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Memento ZK Chain: Creating the Future of Onchain Fund Management

ZKsync

Memento

Overview

Memento blockchain, in collaboration with Deutsche Bank, is modernizing fund management through the launch of new onchain infrastructure designed for institutional adoption.

Memento has deployed Memento ZK Chain, a live institutional Layer 2 (L2) powered by ZKsync Prividium. Prividium is a privacy-first, Ethereum-secured blockchain platform that enables institutions to run permissioned infrastructure with full data control, while anchoring to Ethereum for trustless settlement and native interoperability with Ethereum and ZKsync Chains.

Deutsche Bank's DAMA 2, developed in collaboration with Memento and Axelar, is the first institutional use case launching on the Memento ZK Chain. The project began as part of the Monetary Authority of Singapore's Project Guardian, under the name Project DAMA. DAMA 2 is a full-stack platform for issuing, distributing, and servicing tokenized funds and onchain assets, with embedded privacy, compliance, and soon multichain connectivity*

*multichain connectivity is expected to go live later this year

Challenge

Traditional fund management is slow, costly, and burdened by intermediaries that cost billions in fees annually. Key inefficiencies include:

- **High costs:** Multiple intermediaries increase administrative overhead and investor fees
- **Slow fund deployment:** Launching and distributing a new investment fund can take months
- **Limited liquidity:** Redemption processes are delayed by legacy settlement systems
- **Regulatory constraints:** Strict AML/KYC requirements create operational barriers

To address these challenges, Memento tested solutions across five different blockchain ecosystems before selecting ZKsync Stack. ZKsync offers the right combination of Ethereum-grade security, institutional privacy, and compliance tooling, all within a modular, customizable framework.

Solution

Memento is redefining fund management by bringing the model fully onchain—cutting costs, accelerating processes, and enabling instant settlements. Powered by Prividium, Memento's approach merges institutional-grade privacy, security, and modular compliance tooling with the efficiency of blockchain infrastructure.

- **Streamlined Fund Administration:**
  Launching and managing new funds has traditionally been resource-intensive, requiring coordination across multiple custodians, administrators, and intermediaries, making the process slow and expensive. Memento's decentralized ledger model automates many of these steps. Funds that once took months to set up can now be deployed in days, without sacrificing institutional-grade requirements, like compliance or operational controls.

- **Lower Fees, Higher Transparency:**
  By digitizing fund shares and automating settlements, Memento significantly reduces operating costs. Near-instant redemptions become possible - an improvement over legacy servicing models that rely on multi-day clearing processes and manual reconciliations.

- **Permissioned and Private:**
  Financial institutions used to avoid public blockchains due to compliance risks and a lack of confidentiality. Memento ZK Chain, built using Prividium, enables role-based access, private smart contracts, and full control over data visibility. Institutions can define what gets disclosed – and to whom– while still anchoring transaction integrity to Ethereum.

- **Priming for Multichain Readiness:**
  Through integration with Axelar, DAMA 2 will soon support distribution across 70+ chains, enabling tokenized funds to scale across blockchain ecosystems (ETA Q4 2025).

Technical Summary

At the core of Memento ZK Chain is a private, permissioned L2 built with the ZKsync Stack and powered by Prividium. It is purpose-built to bring institutional fund management onchain while maintaining compliance, privacy, scalability, and cost efficiency.

The architecture follows a clear 1-2-3 stack model:

1. Application Layer – DAMA 2

Deutsche Bank's user-facing platform for launching and servicing tokenized funds. It includes fund templates, investor portals, and automated compliance workflows tailored for institutions.

