

WHAT IS CLAIMED IS:

1. A transaction processing method, comprising:

obtaining, by a first node, at least one statement of a first transaction;

determining, by the first node, a type of a first statement based upon a quantity of steps with which the first statement is executed, wherein the first statement is any one of the at least one statement;

sending, by the first node, the first statement to a second node corresponding to the type of the first statement among at least one second node according to the type of the first statement, so that the second node corresponding to the type of the first statement generates an execution plan corresponding to the first statement according to the first statement;

receiving, by the first node, an execution plan corresponding to the at least one statement of the first transaction sent by the at least one second node; and

processing, by the first node, the first transaction according to the execution plan corresponding to the at least one statement of the first transaction.

2. The method according to claim 1, wherein said processing, by the first node, the first transaction according to the execution plan corresponding to the at least one statement of the first transaction, comprises:

starting, by the first node, the first transaction and allocating a scheduler corresponding to the first transaction according to the execution plan corresponding to the at least one statement of the first transaction; and

processing, by the first node, the first transaction through the scheduler corresponding to the first transaction according to the execution plan corresponding to the at least one statement of the first transaction.

3. The method according to claim 1 or 2, wherein the at least one second node comprises an Online Transaction Processing, OLTP, node and an Online Analytical Processing, OLAP, node; and

said receiving, by the first node, the execution plan corresponding to the at least one statement of the first transaction sent by the at least one second node, and said processing, by the first node, the first transaction according to the execution plan corresponding to the at least one statement of the first transaction, comprises:

receiving, by the first node, an execution plan corresponding to a first-type statement of the first transaction sent by the OLTP node; when the execution plan corresponding to the first-type statement comprises execution content corresponding to the first-type statement, processing, by the first node, the first transaction according to the execution content corresponding to the first-type statement; when the execution plan corresponding to the first-type statement comprises the execution content and a storage node corresponding to the first-type statement, accessing, by the first node, the storage node corresponding to the first-type statement according to the execution content corresponding to the first-type statement;

receiving, by the first node, an execution plan corresponding to a second-type statement of the first transaction sent by the OLAP node, wherein the execution plan corresponding to the second-type statement comprises execution content and a storage node corresponding to the second-type statement; and accessing, by the first node, the storage node corresponding to the second-type statement according to the execution content corresponding to the second-type statement.

4. The method according to claim 1 or 2, wherein the at least one second node comprises an OLTP node; and

said receiving, by the first node, the execution plan corresponding to the at least one statement of the first transaction sent by the at least one second node, comprises:

receiving, by the first node, the execution plan corresponding to the at least one statement of the first transaction sent by the OLTP node, wherein the execution plan corresponding to the at least one statement of the first transaction comprises an execution plan corresponding to a first-type statement of the first transaction and an execution plan corresponding to a second-type statement of the first transaction;

wherein the execution plan corresponding to the first-type statement is generated by the OLTP node according to the first-type statement; and the execution plan corresponding to the second-type statement is generated by the OLTP node according to a received initial execution plan corresponding to the second-type statement sent by an OLAP node;

the initial execution plan corresponding to the second-type statement comprises execution content corresponding to the second-type statement, and the execution plan corresponding to the second-type statement comprises the execution content and a storage node corresponding to the second-type statement.

5. A transaction processing method, comprising:

receiving, by an Online Transaction Processing, OLAP, node, a statement of a first transaction sent by a first node, wherein a type of the statement corresponds to the OLAP node;

generating, by the OLAP node, an initial execution plan corresponding to the statement that comprises execution content corresponding to the statement;

sending, by the OLAP node, the initial execution plan corresponding to the statement to an Online Analytical Processing, OLTP, node, so that the OLTP node generates an execution plan corresponding to the statement according to the initial execution plan corresponding to the statement; wherein the execution plan corresponding to the statement comprises the execution content corresponding to the statement and a storage node corresponding to the statement.

6. A transaction processing method, comprising:

receiving, by an Online Transaction Processing, OLTP node, an initial execution plan corresponding to a statement of a first transaction sent by an Online Analytical Processing, OLAP, node, wherein the initial execution plan corresponding to the statement comprises execution content corresponding to the statement, and a type of the statement corresponds to the OLAP node;

obtaining, by the OLTP node, a storage node corresponding to the statement according to the initial execution plan corresponding to the statement;

generating, by the OLTP node, an execution plan corresponding to the statement; wherein the execution plan corresponding to the statement comprises the execution content and the storage node corresponding to the statement; and

sending, by the OLTP node, the execution plan corresponding to the statement to a first node, so that the first node processes the first transaction according to the execution plan corresponding to the statement.

7. A server, comprising:

a memory configured to store a software program;

a processor configured to read the software program in the memory and perform the transaction processing method of any one of claims 1 to 6.

8. A computer storage medium storing a software program, wherein the software program, when being read and executed by one or more processors, implements the transaction processing method of any one of claims 1 to 6.

9. A transaction processing system, comprising:

a transaction management and execution server;

an Online Transaction Processing, OLTP, server; and

an Online Analytical Processing, OLAP, server;

wherein,

the transaction management and execution server is configured to:

- obtain at least one statement of a first transaction;

- determine a type of a first statement, wherein the first statement is any one of the at least one statement; and

- send the first statement to the OLTP server or the OLAP server according to the type of the first statement;

the OLTP server is configured to:

- receive a first-type statement of the first transaction sent by the transaction management and execution server;

- generate an execution plan corresponding to the first-type statement according to the first-type statement; and

- send the execution plan corresponding to the first-type statement to the transaction management and execution server;

the OLAP server is configured to:

- receive a second-type statement of the first transaction sent by the transaction management and execution server;

- generate an execution plan corresponding to the second-type statement according to the second-type statement; and

- send the execution plan corresponding to the second-type statement to the transaction management and execution server; and

the transaction management and execution server is further configured to:

- receive an execution plan corresponding to the at least one statement of the first transaction sent by the OLTP server and the OLAP server, and process the first transaction according to the execution plan corresponding to the at least one statement of the first transaction.

