

# Stablecoin 2.0: Own the Stack

An Institutional Primer to Modular Stablecoin Infrastructure

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# Introduction

Stablecoins are among the most significant developments in financial infrastructure of this century. They enable near-instant, low-cost value transfer across borders, settle around the clock, and produce a verifiable record of every transaction onchain.

For businesses, they address problems that traditional rails have struggled with for years: multi-day settlement windows, opaque correspondent banking fees, trapped working capital, and the reconciliation overhead that comes with operating across disconnected banking systems.

Not too long ago, stablecoins were primarily a tool for crypto-native users - traders moving between exchanges, DeFi participants, and early adopters in emerging markets looking for dollar-denominated stability.

Recently, though, that usage pattern has changed.

Regulatory frameworks like the EU's MiCA and the US GENIUS Act have started to provide the legal clarity institutions need to adopt stablecoins with confidence.

In 2025, stablecoin transaction volume reached about \$33T, up 72% year over year and roughly 2x Visa's 2025 total volume. Total stablecoin market capitalization has now climbed above \$320B.

At the same time, major commerce and payments platforms have begun integrating stablecoin payment capabilities, reinforcing the view that this is becoming a real payments rail.

The scale of these shifts suggests this is not a passing trend - industry projections put stablecoin payment flows at \$56.6T by 2030, growing at roughly 80% annually from a base of \$2.9T in 2025.

That growth is already pulling in fintechs, banks, payment service providers, OTC desks, and corporate treasury teams, all of whom are either entering or accelerating their presence in the stablecoin economy.

The race to build on stablecoin rails has begun, and it is picking up speed.

**\$33T**

Stablecoin tx volume in 2025

**\$310B+**

Market cap in early 2026

**56T+**

Projected payment flows by 2030

## The infrastructure decision

Given the scale of recent adoption, regulatory progress, and growing support from major financial and payments players, it is no surprise that more companies are now seriously evaluating how stablecoins fit into their business.

What will determine their success is not stablecoin adoption itself - but the infrastructure decisions that guide it.

Those decisions will affect how much control a company retains over their operations, what transaction costs look like at scale, how quickly they can adapt to new markets and regulations, and whether their infrastructure will still serve them as their business grows.

Designed well, stablecoin infrastructure can become a durable operating advantage. Designed poorly, it can create vendor dependency, margin pressure, and technical debt that becomes costly to reverse.

