

CLAIMS

1. A computer-implemented method comprising:
 - receiving, by a storage system, a processing request of data of a distributive ledger system, wherein types of the data of the distributive ledger system comprise block data, transaction data, state data, and index data;
 - determining, by the storage system, a type of the data among the types of the data of the distributive ledger system; and
 - applying, by the storage system, a type of a processing engine specified for processing the type of the data.
2. The computer-implemented method of claim 1, further comprising: receiving, by the storage system, configurations of a plurality of processing engines, wherein the configurations configure a respective type of a processing engine for processing each of the types of the data of the distributive ledger system according to a characteristic of the each of the types of the data.
3. The computer-implemented method of claim 1, wherein the storage system comprises:
 - a type of a processing engine specified for processing block data;
 - a type of a processing engine specified for processing transaction data;
 - a type of a processing engine specified for processing state data; and
 - a type of a processing engine specified for processing index data.
4. The computer-implemented method of claim 1, wherein the state data comprises current state data and history state data, and the storage system comprises:
 - a type of a processing engine specified for processing the current state data; and
 - a type of a processing engine specified for processing the history state data.
5. The computer-implemented method of claim 1, wherein:
 - receiving, by the storage system, the processing request of the data of the distributive ledger system comprises receiving, by the storage system, an input/out (I/O) request of the data of the distributive ledger system; and

the corresponding type of the processing engine specified for processing the type of the data of the distributive ledger system comprises a corresponding type of an input/out (I/O) processing engine specified for performing a read or write operation of the type of the data of the distributive ledger system.

6. The computer-implemented method of claim 1, wherein:

receiving, by the storage system, the processing request of the data of the distributive ledger system comprises receiving, by the storage system, a data management request of the data of the distributive ledger system;

the corresponding type of the processing engine specified for processing the type of the data comprises a corresponding type of a data management processing engine specified for performing a data management operation of the type of the data in the storage system, and

the management operation comprises one or more of tiering, compaction, compression, erasure coding, or snapshot.

7. The computer-implemented method of claim 1, wherein the type of the data is block data or transaction data, and the type of the processing engine specified for processing the type of the data is configured with functions comprising tiering, erasure coding and compression of the block data or transaction data in the storage system.

8. The computer-implemented method of claim 1, wherein the type of the data is state data, and the type of the processing engine specified for processing the type of the data is configured with functions comprising snapshot and compaction of the state data in the storage system.

9. The computer-implemented method of claim 1, wherein the type of the data is current state data, and the type of the processing engine configured for processing the type of the data is configured with functions comprising tiering, erasure coding, compression, snapshot, and compaction of the current state data in the storage system.

10. The computer-implemented method of claim 1, wherein the type of the data is history state data, and the type of the processing engine configured for processing the type of the data is configured with functions comprising tiering, erasure coding, and compression of the history state data in the storage system.
11. An apparatus for processing data request, the apparatus comprising a plurality of modules for performing the computer-implemented method of any one of claims 1 to 10.
12. A system for processing data request, comprising:
 - one or more processors; and
 - one or more computer-readable memories coupled to the one or more processors and having instructions stored thereon that are executable by the one or more processors to perform the computer-implemented method of any one of claims 1 to 10.