CLAIMS

1. A computer-implemented method, the method comprising:

sending, using a blockchain transaction acceleration system, a first transaction generated by a first node to an acceleration node in a blockchain, wherein the first transaction is sent to the acceleration node instead of being sent directly to a second node that is the intended recipient of the first transaction, and wherein the first node, the second node, and the acceleration node are different nodes;

forwarding, by the blockchain transaction acceleration system, the first transaction from the acceleration node to the second node;

sending, from the first node and to the second node, a second transaction that is a duplicate of the first transaction;

executing, by the second node, a first-received transaction that is received the earliest among received transactions comprising the first transaction and the second transaction;

collecting statistics on delivered transactions to determine acceleration nodes in the blockchain that provide faster transaction delivery times; and

selecting, for use by the blockchain transaction acceleration system, an acceleration node having a faster transaction delivery time.

2. The computer-implemented method of claim 1, wherein forwarding the first transaction from the acceleration node to the second node includes:

forwarding the first transaction to a recipient-side acceleration node; and

forwarding, by the recipient-side acceleration node, the first transaction to the second node.

3. The computer-implemented method of claim 1, wherein the first node in the blockchain and the second node in the blockchain are in different networks.

4. The computer-implemented method of claim 1, wherein the blockchain transaction acceleration system is implemented in one or more nodes in the blockchain or in a server accessible by the blockchain.

5. The computer-implemented method of claim 2, wherein the acceleration node forwards transactions to one or more specific acceleration nodes in different networks.

6. The computer-implemented method of claim 1, further comprising selecting the acceleration node based on determining that a transaction delivery time using the acceleration node is expected to be faster than a transaction delivery time that is expected by sending the first transaction directly to the second node.

7. One or more non-transitory computer-readable storage media encoded with instructions that, when executed by one or more processors, cause the one or more processors to:

send, using a blockchain transaction acceleration system, a first transaction generated by a first node to an acceleration node in a blockchain, wherein the first transaction is sent to the acceleration node instead of being sent directly to a second node that is the intended recipient of the first transaction, and wherein the first node, the second node, and the acceleration node are different nodes;

forward, by the blockchain transaction acceleration system, the first transaction from the acceleration node to the second node;

send, from the first node and to the second node, a second transaction that is a duplicate of the first transaction;

execute, by the second node a first-received transaction that is received the earliest among received transactions comprising the first transaction and the second transaction;

collect statistics on delivered transactions to determine acceleration nodes in the blockchain that provide faster transaction delivery times; and

select, for use by the blockchain transaction acceleration system, an acceleration node having a faster transaction delivery time.

8. The one or more computer-readable storage media of claim 7, wherein forwarding the first transaction from the acceleration node to the second node includes:

forwarding the first transaction to a recipient-side acceleration node; and

forwarding, by the recipient-side acceleration node, the first transaction to the second node.

9. The one or more computer-readable storage media of claim 7, wherein the first node in the blockchain and the second node in the blockchain are in different networks.

10. The one or more computer-readable storage media of claim 7, wherein the blockchain transaction acceleration system is implemented in one or more nodes in the blockchain or in a server accessible by the blockchain.

11. The one or more computer-readable storage media of claim 8, wherein the acceleration node forwards transactions to one or more specific acceleration nodes in different networks.

12. The one or more computer-readable storage media of claim 7, further having instructions executable by the one or more computers to select the acceleration node based on determining that a transaction delivery time using the acceleration node is expected to be faster than a transaction delivery time that is expected by sending the first transaction directly to the second node.

13. A system, comprising:

one or more processors; and

one or more computer-readable storage media encoded with instructions that, when executed by the one or more processors, cause the one or more processors to:

send, using a blockchain transaction acceleration system, a first transaction generated by a first node to an acceleration node in a blockchain, wherein the first transaction is sent to the acceleration node instead of being sent directly to a second node that is the intended recipient of the first transaction, and wherein the first node, the second node, and the acceleration node are different nodes;

forward, by the blockchain transaction acceleration system, the first transaction from the acceleration node to the second node;

send, from the first node and to the second node, a second transaction that is a duplicate of the first transaction;

execute, by the second node a first-received transaction that is received the earliest among received transactions comprising the first transaction and the second transaction;

collect statistics on delivered transactions to determine acceleration nodes in the blockchain that provide faster transaction delivery times; and

select, for use by the blockchain transaction acceleration system, an acceleration node having a faster transaction delivery time.

14. The system of claim 13, wherein forwarding the first transaction from the acceleration node to the second node includes:

forwarding the first transaction to a recipient-side acceleration node;

forwarding, by the recipient-side acceleration node, the first transaction to the second node and

the acceleration node forwards transactions to one or more specific acceleration nodes in different networks.

15. The system of claim 13, wherein the first node in the blockchain and the second node in the blockchain are in different networks.

16. The system of claim 13, wherein the blockchain transaction acceleration system is implemented in one or more nodes in the blockchain or in a server accessible by the blockchain.

17. The system of claim 13, further having instructions executable by the one or more processors to select the acceleration node based on determining that a transaction delivery time using the acceleration node is expected to be faster than a transaction delivery time that is expected by sending the first transaction directly to the second node.