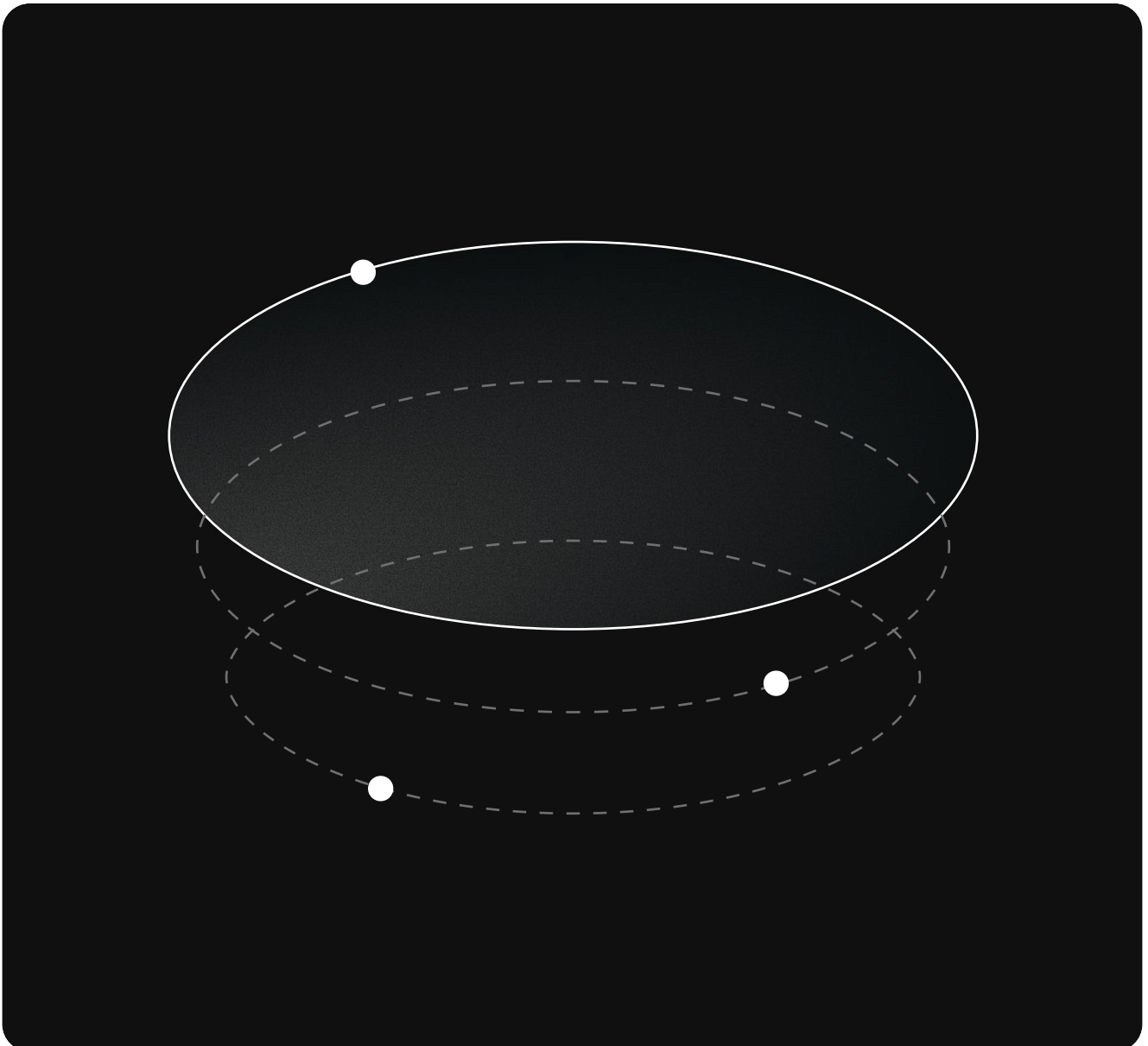
## What this guide covers

This guide is built around a simple thesis: the companies that will lead stablecoin operations will not necessarily be the ones that moved first. They will be the ones that control the infrastructure behind their flows. We call this shift Stablecoin 2.0 - a move from outsourced, bundled platforms to composable infrastructure that the institution controls directly.

It is the difference between plugging into someone else's stack versus building on your own, including wallet architecture, compliance partners, liquidity relationships, operating policies, and transaction margins.

In the pages that follow, we explain what that shift looks like in practice - where the bundled model breaks down, what it means to own the stack, and how the right infrastructure choices translate into control, flexibility, and better unit economics as you scale.

Whether you are exploring stablecoins for the first time or re-evaluating an infrastructure you have already outgrown, this guide is designed to help you make the decisions that will matter most.



# Stablecoin 1.0 vs. 2.0 - From the Black Box to Owning the Stack

## CHAPTER OVERVIEW

Most companies begin their stablecoin operations with an all-in-one provider that bundles wallets, compliance, on/off-ramps, and sometimes licensing into a single package. This chapter explains why that model works early on but breaks down at scale - and what the alternative looks like. It covers the four infrastructure elements companies need to own, the margin argument for internalizing flows, the licensing obstacle, and how Utila enables the transition.

## Stablecoin 1.0: the black-box model

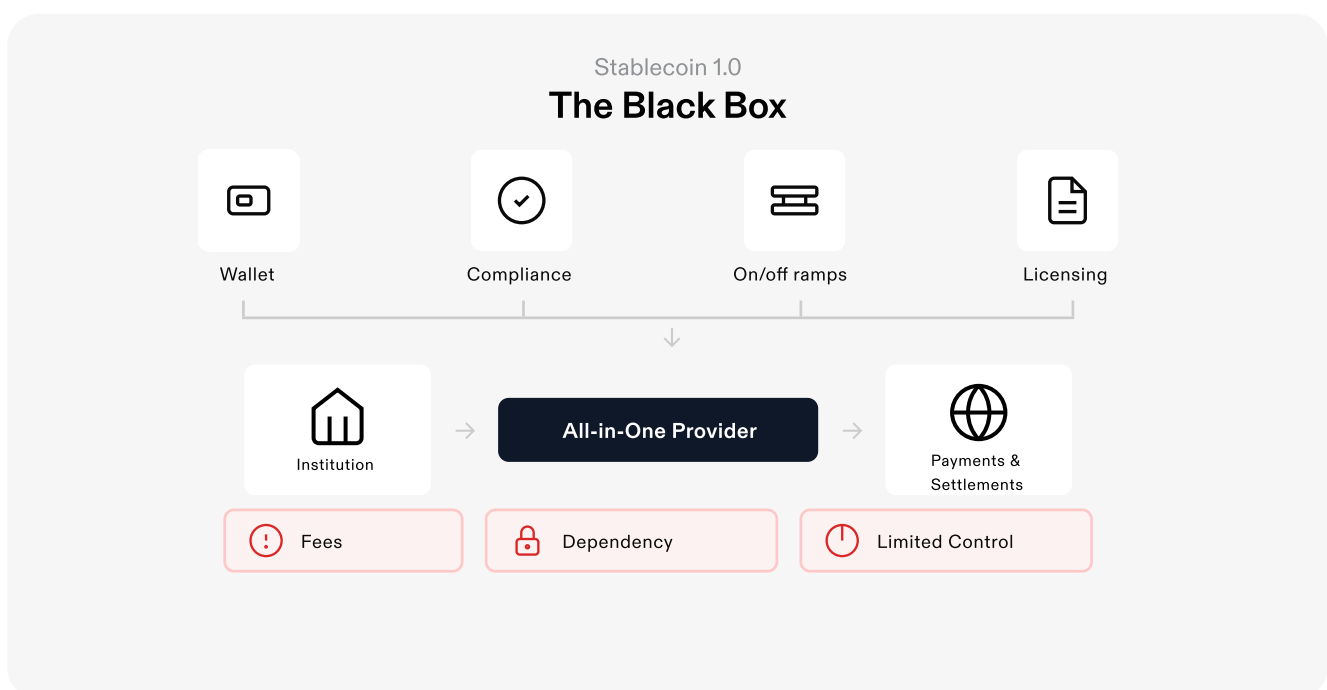
Most institutions today access stablecoin liquidity and payment capabilities through external platform providers that offer an all-in-one bundle: wallets, compliance, on/off-ramps, and licensing under a single umbrella.