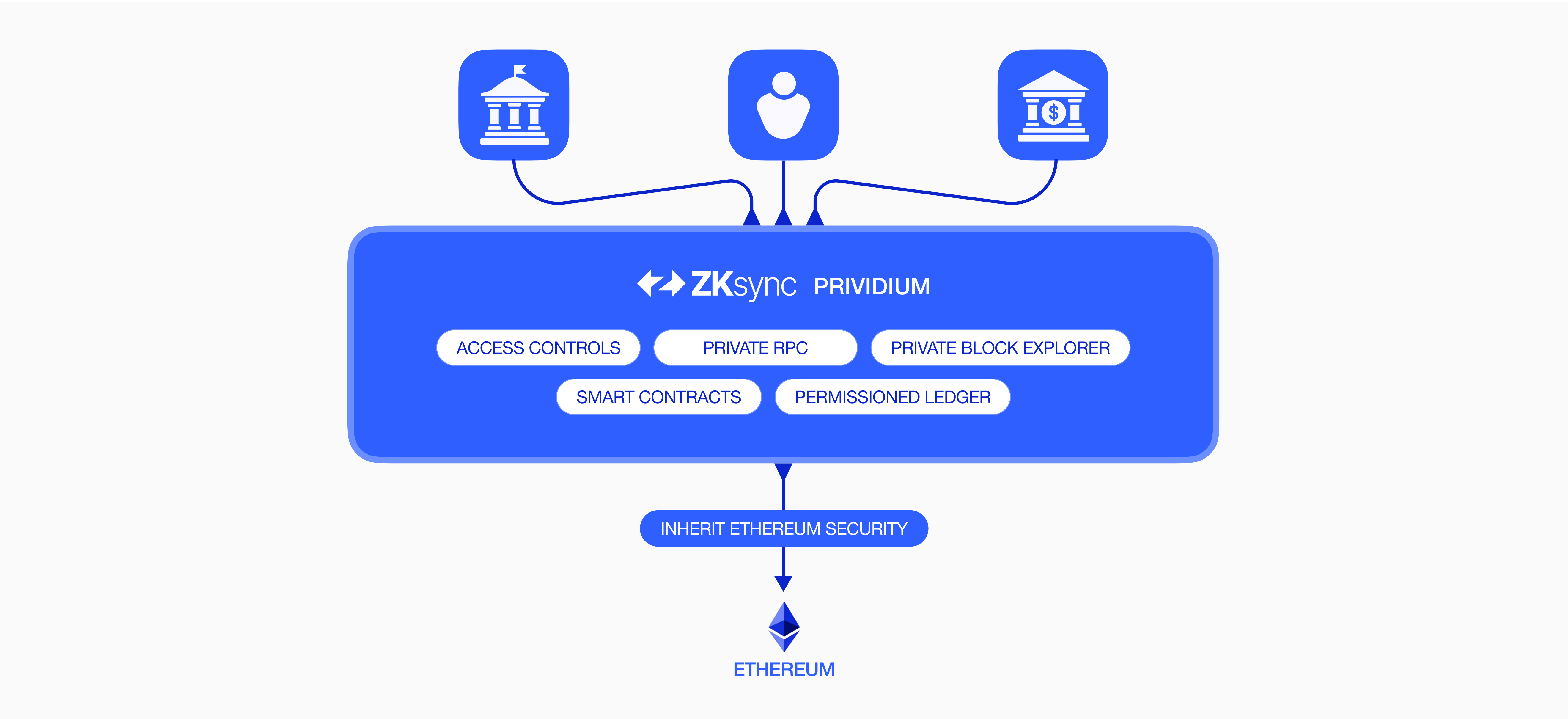
2. Infrastructure Layer – Memento ZK Chain (powered by Prividium)

A dedicated Layer 2 that operates within institutional infrastructure:

- The architecture keeps transaction data off-chain while securing it with ZK proofs
- Role-based access control integrates with enterprise identity systems (e.g., Azure, AD)
- Private RPCs and block explorers enforce internal visibility rules
- Customizable smart contracts support embedded KYC/AML enforcement
- Built-in sequencer and prover deliver high throughput, low latency, and full institutional control

3. Settlement Layer – Ethereum (Inherit Ethereum Security via ZKsync Gateway)

All transactions are cryptographically verified and finalized on Ethereum. This ensures tamper-proof integrity and enables interoperability with other ZKsync Chains and Ethereum networks, without exposing sensitive data.



Notable Stats

- **$50B+:** Potential annual savings from reduced intermediary reliance
- **2–3 weeks:** Time needed to launch a new onchain fund, a fraction of the traditional timeline of 2-3 months.
- **Five different chains:** Explored before selecting ZKsync Stack for its institution-friendly features.
- **Instant redemptions:** Onchain fund shares empower investors to exit positions without multi-day settlement delays.
  - Enables immediate investor existence without multi-day settlement delays
- **Multichain:** Later this year, 70+ Chains supported via Axelar for multichain asset servicing

Why ZKsync?

Built for Institutions

Memento tested various layer-1 and layer-2 solutions before settling on ZKsync for its seamless combination of speed, security, and enterprise alignment, critical to banks and asset managers.

Seamless Compliance & Security

Memento collaborated closely with Matter Labs to refine chain-level permissioning and privacy tooling for AML/KYC compliance through Prividium architecture.

Adoption & Growth

DAMA 2, led by Deutsche Bank, is the first institutional use case launching on Memento ZK Chain. Additional institutions are expected to onboard as tokenization infrastructure scales. Revenue streams from licensing and transaction fees support platform growth.

Looking Ahead

As banks and asset managers adopt permissioned blockchains, Memento is poised to scale beyond fund management. Built on ZKsync and powered by Prividium, Memento ZK Chain can support a broad range of onchain assets from private equity to real estate, and has the potential to help unlock trillions in value and reshape financial markets in the coming years.

With Memento ZK Chain now live and DAMA 2 scheduled to go into production at the Singapore Fintech Festival in 2025, Memento is helping bring institutional-grade tokenization into its next phase of growth.

Get Started with ZKsync Prividium here

The Memento ZK Chain is a cutting-edge blockchain solution built for institutional DeFi and digital asset management. This enterprise-grade blockchain platform enables secure, compliant onchain finance and is built on the ZKsync Stack, leveraging the latest Prividium technology. Key features of the Memento ZK Chain include access controls, private RPC, private block explorer, and a permissioned ledger anchored to Ethereum L1.

Learn more about Memento ZK Chain here
Learn more about project DAMA 2 here and the Litepaper here

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