

starknet_getClassAt

Returns the contract class definition of the specified contract class address in the specified block.

Parameters

- block_id
- : [Required
-] The block parameter object containing one of the following:
 - * block_hash
 - : (string) Block hash.
 - * block_number
 - : (integer) Decimal block number.
 - * One of the string tags latest
 - or pending
 - * .
- contract_address
- : (string) [Required
-] The address of the requested [contract class](#)
- .

Returns

A contract class object containing:

- `abi`
- : The class ABI, as supplied by the user declaring the class.
- `contract_class_version`
- : The version of the contract class object.
- `entry_points_by_type`
- : Entry points by type.
- `sierra_program`
- : The list of Sierra instructions of which the program consists.

Example

Replace YOUR-API-KEY with an API key from your [Infura dashboard](#).

Request

- cURL

```
curl https://starknet-mainnet.infura.io/v3/YOUR-API-KEY \-X POST \-H "Content-Type: application/json" \-d '{ "jsonrpc": "2.0", "method": "starknet_getClassAt", "params": { "block_id": { "block_hash": "0x041b10c45dc3f39372f7b9409261cac9d880c5d75a5bb077d028db20b1bd76c4" }, "contract_address": "0x03b554093fb0a7460913be2d5c011cb5ac4333dfcf6125851bcd3f926a3b558" }, "id": 0 }'
```

