SOLANA

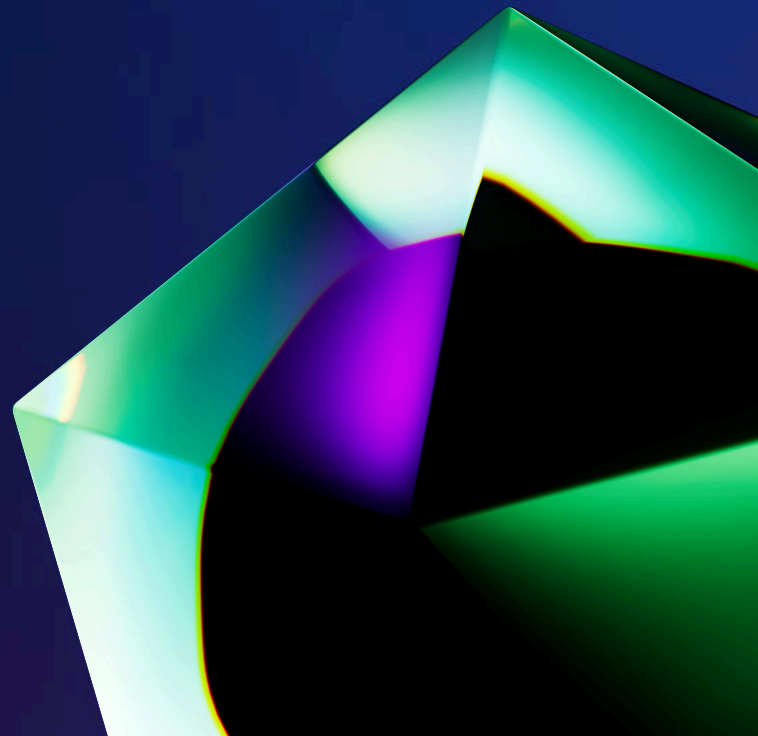# Issuing Tokenized Equities on Solana

A New Paradigm for Capital Markets

MAY 2025

In depth product guide to launching tokenized equities on Solana

Executive Summary

We are at an inflection point for capital markets. As of April 2025, $21B in real-world assets are already tokenized on public blockchains, representing a ~105% jump in 12 months[1]. The combination of rising blockchain adoption, clearer regulatory frameworks, and global competition in financial infrastructure has created the ideal conditions for tokenized securities to move from experiment to mainstream. Jurisdictions such as the EU[2], Singapore[3], and the US[4] are formalizing regulatory regimes for digital assets, improving legal clarity for issuers. Meanwhile, institutional interest in blockchain rails, evidenced by players like BlackRock[5], Visa[6], and PayPal[7], is reshaping what compliance, transparency, and market access can look like in the digital age.

In this landscape, Solana has emerged as the optimal platform for tokenized equities. Its unmatched transaction throughput, near-zero fees, and built-in compliance primitives offer issuers a performant and scalable foundation for digital securities. Solana is not just fast, it is built for onchain finance. The ecosystem has emerging support for onchain KYC, investor credentialing, automated policy enforcement, and corporate actions, all easily programmable with minimal coding requirements.

This document outlines the technical, compliance, and market infrastructure behind tokenizing equities on Solana. From onchain asset controls to DeFi integration and global jurisdictional alignment, Solana enables the next generation of capital formation and liquidity. Whether you are issuing private equity, venture shares, or a public security, this is your blueprint for deploying modern, compliant digital assets.

The Solana Network

Our Competition Is Physics
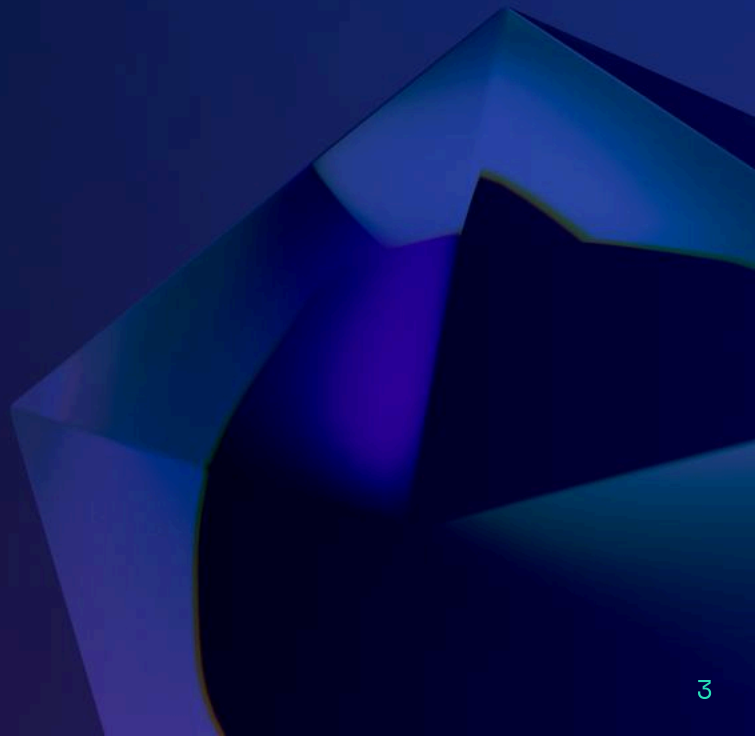
Solana Overview

Solana's institutional-grade performance, combined with its pragmatic, business focused development, make it a uniquely capable platform for tokenized equity issuance.

