

Band CLI & REST Endpoints

You can get the RPC and REST endpoints from [here](#) .

Get Data Source by ID

CLI :bandd query oracle data-source [id] --node {RPC}

Path :/api/oracle/v1/data_sources/{id} Method :GET

bandd query oracle data-source 1 --node {RPC} curl -X GET " {REST} /oracle/v1/data_sources/1" { "data_source" :

{ "owner" :

"band1m5lq9u533qaya4q3nfy16ulzqkpkhge9q8tpzs" , "name" :

"d1" , "description" :

"d1" , "filename" :

"c56de9061a78ac96748c83e8a22330accf6ee8ebb499c8525613149a70ec49d0" , "treasury" :

"band1m5lq9u533qaya4q3nfy16ulzqkpkhge9q8tpzs" , "fee" :

[{ "denom" :

"uband" , "amount" :

"1" }] } }

Get Oracle Script by ID

CLI :bandd query oracle-script [id] --node {RPC}

Path :/api/oracle/v1/oracle_scripts/{id} Method :GET

bandd query oracle oracle-script 37 --node {RPC} curl -X GET " {REST} /oracle/v1/oracle_scripts/37" { "oracle_script" :

{ "owner" :

"band1lv90l7xf3jyneh046clyfujz2se6xkqgcvs3p" , "name" :

"Band Standard Dataset (Crypto)" , "description" :

"" , "filename" :

"f0b7d894b25eca60e8519ca3d37b25ba1df2b01058ccf81ee825fa68293fcf16" , "schema" :

"{symbols:[string],multiplier:u64}/{rates:[u64]}" , "source_code_url" :

"" } }

Get Data Oracle Request by ID

CLI :bandd query request [id] --node {RPC}

Path :/api/oracle/v1/requests/{id} Method :GET

bandd query oracle request 238769 --node {RPC} curl -X GET " {REST} /oracle/v1/requests/238769" { "request" :

{ "oracle_script_id" :

"37" , "calldata" :

"AAAAAQAAAAANCVEMAAAAAA9CQA==" , "requested_validators" :

["bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus" , "bandvaloper1zrl8gmuj3vug7qy7yazzaenl25fvd3s3ussk40"] , "min_count" :

"2" , "request_height" :

"358324" , "request_time" :

"1632326855" , "client_id" :

"from_scan" , "raw_requests" :

[{ "external_id" :

"6" , "data_source_id" :

"61" , "calldata" :

"QIRD" } , { "external_id" :

"0" , "data_source_id" :

"57" , "calldata" :

"QIRD" } , { "external_id" :

"3" , "data_source_id" :

"62" , "calldata" :

"QIRD" } , { "external_id" :

"5" , "data_source_id" :

"60" , "calldata" :

"aHVvYm1wcm8gQIRD" } , { "external_id" :

"2" , "data_source_id" :

"59" , "calldata" :

"QIRD" } , { "external_id" :

"4" , "data_source_id" :

"60" , "calldata" :

"YmluYW5jZSBCVEM=" } , { "external_id" :

"9" , "data_source_id" :