Response

- JSON

```
{ "jsonrpc": "2.0", "id": 0, "result": { "abi": "{\\\"type\\\": \\\"impl\\\", \\\"name\\\": \\\"ISTARKSImpl\\\", \\\"interface_name\\\": \\\"ins:ins:ISTARKS\\\", \\\"type\\\": \\\"interface\\\", \\\"name\\\": \\\"ins:ins:ISTARKS\\\", \\\"items\\\": [{\\\"type\\\": \\\"function\\\", \\\"name\\\": \\\"get_total_supply\\\", \\\"inputs\\\": [{\\\"name\\\": \\\"tick\\\", \\\"type\\\": \\\"core:felt252\\\"}], \\\"outputs\\\": [{\\\"type\\\": \\\"core:integer::u128\\\"}], \\\"state_mutability\\\": \\\"view\\\", \\\"type\\\": \\\"function\\\", \\\"name\\\": \\\"get_max_supply\\\", \\\"inputs\\\": [{\\\"name\\\": \\\"tick\\\", \\\"type\\\": \\\"core:felt252\\\"}], \\\"outputs\\\": [{\\\"type\\\": \\\"core:integer::u128\\\"}], \\\"state_mutability\\\": \\\"view\\\", \\\"type\\\": \\\"function\\\", \\\"name\\\": \\\"balance_of\\\", \\\"inputs\\\": [{\\\"name\\\": \\\"tick\\\", \\\"type\\\": \\\"core:felt252\\\"}], \\\"name\\\": \\\"account\\\", \\\"type\\\": \\\"core::starknet::contract_address::ContractAddress\\\"}], \\\"outputs\\\": [{\\\"type\\\": \\\"core:integer::u128\\\"}], \\\"state_mutability\\\": \\\"view\\\", \\\"type\\\": \\\"function\\\", \\\"name\\\": \\\"allowance\\\", \\\"inputs\\\": [{\\\"name\\\": \\\"tick\\\", \\\"type\\\": \\\"core:felt252\\\"}], \\\"name\\\": \\\"owner\\\", \\\"type\\\": \\\"core::starknet::contract_address::ContractAddress\\\"}], \\\"name\\\": \\\"spender\\\", \\\"type\\\": \\\"core::starknet::contract_address::ContractAddress\\\"}], \\\"outputs\\\": [{\\\"type\\\": \\\"core:integer::u128\\\"}], \\\"state_mutability\\\":
```

```

"view"}, {"type": "function", "name": "get_holders", "inputs": [{"name": "tick", "type": "core::felt252"}], "outputs": [{"type": "core::integer::u128"}], "state_mutability": "view"}, {"type": "function", "name": "transfer", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "recipient", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "amount", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "transfer_from", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "sender", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "recipient", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "amount", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "approve", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "spender", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "amount", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "increase_allowance", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "spender", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "added_value", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "decrease_allowance", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "spender", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "subtracted_value", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "Inscribe", "inputs": [{"name": "tick", "type": "core::felt252"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "Deploy", "inputs": [{"name": "tick", "type": "core::felt252"}, {"name": "maxSupply", "type": "core::integer::u128"}, {"name": "maxPerMint", "type": "core::integer::u128"}], "outputs": [], "state_mutability": "external"}, {"type": "function", "name": "get_tick_counter", "inputs": [], "outputs": [{"type": "core::integer::u128"}], "state_mutability": "view"}, {"type": "function", "name": "get_ticks", "inputs": [], "outputs": [{"type": "core::array::Array::\u003ccore::integer::u128\u003e"}], "state_mutability": "view"}, {"type": "constructor", "name": "constructor", "inputs": [{"name": "_admin", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "_ff", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "_eth", "type": "core::starknet::contract_address::ContractAddress"}, {"name": "_firstTick", "type": "core::felt252"}, {"name": "_firstTickSupply", "type": "core::integer::u128"}, {"name": "_firstTickPerMint", "type": "core::integer::u128"}], "type": "event", "name": "ins::ins::STARKS::Transfer", "kind": "struct", "members": [{"name": "tick", "type": "core::felt252", "kind": "data"}, {"name": "from", "type": "core::starknet::contract_address::ContractAddress", "kind": "data"}, {"name": "to", "type": "core::starknet::contract_address::ContractAddress", "kind": "data"}, {"name": "value", "type": "core::integer::u128", "kind": "data"}], "type": "event", "name": "ins::ins::STARKS::Approval", "kind": "struct", "members": [{"name": "tick", "type": "core::felt252", "kind": "data"}, {"name": "owner", "type": "core::starknet::contract_address::ContractAddress", "kind": "data"}, {"name": "spender", "type": "core::starknet::contract_address::ContractAddress", "kind": "data"}, {"name": "value", "type": "core::integer::u128", "kind": "data"}], "type": "event", "name": "ins::ins::STARKS::Deploy", "kind": "struct", "members": [{"name": "tick", "type": "core::felt252", "kind": "data"}, {"name": "maxSupply", "type": "core::integer::u128", "kind": "data"}, {"name": "maxPerMint", "type": "core::integer::u128", "kind": "data"}], "type": "event", "name": "ins::ins::STARKS::Event", "kind": "enum", "variants": [{"name": "Transfer", "type": "ins::ins::STARKS::Transfer", "kind": "nested"}, {"name": "Approval", "type": "ins::ins::STARKS::Approval", "kind": "nested"}, {"name": "Deploy", "type": "ins::ins::STARKS::Deploy", "kind": "nested"}], "contract_class_version": "0.1.0", "entry_points_by_type": {"CONSTRUCTOR": [{"function_idx": 14, "selector": "0x28ffe4ff0f226a9107253e17a904099aa4f63a02a5621de0576e5aa71bc5194"}], "EXTERNAL": [{"function_idx": 11, "selector": "0x14dfa38c36b389189b8be0b1d3f9434ffcca49bf1a88f3658579d23d16368f"}, {"function_idx": 10, "selector": "0x1fd12fd4580400368d8953eca1bf472ee233e7e06245d1ef8c176ff12bd3c4"}, ...], "L1_HANDLER": [], "sierra_program": ["0x1", "0x3", "0x0", "0x361", "0x8000000000000000700000000000000000000000000000000000000000000000", "0x537472756374", ...]}

```

Last updated on May 9, 2024 [Previous starknet_getClass](#) [Next starknet_getClassHashAt](#)