

# AutoRek

 [White paper](#)

## Bridging the Gap: Precision Reconciliations for Crypto Assets and Stablecoins



# Crypto's Shift into the Mainstream

**Cryptocurrencies have moved from a speculative niche to a mainstream financial instrument.**

Institutions that once viewed digital assets as "fringe" are now integrating them into payments flows, investment portfolios, and custody services. This shift brings with it new reconciliation challenges. Many crypto assets require reconciliation up to 18 decimal places, data comes from fragmented sources, and volatility demands near-real-time processing.

With the exponential adoption in payments, stablecoins are gaining traction. Global stablecoin circulation doubled over the past 18 months to \$250 billion with \$30 billion in daily transactions.<sup>1</sup> In addition, major players like JPMorgan, Visa, and Amazon are exploring stablecoin use cases.<sup>2</sup>

At the same time, regulators are stepping in. The FCA's new CASS 16 and 17 proposals extend reconciliation requirements to stablecoin issuers and custodians, while the US GENIUS Act of 2025 mandates one-to-one backing, audited reserves, and anti-money laundering (AML) obligations for permitted stablecoin issuers.

The message is clear: reconciliations are no longer back-office hygiene, but a frontline control for compliance, transparency, and trust. Firms must address these demands with advanced data control, precise reconciliation, and compliance-ready frameworks.

## The New Mandate for Reconciliations

Firms can no longer treat crypto reconciliations as an afterthought. Going forward, they will require:

### > Precision

Many crypto assets require reconciliation up to 18 decimal places, far beyond the limits of most legacy systems.

### > Integration

Crypto must be reconciled alongside fiat, securities, and payments.

### > Standardisation

Data comes from blockchains, exchanges, wallets, and custodians, causing fragmentation.

### > Compliance

New and proposed regulatory frameworks are extending reconciliation obligations into digital assets.

# Regulation Meets Infrastructure Gaps

**The promise of crypto has always been speed, openness, and innovation.**

Yet behind the scenes, weak back-office processes remain a hidden infrastructure crisis. Manual reconciliations, inconsistent data, and systems designed for traditional assets are slowing adoption and undermining confidence.

Since the collapse of FTX, regulators have little patience for operational blind spots. Scrutiny now extends well beyond balance sheets into the mechanics of custody, safeguarding, and reconciliations. At the same time, crypto is being commoditised. It is no longer a side business for specialist players, but a core element of traditional portfolios and payment systems.

The regulatory landscape is responding in kind. In the UK, the FCA's draft CASS 16 and 17 chapters outline strict reconciliation obligations for stablecoin issuers and custodians. In the US, the GENIUS Act of 2025 represents the first federal stablecoin law, setting clear rules on issuance, reserve management, and reporting.

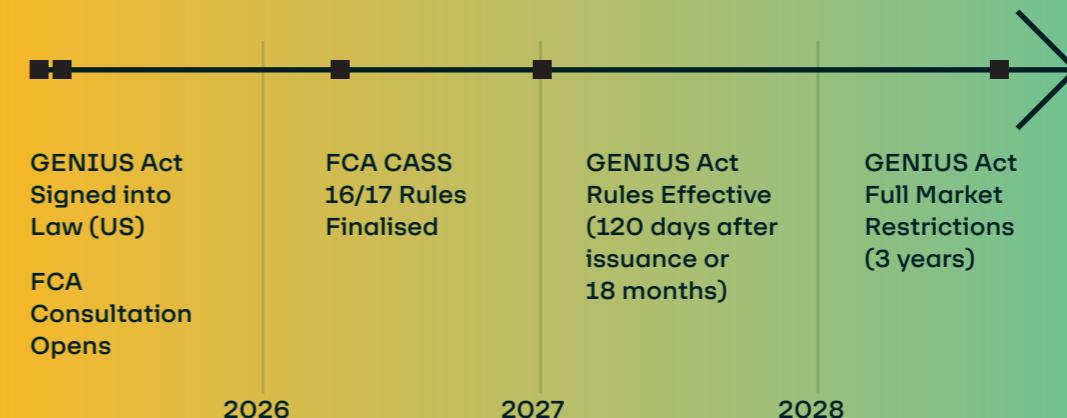
These frameworks signal a shift: reconciliations are now a regulatory requirement, not just an operational necessity.