"60", "calldata" :
"Yml0dHJleCBCVEM=" }, { "external_id" :
"7", "data_source_id" :
"60", "calldata" :
"a3Jha2VuIEJUQw==" }, { "external_id" :
"8", "data_source_id" :
"60", "calldata" :
"Yml0ZmluZXggQlRD" }, { "external_id" :
"1", "data_source_id" :
"58", "calldata" :
"QlRD" }], "ibc_channel" : null, "execute_gas" :
"50000" }, "reports" :
[{ "validator" :
"bandvaloper1zrl8gmuj3vug7qy7yazzaenl25fvd3s3ussk40", "in_before_resolve" : true, "raw_reports" :
[{ "external_id" :
"0", "exit_code" :
0, "data" :
"NDMyODEuMTQ0NQo=" }, { "external_id" :
"1", "exit_code" :
0, "data" :
"NDMyMTIuMjEK" }, { "external_id" :
"6", "exit_code" :
0, "data" :
"NDMxOTEuOAo=" }, { "external_id" :
"3", "exit_code" :
0, "data" :
"NDMyMDUuMjY0OQo=" }, { "external_id" :
"2", "exit_code" :
0, "data" :
"NDM0MjgK" }, { "external_id" :
"9", "exit_code" :
0, "data" :
"NDMxNzUuMjA3Cg=" }, { "external_id" :
"8", "exit_code" :
0, "data" :
"NDMxMDYuMAo=" }, { "external_id" :
"7", "exit_code" :
0, "data" :
"NDMxNzAuMgo=" }, { "external_id" :
"4", "exit_code" :
0, "data" :
"NDMzOTMuNDQ3OAo=" }, { "external_id" :
"5", "exit_code" :
0, "data" :
"NDM1OTUuMDk0Ngo=" }] }, { "validator" :
"bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus", "in_before_resolve" : true, "raw_reports" :
[{ "external_id" :
"2", "exit_code" :
0, "data" :
"NDM0NDAK" }, { "external_id" :
"3", "exit_code" :
0, "data" :
"NDMyMDUuMjY0OQo=" }, { "external_id" :
"0", "exit_code" :
0, "data" :
"NDMyODEuMTQ0NQo=" }, { "external_id" :
"1", "exit_code" :
0, "data" :
"NDMyMTIuMjEK" }, { "external_id" :
"7", "exit_code" :

```
0 , "data" :
"NDMxNzAuMgo=" } , { "external_id" :
"6" , "exit_code" :
0 , "data" :
"NDMxOTeUOAo=" } , { "external_id" :
"8" , "exit_code" :
0 , "data" :
"NDMxMDYuMAo=" } , { "external_id" :
"9" , "exit_code" :
0 , "data" :
"NDMxNzUuMjA3Cg==" } , { "external_id" :
"5" , "exit_code" :
0 , "data" :
"NDMzNzkuMjk3NAo=" } , { "external_id" :
"4" , "exit_code" :
0 , "data" :
"NDMzNjQuMzkzMgo=" } ] } , "result" :
{ "client_id" :
"from_scan" , "oracle_script_id" :
"37" , "calldata" :
"AAAAAQAAAAANCVEMAAAAAA9CQA==" , "ask_count" :
"2" , "min_count" :
"2" , "request_id" :
"249802" , "ans_count" :
"2" , "request_time" :
"1632326855" , "resolve_time" :
"1632326863" , "resolve_status" :
"RESOLVE_STATUS_SUCCESS" , "result" :
"AAAAAQAAAAAoPcQKq" } }
```