This is what we call the Stablecoin 1.0 model. It has proven that stablecoins work for financial enterprises and institutions, and enabled rapid market entry, especially for teams that want to test volumes without building infrastructure. The trade-off is that, in this model, the stack offered is largely pre-packaged and opaque.

The provider of the black-box solution brings the relationships across the underlying components, allowing the institution to plug in quickly - but with limited visibility into how each layer works, who powers it, and how flexible it is as requirements evolve.

At low volumes, that trade-off can be reasonable. But as transaction volumes grow and stablecoins become a strategic priority rather than an experiment, three limitations surface:

- **Margin erosion:** Each transaction carries a third-party fee, and even if the provider secures low underlying costs, they can retain a meaningful share - at scale, that becomes a material drag on profitability.
- **Dependency risk:** When stablecoin operations run on external infrastructure, workflows become coupled to a third party's uptime, tooling, and release cadence, limiting the ability to tailor flows, iterate on products, or respond to market-specific requirements.
- **Loss of control:** The black box makes it difficult to negotiate directly with liquidity providers, choose your own AML vendor, optimize compliance workflows, or retain direct control of private keys. It creates the appearance of operating stablecoin infrastructure, while the critical decisions remain in someone else's hands.

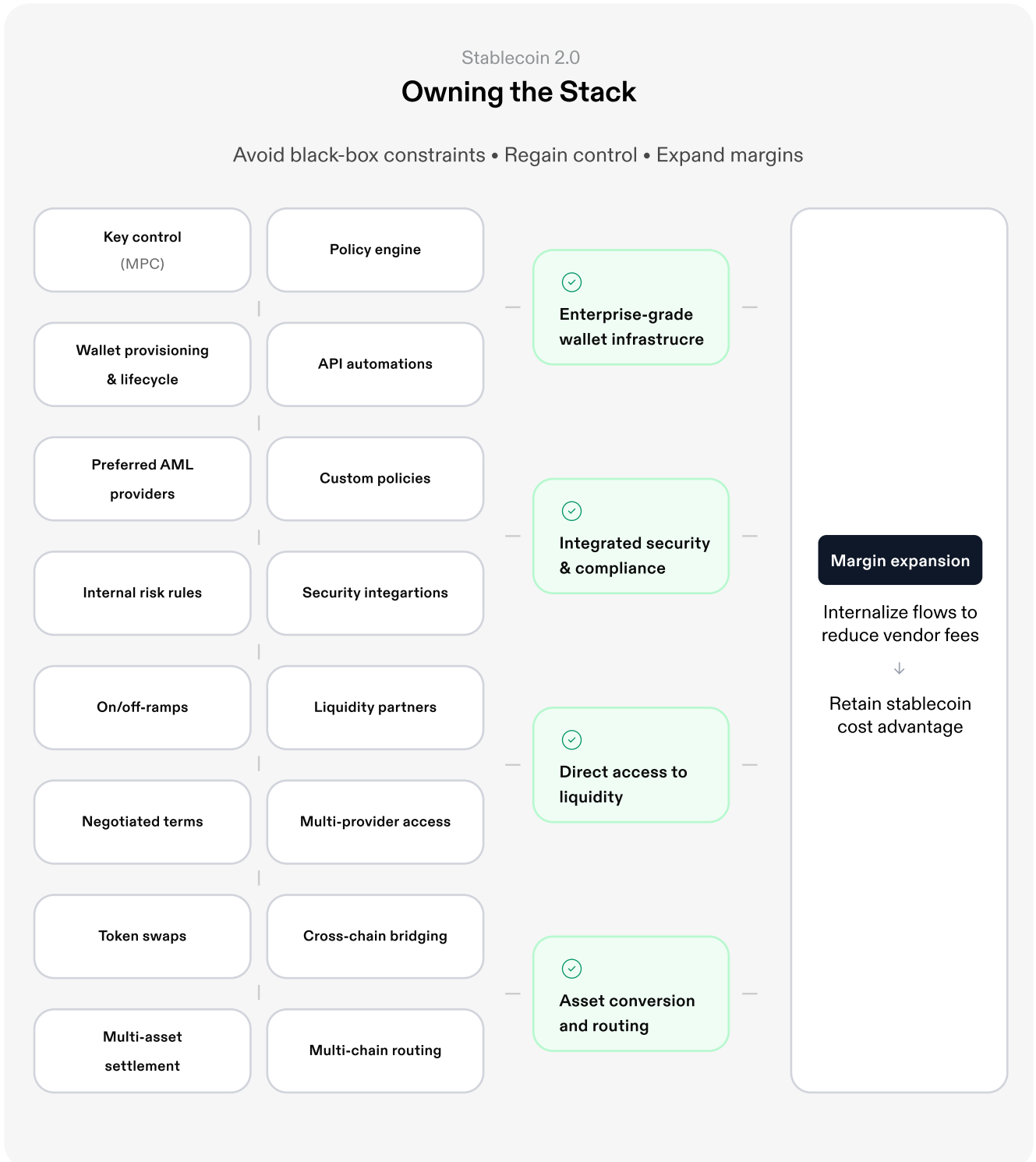


WHEN DOES THE BUNDLED MODEL STOP WORKING?

In conversations with leading payment companies, we see a consistent pattern: the limitations surface when stablecoins move from an experiment to a core operational flow. The trigger is usually volume - when the margin impact of per-transaction fees becomes visible to finance, or when the operations team hits a wall trying to customize a workflow that the bundled provider does not support.

## Taking control: the four infrastructure pieces to own

To move past the constraints of the bundled model, companies need to control at least four elements of the infrastructure stack. These are the layers where control translates directly into operational flexibility, cost reduction, and resilience.



Element	What it means	Why it matters
<b>Enterprise-grade MPC wallet infrastructure</b>	Integrated wallet systems that govern assets, policies, roles, transaction flows, staking, and verifiable audit trails.	The wallet layer is where payment and treasury control begins. In a bundled platform, the institution may operate wallets, but policies, approvals, integrations, supported networks, and provider access are still shaped by the platform. A dedicated MPC-secured wallet layer gives institutions control over key shares, permissions, approval workflows, and ecosystem connectivity, while keeping the operating model flexible as requirements change.
