CLAIMS

WHAT IS CLAIMED IS:

1. A computer-implemented method, comprising:

under the control of one or more computer systems configured with executable instructions,

committing a first reference to a blockchain ledger, the first reference at least including an asset reference, such that the first reference as committed to the blockchain ledger cannot be modified;

providing, to a requestor, access to the first reference as a record in a database table, wherein the blockchain ledger is exposed as the database table via an interface;

receiving, via the interface, a request to update ownership information associated with the first reference;

determining that the first reference includes a key associated with the ownership information, verifying one or more permissions associated with the request;

verifying the one or more permissions, generating a second reference that includes the asset reference and a second key reflecting updated ownership information as requested;

committing the second reference to the blockchain ledger, such that the second reference as committed to the blockchain ledger cannot be modified; and

providing, to the requestor, access to the record such that the record reflects at least the updated ownership information in the second reference.

2. The computer-implemented method of claim 1, wherein the blockchain ledger accepts the second reference based at least in part on verifying the one or more permissions.

3. The computer-implemented method of claim 1, wherein the asset is a digital asset included in the blockchain ledger as part of the first reference.

4. The computer-implemented method of claim 1, wherein one or more fields of the database table are defined by a schema committed to the blockchain ledger.

5. A system, comprising:

at least one computing device that implements one or more services, wherein the one or more services:

generate a cryptographically secured ledger that irrevocably accepts transactions associated with an asset;

generate a database table that reflects a state of the asset in connection with the transactions committed to the cryptographically secured ledger; and

process an update request associated with the asset by at least:

confirming a permission associated with the update request;

committing, to the cryptographically secured ledger, one or more transactions associated with the update request; and

updating the database table to reflect a new state of the asset in connection with the one or more transactions.

6. The system of claim 5, wherein the one or more services further generate the database table in connection with a schema.

7. The system of claim 6, wherein the schema is stored in the cryptographically secured ledger as a transaction connected to the asset.

8. The system of claim 6, wherein the schema is updated via the update request.

9. The system of claim 5, wherein the update request is received by the one or more services via an interface associated with the cryptographically secured ledger.

10. The system of claim 5, wherein the update request is received as a result of a write operation to the database table.

11. The system of claim 5, wherein the one or more services confirm the permission associated with the update request as a result of the asset being associated with a key, the key being associated with an owner of the asset.

12. The system of claim 5, wherein the asset is a physical or digital asset.

13. A non-transitory computer-readable storage medium having stored thereon executable instructions that, as a result of being executed by one or more processors of a computer system, cause the computer system to at least:

generate a cryptographically secured ledger for accepting transactions associated with an asset;

generate a database table that reflects a state of the asset in connection with the transactions committed to the cryptographically secured ledger; and

process a transaction associated with an asset by at least:

confirming a permission associated with the transaction;

committing, to a cryptographically secured ledger, the transaction; and

updating, based on a state of the cryptographically secured ledger, a database table to reflect a new state of the asset resulting from the transaction.

14. The non-transitory computer-readable storage medium of claim 13, wherein the transaction is associated with updating an owner of the asset.

15. The non-transitory computer-readable storage medium of claim 13, wherein the transaction is associated with updating the permission.

16. The non-transitory computer-readable storage medium of claim 13, wherein the instructions that cause the computer system to confirm the permission further include instructions that cause the computer system to verify a signature associated with the transaction.

17. The non-transitory computer-readable storage medium of claim 13, wherein:

the transaction is associated with an update of a first schema related to a first set of transactions associated with the asset in the cryptographically secured ledger to a second schema related to the asset; and

the instructions, as a result of being executed by the one or more processors, further cause the computer system to:

process the transaction by updating the database table to reflect a new state associated with the second schema; and

associate a second set of transactions associated with the asset with the second schema, the second set of transactions being processed by the computer system at a time after the transaction associated with the second schema is written to the ledger.

18. The non-transitory computer-readable storage medium of claim 16, wherein the signature is provided by a requestor associated with the transaction.

19. The non-transitory computer-readable storage medium of claim 16, wherein the signature is provided by an entity other than a requestor associated with the transaction.

20. The non-transitory computer-readable storage medium of claim 13, wherein the transaction is received via a programmatic interface implemented by the computer system.