Solana is a high-performance, Layer 1 blockchain optimized for finance and internet capital markets. It was purpose-built to be "Nasdaq onchain[8]" and address the scalability and cost constraints that have historically limited blockchain adoption in enterprise and institutional settings. Unlike EVM-based chains that rely on sequential processing and Layer 2 workarounds, Solana enables parallel execution and deterministic finality natively on its base layer, ensuring high throughput without sacrificing user experience or composability[9].

With its unique runtime, Solana can process thousands of transactions per second across multiple programs, enabling complex transaction logic such as compliance checks, asset flows, or market matching to occur within a single atomic operation. This makes it particularly well-suited to financial applications where speed, integrity, and certainty of execution are critical. Stripe, Visa, PayPal, Apollo, BlackRock and others have all launched products utilizing the Solana blockchain.

Solana is also distinguished by its commitment to performance without centralization. Over 1,300 voting validators[10] secure the network globally, and the validator requirements are continually improved to encourage accessibility without compromising throughput. Combined with innovations such as local fee markets[11] and transaction prioritization, this allows for a user experience that remains performant even under heavy network load[12].

| Designed from the ground up for throughput and cost-efficiency | Institutional-grade token controls via Token Extensions | Integrated compliance, corporate actions, and investor onboarding |

Network Overview

Ultra-fast, low-cost blockchain designed for scale

Solana's performance advantage is not just theoretical, it has been tested under extreme conditions and used by globally recognized institutions. In January 2025, Solana processed more than 1/10th of Nasdaq's volume onchain without any network disruptions[13]. No other public blockchain network has ever handled this throughput or volume in production. This level of resilience, combined with its developer-friendly environment, ensures that it can serve as the foundation for a scalable, secure, and compliant capital markets infrastructure.

Unlike the EVM scaling solution, which relies on fragmented liquidity and an increasingly complex web of Layer 2 chains, Solana enables unified capital markets, where large volumes of orders, asset flows, and regulatory checks can occur in real time.

$35.9B	0s	$0.001	>1s
ATH DEX Daily Volume[13]	Downtime Last 12 Months[14]	Median Tx Cost[15]	Finality[16]

Throughput & Resilience

Built for Throughput

- Parallel execution, unlike EVM's single-threaded model, enables massive scale

- Continuously increasing bandwidth with a proven 1 million TPS in development[17]

- Local fee markets isolate congestion, prevent global fee spike

Stability & Security

- 100% uptime in the last 12 months, even under unprecedented stress

- Continuous audits and third-party code reviews[18]

- Bug bounty programs[19]

- No history of network level exploitation

Tokenized Securities

Internet Capital Markets on Solana

Tokenized Securities

Internet Capital Markets on Solana

Onchain tokenized equities promise increased efficiency, lower operational overhead, and the potential to unlock global liquidity for traditionally siloed markets. McKinsey estimates nearly $2 trillion in tokenized market cap by 2030 as the base case[20].

Yet achieving these outcomes requires infrastructure that doesn't just mimic traditional systems, it needs to surpass them in auditability, automation, and regulatory alignment.

Industry outlook: Base case estimate of potential value of tokenized assets by 2030 is nearly $2 trillion.

An analysis of tokenization waves by asset capitalization potential and adoption drivers

Wave	2030 tokenized asset market capitalization base case, $ trillion			Examples of use cases driving adoption
1	Cash and deposits[1]	*Excluded from total*	~1.1	24/7 business-to-business payments
	Mutual funds and ETFs[2]		~0.4	Money market fund distribution
	Loans and securitization[3]		~0.3	Streamlined warehouse lending
	Bonds and exchange-traded notes[4]		~0.3	Intraday repo/collateral mobility
2	Alternative funds[5]		~0.2	Distribution and investor onboarding
	Alternative assets[6]		~0.1	Liquid secondary market
	Unlisted equities[7]		~0.1	Liquid private markets for secondary sales
	Precious metals[8]		~0.1	Collateral in decentralized finance
3	Publicly listed equities[9]		<0.1	Clearing and settlement efficiencies
	Intangible assets[10]		<0.1	Real-time distribution of royalties
	Derivatives[11]		<0.1	Clearing and settlement efficiencies
	Total value tokenized in 2030		~1.9	

[1]Tokenized cash and deposits are excluded from total to avoid double counting, since these are involved in the settlements of trades involving tokenized assets. [2]ETFs, mutual funds and money market funds. [3]Wholesale loans, mortgage and home equity, structured credit. [4]Government bonds, municipal bonds, corporate bonds, commercial paper, etc. [5]Private equity/venture capital funds. [6]Real estate (including real estate investment trusts), carbon, art and collectibles, and commodities (excluding precious metals). [7]Single unlisted private equity and mezzanine financing. [8]Gold, silver, platinum, palladium. [9]Listed corporate equities. [10]Intellectual property (brands, trademarks). [11]Options, futures, swaps, warrants, investment certificates, excluding over-the-counter derivatives.
Source: Bank for International Settlements; Deal Logic; Federal Reserve Bank of St Louis; Prequin, Savills; Statista; The Block; WFE; expert interviews

McKinsey & Company

Solana supports this transformation by offering a modern, programmable foundation for asset issuance. Rather than relying a suite of custom smart contracts, Solana integrates the building blocks of compliant finance directly into its token standard. This allows issuers to control transfer behavior, embed investor verification, automate reporting, and execute complex corporate actions with transparency and minimal manual effort.