<b>Integrated security &amp; compliance</b>	Security modules with your preferred AML/KYT providers, tailored execution rules, custom risk controls.	Regulation and risk standards vary by jurisdiction and use case. Pluggable compliance means you configure your own rules, use your preferred vendors, and adapt to new launch geos/products without re-platforming.
<b>Direct access to liquidity</b>	Direct connectivity to on/off-ramp providers, liquidity venues, OTC desks, exchanges, and regional partners across relevant jurisdictions.	You negotiate your own rates, fee structures, and SLAs with ramp counterparties. If one provider underperforms, you route through another without migrating your tech stack.
<b>Asset conversion and routing</b>	The ability to swap and bridge across assets and networks to meet business and user needs.	Stablecoin flows often span assets, networks, and counterparties. If a client sends USDT on TRON but your treasury operates in USDC on Ethereum, routing determines how that value is converted and settled. Modular routing gives you more control over paths, counterparties, and economics.

These four elements are interdependent. Wallet infrastructure without ecosystem access or compliance integration leaves gaps. Liquidity access without conversion capability limits which corridors you can serve. The value comes from owning all four together - a composable stack where each layer works with the others and can be adjusted independently as your business evolves.

## From margin contraction to expansion

The biggest rationale for and advantage of owning the stack is the opportunity for margin expansion. By internalizing transaction flows, companies capture value that would otherwise be ceded to vendors.

This is particularly critical in payments, where margin optimization is an existential concern. Stablecoins are attractive precisely because they can reduce costs compared to traditional rails.

But when excessive fees are paid to a bundled provider, much of that advantage is surrendered.

Controlling more of the stack means retaining more of the transaction economics. When stablecoin volumes reach the hundreds of millions or billions, even small differences in fees and intermediary margin become economically meaningful.

For a payment company processing \$500 million in monthly stablecoin volume, the gap between a bundled provider's fee and the direct cost of running owned infrastructure can translate into millions of dollars in annual margin.

### THE MARGIN QUESTION IN PRACTICE

Ask your finance team: what percentage of each stablecoin transaction goes to your infrastructure provider? How does that compare to the underlying network and ramp costs? The gap between the two is the margin you are leaving on the table. As volumes grow, that gap compounds.

## The licensing question

For many organizations, the transition to Stablecoin 2.0 runs into a practical obstacle: licensing.

Traditional payments licenses are often insufficient for stablecoin activity. In Europe, even firms operating under EMI or Payment Institution frameworks typically need additional MiCA authorization to offer stablecoin services to clients.

Obtaining that approval can take a year or more and demands meaningful regulatory effort. Similar dynamics are playing out in other jurisdictions as stablecoin-specific licensing frameworks take shape.