Get Data Requests by Query Info

```
Path /api/oracle/v1/request_search?oracle_script_id={oracleScriptID}&calldata={calldataHex}&min_count={minCount}&ask_count={askCount} Method :GET
curl -X GET " {REST} /oracle/v1/request_search?oracle_script_id=37&calldata=000000010000000342544300000000000f4240&min_count=2&ask_count=2" { "request" :
{ "request" :
{ "oracle_script_id" :
"37" , "calldata" :
"AAAAAQAAAAANCVEMAAAAAA9CQA==" , "requested_validators" :
[ "bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus" , "bandvaloper1zrl8gmuj3vug7qy7yazzaenl25fd3s3ussk40" ] , "min_count" :
"2" , "request_height" :
"358324" , "request_time" :
"1632326855" , "client_id" :
"from_scan" , "raw_requests" :
[ { "external_id" :
"6" , "data_source_id" :
"61" , "calldata" :
"QIRD" } , { "external_id" :
"0" , "data_source_id" :
"57" , "calldata" :
"QIRD" } , { "external_id" :
"3" , "data_source_id" :
"62" , "calldata" :
"QIRD" } , { "external_id" :
"5" , "data_source_id" :
"60" , "calldata" :
"aHVvYmlwcm8gQIRD" } , { "external_id" :
"2" , "data_source_id" :
"59" , "calldata" :
"QIRD" } , { "external_id" :
"4" , "data_source_id" :
"60" , "calldata" :
```

```
"YmluYW5jZSBCVEM=" }, { "external_id" :
"9" , "data_source_id" :
"60" , "calldata" :
"Yml0dHJleCBCVEM=" }, { "external_id" :
"7" , "data_source_id" :
"60" , "calldata" :
"a3Jha2VuIEJUQw==" }, { "external_id" :
"8" , "data_source_id" :
"60" , "calldata" :
"Yml0ZmluZXggQIRD" }, { "external_id" :
"1" , "data_source_id" :
"58" , "calldata" :
"QIRD" } ] , "ibc_channel" : null, "execute_gas" :
"50000" } , "reports" :
[ { "validator" :
"bandvaloper1zrl8gmuj3vug7qy7yazzaenl25fvd3s3ussk40" , "in_before_resolve" : true, "raw_reports" :
[ { "external_id" :
"0" , "exit_code" :
0 , "data" :
"NDMyODEuMTQ0NQo=" }, { "external_id" :
"1" , "exit_code" :
0 , "data" :
"NDMyMTluMjEK" }, { "external_id" :
"6" , "exit_code" :
0 , "data" :
"NDMxOTEuOAo=" }, { "external_id" :
"3" , "exit_code" :
0 , "data" :
"NDMyMDUuMjY0OQo=" }, { "external_id" :
"2" , "exit_code" :
0 , "data" :
"NDM0MjgK" }, { "external_id" :
"9" , "exit_code" :
0 , "data" :
"NDMxNzUuMjA3Cg==" }, { "external_id" :
"8" , "exit_code" :
0 , "data" :
"NDMxMDYuMAo=" }, { "external_id" :
"7" , "exit_code" :
0 , "data" :
"NDMxNzAuMgo=" }, { "external_id" :
"4" , "exit_code" :
0 , "data" :
"NDMzOTMuNDQ3OAo=" }, { "external_id" :
"5" , "exit_code" :
0 , "data" :
"NDM1OTUuMDk0Ngo=" } ] } , { "validator" :
"bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus" , "in_before_resolve" : true, "raw_reports" :
[ { "external_id" :
"2" , "exit_code" :
0 , "data" :
"NDM0NDAK" }, { "external_id" :
"3" , "exit_code" :
0 , "data" :
"NDMyMDUuMjY0OQo=" }, { "external_id" :
"0" , "exit_code" :
0 , "data" :
"NDMyODEuMTQ0NQo=" }, { "external_id" :
"1" , "exit_code" :
0 , "data" :
```

```
"NDMyMTluMjEK" }, { "external_id" :
"7" , "exit_code" :
0 , "data" :
"NDMxNzAuMgo=" }, { "external_id" :
"6" , "exit_code" :
0 , "data" :
"NDMxOTEuOAo=" }, { "external_id" :
"8" , "exit_code" :
0 , "data" :
"NDMxMDYuMAo=" }, { "external_id" :
"9" , "exit_code" :
0 , "data" :
"NDMxNzUuMjA3Cg==" }, { "external_id" :
"5" , "exit_code" :
0 , "data" :
"NDMzNzkuMjk3NAo=" }, { "external_id" :
"4" , "exit_code" :
0 , "data" :
"NDMzNjQuMzkzMgo=" } ] } , "result" :
{ "client_id" :
"from_scan" , "oracle_script_id" :
"37" , "calldata" :
"AAAAAQAAAANCVEMAAAAAA9CQA==" , "ask_count" :
"2" , "min_count" :
"2" , "request_id" :
"249802" , "ans_count" :
"2" , "request_time" :
"1632326855" , "resolve_time" :
"1632326863" , "resolve_status" :
"RESOLVE_STATUS_SUCCESS" , "result" :
"AAAAAQAAAAPcQKq" } } }
```

Get Data Content by Hash

Path :/oracle/v1/data/{data_hash} Method :GET

```
curl -X GET " {REST} /oracle/v1/data/32ee6262d4a615f2c3ca0589c1c1af79212f24823453cb3f4cfff85b8d338045" { "data" :
"lyEvdXNyL2Jpbj9lbnYgcHl0aG9uMwoKaW1wb3J0IGpzbn24KaW1wb3J0IHVybgxpYi5yZXZF1ZXN0CmltcG9ydCBzeXMKCkVUSF9HQVNU11RBVEIPT9VUkwgPSAiaHR0cHM6Ly9ldGhnYXNzdGF0aW9u"
}
```