Compared to traditional securities infrastructure, which often relies on layers of custodians, transfer agents, and offchain recordkeeping, tokenized securities on Solana allow for real-time settlement, auditable investor controls, and lifecycle automation, all governed by deterministic program logic. The result is a platform that is built with emerging regulatory frameworks in mind while enabling new financial models to emerge.

Solana enables this through three foundational capabilities:

Corporate Actions
Automate distributions, voting, and ownership changes

Asset Controls
Define token behavior and manage operational access

Programmable Compliance
Enforce rules and permissions at the token layer

Business Case

Consider a venture capital firm that wants to tokenize its fund shares and enable quarterly redemptions for eligible LPs. On traditional rails, this would involve offchain reconciliation, manual KYC/AML reviews, and capped liquidity. Using Solana-based token extensions, investor eligibility could be enforced through verifiable credentials, redemptions can be triggered by smart contract logic, and token behavior can reflect jurisdictional rules, all within one programmable asset.

This isn't just faster; it's fundamentally more scalable. Automated policy enforcement reduces legal overhead. Built-in auditability lowers reporting costs. And composability allows these assets to participate in whitelisted liquidity pools or be wrapped for use across a broader DeFi ecosystem.

Token Design
Flexible Architecture for Asset Issuance

When deploying tokens onchain, issuers must weigh a range of design decisions based on the asset and the desired investor experience.

Digital Twin models represent tokenized versions of offchain managed assets, such as stablecoins, ETFs, or publicly traded equities. These tokens can potentially only require compliance enforcement at issuance or redemption.

In contrast, **Digital Native** assets are issued and governed entirely onchain. They introduce new design considerations such as embedded price discovery, investor eligibility enforcement, and onchain governance mechanics.

Compliance can be enforced across a broad spectrum, from fully offchain enforcement at key touch points, to granular, programmable rules applied at the asset level and checked during every transfer.

Solana supports this full design spectrum with minimal custom smart contract development required, giving issuers the flexibility to tailor enforcement, governance, and interoperability to their asset class and jurisdictional needs.

"Compliance Integration Spectrum"

Compliance Model	Description	Ex. Asset Type
Fully Restricted	KYC/KYB, jurisdiction and additional custom (e.g.: accreditation) checks enforced on every transfer	Reg D/Reg S securities
Jurisdiction & KYC Enforcement	KYC/KYB and jurisdictional checks enforced on every transfer	Derivatives
KYC Enforcement	KYC/KYB checks enforced on every transfer or account initialization	Public Equities
Credential Enhanced	Transfers occur permissionlessly, but credentials can be enforced for additional features (e.g.: yield)	Tokenized Treasuriees
Permissionless	No compliance controls embedded. Can be enforced offchain at issuance and redemption	Jurisdiction dependent

Corporate Actions

Corporate actions like dividends, splits, voting, and M&A have traditionally required multiple intermediaries, reconciliation steps, and long timelines. ValueExchange found that 46% of all corporate event data is processed entirely manually and costs associated with corporate actions will rise 33% by 2027[21]. With Solana smart contracts and token extensions, these events can be executed directly onchain, ensuring speed, transparency, and lower operational overhead.

These onchain-native mechanisms reduce reliance on offchain coordination and give issuers, custodian banks, brokers and fund managers the ability to automate governance workflows. By eliminating manual execution and third-party dependencies, tokenized issuers can streamline shareholder interactions, reduce cost and delay, and increase transparency and engagement across their investor base.

Governance Made Programmable

Dividends:
Distributed via airdrops, claims, or through the Scaled UI extension

Splits / Reverse Splits:
Automatically reflected by updating the Scaled UI multiplier

Voting & Proposals:
Token-gated voting mechanisms based on ownership snapshots

M&A Events:
Conditional swaps, redemptions, or reissuance

Solana smart contracts and token extensions turn corporate governance into deterministic protocol logic, minimizing delays, disputes, and execution risk across your cap table.

Programmable Compliance

Automated, verifiable enforcement for the digital world

Solana's programmable compliance framework enables rules to be enforced dynamically at the protocol level, without intermediaries or manual review. Compliance is no longer something that happens after the fact: it's embedded directly into how the asset behaves, from onboarding to transfer to reporting.

Through verifiable identity, policy-enforced transfer logic, and real-time reporting, Solana allows tokenized equities to comply with regulations across jurisdictions, while remaining composable with DeFi and traditional infrastructure alike.

This shift creates significant advantages for capital markets:

1. Investors are screened and managed using verifiable credentials, enabling access controls and automated onboarding.

2. Transfers are evaluated in real time against jurisdictional rules, sanction lists, or custom holding requirements.

3. Audits become easier, since all relevant events are recorded immutably and can be analyzed at any time.

By making the rules transparent, testable, and enforceable, Solana empowers issuers to launch digital securities that meet or exceed global compliance expectations while reducing operational costs.

