

# Custody Protocol — Query API Specification

## (Option A: Explicit Endpoints)

This document defines the JSON-based Query API for the Custody Protocol using explicit endpoint paths (Pattern A). Each endpoint corresponds to a specific query type and maps directly to RocksDB key reads or prefix scans.

Transport: CometBFT ABCI Query

All requests and responses are UTF-8 JSON.

Transport Details:

ABCI Path: explicit per endpoint (e.g., /custody/v1/intent/get)

ABCI Data: UTF-8 encoded JSON request body

ABCI Value: UTF-8 encoded JSON response body

Height: optional (PoC may ignore and use latest state)

prove: ignored for PoC (no Merkle proofs)

Common Conventions:

- All identifiers (hash32, pubkeys, signatures) are lowercase hex strings without 0x.
- uint128 values (e.g., amounts) must be encoded as decimal strings.
- All responses follow this structure:

```
Success:
{
  "ok": true,
  "result": { ... }
}

Error:
{
  "ok": false,
  "error": {
    "code": "ERR_NOT_FOUND",
    "message": "Human readable message"
  }
}
```

Endpoints:

/custody/v1/workspace/get

Request:

```
{ "workspace_id": "" }
```

Reads: W|

/custody/v1/vault/get

Request:

```
{  
  "workspace_id": "",  
  "vault_id": ""  
}
```

Reads: V|ws|vault

/custody/v1/destination/get

Request:

```
{  
  "workspace_id": "",  
  "dest_id": ""  
}
```

Reads: D|ws|dest

/custody/v1/asset/get

Request:

```
{ "asset_id": "" }
```

Reads: AS|asset

/custody/v1/policy/active

Request:

```
{  
  "scope": {  
    "type": "vault",  
    "workspace_id": "",  
    "vault_id": ""  
  }  
}
```

Reads: PA|

/custody/v1/policy/get

Request:

```
{  
  "scope": { ... },  
  "policy_set_id": "",  
  "version": 1  
}
```

Reads: PS|||

/custody/v1/intent/get

Request:

```
{  
  "workspace_id": "",  
  "vault_id": "",  
  "intent_id": ""  
}
```

}

Reads: I|ws|vault|intent

/custody/v1/intent/approvals

Request:

{

"intent\_id": "",

"limit": 100,

"cursor": null

}

Reads: prefix scan IA|intent|

/custody/v1/attestation/get

Request:

{

"workspace\_id": "",

"subject": "",

"claim": { "type": "sanctions\_clear" },

"issuer": { "scheme": "ed25519", "pubkey": "" } }

}

Reads: AT|ws|subject|claim|issuer

/custody/v1/nonce/get

Request:

{

"signer": { "scheme": "ed25519", "pubkey": "" } }

}

Reads: N|canon(signer)

Deterministic Requirements:

- All list responses must be lexicographically sorted by key.
- Unknown fields must cause ERR\_BAD\_REQUEST.
- No implicit time usage — if time-sensitive, require explicit now\_ms param.
- All endpoints must be versioned under /custody/v1/.