Get Active Status of a Validator

CLI :bandd query oracle validator [validator-address] --node {RPC}

Path :/api/oracle/v1/validators/{validator-address} Method :GET

```
bandd query oracle validator bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus --node {RPC} curl -X GET {REST} /oracle/v1/validators/bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus {
"status" :
```

```
{ "is_active" : true, "since" :
"2021-09-07T14:52:54.598085215Z" } }
```

Check Grant of Account on This Validator

Path :/api/oracle/v1/reporter/{validator_address}/{reporter_address} Method :GET

```
curl -X GET " {REST} /oracle/v1/reporter/bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus/band1rgcrk9qttfjc5zfnmu63wj8503gc5r3wlagdrn" { "is_reporter" :
true }
```

Get Active Validators

CLI :bandd query oracle active-validators --node {RPC}

Path :/api/oracle/v1/active_validators Method :GET

```
bandd query oracle active-validators --node {RPC} curl -X GET " {REST} /oracle/v1/active_validators" { "validators" :
```

```
[ { "address" :
"bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus" , "power" :
"10132920646" } , { "address" :
"bandvaloper1ajna89zrh4u2kuv6qqyak7fn9dqphiluvvg0jk" , "power" :
"10111034000" } , { "address" :
"bandvaloper1nlepx7xg53fsy6vslrss6admtl8a33kusv7fa" , "power" :
"10110700071" } , { "address" :
"bandvaloper1274qgg28xkz6f3upx05ftr9zepgmftgts392dy" , "power" :
```

```
"10109100000" }, { "address" :  
"bandvaloper1jengg99ssg9xq9dycent782syrr4wwdn4d68s7" , "power" :  
"10103500000" }, { "address" :  
"bandvaloper1zkf9qzs7ayf3uqksxqwve8q693dsdhxk800vww" , "power" :  
"10101000000" } , ... } }
```

Get Pending Requests

bandd :bandd query oracle pending-requests [validator-address]

Path :/api/oracle/v1/pending_requests Method :GET

```
bandd query oracle pending-requests bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus --node {RPC} curl -X GET " {REST}  
/oracle/v1/pending_requests/bandvaloper1kfj48adjsnrgu83lau6wc646q2uf65rf84tzus" { "request_ids" :  
[ "249764" ] }
```

Get Latest Price on Standard Price Reference Database

Path :/oracle/v1/request_prices?ask_count={askCount}&min_count={minCount}&symbols={symbol-1}&symbols={symbol-2}&...&symbols={symbols-n} Method :GET

curl -X GET " {REST} /oracle/v1/request_prices?symbols=BTC&symbols=ETH&ask_count=4&min_count=3" { "price_results" :

```
[ { "symbol" :  
"BTC" , "multiplier" :  
"100" , "px" :  
"4822795" , "request_id" :  
"235866" , "resolve_time" :  
"1631766659" } , { "symbol" :  
"ETH" , "multiplier" :  
"100" , "px" :  
"303321" , "request_id" :  
"245820" , "resolve_time" :  
"1632163802" } } }
```

Get BandChain Oracle Governance Parameters

CLI :bandd query oracle params --node {RPC}

Path :/oracle/v1/params Method :GET

bandd query oracle params --node {RPC} curl -X GET " {REST} /oracle/v1/params" { "params" :

```
{ "max_raw_request_count" :  
"12" , "max_ask_count" :  
"16" , "max_calldata_size" :  
"256" , "max_report_data_size" :  
"512" , "expiration_block_count" :  
"100" , "base_owasm_gas" :  
"20000" , "per_validator_request_gas" :  
"30000" , "sampling_try_count" :  
"3" , "oracle_reward_percentage" :  
"70" , "inactive_penalty_duration" :  
"600000000000" , "ibc_request_enabled" :  
true } }
```

Get BandChain Oracle Counts

CLI :bandd query oracle counts --node {RPC}

Path :/oracle/v1/counts Method :GET

bandd query oracle counts --node {RPC} curl -X GET " {REST} /oracle/v1/counts" { "data_source_count" :

"98" , "oracle_script_count" :

"61" , "request_count" :

"249073" } [Previous API Endpoints](#) [Next Overview](#)