10. A transaction processing system, comprising:

an Online Transaction Processing, OLTP, server; and

an Online Analytical Processing, OLAP, server;

wherein,

the OLTP server is configured to:

obtain at least one statement of a first transaction;

determine a type of a first statement, wherein the first statement is any one of the at least one statement;

generate an execution plan corresponding to a first-type statement when the first statement is determined as the first-type statement; and

send a second-type statement to the OLAP server when the first statement is determined as the second-type statement;

the OLAP server is configured to:

receive the second-type statement sent by the OLTP server;

generate an initial execution plan corresponding to the second-type statement; and

send the initial execution plan corresponding to the second-type statement to the OLTP server; and

the OLTP server is further configured to:

receive the initial execution plan corresponding to the second-type statement sent by the OLAP server;

generate an execution plan corresponding to the second-type statement according to the initial execution plan corresponding to the second-type statement; and

process the first transaction according to the execution plan corresponding to the first-type statement and the execution plan corresponding to the second-type statement.

11. An electronic device, comprising a processor, a memory, a transceiver and a bus interface, wherein the processor, the memory, the transceiver, and the bus interface are connected through buses;

the processor is configured to read a program in the memory to perform following operations:

obtaining at least one statement of a first transaction;

determining a type of a first statement based upon a quantity of steps with which the first statement is executed, wherein the first statement is any one of the at least one statement; and

sending the first statement to a second node corresponding to the type of the first statement among at least one second node according to the type of the first statement, so that the second node corresponding to the type of the first statement generates an execution plan corresponding to the first statement according to the first statement; and

processing the first transaction according to an execution plan corresponding to the at least one statement of the first transaction;

the transceiver is configured to receive the execution plan corresponding to the at least one statement of the first transaction sent by the at least one second node; and

the memory is configured to store one or more executable programs and store data used by the processor when performing the operations.

12. The electronic device according to claim 11, wherein the processor is configured to:

start the first transaction and allocate a scheduler corresponding to the first transaction according to the execution plan corresponding to the at least one statement of the first transaction; and

process the first transaction through the scheduler corresponding to the first transaction according to the execution plan corresponding to the at least one statement of the first transaction.

13. The electronic device according to claim 11, wherein the at least one second node comprises an Online Transaction Processing, OLTP, node and an Online Analytical Processing, OLAP, node; and

the processor is configured to:

when an execution plan corresponding to a first-type statement comprises execution content corresponding to the first-type statement, process the first transaction according to the execution content corresponding to the first-type statement;

when the execution plan corresponding to the first-type statement comprises the execution content and a storage node corresponding to the first-type statement, access the storage node corresponding to the first-type statement according to the execution content corresponding to

the first-type statement; and

access a storage node corresponding to a second-type statement according to execution content corresponding to the second-type statement; wherein an execution plan corresponding to the second-type statement comprises the execution content and the storage node corresponding to the second-type statement.

14. The electronic device according to claim 11, wherein the at least one second node comprises an OLTP node;

the transceiver is configured to:

receive the execution plan corresponding to the at least one statement of the first transaction sent by the OLTP node, wherein the execution plan corresponding to the at least one statement of the first transaction comprises an execution plan corresponding to a first-type statement of the first transaction and an execution plan corresponding to a second-type statement of the first transaction; wherein the execution plan corresponding to the first-type statement is generated by the OLTP node according to the first-type statement; and the execution plan corresponding to the second-type statement is generated by the OLTP node according to a received initial execution plan corresponding to the second-type statement sent by an OLAP node; the initial execution plan corresponding to the second-type statement comprises execution content corresponding to the second-type statement, and the execution plan corresponding to the second-type statement comprises the execution content and a storage node corresponding to the second-type statement.

15. An electronic device, comprising a processor, a memory, a transceiver and a bus interface, wherein the processor, the memory, the transceiver and the bus interface are connected through buses;

the transceiver is configured to receive a statement of a first transaction sent by a first node, and send an initial execution plan corresponding to the statement to an OLTP node, so that the OLTP node generates an execution plan corresponding to the statement according to the initial execution plan corresponding to the statement;

the processor is configured to generate the initial execution plan corresponding to the statement that comprises execution content corresponding to the statement;

wherein a type of the statement corresponds to the electronic device; and the execution plan corresponding to the statement comprises the execution content corresponding to the statement and a storage node corresponding to the statement.

16. An electronic device, comprising a processor, a memory, a transceiver and a bus interface, wherein the processor, the memory, the transceiver and the bus interface are connected through buses;

the transceiver is configured to receive an initial execution plan corresponding to a statement of a first transaction sent by an OLAP node, wherein the initial execution plan corresponding to the statement comprises execution content corresponding to the statement; and send an execution plan corresponding to the statement to a first node, so that the first node processes the first transaction according to the execution plan corresponding to the statement;

the processor is configured to obtain a storage node corresponding to the statement according to the initial execution plan corresponding to the statement, and generate the execution plan corresponding to the statement; wherein a type of the statement corresponds to the OLAP node, and the execution plan corresponding to the statement comprises the execution content and the storage node corresponding to the statement.

17. A non-transitory computer readable storage medium, storing computer instructions which cause a computer to perform the transaction processing method of any one of claims 1 to 6.

18. A computer program product, comprising a computer program stored on a non-transitory computer readable storage medium, wherein the computer program comprises program instructions which, when executed by a computer, cause the computer to perform the transaction processing method of any one of claims 1 to 6.