This section introduces the three core components of programmable compliance:

Built-in identity and credential checks	Transfer logic to enforce compliance rules	Transparent audit trails and real-time alerts

Solana's architecture allows for dynamic compliance checks at every stage of the asset lifecycle. From investor onboarding to transfer restrictions and reporting, rules can be enforced in real-time using smart logic built into the token itself.

Integrated KYC/KYB

Token gate to only verified participants

Ensure only verified participants interact with tokenized equities. Identity verification is the foundation of regulatory compliance in any securities offering, and Solana provides flexible tools to implement KYC/KYB at the token layer. Whether an issuer wants to manage investor lists directly, delegate to third-party verifiers, or leverage onchain credentials via the Solana Attestation Service[22], each approach is fully supported and compatible with programmable transfer logic.

These capabilities allow issuers to meet jurisdictional requirements while preserving user privacy, enabling a balance between control and openness. Solana supports multiple approaches to identity and investor credentialing, offering issuers flexibility while maintaining compliance and privacy.

SPOT LIGHT

Solana Attestation Service (SAS)

Leverages onchain attestations issued by trusted providers. These attestations can be verified by token transfer logic or DeFi protocols to gate access or enforce restrictions, all while preserving privacy.

The three primary ways issuers can implement identity and compliance controls on Solana:

Method	Description	Best For
Offchain & Manual	Offchain verification + manual token permissioning	Fully permissioned tokens
Custom Onchain Logic	Fully programmable rules for KYC, jurisdiction, accreditation	Full control, highly complex rules
Solana Attestation Service	Onchain verifiable credentials via trusted identity providers	Scalable, plug-and-play identity

Automated Policy Engine

Onchain compliance policy enforcement at the token level

Solana smart contracts and token extensions allows issuers to define compliance rules that are automatically checked and enforced at the moment of transfer—before the transaction finalizes. This means that restrictions based on investor type, jurisdiction, timing, asset class, or custom business logic can be implemented natively at the token level.

At the heart of this system are Transfer Hooks, which allow token programs to execute logic during a transfer[23]. These hooks can access metadata, credential registries, and even oracles to determine whether a transfer should proceed.

This makes Solana capable of supporting programmable, automated controls in highly regulated environments, where who owns an asset, and under what conditions it can move, is subject to evolving legal requirements.

This approach replaces complex offchain reviews with deterministic, onchain enforcement. Custom transfer logic gives issuers flexibility while ensuring consistency and reducing operational risk.

Key Benefits

- Fully automated enforcement of compliance policies during transfer execution

- Real-time rejection of non-compliant activity (e.g., ineligible investor, restricted jurisdiction)

- Reduces manual overhead, operational complexity, and legal exposure

- Reduces liability for issuers by guaranteeing consistent enforcement

Common Use Cases

- Enforcing transfer eligibility based on KYC, KYB, or accreditation credentials
- Implementing vesting, lockups, or holding period policies directly in transfer logic
- Restricting transfers to qualified institutional investors or authorized resellers
- Sector or asset-specific regulatory enforcement

Payment Sent to Data Science Contractors

● One Recipient Pending KYC

Alex Frost, Data Scientist 6xmve...535		⊙ Failed KYC
Rita Smith, Data Scientist 5hrsvx...781		✓ Paid
Julio Arizpe, Data Scientist gxaseq...113		✓ Paid

Monitoring & Reporting

Enhanced auditing through transparency

Effective compliance goes beyond enforcement, and requires transparency. Solana's architecture provides real-time, transparent visibility into token movements, control changes, and investor interactions. This creates a continuous audit layer that benefits issuers, regulators, and service providers alike.

By leveraging Solana's immutable ledger, compliance teams can monitor transactions as they happen, trace asset movement networks, and verify investor actions without relying on fragmented systems. Monitoring tools can be integrated directly with dashboards, alerts, and reporting frameworks to proactively detect anomalies, enforce internal controls, or generate periodic compliance attestations.

This infrastructure not only reduces risk and manual reporting burdens, it also allows issuers to meet jurisdictional requirements with verifiable onchain evidence, accelerating audits, streamlining disclosures, and enabling real-time compliance analytics. This enables issuers and compliance teams to automate monitoring, audit trails, and reporting across the entire asset lifecycle.

Transparency & Traceability

- Immutable audit trails for all token activity, including transfers, freezes, and policy changes

- Chain of custody tools to monitor asset movement across jurisdictions or ownership transitions

- On-demand proofs for regulators or internal teams to validate transaction history and compliance status

Automation & Monitoring

- Real-time dashboards for compliance and investor relations teams to monitor onchain activity

- Custom event logging to link reporting with offchain systems

- Support for automated alerts and exportable reporting to streamline regulatory compliance

Asset Controls
Authority Management for Digital Securities

Solana enables comprehensive control over digital securities. These controls give issuers and administrators the ability to define and enforce governance, compliance, and operational policies directly within the token architecture. Each control is individually assignable to different administrators to ensure operational separation, reduce risk, and support regulated governance models across teams and jurisdictions.

