CLAIMS

WHAT IS CLAIMED IS:

1. A computer-implemented method, comprising:

under 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, the database table formatted according to a database representation wherein one or more fields of the database table are defined by a schema committed to the blockchain ledger;

receiving, via the interface, a request to update information associated with the first reference and to update the database representation associated with the asset reference;

determining that the first reference includes a key associated with the 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, a second key reflecting updated information as requested, and the updated database representation;

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 the schema includes metadata associated with one or more relationships between a plurality of fields of the database table.

5. 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 a transaction associated with an asset;

generate a database table, according to a database table schema, that reflects a state of the asset in connection with the transaction committed to the cryptographically secured ledger, wherein the database table schema is based at least in part on information tracked in the cryptographically secured ledger; and

process the transaction associated with an asset by at least:

confirming a permission associated with the transaction by at least verifying a signature associated with the transaction;

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

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

6. The non-transitory computer-readable storage medium of claim 5, wherein the transaction is associated with updating an owner of the asset.

7. The non-transitory computer-readable storage medium of claim 5, wherein the transaction is associated with updating the permission.

8. The non-transitory computer-readable storage medium of claim 5, wherein:

the database table schema is a first database table schema;

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

associate a second set of transactions associated with the asset with the second database table schema, the second set of transactions being processed by the

computer system at a time after the transaction associated with the second database table schema is written to the ledger.

9. The non-transitory computer-readable storage medium of claim 5, wherein the signature is provided by a requestor associated with the transaction.

10. The non-transitory computer-readable storage medium of claim 5, wherein the signature is provided by an entity other than a requestor associated with the transaction.

11. The non-transitory computer-readable storage medium of claim 5, wherein the transaction is received via a programmatic interface implemented by the computer system.

12. The non-transitory computer-readable storage medium of claim 5, wherein the signature associated with the transaction is associated with a subset of a plurality of owners of the asset.

13. 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 for accepting a transaction associated with an asset;

generate a database table, according to a database table schema, that reflects a state of the asset in connection with the transaction committed to the cryptographically secured ledger, wherein the database table schema is based at least in part on information tracked in the cryptographically secured ledger; and

process the transaction associated with the asset by at least:

confirming a permission associated with the transaction by at least verifying a signature associated with the transaction;

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

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

14. The system of claim 13, wherein the one or more services further generate the database table in connection with a schema indicative of one or more database formats based at least in part on information tracked in the cryptographically secured ledger.

15. The system of claim 14, wherein the schema is stored in the cryptographically secured ledger as a transaction connected to the asset.

16. The system of claim 14, wherein the schema is updated via the transaction.

17. The system of claim 13, wherein the transaction is received by the one or more services via an interface associated with the cryptographically secured ledger.

18. The system of claim 13, wherein the transaction is received as a result of a write operation to the database table.

19. The system of claim 13, wherein the one or more services confirm the permission associated with the transaction as a result of the asset being associated with a key, the key being associated with an owner of the asset.

20. The system of claim 13, wherein the asset is a physical or digital asset.