This creates a real dilemma. The strategic case for owning the stack is clear, but waiting 12+ months to start operating is rarely acceptable. Teams want to begin building and validating volumes now, while licensing applications move through the regulatory process.

The practical solution is a transition model: start operations under an established licensed framework while building the permanent technology stack from day one. When the company secures its own authorization, it transitions to full autonomy without migrating infrastructure or re-integrating workflows. The result is immediate market entry with a clean path to independence.

### PRACTICAL CONSIDERATION

The licensing question is not binary. Many institutions will operate under a transitional arrangement for 12–18 months before their own authorization comes through. The infrastructure you build during that period should not be throwaway. Choose a stack that will carry you from day one under a partner's license to full independence under your own - without a migration.

## How Utila enables Stablecoin 2.0

Utila is built for institutions that want the Stablecoin 2.0 outcome: control over the stack, control over counterparties, and control over unit economics. The platform maps directly to the four elements described above.

- **Self-custodial MPC wallets** give institutions direct key control and granular policy enforcement.
- **Native compliance integrations** with Chainalysis, TRM, and Elliptic let institutions choose and contract their preferred AML provider.
- **Utila Link** provides direct connectivity to on/off-ramp and liquidity providers across jurisdictions, with the ability to negotiate terms and diversify execution partners.
- **Built-in cross-chain swap, bridging, and multi-chain** support handle asset conversion and routing at the infrastructure level - including BYO EVM for custom network requirements.

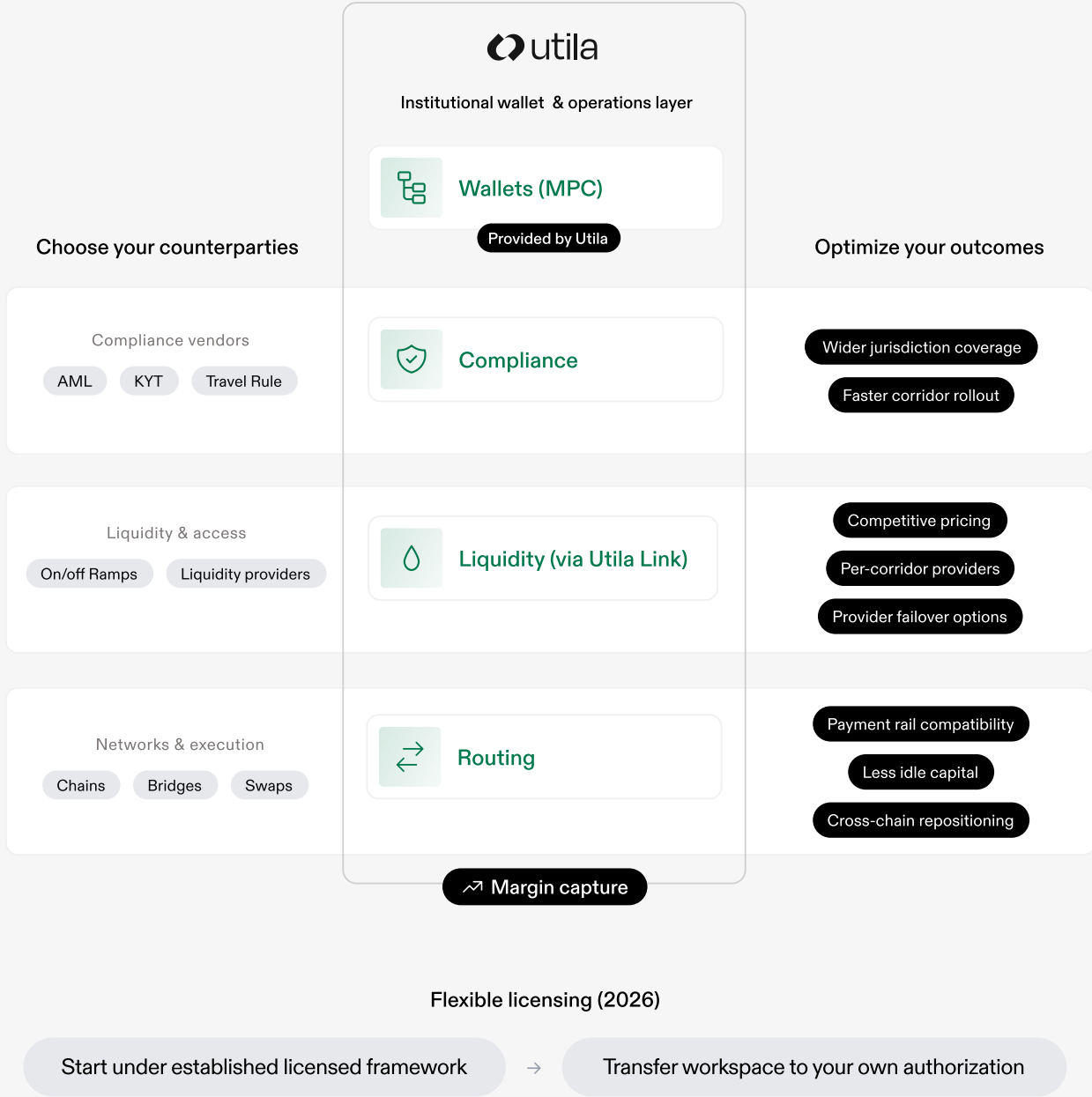
On the licensing front, Utila is actively building a flexible licensing model that lets institutions start operating under an established licensed framework while building on Utila's infrastructure from day one. When an institution secures its own authorization, workspace ownership transfers, and operations continue without interruption. This is one of Utila's key areas of focus for 2026.