Key Capabilities

- Mint and burn tokens programmatically

- Freeze or thaw accounts based on compliance flags or operational needs

- Update metadata for cap tables, share classes, or disclosures

- Configure and collect transfer fees or yield mechanics

- Seize assets via Permanent Delegate authority for clawbacks or enforcement

- Configure default account states for onboarding or lock-up behavior

"Example Role-Based Authority Assignment"

Role	Capabilities	Enforcement Method
Finance Admin	Mint/Burn, Fee Settings, Corporate Actions	Signer or multisig
Compliance Officer	Freeze/Thaw, Transfer Restrictions	Signer or multisig
Product Manager	Metadata	Signer or multisig
Compliance Admin	Clawbacks	Signer or multisig
External Auditor	Confidential Balances Auditor	Signer or multisig

Token Extensions

Permissioned Tokens on a Permissionless Network
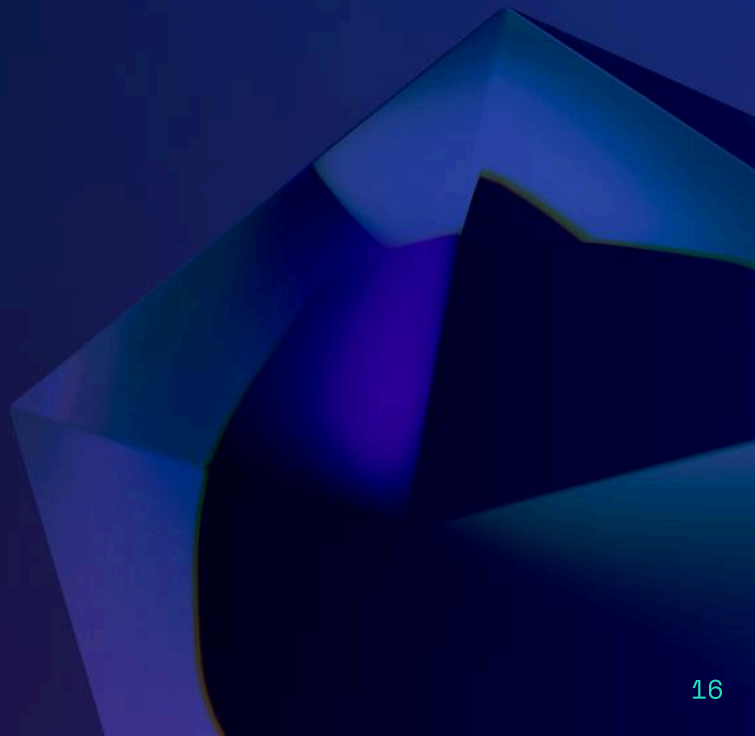
Token Extensions Overview

Permissioned Tokens on a Permissionless Network

Token extensions introduce an expanded suite of features to token issuance on Solana, enabling native compliance, customization, and control. Token Extensions offer a modular foundation for building digital assets that meet modern operational, regulatory, and investor experience requirements, without the need to build and maintain custom smart contracts[24]. Knowledge of Rust or Solana smart contract development is only needed for advanced custom usage.

Key Features

Single Program Architecture:
One extensible program supports permissioned, permissionless, and hybrid token models to accelerate deployment.

Advanced Permissioning:
Assign granular authorities for minting, burning, metadata updates, and account configuration through role-based controls.

Detailed Asset Metadata:
Attach structured metadata for ownership, disclosures, share classes, and compliance requirements.

Advanced Compliance:
Enforce real-time regulatory checks such as KYC/KYB, lockups, and jurisdictional controls via transfer hooks.

Seamless Wallet Integrations:
Compatible with all major Solana wallets and institutional custodians for smooth onboarding and access control.

Reduced Risk and Maintenance:
Multiple in-depth security audits completed by top audit firms helps reduce risk and dev lift.

Assets utilizing Token Extensions include BlackRock's BUIDL, PayPal's PYUSD, and Apollo's ACRED

Transfer Hooks

Configurable Policy Engine

Transfer Attempt	Trigger Hook	Complete Transfer
		- Allow
		- Optionally

Run Compliance Logic:
Evaluate Ruleset (e.g., jurisdiction, accreditation, lock-up)

Deny
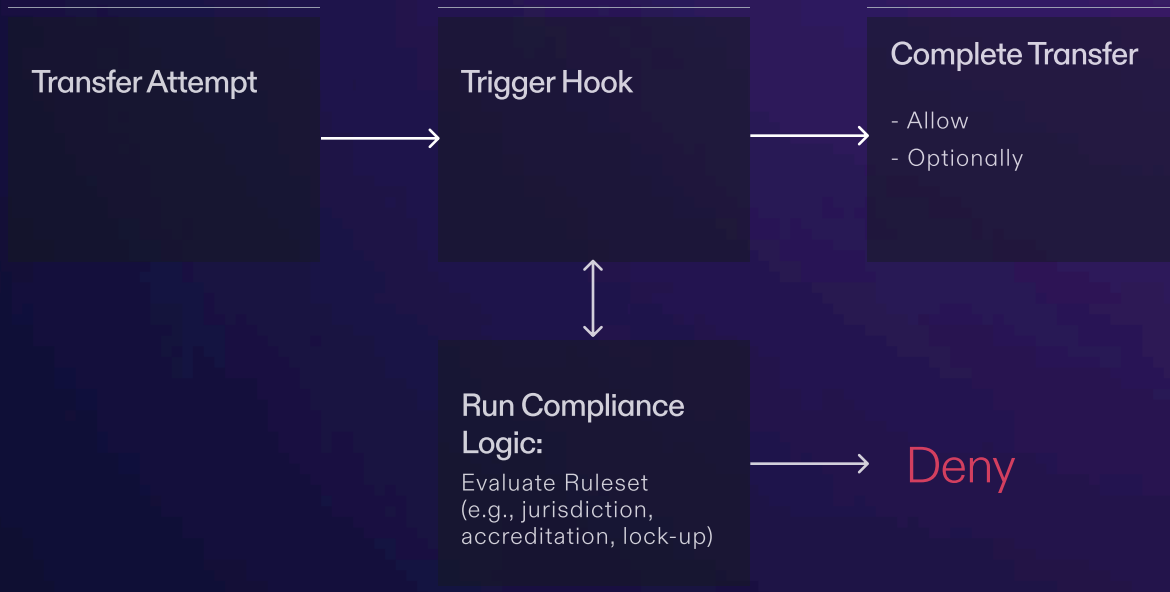
Token transfers can be more than just a movement of value, they can be compliance-aware, context-sensitive events. Transfer Hooks allow issuers to embed programmable logic directly at the point of transfer, enabling onchain enforcement of real-world policy requirements. This means each token movement can carry embedded logic for regulatory compliance, investor eligibility, and more.

