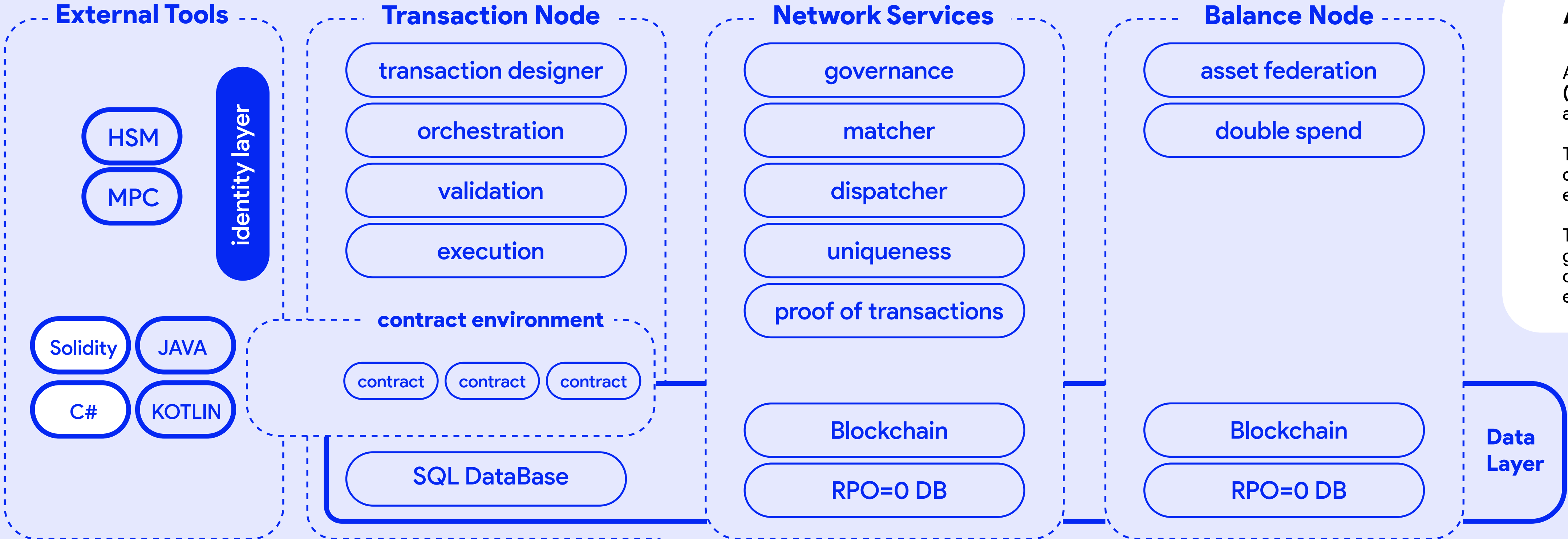


Blueprint

integration layer

kafka based



ABSTRACT

Adoption of **DeFi**, **Central Bank Digital Currency (CBDC)**, and **Tokenized Multiassets** necessitates new security architectures for **Regulated Tokenized Multiasset Networks (RTMNs)**.

Traditional approaches are insufficient for the distributed nature of decentralized finance, and **Zero Trust** models face compliance and efficiency challenges in financial networks.

This paper proposes a novel framework for diverse use cases, guarantees composability, atomicity, settlement finality, and enforced compartmentalization, sharing minimal necessary information, enabling **privacy-by-design**.

A detailed analysis of the framework's application in **RTMNs** is presented, evaluating its characteristics in the context of tokenizing government securities.



Illustrative graphic,
part of graphic material
for the BBChain Ptah
framework - 2025