The path from Stablecoin 1.0 to 2.0 is not about replacing everything at once. It is about building on infrastructure that you own and that remains flexible - so that each step toward independence is a configuration change, not a migration.

Stablecoin 2.0

# Composable Stablecoin Infrastructure

Own the Stack. Control the Margins



- 01** The Stablecoin 1.0 model - bundled wallets, compliance, ramps, and licensing from a single provider - works for getting started. It does not scale well. The limitations show up as margin erosion, dependency risk, and loss of operational control.

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- 02** Stablecoin 2.0 means owning four elements of the stack: wallet infrastructure (starting with private key control), integrated compliance, direct liquidity access, and asset conversion and routing.

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- 03** The primary driver for the transition is margin. Internalizing transaction flows recaptures value that bundled providers extract on every transaction. At institutional volumes, the difference is material.

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- 04** Licensing is the most common blocker. A transition model - building on owned infrastructure while operating under an established license, then transferring to full autonomy - solves the sequencing problem.

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- 05** The infrastructure you choose during the transition period should carry you to independence. If you have to migrate when your license arrives, you chose the wrong stack.

# The Stablecoin OS

## CHAPTER OVERVIEW

The infrastructure components required to run stablecoin operations at institutional scale, how they fit together as an integrated platform, and how the Stablecoin OS implements the ownership model described in the previous chapter.

## Common infrastructure challenges

As stablecoin operations expand, infrastructure complexity tends to expand with them. What begins as a simple payment or treasury flow quickly involves wallet design, key management, compliance screening, gas funding, reconciliation, and fiat connectivity.

Many teams handle these functions through separate platforms, manual processes, or bundled providers with limited flexibility.

That can slow execution, reduce visibility, and make it harder to adapt the setup as volumes grow and counterparties or regulatory requirements change.

In practice, those constraints show up in the core operating layers:

- Wallet infrastructure struggles to scale across chains and users.
- Compliance sits outside the transaction flow. Custody, AML, and automation tools remain fragmented.
- Gas management, fiat connectivity, and reconciliation consume more operational time than they should.

The result, for many teams, is stalled launches, operational risk, and costs that grow faster than volume.



## From fragmented operations to a coherent operating system

The Stablecoin OS is Utila's answer to this problem. Rather than requiring enterprises to assemble and maintain separate systems for each function, it provides a single platform where wallets, compliance, policies, connectivity, automation, and reporting share the same infrastructure.

In practical terms, this means a deposit arriving at a dedicated wallet triggers compliance screening automatically. If the transfer clears, funds are swept to treasury using a sponsored transfer, with gas paid by a designated gas station wallet. The sweep is governed by the institution's own policy rules.

Outbound transfers to counterparties or off-ramp partners are screened, signed (by a human approver or a programmable co-signer, depending on the institution's setup), and logged with full audit context. Every step runs through the same policy engine, produces the same audit trail, and operates within the same wallet architecture.

No component works in isolation, and no component requires a separate integration to function.

In Utila's implementation, the OS covers eight functional areas:

- **Core infrastructure** - self-custodial MPC wallets with multi-chain support across 100+ blockchains, mobile signing, and a policy engine that evaluates every outbound transaction
- **Pay-in infrastructure** - programmatic wallet creation via API, multiple deposit addresses per customer, automated sweeping, and compliance screening on every inbound transfer
- **Payout capabilities** - gas station and sponsored transfers, batch payouts, concurrent transfers, and address whitelisting

- **Compliance and risk** - policy enforcement with transfer limits, multi-step approvals, wallet grouping, and multi-admin protection
- **Compliance connectivity** - native integrations with Chainalysis, TRM Labs, and Elliptic for AML/KYT screening, with configurable thresholds, automated freeze on flagged funds, and quorum-based resolution
- **Treasury and ecosystem** - exchange connectivity (Binance, Coinbase, Kraken and others), swap and bridge, DeFi access, Utila Link for on/off-ramp and liquidity provider discovery, and banking connectivity via Bridge.xyz
- **Reconciliation and reporting** - real-time dashboards, full audit logs, automated tracking, instant notifications, advanced filtering, and data export for accounting and regulatory reporting
- **Developer experience** - high-performance APIs, secure webhooks, gRPC support, co-signer infrastructure, IP whitelisting, and JavaScript SDKs

Each challenge from the list above maps directly to a capability within the OS.

