



Real-World Assets (RWAs) Tokenization Report - August 2023 Recap

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This report highlights developments related to the tokenization and on-chain adoption of Real-World Assets (RWAs).

Our report includes details on centralized industry players and asset class coverage, as well as coverage of select decentralized finance protocols working to integrate RWAs on-chain.

Information is compiled from Digital Asset Research's (DAR's) data sources, public sources, media reports, and press releases, and, while wide-ranging, this report covers only representative initiatives related to the development and tokenization of RWAs in the digital asset space.

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Introduction

While many cryptocurrencies offer solutions to the challenges encountered by Web3 users, only a few digital assets possess characteristics that connect them to real-world economic activities. Skeptics contend that cryptocurrency use cases are confined to the digital realm, and therefore the value of crypto assets is not sustainable, given that much of daily life revolves around the physical world.

Real-world asset tokenization bridges this gap between the physical and digital worlds. Real-World Assets (RWAs) are assets that exist tangibly offline, such as real estate or equities. Tokenization refers to the process of generating a digital certificate that is impervious to alteration or replication to represent an RWA on a blockchain. These digital certificates are backed by real-world assets as collateral.

Through tokenization, investors can gain access to conventional investment opportunities in a more trustless and efficient manner via blockchain technology. Settlement can be conducted in real time and investors are always able to see where their assets are stored on chain. The spectrum of assets that could be tokenized includes but is not confined to, real estate, private credit, securities, commodities, and fiat currencies. A significant proportion of the world's financial value is ascribed to RWAs, thereby presenting the potential for RWA tokens to access a total addressable market equivalent to the largest financial markets.

In this report, entities working on RWA initiatives are classified into two groups:

- Centralized organizations that offer tokenization services are detailed in the **CeFi RWA** sections.
- Decentralized Finance (DeFi) protocols that integrate RWAs with on-chain market participants are detailed in the **DeFi RWA** sections.

Significant RWA Tokenization News

- Ondo Finance [launched](#) USD Yield (USDY), which is a tokenized note secured by U.S. Treasuries and bank notes that offered a 5% APY at launch.
- Clearpool, a DeFi lending protocol, now [supports](#) transactions on Polygon's zkEVM scaling solution.
- Maple Finance, a DeFi lending protocol, [raised](#) \$5 million in funding from venture capital firms, including GSR Ventures, Cherry Ventures, Veris Ventures, and The Spartan Group.
- Backed Finance, a DeFi project, integrated Chainlink's price feeds and [tokenized](#) multiple assets, including Coinbase's COIN stock, an S&P 500 index fund, and several bond offerings, across six blockchains.
- Solana co-founder Raj Gokal [expressed](#) optimism about the future of real world asset tokenization in an interview, saying "Real-world asset tokenization indeed presents tremendous opportunities..."

CeFi RWA Industry Players

The table below provides details on a selection of 49 centralized tokenization service providers.

Entity	Website	Founded	Jurisdiction	In-House Blockchain	Tokenized Asset Marketplace	Fractionalization of Assets	Self-Custody	Total Funding
10XTS	https://10xts.com/	2017	United States	Yes	No	Yes	Yes	\$2,400,000
ADDX	https://addx.co/en/index.html	2017	Singapore	No	Yes	Yes	No	\$140,900,000
Aktionariat	https://www.aktionariat.com/	2020	Switzerland	No	Yes	No	No	\$1,500,000
AllianceBlock*	https://allianceblock.io/	2018	Netherlands	No	Yes	No	Yes	\$1,500,000
Alphaledger*	https://www.alphaledger.com/	2019	United States	No	Yes	No	No	\$7,500,000
AlphaPoint	https://alphapoint.com/	2013	United States	Yes	No	Yes	Yes	\$23,200,000
Arca US Treasury Fund	https://invest.arcalabs.com/#/login?redirect=/home	2020	United States	No	No	Yes	No	\$10,000,000
Archax	https://www.archax.com/	2018	United Kingdom	No	Yes	Yes	Yes	\$41,600,000
Arf	https://arf.one/	2019	Switzerland	No	No	No	No	\$14,100,000
Bankex	https://bankex.com/	2015	United States	No	No	Yes	Yes	\$18,100,000
Bondblox*	https://bondblox.com/	2016	Singapore	No	Yes	Yes	No	\$6,000,000
Brickken	https://www.brickken.com/	2020	Spain	No	Yes	Yes	No	\$2,700,000
Canton Network	https://www.canton.network/	2023	United States	Yes	No	No	No	Unknown
Cerchia	https://www.cerchia.io/	2020	Switzerland	No	Yes	No	No	\$2,700,000
Enigma Vault	https://www.enigmavault.io/	2020	United States	No	No	No	Yes	

