Answering the Need for Standardization

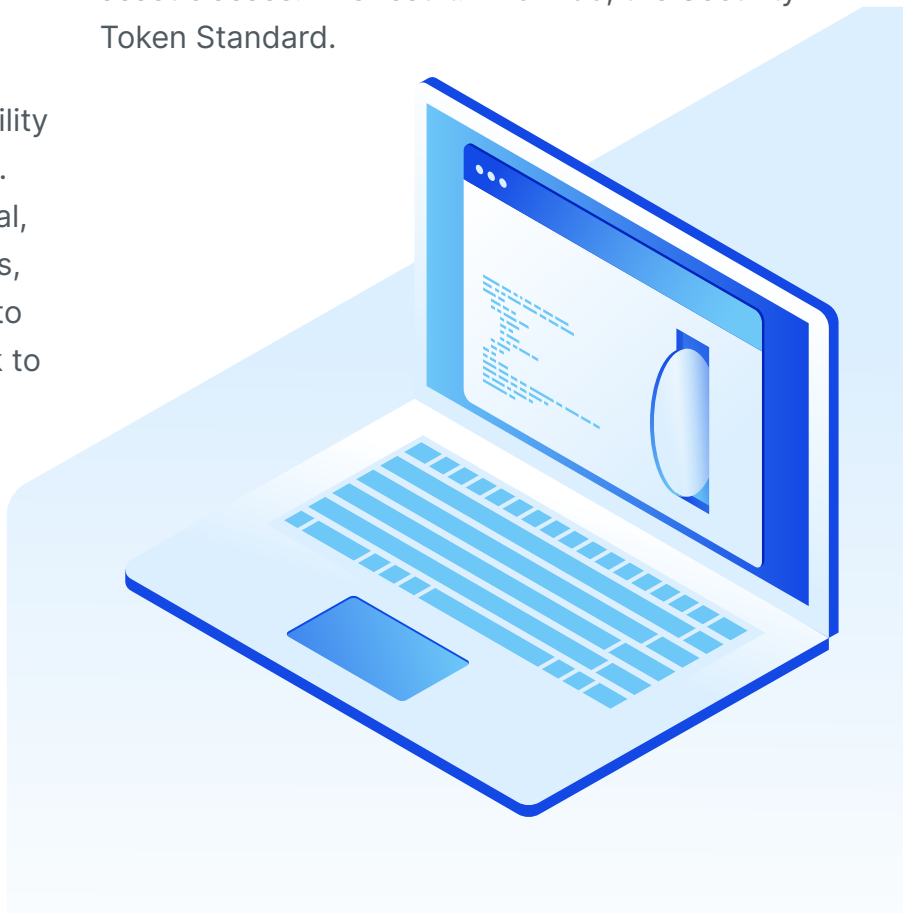
ERC 1400 Standard

Originally, each Security Token created was supported by a new, unique smart contract on the Ethereum blockchain. But a lack of consistency in how these smart contracts were engineered increased friction with process stakeholders like custodians and exchanges, who would need to complete both business and technical due diligence on assets. Challenges like this increased operational requirements unnecessarily when issuing, trading, or managing Security Tokens, risking the market relevance for a whole new class of assets.

Like the adoption of many other new technologies, the path to Security Token viability is paved by a requirement for standardization. For Security Tokens to reach their full potential, issuers, investors, KYC/AML providers, wallets, exchanges, regulators, and developers need to be working within an agreed-upon framework to better guide the industry.

The Security Token Roundtable

In July 2018, Polymath set out to address the lack of standardization when creating Security Tokens with the Security Token Roundtable. Led and co-authored by Polymath's Adam Dossa and Pablo Ruiz, we brought together a diverse team of developers, lawyers, transfer agents, exchanges, and industry thought leaders. The ultimate goal was to collaborate and determine how a Security Token standard should be best structured and operated to support both existing and new financial asset classes. The result: ERC1400, the Security Token Standard.



Introducing ERC1400

In essence, the ERC1400 standard programmably enforces regulation for Security Tokens by applying jurisdictional laws from across the globe. It can even apply off-chain data to transactions to include necessary real-world input and authorization. With these elements engineered into your Security Token smart contract, issuers experience:

Increased Transparency

The ability to reverse, force, and check the status of transfers makes the journey of tokens totally transparent.

Streamlined Due Diligence

Standardization ensures that stakeholders like exchanges and custodians no longer have the onus to complete technical due diligence prior to onboarding the asset.

Expanded Range of Supported Assets

Support for a broad range of current and new financial assets such as: publicly traded equity and bonds, real estate, or artwork, etc.

Improved User Experience

Investors can easily understand why trades fail and what's needed to remain compliant.

POLYMATH

Polymath has created the pathway to a new category of financial assets, truly digital securities enabled by the blockchain. The Polymath team brings together a depth of knowledge in the blockchain and securities space, world class advisory partners, and the technology to take your clients from token creation to offering and beyond. By leveraging our ecosystem of institutional and regulated partners, we empower issuers to create compliant, innovative, transparent and liquid Security Tokens for a global investor pool.

One Standard for All?

The race toward market standardization isn't about one standard winning over another; instead, the shift from a marketplace full of bespoke tokens to a more homogenized approach provides clarity, guidance, and best practices for how key market players can set themselves up for success. Whether it's 1 or 5 standards, the consensus is a win for the entire industry. Polymath continues to work with service providers on ERC1400 adoption and looks forward to the continued increase in adoption of the standard.

Standards Comparison

Feature	ERC-20	ERC-1400 (ST-20)	Polymesh
Controller Access	✗	✓	✓
Compliance	✗	✓	✓ (Identity Based)
Error Codes	✗	✓	✓
Off-chain Authorisation	✗	✓	✓ (Coming in V2)
Document Management	✗	✓	✓
Checkpoints	✗	✓	✓
Partitions	✗	✓	✓ (Portfolios)
Issue / Redemption	✗	✓	✓
Settlement	✗	✗	✓
Corporate Actions	✗	✗	✓
Permissioned Access	✗	✗	✓
Custody	✗	✗	✓ (Portfolio based)
Security Identifiers	✗	✗	✓
Aggregated Entity Balances	✗	✗	✓ (PUIS)
Relayer Support	✗	✗	✓
Confidential Assets	✗	✗	✓ (Coming in V2)