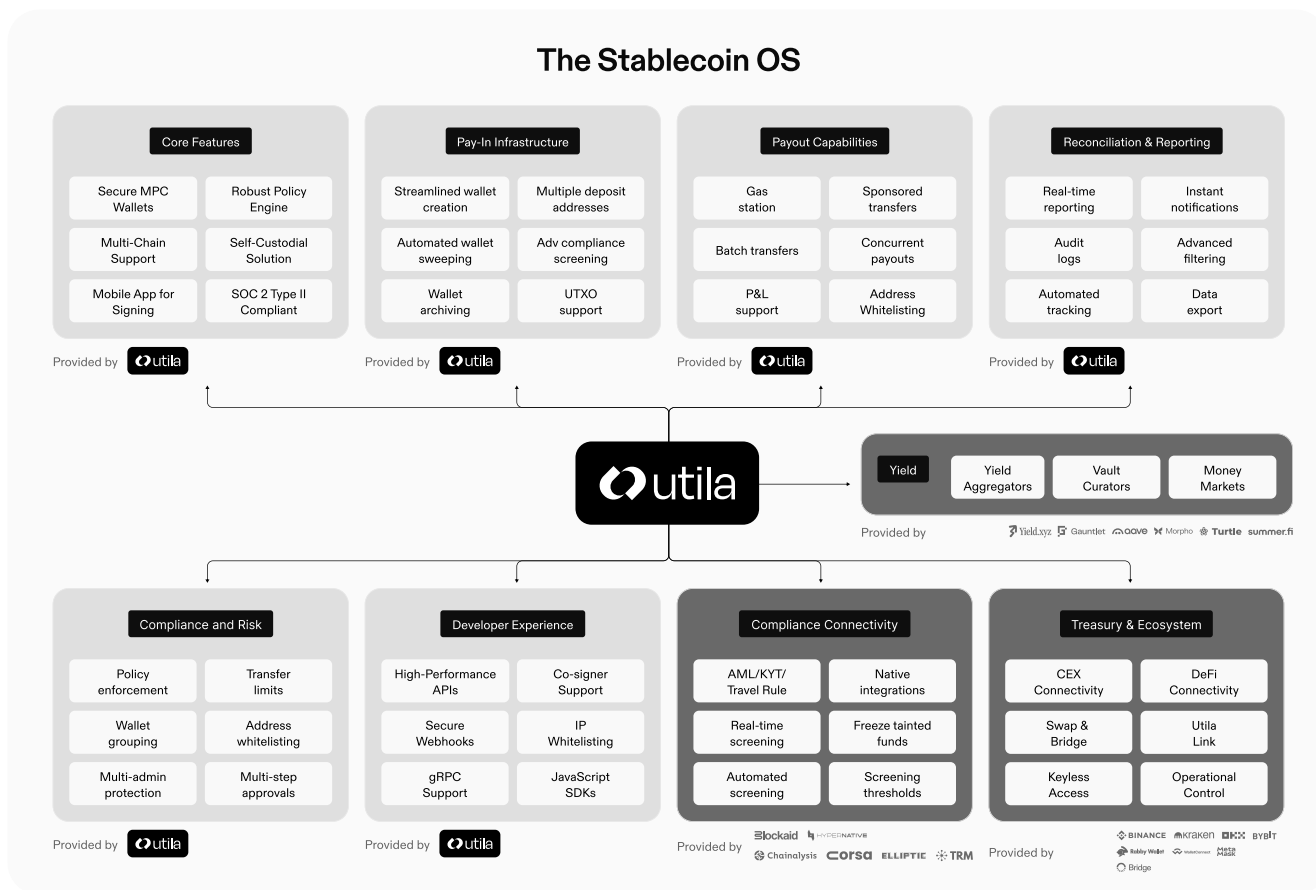
Multi-chain wallet complexity is handled by a single wallet architecture that spans 60+ networks.

Compliance disconnection is solved by embedding screening inside the transaction flow. Gas management becomes a configuration decision, not a staffing problem.

Fiat connectivity runs through Utila Link, where adding a new corridor or switching a ramp provider is a platform-level change, not a re-integration.

And reconciliation is built into the data model: every transaction carries labels, tags, and exportable records rather than requiring manual reconstruction after the fact.

## The Stablecoin OS



## From 2.0 principle to operating reality

The Stablecoin 2.0 model asks institutions to own four things: wallet infrastructure, compliance, liquidity access, and asset conversion. The Stablecoin OS is how those four elements become operational.

Self-custodial MPC wallets mean the institution holds its own key shard. Compliance integrations are direct contracts with the institution's chosen provider, not a vendor locked in by the platform.

Liquidity access runs through Utila Link, where the institution discovers and connects with on/off-ramp providers, exchanges, and OTC desks by geography and jurisdiction, negotiates its own terms, and can switch or add providers without touching the rest of the stack.

