

KSBC System Architecture Diagram

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KSBC System Architecture (Tri-Level Design)

[ Level 1 – Physical Layer ]
Gold Vaults (insured, audited)
■ Gold Agents (testing, purity, serial numbers)
■ Vault API (weight, purity, custody logs)

↓ Verified Data → Hash Stored On XRPL

[ Level 2 – Intelligence Layer ]
Bittensor Subnet (AI Oracle)
■ Validates vault data
■ Anomaly detection
■ Price feeds & metadata scoring
■ Sends signed verification payload → KSBC Backend

↓ Validated Payload

[ Level 3 – Ledger Execution Layer ]
KSBC Backend (Webhook Engine)
■ XRPL Transaction Builder
■ Mint/Burn Logic
■ Issuing Account Controls
■ DEX Routing (GLDX ↔ RLUSD)
■ Transparency Dashboard Logging

↓ Final Settlement

XRPL Mainnet
■ Issued Currency (GLDX)
■ Trustlines + Multi-sign
■ AMM/Orderbooks
■ Public Audit Trail

User Wallets (Xumm)
■ Mint requests
■ Redemption flows
■ GLDX balance & reserves view
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