## A Rapid Regulatory Evolution

### Regulatory Timeline:

**FCA CASS 16/17 and U.S. GENIUS Act (2025-2027)**



### FCA (UK) – CASS 16 & 17 (Stablecoins & Crypto Custody)

- 31 July 2025: FCA consultation paper closes on extending CASS to stablecoin issuers (CASS 16) and custodians (CASS 17).
- Q1 2026: FCA expected to publish final policy statement and rules.
- 8 May 2026: FCA CASS 16/17 rules scheduled to enter into force, giving firms less than nine months from consultation closure to prepare.

### US GENIUS Act of 2025 (Stablecoin Federal Law)

- 20 July 2025: President signs the GENIUS Act into law.
- 2025 - 20 January 2027 Effective Date: The Act specifies rules take effect 120 days after issuance of implementing regulations or 18 months after enactment (20 January 2027), whichever comes first.
- 20 July 2028: Three-year transition deadline: unpermitted stablecoins will no longer be offered by digital asset service providers in the U.S.

## Five Key Reconciliation Challenges in a **Crypto** World

1

### Decimal precision

Without precision-ready systems, rounding errors can turn into material risks.

2

### Cross-asset complexity

Institutions must be able to integrate reconciliation across asset classes and data sources.

3

### Data fragmentation

Lack of data standardisation across different formats make reconciliations difficult and error-prone.

4

### High volumes

Reconciliations must keep pace in a high-speed, high-volume transaction environment.

5

### Audit and custody obligations

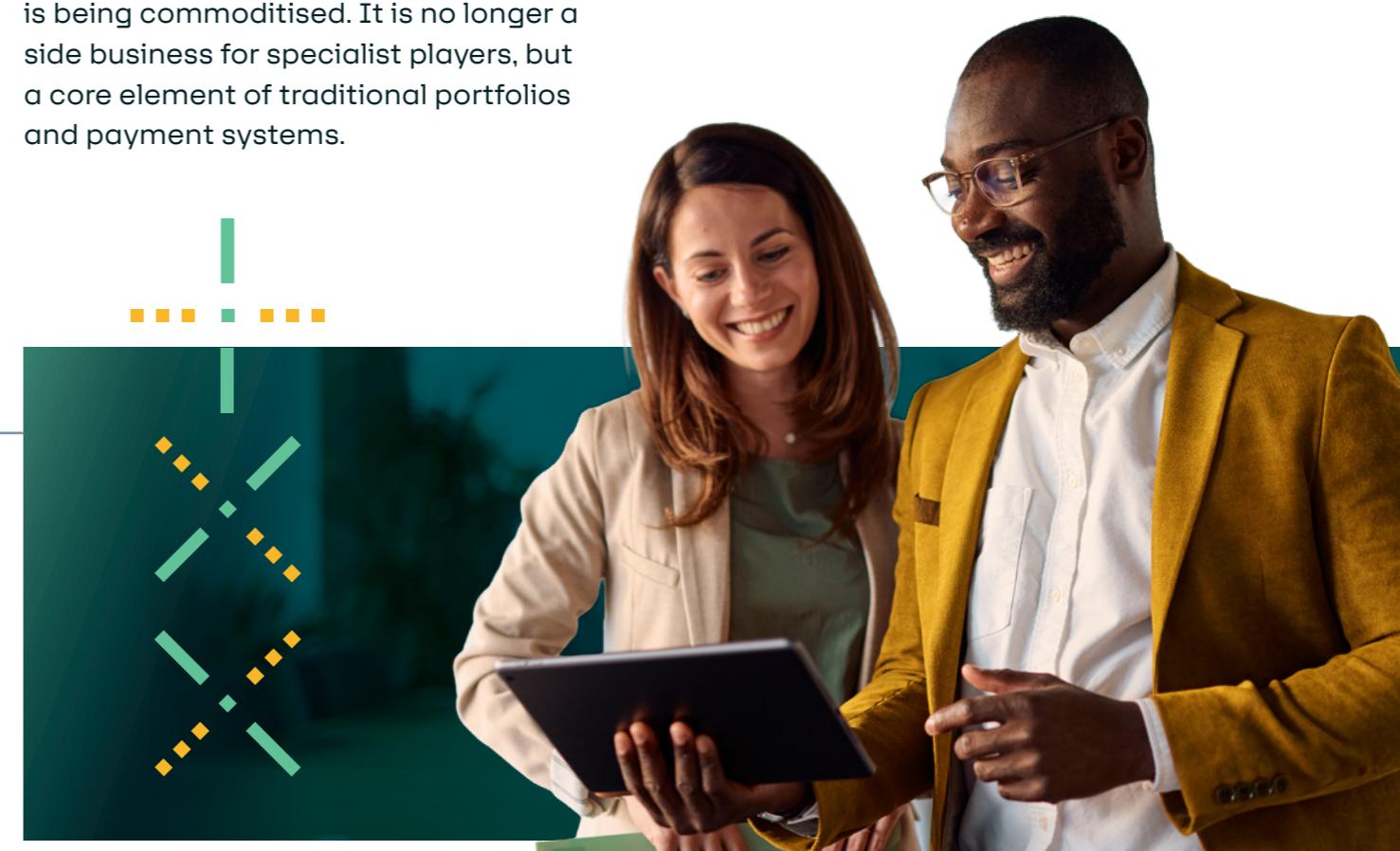
Reconciliations should be transparent, repeatable, and regulator-ready.

