

Capital Markets Special Interest Group

Token Definition Project-2020 eThaler demo

Model a sample CBDC (eThaler) in TTF (Token Taxonomy Framework) and implement as EIP 1155 token in Besu. A fiat token will remove one of the major hurdles for any transfer of value network, a fundamental requirement for frictionless digital capital markets. Implemented as a wholesale CBDC. TTF is now moving to InterWork Alliance.

eThaler Choices

Wholesale	Retail
Account Based	Token Based
DLT	Other Technology
Direct Claim	Indirect Claim

Uses the pyramid in [The technology of Central Bank Digital Currency](#) In BIS Quarterly Review by Raphael Auer and Rainer Boehme, March 2020 Graph 1

TTF-Artifact- Formula

Formula: `"tF{d,t,p,c,SC}"`

Business Description: It is **fractional**, by setting the **Decimals** property on the **divisible** behavior. A token can be **minted** or **burned**. Before executing transfer, burn or mint operation check if they are within the **compliance** regulations. **Pausable** for possible freezing of movement and all other operations because of discovered bugs or upgrade.

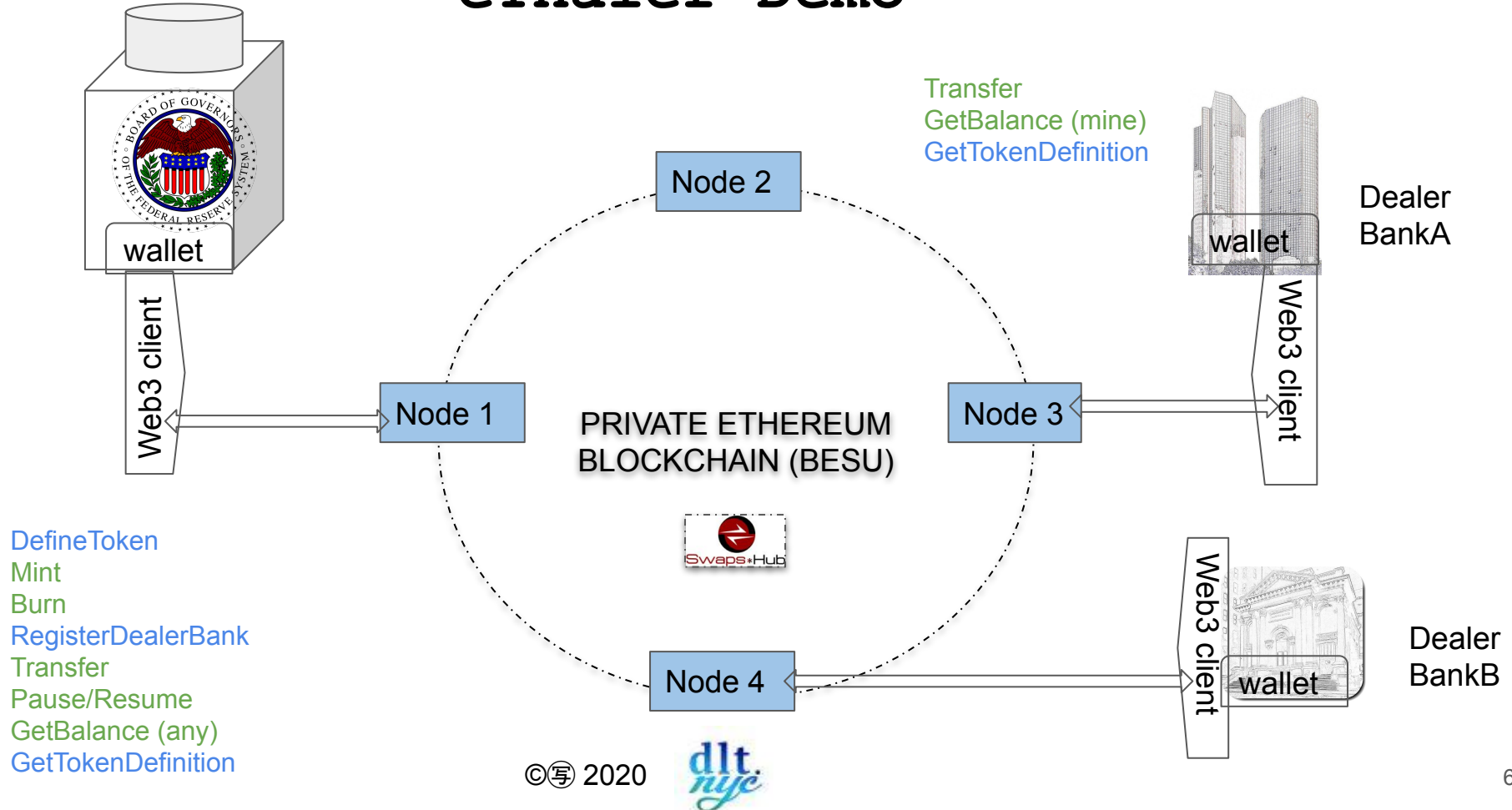
Business Example: Enables the issuance of regulated electronic money by the central bank (mintable and burnable only by Central bank) and its practical usage in real financial applications.

TTF is now the first pillar in InterWork Alliance.

EIP 1155

- Many tokens with different characteristics can be minted from the same code
- Keep tokens segregated even minted by the Fed
- Dealers can mint their own stablecoins

eThaler Demo



References

1. [Besu Github](#)
2. [BIP 1155](#)
3. [Hyperledger labs eThaler](#)