash trade checker
 - NFT collection statistics
 - NFT statistics
 - NFT info
 - NFT attributes
 - NFT collections by chain
 - NFT balance
 - NFT balance by wallet
- Token
- GameFi
- Chain
- SQL API
- Query
- UPLOAD API
- Upload
- REST API V1
 - NFT
 - GameFi
 - Chain
 - Address

NFT transactions

GET <https://api.fingerprint.network/api/v2/nft/collection/transactions>

Returns the sales record of the NFT collection in the marketplace.

YOUR REQUEST HISTORY

9 Calls 7 Days ↕			
TIME	STATUS	PATH	USER AGENT
2023/1/12 17:44	● 200	/api/v2/nft/collection/tran...	API Explorer 🔄
2023/1/12 17:44	● 200	/api/v2/nft/collection/tran...	API Explorer 🔄
2023/1/12 17:42	● 200	/api/v2/nft/collection/tran...	API Explorer 🔄

EXPAND ▾ Page 1

QUERY PARAMS

chain string required

Ethereum ↕

collection_contract_address string required

0x60E4d78662BF

NFT Collection Contract Address

eg:
 Ethereum: 0xbc4Ca0Eda7647a8ab7c2061c2e118a18a936f1D3
 Polygon: 0x2953399124f0cb46dc2bacdb8a89cf0599974963
 BNB Chain: 0x07d971c03553011a48e951a5348632d37652ba1
 Solana: acb3092b2babb32acd5c50eaad4a11b7caaf0fd9de4db0edde2dcdb12b9687fe

start_time string

The query supports time period query, when start_time is specified, but end_time is not specified, the default query is the data of 24 hours after start_time (including start_time); if you do not specify start_time and end_time, the default query is yesterday; the maximum span of one inquiry is 30 days , eg: 2022-02-02 00:00:00

end_time string

When end_time is specified, but no start_time is specified, the default query is 24 hours before end_time (not including end_time) , eg: 2022-02-03 00:00:00

The screenshot displays a REST client interface with three tabs: Header, Request, and Response.

- Header Tab:** A custom header is added with the key `API-KEY` and the value `40c2avna08fujYtPd2Mz9x16/0/jR2Mvgofp7f1f9qz1Dwcm1`.
- Request Tab:** A curl command is shown:


```
curl --request GET \
  --url 'https://api.footprint.network/api/v2/nft/c...' \
  --header 'API-KEY: 40c2avna08fujYtPd2Mz9x16/0/jR2Mvgofp7f1f9qz1Dwcm1' \
  --header 'accept: application/json'
```
- Response Tab:** The response status is 200. The JSON body contains the following data:


```
{
  "transaction_hash": "0xb0bd6331920d7262c0687ba41557b...",
  "block_timestamp": "2023-01-11 21:30:59.000 UTC",
  "block_number": "16386259",
  "log_index": "215",
  "chain": "Ethereum",
  "eth_amount": "20.5",
  "internal_index": "0",
  "collection_contract_address": "0xb0e4d786628fea6471...",
  "collection_slug": "mutant-ape-yacht-club",
  "nft_token_id": "9497",
  "marketplace_contract_address": "0x74312363a45dcaba...",
  "marketplace_slug": "x2y2",
  "number_of_nft_token_id": "1",
  "value": "27337.034991136155",
  "value_currency": "USD",
  "amount": "20.5",
  "amount_currency": "ETH",
  "internal_currency_contract_address": "0xeeeeeeeeeeeeee...",
  "buyer_address": "0xbdf67f94d480e9cd086512b19ed9a2...",
  "seller_address": "0x782193c186046edf89379d566a622bd...",
  "royalty_value": "0",
  "platform_fee_rate": "0"
}
```

Build your NFT dapps with Footprint, including:

- NFT explorer
- NFT wallets
- NFT trackers
- NFT marketplaces
- NFT games

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SQL API - Customized for Your Needs — 灵活性