# Why **Crypto** Reconciliations Are Uniquely Challenging

The promise of crypto has always been speed, openness, and innovation. Yet behind the scenes, weak back-office processes remain a hidden infrastructure crisis. Manual reconciliations, inconsistent data, and systems designed for traditional assets are slowing adoption and undermining confidence.

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# Responding to the Challenge: Building a Future-Proof Framework

Addressing these challenges requires more than patching or retooling old systems. Firms need to rethink reconciliations for the era of digital assets.

The first step is investing in infrastructure that can handle crypto's decimal requirements. Precision-ready reconciliations reduce risk by ensuring every fraction of a token is accounted for. Integration is equally critical. Rather than sitting in silos, crypto should be reconciled as part of the broader financial ecosystem, alongside fiat, payments, and securities.

A regulatory-first mindset is also essential. Firms should embed audit trails, retention policies, and sign-off processes into reconciliation workflows from the outset. These components are no longer optional; they are the baseline for demonstrating compliance under regimes such as CASS 17 or the GENIUS Act.

Automation offers the scalability to reconcile millions of transactions daily without proportionate increases in staffing. Equally vital is flexibility. Stablecoins, central bank digital currencies (CBDCs), and other instruments will evolve, and systems must be able to adapt without costly overhauls.

Finally, governance must go beyond exception management. Reconciliations should generate meaningful management information (MI) and business intelligence (BI) in the form of dashboards and reports that inform decision-making at board, audit, and regulator levels.



## Six Crucial Actions for Firms to Take Now

### 1. Invest in precision-ready systems

Ensure infrastructure can handle 18 decimal places and beyond.

### 2. Integrate crypto into existing workflows

Avoid silos. Reconciliations should unify blockchain data with books and records, general ledgers, and payment flows.

### 3. Adopt a regulatory-first mindset

Embed audit trails, retention policies, and sign-off procedures into reconciliation processes from the start.

### 4. Automate for scale

Make sure automation can reduce operational risk and support reconciliation of millions of daily transactions without increasing headcount.

### 5. Embed flexibility

Implement processes that adapt to evolving regulations and new digital instruments, including stablecoins and CBDCs.

### 6. Enhance governance and transparency

Reconciliations should provide exception management, MI, and BI to enable reporting to boards, regulators, and auditors.

# Sector Implications: Who Needs to Act First, and How?

The implications of crypto reconciliations vary by sector, but all share the same underlying theme: greater precision, transparency, and control.

Stablecoin issuers face perhaps the most immediate challenge. New regulations require daily reconciliations of reserves and custody accounts against issuance, with strict one-to-one backing rules. Failing to reconcile accurately could threaten both compliance and credibility.

Asset managers are increasingly incorporating crypto into diversified portfolios. They must reconcile digital assets alongside equities, bonds, and derivatives, ensuring accuracy down to fractional levels to avoid misstatements of net asset value.

Payments firms are seeing crypto rails intersect with fiat payments. Reconciling across these systems, often at scale, is crucial for both safeguarding obligations and efficient operations.

Custodians and exchanges carry the burden of safeguarding client assets. This means reconciling wallet balances, client holdings, and custody accounts daily, under the watchful eye of regulators and auditors.

