Casper Labs IBM Workshop

Session 3.1 Account Management

Use Case
Document Notarisation

Use Case

Law Association

Law Firms

Lawyers

Legal Clerks

Use Case

- **Notarisation of submissable evidence**

- **hash(document) + metadata -> chain**

- **Multi-Sig**
  - **clerk | lawyer | partner**

- **IPFS integration**

Workflow

- Step 0: Start test network

- Step 1: Set document checksum / metadata

- Step 2: Initialise accounts, keys & thresholds

- Step 3: Install smart contract

- Step 4: Set multi-signature deploy

- Step 5: Publish deploy to ledger

- Step 6: Verify

Step 0 Network Setup

- **Start local NCTL network**

- **5 nodes logically isolated**

- **Initialised with accounts**

- **Await block production**

A = Law Association

B = Legal Clerk

C = Lawyer

D = Partner

Step 1 Document

- **Document -> submissable evidence**

- **Sourced by clerk**

- **Reviewed by lawyer**

- **Acknowledged by partner**

- **Checksum + Metadata**

Account Permissions

ACTION THRESHOLDS

A1: Dispatch Deploys

A2: Manage Keys

ASSOCIATED KEYS

Authorisation

Weight By Account Key

NAMED KEYS

Storage Control

U-Ref Permissions

- **Law Association -> contract operator**

- **Member(s) -> contract user(s)**

- **Association authorises Members**

- **Association assigns keys & thresholds**

Smart Contract

Installation	**Upgrade**
Execution	**Decomission**

- **Installation by Law Association**

- **Await installation confirmation**

- **Cache contract identifier (hash)**

- **View on-chain account (A)**

Legal Clerk

- creates
- approves
- emails -> user-C

Lawyer

- approves
- emails -> user-D

Partner

- approves
- sends -> blockchain

Header
(metadata)

Session
(execution)

Payment
(fees)

Approvals
(authorisation)

- **Recalculate checksum**

- **Query ledger**

- **View metadata**

- **Assert validity**

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Document Notarisation

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