

# A BLOCKCHAIN FOR ALL TRADEABLES

From R-Squared Labs.

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# EXECUTIVE SUMMARY

R-Squared Labs has developed and released a new decentralized blockchain utility hardcoded to allow any tradeable to be tokenized, regardless of market structure particulars, whether they be stocks, bonds, listed derivatives or OTC instruments (fixed income, currencies, commodities) – any of it can be tokenized within minutes.

This is not a smart contract platform; this is new. And different. It's purpose-built and hardcoded to issue, trade and settle tokenized assets by means of flexible market structuring; and it includes a data privacy and file-access protocol to allow real-world data to be tied to trading activity for a fully atomic lifecycle all on and from a single layer-1 solution, including post-trade activities like delivering proxy materials or performing MBS TBA settlements in under one minute.

With a fully functioning native decentralized exchange, which includes an order book, matching engine, asset issuance protocol (with flexible market structuring), and file-access controls, all hardcoded into the same blockchain, there can be an atomic one-stop shop for trade + post-trade across a multitude of asset classes and product classes, down to the tradeable.

Approved financial institutions can also issue stablecoins directly onto the blockchain for payments and settlements, with no smart contract needed, and fully own that asset. And as a true decentralized blockchain, it is non-monopolistic, meaning approved entities can structure markets that can compete with one another, yet all market structures can now stem from a single source of truth.

