WHAT IS CLAIMED IS:

1. A computer-implemented method for blockchain-based routing, comprising:

receiving, by a blockchain routing node, a plurality of single-node forwarding tables from a plurality of blockchain routing nodes in accordance with an extended blockchain protocol, the blockchain routing node participating with the plurality of blockchain routing nodes in an overlay network, and wherein each of the plurality of single-node forwarding tables comprises a plurality of optimal network routes;

determining, by the blockchain routing node, a routing table for the overlay network based at least on part on the plurality of single-node forwarding tables; and

routing, by the blockchain routing node, a payload message to a destination blockchain routing node in the overlay network in accordance with the determined routing table.

2. The computer-implemented method of claim 1, further comprising:

executing, by the blockchain routing node, instructions to join the overlay network;

identifying, by the blockchain routing node, a subset of the plurality of blockchain routing nodes from a stored data record;

transmitting, by the blockchain routing node, a forwarding table request message to the subset of the plurality of blockchain routing nodes; and

receiving, by the blockchain routing node, forwarding table information from at least one of the subset of the plurality of blockchain routing nodes.

3. The method of claim 2, wherein the data record is stored in local memory of the blockchain routing node.

4. The computer-implemented method of claim 2, further comprising maintaining, by the blockchain routing node, a blockchain ledger comprising entries corresponding to the routing table.

5. The computer-implemented method of claim 4, further comprising transmitting, by the blockchain routing node, a distribution message to the plurality of blockchain routing nodes, the distribution message comprising the blockchain ledger, the distribution message being formatted according to the extended blockchain protocol.

6. The computer-implemented method of claim 1, further comprising

calculating, by the blockchain routing node, an optimal network route for routing the payload message through the overlay network to the destination blockchain routing node, the optimal network route being based at least in part on performance data associated with respective blockchain routing nodes of the plurality of blockchain routing nodes.

7. The computer-implemented method of claim 6, wherein the performance data comprises at least a first attribute associated with a latency value and a second attribute corresponding to a cost value.

8. The computer-implemented method of claim 7, wherein the optimal network route is calculated based at least in part by multiplying the latency value by the cost value.

9. The computer-implemented method of claim 1, wherein the extended blockchain protocol defines at least one routing procedure that is undefined in a blockchain protocol from which the extended blockchain protocol extends.

10. The computer-implemented method of claim 7, wherein transmitting the payload message according to the optimal network route causes a destination blockchain computing node of a different overlay network to process the payload message.

11. A blockchain routing node comprising,

a processor, and

a computer readable medium coupled to the processor, the computer readable medium comprising code for causing the processor to:

receive a plurality of single-node forwarding tables from a plurality of blockchain routing nodes in accordance with an extended blockchain protocol, the blockchain routing node participating with the plurality of blockchain routing nodes in an overlay network, and wherein each of the plurality of single-node forwarding tables comprises a plurality of optimal network routes;

determine a routing table for the overlay network based at least on part on the plurality of single-node forwarding tables; and

route a payload message to a destination blockchain routing node in the overlay network in accordance with the determined routing table.

12. The blockchain routing node of claim 11, wherein the computer readable medium comprises additional code for causing the processor to:

execute instructions to join the overlay network;

identify a subset of the plurality of blockchain routing nodes from a stored data record;

transmit a forwarding table request message to the subset of the plurality of blockchain routing nodes; and

receive forwarding table information from at least one of the subset of the plurality of blockchain routing nodes.

13. The blockchain routing node of claim 12, wherein the data record is stored in local memory of the blockchain routing node.

14. The blockchain routing node of claim 12, further comprising maintaining, by the blockchain routing node, a blockchain ledger comprising entries corresponding to the routing table.

15. The blockchain routing node of claim 14, wherein the computer readable medium comprises additional code for causing the processor to:

transmit a distribution message to the plurality of blockchain routing nodes, the distribution message comprising the blockchain ledger, the distribution message being formatted according to the extended blockchain protocol.

16. The blockchain routing node of claim 11, wherein the computer readable medium comprises additional code for causing the processor to:

calculate an optimal network route for routing the payload message through the overlay network to the destination blockchain routing node, the optimal network route being based at least in part on performance data associated with respective blockchain routing nodes of the plurality of blockchain routing nodes.

17. The blockchain routing node of claim 16, wherein the performance data comprises at least a first attribute associated with a latency value and a second attribute corresponding to a cost value.

18. The blockchain routing node of claim 17, wherein the optimal network route is calculated based at least in part by multiplying the latency value by the cost value.

19. The blockchain routing node of claim 11, wherein the extended blockchain protocol defines at least one routing procedure that is undefined in a blockchain protocol from which the extended blockchain protocol extends.

20. A system, comprising:

an overlay network comprising a plurality of blockchain routing nodes, the plurality of blockchain routing nodes individually comprising:

a processor; and

a computer readable medium coupled to the processor, the computer readable medium comprising instructions that, when executed, cause the processor to:

join the overlay network comprising the plurality of blockchain routing nodes;

receive a plurality of single-node forwarding tables from at least one of the plurality of blockchain routing nodes in accordance with an extended blockchain protocol;

determine a routing table for the overlay network based at least on part on the plurality of single-node forwarding tables, and wherein each of the plurality of single-node forwarding tables comprises a plurality of optimal network routes; and

route a payload message to a destination blockchain routing node in the overlay network in accordance with the determined routing table.