Asset conversion (swaps, bridges, multi-chain routing) is handled natively, so a counterparty sending USDT on Tron and an off-ramp requiring USDC on Ethereum do not create a manual, multi-step problem.

Every operational decision stays with the institution: which chains to support, which stablecoins to use, which counterparties to connect with, what governance rules to enforce, and how to structure flows for each use case.

The OS provides the capabilities. The institution decides how to compose them.

This is also what makes the transition from 1.0 to 2.0 incremental rather than all-or-nothing.

Companies adopt the OS, start with the capabilities they need for their first use case, and expand as requirements grow. Adding a new corridor, connecting a new exchange, enabling yield on idle balances, or adjusting a policy threshold are configuration changes within the same platform, not migrations to a new one.

- 01** Stablecoin operations at scale require wallets, compliance systems, automation and policies, ecosystem connectivity and access to liquidity as well as reporting to function as one integrated system. Manually stitching these tools across disconnected platforms creates operational risk, slows execution, and limits flexibility.

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- 02** The Stablecoin OS addresses the most common infrastructure challenges. It is the answer to multi-chain wallet complexity, disconnected compliance, gas management overhead, fiat connectivity friction, and manual reconciliation.

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- 03** The OS implements the Stablecoin 2.0 ownership model. Institutions control their keys, choose their compliance and liquidity partners, and govern their own transaction policies within a single platform.

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- 04** Adoption is incremental. Start with one use case and the components it requires. Expand by configuration, not re-architecture.

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# Conclusion: Explore Stablecoin 2.0 for Your Business

## CHAPTER OVERVIEW

How to evaluate whether your current infrastructure fits the Stablecoin 2.0 model, where to start, and how to engage with Utila.

Stablecoin 2.0 starts with a practical assessment: which infrastructure decisions do you need to control directly, which can stay with partners, and which should be redesigned before volume makes the choice more expensive.

For some companies, the pressure is already visible: provider margins are affecting unit economics, a new corridor requires a ramp partner the current platform does not support, or compliance needs to change AML vendors without re-platforming.

Others are earlier in the process and want to avoid building around constraints they will have to unwind later.

The next step is to map your operating model against the core infrastructure layers: wallets and key management, policies and approvals, compliance connectivity, liquidity access, routing, gas management, reconciliation, and reporting. That map shows where you can start small, where you need direct control, and where a more modular setup can improve margin, flexibility, and operational resilience.

## Three steps to start

- **Request a demo and architecture review.** Utila's team will walk through your specific payment flows, compliance requirements, and operational structure to recommend a configuration tailored to your business. This is particularly useful for companies with complex multi-corridor or multi-entity setups. Book at [utila.io/request-a-demo](https://utila.io/request-a-demo).
- **Explore Utila Link.** Browse on/off-ramp providers, liquidity partners, and exchanges by geography and regulatory jurisdiction. Utila Link lets you evaluate available counterparties before committing to an integration path.
- **Talk to our institutional team.** For high-volume implementations or companies evaluating a transition from an existing provider, Utila's institutional team can scope the migration path and timeline. Contact [sales@utila.io](mailto:sales@utila.io).

Utila's platform supports more than \$25 billion in monthly transaction volume across fintechs, payment companies, banks, OTC desks, treasury teams and stablecoin issuers worldwide.

The infrastructure is SOC 2 Type II compliant, supports all major blockchains, and is designed for incremental adoption: you do not need the full stack on day one to start getting value.

The companies that will define the next phase of stablecoin adoption are building on infrastructure they own. If that is the direction you are heading, we are ready to help you get there.

The institutions best positioned for the next phase of stablecoin adoption will not be defined by how early they moved, but by how much control they have over the infrastructure they rely on.

Stablecoin 2.0 is an operating model built around ownership and flexibility: control over wallets and keys, direct access to counterparties, governance over how funds move, and the ability to adapt the stack as requirements change. That is what allows stablecoin operations to expand across products, regions, and workflows without being constrained by a provider's roadmap.

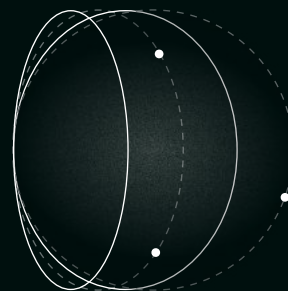


**Utila provides the infrastructure to support that shift. Scan the QR code to book a demo.**



POWERING A NEW ERA OF DIGITAL ASSETS

The most secure, flexible, and robust platform to work with digital assets.



### Founding team



**Bentzi Rabi**  
Co-founder & CEO



**Sam Eiderman**  
Co-founder & CTO



**Gilad Asharov**  
Cryptographer

Backed by the best



## Wallet Infrastructure for Stablecoin and Digital Asset Operations

**\$25B+**

Monthly Volume

**300+**

Companies Operate on Utila

**\$50M+**

Funding

**80+**

Team Members

**24/7**

Customer Support