

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/.