For issuers, this means no more manual restrictions or patchwork KYC layers—Transfer Hooks enforce policies directly in the token, at scale.

Example Use Cases

• Restrict transfers to only KYC-verified wallets

• Block transfers between unauthorized jurisdictions (e.g., US ↔ non-allowlisted country)

• Automatically enforce vesting schedules or holding periods

• Require accreditation or role-based credentials at transfer time

• Log every denied transfer attempt for audit/reporting

Additional Extensions

Permissioned Tokens on a Permissionless Network

Token Extensions unlock a broad suite of capabilities that enable issuers to design tokens tailored to operational, regulatory, and user experience needs. Beyond transfer hooks, Solana offers over a dozen additional extensions, some essential for securities issuance, others tailored to stablecoins or other financial instruments.

Below is a curated list of additional extensions that could be interesting to security issuers. The full technical documentation and list of extensions is available at solana-program.com[25].

Highlighted Extensions for Security Issuers

Extension Name	Capability	Scope
Scaled UI	Fixed multiplier for scaled balances. Enables stock splits and dividend distribution as well as interest bearing tokens.	All Tokens
Confidential Balances	Balance confidentiality. Only sender, receiver and optional auditor can see transfer amounts.	Individual Account
Default Account State	Permissioned token access. Streamlined regulatory compliance and allowlisting.	All Accounts
Permanent Delegate	Clawbacks and seizures. Configures an account/program that has programmatic delegation over tokens in accounts.	All Accounts
Transfer Fees	Denominated in the token type, withholds configured basis points from the recipient account.	All Transfers
Immutable Owner	Nontransferable ownership of accounts. Prevents account misappropriations or unintended ownership changes.	Individual Account
CPI Guard	Prohibit certain actions in cross-program invocations. This extra security can help prevent unauthorized transfers.	Individual Account
Pausable	Pause all transfers, mints and burns. Useful in disaster recovery scenarios.	All Tokens

These tools empower teams to build flexible token systems tailored to both investor expectations and regulatory realities.

SOLANA

Market & Ecosystem

The Future of Regulated Global Capital
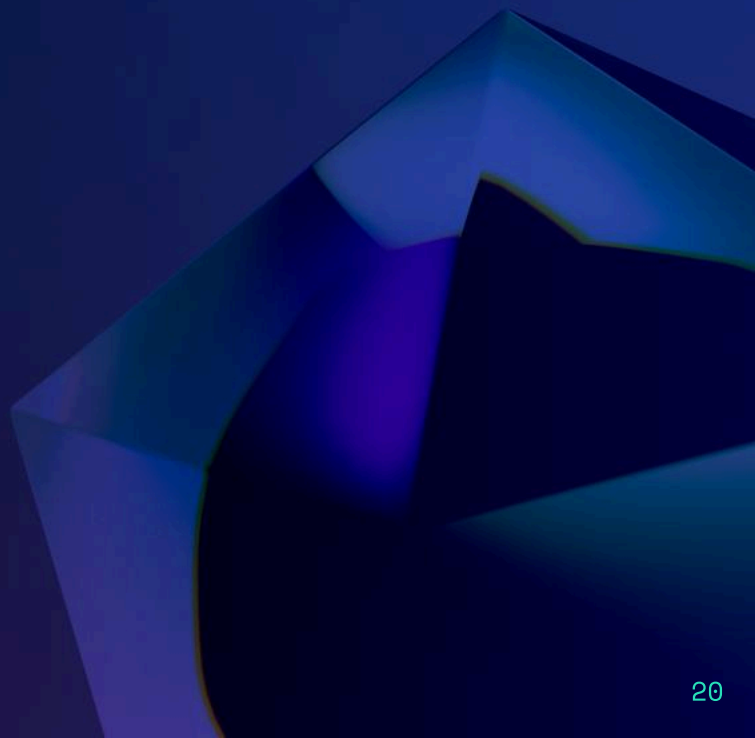
SECURITIZE®

Case Study

Securitize DS Tokens

How Token Extensions Enable Institutional-Grade RWA on Solana

Securitize has launched some of the first tokenized real-world assets including BlackRock's BUIDL tokenized treasury fund & Apollo's ACRED private credit fund. They use Solana's Token Extensions to enforce complex compliance logic while maintaining DeFi interoperability[26].