Entity	Website	Founded	Jurisdiction	In-House Blockchain	Tokenized Asset Marketplace	Fractionalization of Assets	Self-Custody	Total Funding
Ekta	https://ektarealestate.app/	2021	Indonesia	Yes	Yes	Yes	No	\$67,100,000
Fnality International	https://www.fnality.org/home	2019	United Kingdom	Yes	No	No	No	\$62,000,000
Franklin Templeton	https://www.franklintempleton.com/investments/options/money-market-funds/products/29386/SI NGLCLASS/franklin-on-chain-u-s-government-money-fund/FOB XX	1947	United States	No	No	Yes	No	N/A
HoneyBricks	https://www.honeybricks.com/	2020	United States	No	Yes	Yes	Yes	Unknown
HouseAfrica	https://houseafrica.io/	2017	Nigeria	No	Yes	Yes	No	\$525,000
INX Digital	https://www.inx.co/	2017	United States	No	Yes	Yes	No	\$101,700,000
InvestaX	https://investax.io/	2015	Singapore	No	Yes	Yes	Yes	\$150,000
Jia	https://www.jia.xyz/	2022	United States	No	Yes	Yes	No	\$5,300,000
Lofty	https://www.lofty.ai/	2018	United States	No	Yes	Yes	No	\$5,000,000
NYALA*	https://www.nyala.de/en/	2019	Germany	No	Yes	Yes	No	Unknown
Ownera	https://ownera.io/	2018	United Kingdom	Yes	No	Yes	No	\$20,000,000
Paxos	https://paxos.com/	2012	United States	No	Yes	No	Yes	\$543,500,000
Polymath	https://polymath.network/	2017	Barbados	Yes	Yes	Yes	No	\$58,700,000
Pontoro	https://www.pontoro.com/	2015	United States	No	No	Yes	No	\$10,000,000
RealT	https://realt.co/	2019	United States	No	Yes	Yes	No	\$10,200,000

Entity	Website	Founded	Jurisdiction	In-House Blockchain	Tokenized Asset Marketplace	Fractionalization of Assets	Self-Custody	Total Funding
RealX	https://www.realx.in/about-us	2017	India	No	No	Yes	No	
Riddle&Code	https://www.riddleandcode.com/	2016	Austria	Yes	No	No	Yes	Unknown
Robinland	https://www.robinland.io/	2021	United States	No	Yes	Yes	No	\$2,000,000
SEBA Bank	https://www.seba.swiss/	2018	Switzerland	No	Yes	No	Yes	\$246,900,000
Securitize	https://securitize.io/	2017	United States	No	Yes	Yes	No	\$100,200,000
Securrency	https://securrency.com/	2015	United States	No	Yes	Yes	No	\$64,500,000
Smart Token Labs*	https://smarttokenlabs.com/	2017	Australia	No	No	No	Yes	\$6,000,000
Spydra	https://www.spydra.app/	2021	United States	Yes	No	No	No	\$18,300,000
Stobox	https://stobox.io/	2018	United States	No	Yes	Yes	No	\$1,200,000
STOKR	https://stokr.io/	2018	Luxembourg	No	Yes	Yes	No	\$8,100,000
Structure	https://structure.fi/	2020	British Virgin Islands	No	Yes	No	No	\$20,000,000
Taurus Platform	https://www.taurushq.com/	2018	Geneva	No	Yes	No	Yes	\$75,900,000
Texture Capital	https://www.texture.capital/	2019	United States	No	Yes	Yes	No	\$1,000,000
Tokeny Solutions	https://tokeny.com/	2017	Luxembourg	No	Yes	Yes	Yes	\$5,660,000
TOKO	https://toko.network/	2022	Hong Kong	No	No	Yes	No	Unknown
tZERO	https://www.tzero.com/	2014	United States	No	Yes	Yes	No	\$275,000,000
Vertalo	https://www.vertalo.com/	2017	United States	No	No	Yes	No	\$7,800,000
WeOwn	https://weown.com/en/	2017	Liechtenstein	Yes	Yes	Yes	Yes	Unknown

Entity	Website	Founded	Jurisdiction	In-House Blockchain	Tokenized Asset Marketplace	Fractionalization of Assets	Self-Custody	Total Funding
WisdomTree	https://www.wisdomtree.com/investments/digital-funds	1985	United States	No	Yes	Yes	No	\$126,400,000

*Newly added to the report

Data as of 6 September 2023

Key Takeaways

- 24 of the listed organizations are registered in the United States, followed by Switzerland with 4 projects, and Singapore and the United Kingdom with 3 projects each.
- Five new projects are added for this month's report:
 - AllianceBlock is a Netherlands-based tokenization platform specializing in capital markets.
 - AlphaLedger focuses on tokenizing municipal bonds.
 - Bondblox allows for trading of fractionalized government bonds on the blockchain.
 - NYALA is based in Germany and provides services for real estate and bonds tokenization.
 - Smart Token Labs is an Australia-based tokenization provider that has previously successfully tokenized car ownership and FIFA tickets.
- Only 10 organizations utilize an in-house blockchain network.
- 32 of the organizations have their own tokenized asset marketplace.
- 34 of the organizations support the fractionalization of real-world assets.

