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Document Signing on Blockchain

A Decentralized Solution for Document Workflows

Asic Chen, Jackie Chen, Eric Zheng,
Supervised by Prof. Arno Jacobsen,
University of Toronto

Key Features in a Document Workflow

- Storage location
- Security and access control
- Version control
- Audit trails
- Check-in/check-out and document lockdown

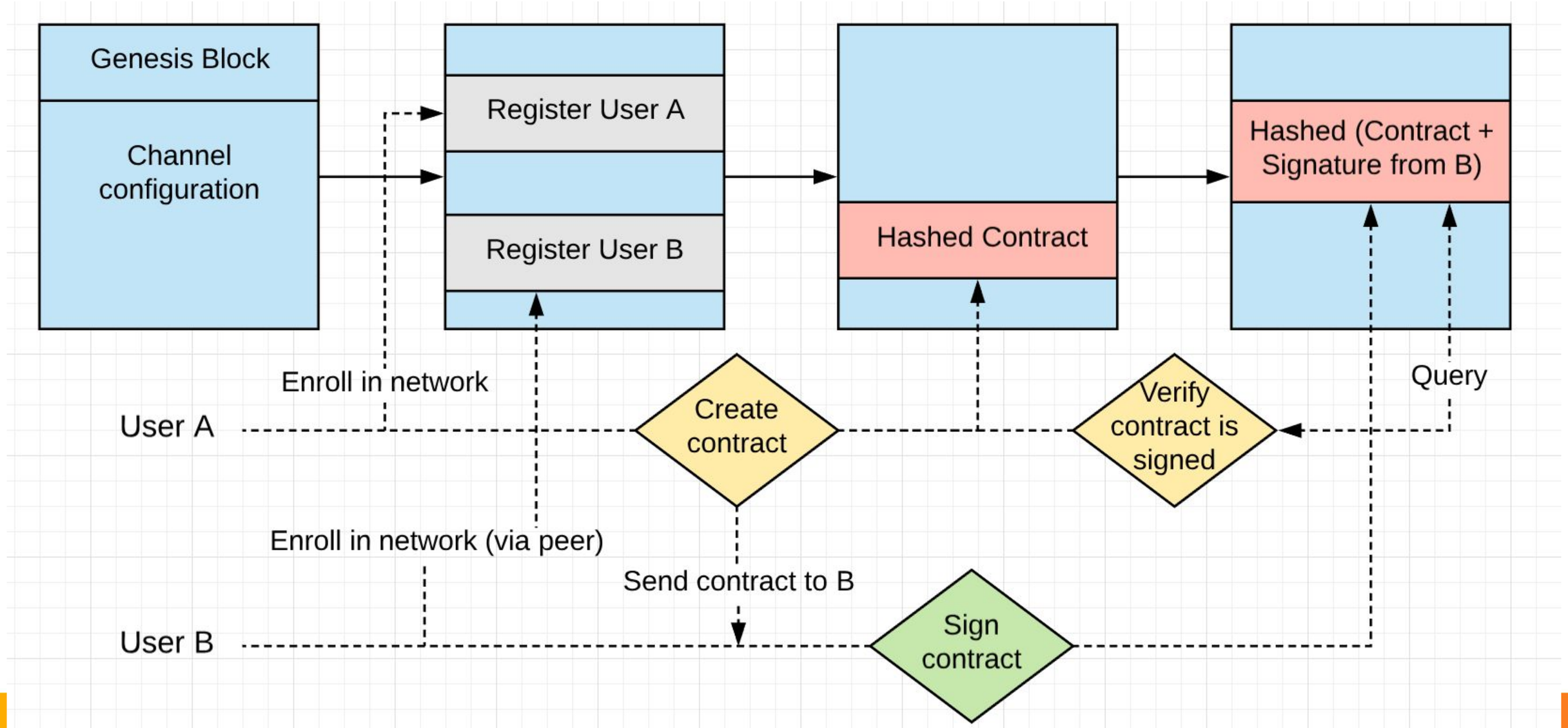
Existing Challenges in Document Signing

- Traditional signatures-based signing relies on a questionable connection between our identities and our signatures.
- We often rely on a third party to verify that our signatures are authentic.
- Conflict resolution on the existence, veracity, and timestamping of a document is usually tedious and costly.