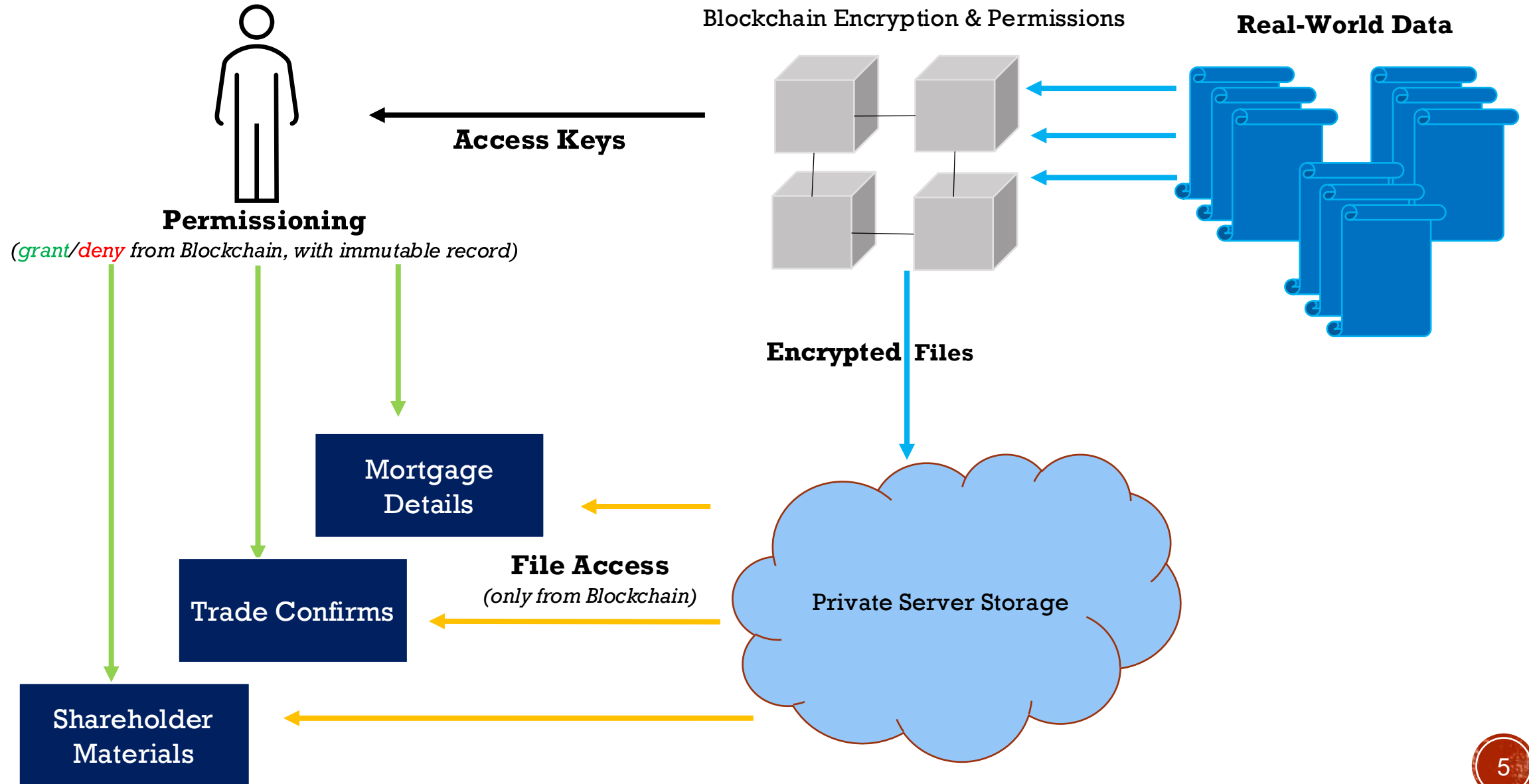
# R-SQUARED BLOCKCHAIN VS. OTHERS

Function	Smart Contract Blockchains (e.g., Ethereum, Solana, Avalanche, Polygon, Canton, et al)	R-Squared Blockchain
Tokenization + stablecoin creation	✓	✓
One-time sale (primary issuance)	✓	✓
Flexible & adjustable structures for secondary trading per tradeable	✗	✓
Consolidated market structures across tradeables	✗	✓
Non-monopolistic markets per tradeable	✗	✓
Protocol for data privacy/ownership/access-controls for <b>any</b> file, hardcoded into the blockchain	✗	✓
Atomic settlements in any crypto or stablecoin, tying files & data with trading &/or payments, all on and from the same core blockchain	✗	✓

# DIFFERENTIATING DETAILS

1. **An active market:** the issuance concept has been proven with the creation of a wrapped Ethereum token being used to acquire the native RQRX token. Anyone can buy or sell the native RQRX token via a live trading facility.
2. **Accountability:** tokenization can only be done by way of a special user class called a “Clearing House Participant” or “CHP” - i.e., a clearing broker creates and issues tokens on behalf of vetted entities (or allow direct ownership), ensuring accountability & properly vetted offerings.
3. **Stablecoin creation:** any approved financial institution can issue their stablecoins directly onto the core layer-1 blockchain for payments and settlements without having to create a smart contract. There’s also the flexibility to create wrapped versions of their internally created stablecoins if preferable, bridging directly to their chain.
4. **Flexibility:** with asset-creation features for CHPs like white-listing of accounts to trade, & white-listing of assets on the system to pair with for trading, all baked into the blockchain’s native functionality, a variety of bespoke markets can be readily fashioned asset by asset, market by market, down to the tradeable.
5. **D2D + D2C:** along with the ability to structure fully regulated markets for instruments such as tokenized stocks, bonds and listed derivatives, such a system also permits OTC dealer-to-dealer trading in size for things like fixed income and currencies derivatives, and commodities, with confidential transactions to avoid exposing price footprints (a critical differentiator) - and with a separate segregated market for dealer-to-client buy-side distribution all on the same chain, there can be a seamless one-stop-shop for full roundtrip market-making.
6. **Post-trade data protocol:** a real-world-data access protocol has been built into the blockchain that allows financial institutions to repose files, of any format, on their servers, & securely tie the data directly to any activity that occurs on chain, for things like instant delivery of proxy materials or performing MBS TBA settlements in under one minute.
7. **Public utility:** as this is a truly decentralized and open public blockchain, and therefore a true public utility, it’s by nature non-monopolistic. This is key for take-up because there will always be a check against market-by-market monopolization, providing a comfort level for participants wary of such an outcome. And yet a multitude of markets can be fashioned and co-exist on and from a single decentralized source of truth.

# POST-TRADE DATA MECHANICS



# HOW THE DATA PROTOCOL WORKS

- ❑ A data owner uploads files.
- ❑ The software will hash & encrypt the files, store them directly on the company's servers, & simultaneously store the link to each file & (vitaly) the lock/unlock permissioning with the data owner's account on the blockchain. **Your keys = your data.**
- ❑ There are now two layers of asymmetric security: a public blockchain + private servers.
- ❑ If someone were to hack a company's private servers (which is difficult enough), they'd be staring at a bunch of encrypted files secured by a decentralized blockchain.
- ❑ And, along with providing next-generation privacy & security, companies can also use the data for AI, including if de-identification is needed, because the data all resides in bulk on the company's servers.
- ❑ An asset tokenization facility / decentralized exchange is hardcoded into the same chain and can issue wholly backed versions of any crypto or stablecoin – which means that atomic settlements of any tokenized asset can occur, with full cycles able to settle in under a minute, including structured securities that rely on data inputs (like MBS).
- ❑ And there can now be clean, straight-through and immediate delivery of trade confirms and proxy materials, all from a single source of truth.



# AI FROM AGGREGATED DATA