CeFi RWA Asset Classes

The table below displays the types of underlying assets tokenized by the selected protocols.

Entity	Real Estate	Equities	Commodities	Fixed Income	Private Credit	Forex	Other (Art, Luxury, etc.)
10XTS	✓	✓			✓		✓
ADDX	✓	✓			✓		
Aktionariat		✓					
AllianceBlock*					✓		
Alphaledger*				✓			
AlphaPoint	✓	✓	✓				✓
Arca US Treasury Fund				✓			
Archax		✓		✓			
Arf					✓		
Avalanche Vista							
Bankex	✓				✓		✓
Bondblox*				✓			
Brickken		✓					
Canton Network		✓	✓	✓	✓		
Cerchia				✓	✓		
Enigma Vault							✓
Ekta	✓						
Finality International						✓	
Franklin Templeton				✓			
HoneyBricks	✓						

Entity	Real Estate	Equities	Commodities	Fixed Income	Private Credit	Forex	Other (Art, Luxury, etc.)
HouseAfrica	✓						
INX Digital		✓					
InvestaX	✓	✓			✓		✓
Jia					✓		
Lofty	✓						
NYALA*	✓			✓			
Ownera	✓	✓		✓	✓		
Paxos		✓	✓			✓	
Polymath	✓	✓		✓			
Pontoro					✓		
RealT	✓						
RealX	✓						
Riddle & Code	✓						✓
Robinland	✓						
SEBA Bank						✓	
Securitize	✓	✓	✓				
Securrency		✓		✓			
Smart Token Labs*							✓
Spydra					✓		✓
Stobox	✓	✓	✓				✓
STOKR		✓		✓			✓
Structure		✓					
Taurus Platform	✓						✓
Texture Capital	✓	✓		✓	✓		

Entity	Real Estate	Equities	Commodities	Fixed Income	Private Credit	Forex	Other (Art, Luxury, etc.)
Tokeny Solutions	✓	✓			✓		
TOKO	✓	✓					✓
tZERO		✓					
Vertalo	✓	✓			✓		
WeOwn		✓		✓	✓		
WisdomTree		✓		✓			

*Newly added to the report

Data as of 6 September 2023

Key Takeaways

- The most common tokenized asset types are equities (24) and real estate (23).
- Tokenization of private credit and luxury goods are almost as popular, with 16 and 12 platforms, respectively, providing these services.
- Tokenization of foreign exchange and commodities based-assets are least popular among CeFi RWA providers.

DeFi RWA Industry Players

The table provides details on a selection of 37 on-chain tokenization providers. Unlike their CeFi counterparts, DeFi RWA providers are generally more permissionless, with a majority of operations conducted on the blockchain.

Entity	Blockchain(s)	Sector	Asset Class(es)	Founding Year	Geography/Jurisdiction
AmFi	Avalanche	Credit	Credit & Loans, Real Estate	2022	United States
Alta*	Ethereum, Polygon, Optimism	Tokenization	Real Estate, Automotive	2020	United States
Anzen*	Unconfirmed	Credit	Credit & Loans	2022	United States
Backed Finance	Ethereum, Gnosis	Tokenization	Credit & Loans, Fixed Income Equities	2021	Switzerland
Bitbond	Arbitrum, Avalanche, Binance, Ethereum, Optimism	Tokenization	Fixed Income	2013	Germany
Bluejay Finance	Ethereum	Stablecoin Credit	Fixed Income	2021	Singapore
Canza Finance	Avalanche, Celo	Stablecoin Credit	Credit & Loans	2020	Nigeria
Carapace Finance	Ethereum	Credit	Credit & Loans	2021	Unknown
Centrifuge	Ethereum	Credit	Credit & Loans, Real Estate	2017	Switzerland
CitaDAO	Ethereum	Tokenization	Real Estate	2021	Singapore
Clearpool	Ethereum, Polygon	Credit	Credit & Loans	2021	Hong Kong
CredeFi	Ethereum, Binance	Credit	Credit & Loans	2020	Bulgaria
Credix	Solana	Credit	Credit & Loans	2021	Belgium

