

The Truth Layer

Tokenisation moves ownership on-chain — but the asset still has to be real. Why authentication is the missing layer.

What follows is a sober read on that problem, written from the vantage of IMS Group, a technology-forward private markets investment group a

The missing layer

An immutable ledger can record a lie perfectly. Most writing on asset tokenization treats the on-chain token as the hard part, and tokenised real-world assets as a problem of better plumbing: faster settlement, cleaner custody, more programmable rights. Those are real, and they are mostly solved or solving. The harder problem sits underneath the token, off the chain, and almost no one names it.

What follows is a sober read on that problem, written from the vantage of IMS Group, a technology-forward private markets investment group and partnership of family offices, for the allocator asking the unglamorous question behind every tokenised position: if I hold the token, who guarantees the thing underneath it is real? The page assumes you already understand how tokenisation works; it is about the layer the mechanics depend on, and why that layer decides whether tokenisation is investable at institutional scale.

What every tokenisation explainer gets right, and the one thing it skips

The consensus account of tokenisation is largely correct, and worth conceding plainly. A token issued on a distributed ledger can represent ownership of an off-chain asset. Settlement that once took days can clear in close to real time. Custody can be ring-fenced with qualified custodians, and ownership rules, income and redemptions can be encoded in a smart contract. The institutional sources the market already cites, from State Street to DTCC, cover that ground thoroughly, and the basics need no re-litigating here; for the full sequence, see [the mechanics of tokenisation](#).

What that account assumes is that the on-chain representation is where the difficulty lives. It is not. Every one of those mechanics takes for granted that the token corresponds to a real asset that exists, is what it is described to be, and is held as stated. That correspondence is asserted, rarely interrogated. The chain can prove a token moved from one wallet to another with perfect fidelity. It cannot, on its own, prove that the warehouse holds the gold, that the building has clean title, or that the loan has not been pledged twice off-ledger. The skip lives there, and it is the subject of this page.

Why the chain is not enough — the off-chain authentication problem

A token is only ever as true as the real-world asset it claims to represent. This is the oracle problem, familiar from the wider digital-asset field, applied to real-world assets: a ledger is only as reliable as the data fed into it, and if the input is wrong, immutability simply preserves the error. Garbage in is recorded permanently, and verifiably, and falsely.

For a real-world asset, the input is the off-chain truth about it, and that truth has several parts. Does the asset exist? Is it what the documentation says, in quantity, grade and condition? Who holds legal title, and is it unencumbered? Is it custodied as stated, and not double-pledged? None of these questions is answered by the blockchain. They are answered, today, by the same registrars, custodians, auditors and inspectors that tokenisation is often said to disrupt, and the quality of that off-chain verification is exactly as variable as it has always been.

It helps to separate two problems that are routinely run together. Settlement, the act of transferring the on-chain claim and its payment as a single, near-instant step, is largely a solved problem, and an impressive one. Authentication, the act of establishing that the underlying asset is genuinely there and is what it claims to be, is not. They are distinct, they are solved to very different degrees, and a tokenised market can have flawless settlement sitting on top of an unverified underlying. That is not a collapse and it is not cause for doom; it is a maturation gap. The direction of travel is constructive. The point is only that authentication, not settlement, is the part still being built.

The truth layer, defined

The truth layer is the verification layer that authenticates the underlying real-world asset before it is tokenised and keeps that authentication current for as long as the token exists. It is the bridge between the off-chain asset and the on-chain claim, and its job is to make the correspondence between the two something an allocator can rely on rather than assume.

To do that, a credible truth layer has to deliver three things. It needs verifiable provenance: a documented, tamper-evident origin and chain of custody for the asset, not a one-off attestation. It needs a single source of truth for the underlying, so that the token, the legal title and the physical or financial reality describe the same thing at all times. And it needs an audit trail that an institutional holder can actually trust, one that records who verified what, when, and on what basis.