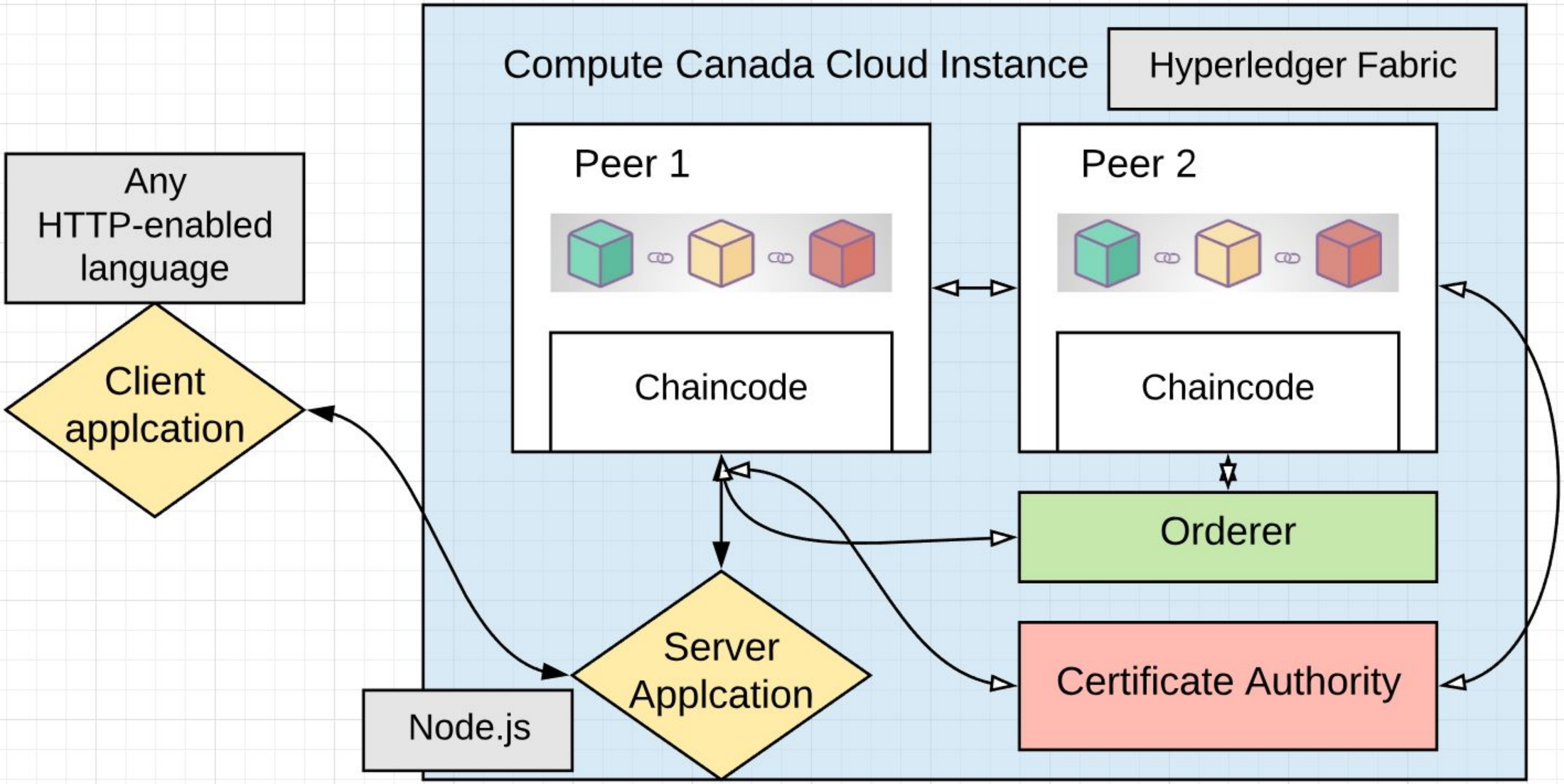
Why blockchain?

Blockchain	In this project
Every transaction is timestamped.	No longer need a Time Stamping Authority (TSA).
Every transaction is broadcast to and agreed on by each peer.	No longer rely on third party to ensure authenticity.
Signatures can be decoupled from the document.	Signing can happen in parallel to save time.
Data is copied on each peer.	Better long-term maintainence of data.

How this works



Basic Technical Architecture



Limitations & Future Work

- Will need a method to bind physical identity with digital identity. Options: biometrics, government ID, blockchain-based digital identity, etc.
- Could enable version control capability.
- Might potentially move away from a private blockchain with a Certificate Authority in order to achieve true decentralization.

Thank you!

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