Entity	Blockchain(s)	Sector	Asset Class(es)	Founding Year	Geography/Jurisdiction
Dexstar	Ethereum	Credit	Credit & Loans	2021	Cayman Islands
DEFYCA	Avalanche	Tokenization	Credit & Loans, Fiat	2021	Luxembourg
Elysia*	Ethereum	Tokenization	Real Estate	2020	Singapore
Ensuro	Ethereum	Insurance	Insurance Portfolio	2021	Singapore
Fabrica	Ethereum	Derivatives	Real Estate	2019	United States
Florence Finance	Ethereum	Credit	Credit & Loans	-	United Arab Emirates
Frigg	Ethereum	Credit	Credit & Loans	2022	Switzerland
Goldfinch	Ethereum	Credit	Credit & Loans	2020	United States
Homecoin	Ethereum	Stablecoin	Mortgages	-	Unknown
LandX	Ethereum	Credit	Credit & Loans	-	Lithuania
Maker	Ethereum	Stablecoin Credit	Credit & Loans, Cryptocurrencies	2015	Denmark
Maple	Ethereum, Solana	Credit	Credit & Loans	2020	Australia
Maxos	Ethereum	Stablecoin Credit	Credit & Loans	2020	United States
Meld Gold	Algorand	Commodities	Gold	2020	Australia
Obligate	Polygon	Credit	Credit & Loans	2019	Switzerland
Ondo Finance	Ethereum	Tokenization	Credit & Loans	2021	United States
Parcl	Solana	Derivatives	Real Estate	2022	British Virgin Islands
Pearl Exchange*	Polygon	Infrastructure	Stablecoins	2023	Unknown

Entity	Blockchain(s)	Sector	Asset Class(es)	Founding Year	Geography/Jurisdiction
Polytrade Finance	Polygon	Credit	Credit & Loans	2021	United Arab Emirates
PurpleFi	-	Tokenization	Real Estate	2022	United Kingdom
Sapling	Polygon	Credit	Credit & Loans	2022	United Kingdom
Tangible	Polygon	Stablecoin	Luxury Goods, Precious Metals, Real Estate	2021	United States
Toucan Protocol	Polygon, Celo	Tokenization	Carbon Credit	2021	Switzerland
TrueFi	Ethereum	Credit	Credit & Loans	2020	United States

*Newly added to the report

Data as of 6 September 2023

Key Takeaways

- Four new protocols were added to our list of decentralized providers:
 - Alta provides tokenization services for a diverse set of assets including real estate and automobiles.
 - Anzen allows users access to yield from short-term debt investments, such as corporate loans and installment lending.
 - Elysia is a real estate tokenization platform based in Singapore.
 - Pearl Exchange is a decentralized exchange that facilitates trading of real world asset tokens.
- As of the end of August 2023, Credit & Loans is the most common sector for DeFi tokenization products with a total of 23 platforms supporting real-world loans.
- Ethereum is the most common blockchain among RWA DeFi applications, with 24 out of 36 platforms being run on the blockchain.
- A smaller portion of the RWA DeFi applications run on the Polygon, Solana, Avalanche, Celo, BNB Smart Chain, and Gnosis Chain blockchains.

DeFi RWA Protocols

The following table provides details on DeFi protocols that integrate real-world assets. These range from on-chain emerging markets lenders to protocols providing on-chain market participants with access to US Treasury Bills.

Protocol	Network	Active Loans	Total Lifetime Loans	Total Value Locked (TVL)	Market Capitalization of Protocol's Native Token	Month over Month Change in Market Capitalization (%) of Protocol's Native Token
Centrifuge	Ethereum	\$238,153,802	\$440,571,955	\$236,981,768	\$92,896,546	-14.42%
Maple	Ethereum	\$129,728,402	\$2,140,076,800	\$54,500,000	\$35,263,2811	-25.94%
Goldfinch	Ethereum	\$99,470,0007	\$112,989,773	\$1,140,000	\$19,656,820	-12.41%
Credix	Solana	\$35,537,576	\$40,520,152	\$37,203,269	N/A	N/A
Clearpool	Ethereum	\$20,436,412	\$422,674,843	\$29,503,706	\$7,512,711	-24.25%
TrueFi	Ethereum	\$19,002,202	\$1,740,000,000	\$23,950,000	\$34,966,220	-6.14%
HomeCoin	Ethereum	\$6,114,255	\$7,955,966	\$6,309,779	N/A	N/A
Clearpool	Polygon	\$65,439	\$80,674,770	\$105,390	\$7,512,711	-24.25%
Maple	Solana	N/A	N/A	N/A	N/A	N/A
Ondo Finance	Ethereum	N/A	N/A	\$28,681,000	N/A	N/A

Source: Digital Asset Research | Data period: 6 August 2023 - 6 September 2023
Data is sourced from project websites or other publicly available information, including [rwa.xyz](#).

Key Takeaways

- Active loan amounts remain relatively stable despite a decline in cryptocurrency prices. With the exception of Centrifuge and Clearpool on Polygon, all other protocols reported a slight decrease in their active loan amounts.
- Despite a lesser loan issuance amount, total value locked for all of the protocols increased this month.
- The market capitalization of protocol native currencies decreased significantly in the month of August as the broader cryptocurrency market declined.

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