A flexible SQL API customization for robust requirements

SQL API

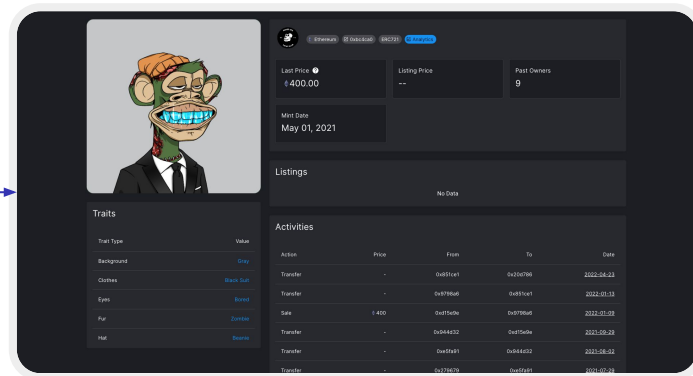
```
import axios from 'axios'

axios.post('https://api.footprint.network/api/v1/native', {
  query: `
    SELECT * FROM (
      SELECT * FROM nft_info
      WHERE collection_contract_address =
        '0xbc4ca0eda7647a8ab7c2061c2e118a18a936f13d' AND nft_token_id = 1401
    ) a
    LEFT JOIN (
      SELECT * FROM nft_token_attributes
      WHERE collection_contract_address =
        '0xbc4ca0eda7647a8ab7c2061c2e118a18a936f13d' AND nft_token_id = 1401
    ) b
    ON b.collection_contract_address = a.collection_contract_address AND
    b.nft_token_id = a.nft_token_id
    LEFT JOIN (
      SELECT * FROM nft_transfers
      WHERE collection_contract_address =
        '0xbc4ca0eda7647a8ab7c2061c2e118a18a936f13d' AND nft_token_id = 1401
    ) c
    ON c.collection_contract_address = a.collection_contract_address AND c.nft_token_id
    = a.nft_token_id
  )`
})
```

Response

```
{
  "chain": "Ethereum",
  "collection_contract_address": "0xbc4ca0eda7647a8ab7c2061c2e118a18a936f",
  "nft_token_id": "1401",
  "collection_slug": "bored-ape-yacht-club",
  "collection_name": null,
  "token_name": "BoredApeYachtClub #1401",
  "description": null,
  "image_url": "https://lh3.googleusercontent.com/vqgWQ4eX6zm8KFSRgv4-K6",
  "mint_transaction_hash": "0x6d5a377ad620edae2d7c54403824c451174ac8dd",
  "mint_block_timestamp": "2021-05-01T05:36:00.000Z",
  "mint_address": "0xc6dc654b5aa7969a24c7e442a52e61fb8b24827",
  "metadata_url": "https://ipfs.io/ipfs/QmeSjSinHPnMxmpMjwiXyN6zS4E9zcca",
  "metadata": {
    "traits": [
      {
        "trait_type": "Clothes",
        "value": "Black Suit"
      }
    ]
  },
  "internet_mime_type": "image/png",
  "animation_url": null,
  "attribute_key": "Background",
  "attribute_value": "Gray",
  "attribute_type": "string",
  "block_timestamp": "2022-10-24T00:36:11.000Z",
  "transaction_hash": "0x0ffdd35fc0833657098b26264d399a4c2e546c08d9de0b",
  "log_index": "1401",
  "block_date": "2022-10-24",
  "block_number": "15814427",
  "from_address": "0xd30cad3f023888d5a81580fb80f93102d69e9ef",
  "to_address": "0x4e9cf298bc3dc6c38013b25fd560bca6a18e2ae6",
  "amount_raw": 1,
  "internal_index": "0",
  "transfer_type": "transfer"
}
```

NFT App



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一款能满足你基本需求和实现你目标的产品只是基准条件，那一款能加速你 build web3项目的产品，更应该拥有的核心特性是什么？

- 低门槛 —— 不管你是小白用户还是专业用户，都能快速的使用起来并快速得到答案
- 高兼容度 —— 支持跨链，EVM和非EVM都能保持统一的结构，降低对接和维护成本
- 高灵活性 —— 你的特定定制需求，不依赖提供商，可以自己掌握主动权

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Discord: <https://discord.com/invite/3HYaR6USM7>



Data API: <https://www.footprint.network/data-api>



Github: <https://github.com/footprintanalytics>



Email: sales@footprint.network



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