- Built by Securitize for BlackRock and Apollo fund launches

- Utilized Solana's Token Extensions for granular compliance enforcement

- Incorporated complex rules such as lockups, jurisdictional filters, accreditation checks, etc.

- Automated Transfer Agent functions with immediate settlement of investor transfers in a regulated manner

Outcomes & Learnings

- Showcased Token Extensions' transfer hook usage for real-time regulatory enforcement without generating user friction.

- Issuers can get to market quickly by fully embracing Solana's native capabilities.

- Set precedent for future institutional tokenization efforts on Solana's public infrastructure securely and efficiently.

- Early planning for DeFi strategy can ensure seamless integration to access potential long-term liquidity.

As the market for RWAs and tokenized treasuries gains momentum, expanding BUIDL to Solana—a blockchain known for its speed, scalability, and cost efficiency—is a natural next step.

Carlos Domingo
Co-founder and CEO of Securitize[27]

Issuance Standards

Audited Off-the-shelf Tokenization Frameworks

As the tokenized securities ecosystem matures, several standardization efforts have emerged to guide how digital assets should behave across jurisdictions, custody providers, and compliance regimes. These frameworks aim to ensure compatibility, reduce implementation complexity, and foster broader institutional adoption.

Many of these frameworks take direct influence from ERC-3643, an Ethereum-based token standard designed to enforce onchain permissioning and regulatory compliance. While Solana's Token Extensions supports the token specific functionality, these frameworks provide unified methodologies for standard investor onboarding, compliance rules, and token issuance factories.

Below are three of the most prominent and emerging frameworks:

Medici RWA Framework[28]

- Unopinionated, flexible, and composable solution for real world assets.

- Modular framework comprising of asset management, policy enforcement, identity registration, and an asset data registry.

CoMakery Security Token[29]

- Security Token smart contract implementation from Upside.

- Implementation focuses on access management, transfer groups and restrictions, and dividend distributions.

Solana ERC-3643 Inspired Standard
[In Development]

- A new standard being designed to be compatible with ERC-3643 to support cross-chain deployments.

- Under development in collaboration with a council of experts and issuers.

DeFi Compatibility

Composable, Compliant Liquidity

Tokenized equities issued on Solana can participate in DeFi ecosystems while maintaining strict compliance guarantees. Rather than relying on centralized permissioning, Solana's architecture enables onchain credential verification and programmable policy enforcement at the protocol level.

This allows regulated assets to interact with liquidity, lending, and trading platforms securely and scalably, opening the door for institutional capital to enter decentralized markets.

Compliant DeFi Strategies

Gated Pools:

Restrict deposits and withdrawals to credentialed wallets using onchain attestations (e.g., jurisdiction, KYC, investor status)

Wrapped Tokens:

Convert compliant assets into SPL-compatible tokens that maintain regulatory boundaries, enabling broader composability[30]

These mechanisms allow compliant assets to unlock composable liquidity across DeFi while adhering to institutional and regulatory requirements.

Benefits for Institutions

- Regulatory-safe liquidity access without compromising efficiency

- Support for policy enforcement directly within DeFi protocols (e.g., lock-up periods, transfer blacklists)

- Full transparency into access permissions and transfer logic across chains

- Seamless participation in lending, yield, and market-making environments

EVM vs. Solana

Issuers deciding their launch and go-to-market strategy need to consider which chains to launch on and when. While EVM networks have historically been the safe and obvious first choice, issuers should evaluate where their target market resides and which networks can support their long-term vision and scaling requirements.

More often than not, Solana is an excellent choice as the premier network to focus on due to its infrastructure, ease of integration, financial application innovation and proven product-market fit, particularly among the next generation of retail investors.

Network Architecture & Issuance Comparison

Feature	EVM	Solana
Scalability	L2/L3 dependent. Constrained by sequential execution	Parallel processing combined with an aggressive scalability roadmap[31]
Finality	~3m on Ethereum[32]. ~1m on most L2s due to reliance on L1 commitments[33]	> 1s[34]
Fees	Highly variable[35]. Fees spike unilaterally under heavy load	~$0.001 median cost per transfer regardless of network congestion[36]
Liquidity	Fragmented across ecosystems (L1/L2s)	Highly composable due to a unified execution layer
Token Development	Requires custom smart contract development	Configurable via Token Extensions. Dev required for advanced features
KYC/KYB Integration	Requires custom smart contract development	Available soon with no custom dev with the Solana Attestation Service
Corporate Actions	Requires custom smart contract development	Native via token extensions
Ecosystem	Extensive tooling and ecosystem with strong institutional presence	Rapidly growing. Native support from institutional issuers and custodians

Solana provides a scalable environment with built-in primitives for security token issuance and an ecosystem ready for the future of onchain tokenization.

Conclusion

The next evolution of capital markets is underway, and tokenization is at its center.

Solana provides the technical foundation, compliance tooling, and institutional-grade infrastructure needed to bring traditional securities into the global digital age, without sacrificing regulatory clarity or operational integrity.

By leveraging programmable compliance, onchain asset controls, and automated corporate actions, issuers can launch digital equities that are secure, scalable, and composable with the broader DeFi ecosystem. The network's global reach, high throughput, and robust developer tools made to help ensure institutions can deploy with speed and confidence.

