Accelerate your digital transformation with Corda

R3’s Corda is the world’s leading distributed application platform powering regulated digital finance. Only Corda offers a permissioned ledger, asset modeling capabilities and a multi-party workflow engine all in one flexible and scalable platform.
Current market landscape

Challenges are emerging for traditional institutions operating in today’s global markets—everything from rising operating costs, threats of obsolescence from new entrants to mounting technical debt associated with outdated legacy systems. Innovative leaders have discovered that by integrating distributed ledger technology (DLT) into their institution they can fundamentally transform how they operate and deliver greater value for their customers—turning these market challenges into opportunities.

Next-Gen Corda is highly scalable

As the world’s first regulatory-compliant and scalable DLT platform, R3’s **Corda** is already trusted by leading institutions to automate business processes across entities, drive faster settlement, streamline reconciliation, and manage the lifecycle of digital assets and currencies. The Next Generation of Corda was informed by and engineered to meet the needs of customers who are operating at scale in regulated environments. It builds on Corda 4 while delivering on our promise of enabling an open, trusted and connected ‘network of networks’ in high-performance regulated markets.

Why leading institutions choose Corda

- The fast and future-proof way to build multi-party apps that run on permissioned, scalable and secure distributed networks—that is also open to other apps and chains
- A highly-available, hardened platform informed by real-world feedback from systemically important institutions operating at scale
- Scalable network model to support rapid expansion plus future seamless integration with public and private networks
- Foundation of cloud-native technologies provides a modern development and simple deployment experience
- Evolving set of ‘out-of-the-box’ tools to build and commercialize next gen multi-party applications with ease
- Permissioned single record of truth that records, manages and synchronizes shared data across multiple parties to ensure consistency and immutability

*Project Ion on Corda is designed to leverage DLT for settlement while upholding the DTCC’s rigorous resiliency and safety standards.*

MICHELE HILLERY, GENERAL MANAGER, EQUITIES CLEARING AND DTC SETTLEMENT SERVICE

**DTCC**
The power of connected distributed networks

Single identity with mutual memberships
Corda provides the ability to maintain identities across all Corda-based networks and ensures all CorDapp identities are tied to a legal entity reducing security risks.

Asset fluidity
Digital assets and currencies can move freely across network boundaries using well-defined trusted exchange protocols that meet regulatory demands for privacy and security.

Connecting regulated networks
R3 is building interoperability to ensure Corda can act as a bridge to liquidity beyond the Corda ecosystem. In the future, non-traditional digital assets will travel securely into and out of regulated Corda-based networks.

Modular application networks
Corda is application centric and optimized for permissioned multi-party app networks and introduces Virtual Nodes where one Corda instance can host multiple different identities and networks. The Virtual Node manages and installs the network and apps from a single installer to lower cost and simplify network management.

- Onboard new network participants faster without relying on third party providers or complicated network configuration tools
- Less upfront coordination with trust root details and membership requirements included
Regulated ‘network of networks’ effect

Participants can be in more than one network opening access to new sources of liquidity and revenue streams

Enabling the seamless execution of DvP involving collateral on our platform powered by Corda demonstrates our commitment to extending the mobility and use of collateral for participants of HQLA

GUIDO STROEMER, HQLA CEO

HQLA
Architected for critical systems

**Horizontal Scalability**
Corda can scale for growth and large volumes on cloud-native technology that contains identity, network and notary features all in one ‘runtime instance’

**High Availability**
Pathway to reaching maximum uptime. Redundant workers ensure continuous availability and scale for growth and large volumes

**Application Network**
No need to decide on your network model at the outset of a project. Start with a centralized, private network and gradually decentralize over time

**Lower cost of ownership**
A multi-tenanted Corda platform means using shared infrastructure to lower the cost of ownership per network participant

**Peer to Peer communications**
JSON/REST over standard HTTPS web protocols for exchanging data

**Integrates easily with existing systems**
Corda uses standard sets of technologies such as HTTPS, X509 and RESTful APIs to enable deployment and integration with the enterprise ecosystem, and compliance with enterprise security policy

“Brains” of Next-Gen Corda

A Corda Worker is a Java process that picks up tasks from an event stream and processes them in parallel to enable continuous throughput of workflow transactions.

**Developer friendly**
Apps can be developed using standard languages and protocols such as Java or Kotlin. There is no need to learn a complex, siloed domain language. Build distributed applications with business workflow logic and leverage modular APIs for exploring new use cases and improved testability.

Deploying an application, joining or operating a network and updating an app on Corda has never been easier with CPI (Corda Package Installer), a collection of Java application libraries that define workflow and network rules in one package.
A platform that grows with you

Whether you are just getting started with Corda or are further along in your blockchain journey, exploring Corda has never been easier. Build and run your first Corda application in minutes using production-ready open-source code available under an Apache 2 license.

- **Explore the code**—Developers can inspect and verify Corda source code themselves
- **Start small and grow with Corda**—Get started for free and learn how to automate multi-party workflows. When needed, move to our enterprise licensed version with additional database integration features and 24/7 support
- **Enterprise ecosystem**—Leverage an existing enterprise infrastructure for Corda deployment, operations and security compliance

Professional Services from ideation to production

Our Professional Services team provides comprehensive advisory and engineering services to help organizations of all sizes accelerate the entire design, development and deployment of distributed applications built on Corda.

Corda in action

- Modernize legacy market infrastructure by streamlining price discovery, trading, clearing and settlement
- Synchronize systems and automate complex business processes and workflows across entities to reduce costs, time and risk
- Speed up reconciliation by automating and standardizing the sharing of data across a secure, distributed network
- Foster the frictionless, secure and timely exchange of value by managing the lifecycle of digital assets and currencies

As an open and permissioned DLT platform, Corda is the leading choice for regulated institutions.

Join us on the journey towards an open, connected and trusted financial ecosystem.

Contact Us
About R3

R3 is a leading provider of enterprise distributed ledger technology (DLT) and services that enable the secure exchange of value in regulated industries where trust is critical. Distributed solutions developed on our platform Corda harness the “Power of 3”—R3’s distributed trust technology, connected networks and regulated markets expertise—to drive transformation in digital finance.

Built to facilitate an open, trusted, and enduring digital economy, R3’s Corda empowers regulated institutions to realize the full potential of direct digital collaboration to solve complex multi-party workflows.

R3 maintains one of the largest global DLT ecosystems connecting over 400 institutions, including global systems integrators, cloud providers, technology firms, software vendors, corporations, regulators, and financial services firms from the public and private sectors – specifically financial market infrastructures (FMIs), exchanges, central banks and commercial banks.

For more information, visit www.r3.com or connect with us on Twitter or LinkedIn.