Taken together, these examples show that while the drivers differ by sector—regulatory compliance for issuers, portfolio integrity for asset managers, operational resilience for payments, and safeguarding for custodians—the destination is the same. Every part of the value chain must upgrade its reconciliation practices if crypto is to mature into a trusted, regulated component of global finance.

## Reconciliation Stress Points Along the **Crypto Value Chain**



## Looking Ahead: Stablecoins to CBDCs

Stablecoins are rapidly evolving into operational instruments. McKinsey projects that total stablecoin issuance could surpass \$2 trillion by 2028, and daily stablecoin transaction volumes may exceed \$250 billion within three years.<sup>1</sup> This surge underscores the scale at which reconciliation processes must operate.

Once fully reserve-backed and regulated, they will likely become part of the mainstream settlement infrastructure. Reconciling them with traditional financial flows will be critical to maintaining confidence in their stability.

The arrival of CBDCs will accelerate this trend. CBDCs are expected to extend reconciliation requirements across the entire financial system, demanding near-real-time visibility of positions and flows.

Emerging technologies will help. Artificial intelligence and intelligent data preparation tools promise to shorten time-to-value, improve anomaly detection, and handle growing complexity. Over time, reconciliations for crypto, securities, and payments will converge, creating unified frameworks that serve compliance, operations, and governance together.

**Although Tokenisation Projections Vary, the Consensus is Growth**

**\$2T-\$4T by 2028**

Source: McKinsey & Company<sup>1</sup>

**\$18.9T by 2033**

Source: Boston Consulting Group<sup>3</sup>

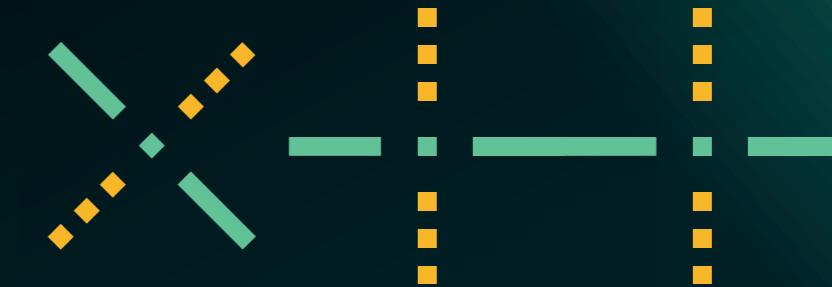
**\$30.1T+ by 2034**

Source: Standard Charter<sup>4</sup>

**\$30T-\$50T by 2030**

Source: Security Token Market<sup>4</sup>





## From Niche to Core Control

Crypto reconciliations are no longer a niche technical concern. They are becoming a core operational and compliance requirement for any modern financial institution engaging with digital assets.

As stablecoins, CBDCs, and other digital assets gain traction in the financial mainstream, reconciliations will become a strategic control point that bridges innovation with oversight, and ambition with accountability—safeguarding transparency, ensuring compliance, and reinforcing trust in digital assets.

Institutions that invest now in accurate, automated, and compliance-aligned reconciliation frameworks will be positioned to meet regulatory expectations, build resilience and trust for the future, and seize opportunities in the next phase of financial innovation.

**Book a demo to see AutoRek in action.**

# AutoRek

**When accuracy counts. Be sure.**

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## Sources

- 1 [www.mckinsey.com/industries/financial-services/our-insights/the-stable-door-opens-how-tokenized-cash-enables-next-gen-payments](http://www.mckinsey.com/industries/financial-services/our-insights/the-stable-door-opens-how-tokenized-cash-enables-next-gen-payments)
- 2 [www.investors.com/news/stablecoin-genius-act-payments-revolution/](http://www.investors.com/news/stablecoin-genius-act-payments-revolution/)
- 3 [www.ledgerinsights.com/bcg-ripple-predict-tokenization-to-reach-18-9-trillion-by-2033/](http://www.ledgerinsights.com/bcg-ripple-predict-tokenization-to-reach-18-9-trillion-by-2033/)
- 4 [www.assettokenization.com/resources/asset-tokenization-forecasts-range-from-2t-to-30t-by-2030](http://www.assettokenization.com/resources/asset-tokenization-forecasts-range-from-2t-to-30t-by-2030)