Whether you're a startup modernizing equity structures or a multinational asset manager preparing for the next wave of digital securities, Solana offers a powerful, open, and production-ready platform, trusted by leading institutions and already powering real-world tokenization at scale.

The infrastructure is here. The regulation is maturing. The market is ready.

Now is the time to reimagine how capital flows and build it onchain.

SOLANA

capitalmarkets@solana.org

Citations

Executive Summary

1. HTTPS://RWA.XYZ
2. HTTPS://WWW.ESMA.EUROPA.EU/PUBLICATIONS-AND-DATA/INTERACTIVE-SINGLE-RULEBOOK/MIFID-II
3. HTTPS://WWW.MAS.GOV.SG/SCHEMES-AND-INITIATIVES/PROJECT-GUARDIAN
4. HTTPS://WWW.SEC.GOV/NEWSROOM/SPEECHES-STATEMENTS/CF-CRYPTO-SECURITIES-041025
5. HTTPS://FORTUNE.COM/CRYPTO/2025/03/25/BLACKROCKS-BUIDL-SOLANA-TOKENIZED-MONEY-MARKET-FUND-EYES-2-BILLION-BUIDL/
6. HTTPS://USA.VISA.COM/SOLUTIONS/CRYPTO.HTML
7. HTTPS://WWW.PAYPALOBJECTS.COM/DEVDOC/COMMUNITY/PYUSD-SOLANA-WHITE-PAPER.PDF

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8. HTTPS://SOLANA.COM/NEWS/ANATOLY-YAKOVENKO-TALKS-DECENTRALIZATION-DEVELOPER-COMMUNITY-AT-UDC-2021
9. HTTPS://WWW.HELIUS.DEV/BLOG/SOLANA-EXECUTIVE-OVERVIEW
10. HTTPS://WWW.VALIDATORS.APP/
11. HTTPS://WWW.HELIUS.DEV/BLOG/SOLANA-LOCAL-FEE-MARKETS
12. HTTPS://X.COM/0XMERT_/STATUS/1881446947153760431
13. HTTPS://DEFILLAMA.COM/DEXS/CHAINS/SOLANA
14. HTTPS://STATUS.SOLANA.COM/UPTIME
15. HTTPS://DUNE.COM/ELOVIANOO/MEDIAN-AND-AVERAGE-TRANSACTION-FEES-ETH-ALTS-L2S
16. HTTPS://SOLANA.COM/IT/DEVELOPERS/GUIDES/ADVANCED/CONFIRMATION
17. HTTPS://WWW.ANZA.XYZ/BLOG/ANZAS-2025-MISSION-ON-THE-ROAD-TO-1M-TPS
18. HTTPS://GITHUB.COM/ANZA-XYZ/SECURITY-AUDITS
19. HTTPS://GITHUB.COM/ANZA-XYZ/AGAVE/SECURITY

Tokenized Securities

20. HTTPS://WWW.MCKINSEY.COM/INDUSTRIES/FINANCIAL-SERVICES/OUR-INSIGHTS/FROM-RIPPLES-TO-WAVES-THE-TRANSFORMATIONAL-POWER-OF-TOKENIZING-ASSETS
21. HTTPS://WWW.DTCC.COM/DTCC-CONNECTION/ARTICLES/2024/MAY/01/THE-HIDDEN-RISING-COST-OF-CORPORATE-ACTIONS
22. HTTPS://GITHUB.COM/SOLANA-FOUNDATION/SOLANA-ATTESTATION-SERVICE
23. HTTPS://SOLANA.COM/DEVELOPERS/COURSES/TOKEN-EXTENSIONS/TRANSFER-HOOK

Token Extensions

24. HTTPS://SOLANA.COM/TOKENEXTENSIONS
25. HTTPS://SOLANA-PROGRAM.COM

Market & Ecosystem

26. HTTPS://SECURITIZE.IO/LEARN/PRESS/BLACKROCK-AND-SECURITIZE-DEBUT-NEW-BUIDL-SHARE-CLASS-ON-SOLANA-NETWORK
27. HTTPS://SECURITIZE.IO/LEARN/PRESS/BLACKROCK-AND-SECURITIZE-DEBUT-NEW-BUIDL-SHARE-CLASS-ON-SOLANA-NETWORK
28. HTTPS://MEDICI-DOCS.BRIDGESPLIT.COM/
29. HTTPS://GITHUB.COM/COMAKERY/SOLANA-SECURITY-TOKEN
30. HTTPS://GITHUB.COM/SOLANA-PROGRAM/TOKEN-WRAP
31. HTTPS://SOLANACOMPASS.COM/LEARN/LIGHTSPEED/WHATS-COMING-FOR-SOLANA-IN-2025
32. HTTPS://ETHEREUM.ORG/EN/DEVELOPERS/DOCS/CONSENSUS-MECHANISMS/POS/#FINALITY
33. HTTPS://L2BEAT.COM/SCALING/FINALITY
34. HTTPS://USA.VISA.COM/SOLUTIONS/CRYPTO/DEEP-DIVE-ON-SOLANA.HTML
35. HTTPS://DUNE.COM/HILDOBBY/GAS
36. HTTPS://DUNE.COM/QUERIES/3921548

Disclosures