

# Modern, Secure Data Exchange for Semiconductor Traceability

AWS and Vendia help customers ensure die fabrication traceability across systems and organizations – while protecting IP – with the world’s most powerful real-time data sharing platform.

## Challenge

From purchase order through final delivery, the semiconductor supply chain is rich with data about inventory, suppliers, manufacturing, logistics, and a whole lot more. But sharing with control – and keeping shared data accurate and trusted — is a daunting and expensive challenge.

How can partners gain full trust and traceability across the full process, without involving partner resources or exposing the IP of individual team or organizations?

## Traditional approaches fall short

Most data exchanges grew up as a complex nest of point-to-point integrations based on traditional APIs, file exchanges, or first-gen blockchains. These traditional approaches are complex to build and too costly to maintain. Limitations of common solutions include:

- All partners can read and write all data → Lack of transparency + trust. Auditing is impossible.
- API delays and inconsistent copies of data → No single-source of truth
- Every API and field must be evaluated individually → Requires code updates to change permissions and increases security risks
- Every end point needs its own API → High API complexity and operational burdens

## Requirements for a modern, secure data exchange

Modern, fully-traceable secure data exchanges require:

- Ability for everyone to audit every step and change in the product journey
- Single-source of truth that cannot be overwritten or disputed
- Share just the right information, without exposing intellectual property to other partners

- Ability to evolve data models based on business needs, without relying on IT or requiring expensive consultants

## Benefits of AWS + Vendia

With distributed ledgers:

- Every transaction is recorded and tracked with a unique identifier
- Single source of truth as data cannot be changed or disputed
- Each partner has their own mirrored version of the entire ledger for transparency and auditability

With distributed ledgers on Vendia you *also* ensure:

- High levels of control of what data is shared with partners, avoiding risk of IP leaks
- Every partner has their own connection and access
- Data is automatically distributed and encrypted in real-time
- You build and launch in a matter of weeks
- Customers bring their own schema so data is highly interoperable
- SDKs and APIs are automatically generated based on customer provided schema

## Deliver proof in less than one week

Visit [vendia.net/data-exchange](https://vendia.net/data-exchange) or email [traceability@vendia.net](mailto:traceability@vendia.net) to schedule your free 1-week POC. You get four free hours with one of our experienced solutions architects who will help you turn your data model into a working POC that includes:

- Full traceability – share data with full lineage, auditing, and immutability
- Multi-party sharing – an application that empowers multi-party, secure data sharing.
- Easy partner invitations – the ability to connect partners in minutes, not weeks.
- Resiliency – a resilient global serverless architecture with no operational overhead.
- Security & control – fine-grained data access controls to share with confidence with any number of partners.