Authentication of this kind is the precondition for tokenisation at institutional scale, which is why it bears directly on the allocator question of whether and how much to allocate. A family office can model price, liquidity and regulatory risk on a tokenised asset using familiar tools. What it cannot easily model is the integrity of the link between the token and the thing, and that integrity is precisely what the truth layer exists to provide. Without it, a tokenised real-world asset is a well-engineered claim on an unverified promise. With it, the claim becomes investable on the same terms as the underlying.

How IMS Labs approaches the problem — Onyx

Technology is not a department at IMS Group; it is the operating system. The Group's engineering arm, [IMS Labs](#), builds the platforms the investment side runs on rather than buying them in, and one of those platforms is addressed squarely at the authentication problem described above.

That platform is Onyx, an IMS Labs system in production. On the public record, [imslabs.ai](#) describes Onyx as the authentication and truth layer for real-world assets: patent-pending provenance, digital twins, and tokenised ownership. The digital twin is the mechanism that matters here, a permanent on-chain counterpart to a real-world asset that carries its origin, authenticity, ownership and trade history, so the underlying and its token reference one verified record rather than two loosely coupled ones. Onyx sits alongside the Group's other Labs platforms, Cortex, the firm's 41-agent underwriting engine built on an Agent Mesh that compresses two-week diligence to roughly ninety minutes, and Nimbus, its agentic-commerce ecosystem.

The relevant point is not a feature list, and the public facts stop well short of one. It is that the truth-layer problem is not being treated here as a thesis to be admired from a distance, but as something to be built. The Group takes that same builder's posture across its venture work; for the broader thesis, see [the venture-builder thesis](#) at IMS Digital Ventures. Production beats demos, and the gap between the two is where the authentication problem is actually won or lost.

What this means for allocators

The takeaway is a question to carry into diligence. When you assess a tokenised real-world asset, the first thing to interrogate is not which chain it settles on or how fast it clears. It is who authenticates the underlying, how, and how that authentication stays current. The chain is rarely the weak point. The off-chain verification is.

None of this is an argument to wait. The market is maturing in public, not in theory: real-world assets are already being issued and held at institutional scale, a subject the Group covers in its work on what is [already in production](#) with tokenised treasuries, and a serious assessment of [who is actually building on tokenisation](#) separates the firms solving the truth-layer problem from those assuming it away. The direction is clear; the magnitude is contested, with credible 2030 forecasts for tokenised assets spanning roughly \$2 trillion to \$16 trillion depending on the model, and every figure in that range a projection rather than a promise. Read the range, not the headline, and read the layer beneath both.

Frequently asked questions

What is the "truth layer" in asset tokenisation?

The truth layer is the verification layer that authenticates a real-world asset before it is tokenised and keeps that authentication current while the token exists. It establishes that the underlying asset genuinely exists, is as described, and is held and titled as stated, giving the on-chain token a verified off-chain anchor rather than an assumed one. It is the precondition for trustworthy tokenisation.

Why isn't blockchain enough to guarantee a tokenised real-world asset?

A blockchain records and transfers an on-chain token with near-perfect reliability, but it cannot independently confirm the off-chain facts the token depends on: that the asset exists, is what the documents claim, and is not double-pledged. This is the oracle problem applied to real-world assets. If the input is wrong, immutability preserves the error faithfully, which is why off-chain authentication still matters.

What is the difference between custody and authentication in tokenisation?

Custody is holding the underlying asset securely, often with a qualified custodian, so it cannot be moved or pledged twice. Authentication is establishing, and continuing to verify, that the asset genuinely exists and matches its description and title. Custody answers where the asset is held; authentication answers whether the thing being held is truly what the token claims. Both are needed; neither substitutes for the other.

How does IMS Labs' Onyx fit in?

Onyx is an IMS Labs platform, in production, that imslabs.ai describes as the authentication and truth layer for real-world assets, using patent-pending provenance, digital twins and tokenised ownership. The digital twin gives a real-world asset a permanent on-chain counterpart carrying its origin, authenticity and ownership history, so the token references one verified record. It is IMS Group's engineering answer to the off-chain authentication problem this page describes.

Sources & important information

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Tokenisation, read from
the buy-side — settled
in direction, sized as a
range.

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