CLAIMS

What is claimed is:

1. A method comprising:

receiving, by a network access device, to-be-transmitted data over a bonded network port, the bonded network port including a plurality of physical network ports;

determining, by the network access device, whether the to-be-transmitted data comprises target data to be broadcast;

transmitting, by the network access device if the to-be-transmitted data comprises target data to be broadcast, the target data to a plurality of network connection management devices coupled to the network access device by transmitting the target data on a plurality of the physical network ports of the network access device, each port of the physical network ports coupled to a corresponding switch; and

if the to-be-transmitted data does not comprise target data to be broadcast:

selecting a physical network port from the plurality of physical network ports based on a hash rule, and

transmitting the to-be-transmitted data to a target network connection management device using the physical network port.

2. The method of claim 1, the identifying that to-be-transmitted data comprises target data to be broadcast comprising identifying whether a packet type of the to-be-transmitted data matches a pre-determined packet type.

3. The method of claim 1, the identifying that to-be-transmitted data comprises target data to be broadcast comprising identifying that the to-be-transmitted data includes network configuration information.

4. The method of claim 1, the identifying and transmitting being performed by a kernel of the network access device or being performed by a network interface card of the network access device.

5. The method of claim 1, further comprising:

monitoring, by the network access device, connection states between the network access device and the plurality of network connection management devices; and

retransmitting, by the network access device, the target data in response to determining that a connection between the network access device and a network connection management device is restored.

6. The method of claim 1, the transmitting the target data to a plurality of network connection management devices coupled to the network access device comprising transmitting the target data on all of the plurality of physical network ports of the bond port.

7. The method of claim 3, the network configuration information comprising a mapping relationship between a network address of a network device and a physical address of the network device.

8. The method of claim 3, the identifying that to-be-transmitted data comprises target data to be broadcast comprising identifying that the to-be-transmitted data matches a data format of target data associated with network configuration information.

9. The method of claim 1, the transmitting the target data further comprising:

establishing direct communication links with each of the plurality of network connection management devices; and

transmitting the target data to each of the plurality of network connection management devices through the respective communication links.

10. A network access device comprising:

a processor; and

a storage medium for tangibly storing thereon program logic for execution by the processor, the stored program logic comprising:

logic, executed by the processor, for receiving to-be-transmitted data over a bonded network port, the bonded network port including a plurality of physical network ports,

logic, executed by the processor, for determining whether the to-be-transmitted data comprises target data to be broadcast,

logic, executed by the processor, for transmitting the target data to a plurality of network connection management devices coupled to the network access device if the to-be-transmitted data comprises target data to be broadcast by transmitting the target data on a plurality of the physical network ports of the network access device, each port of the physical network ports coupled to a corresponding switch, and

logic, executed by the processor, for selecting a physical network port from the plurality of physical network ports based on a hash rule if the to-be-transmitted data does not comprise target data to be broadcast, and transmitting the to-be-transmitted data to a target

network connection management device using the physical network port.

11. The network access device of claim 10, the logic for identifying that to-be-transmitted data comprises target data to be broadcast comprising logic, executed by the processor, for identifying whether a packet type of the to-be-transmitted data matches a pre-determined packet type.

12. The network access device of claim 10, the logic for identifying that to-be-transmitted data comprises target data to be broadcast comprising logic, executed by the processor, for identifying that the to-be-transmitted data includes network configuration information.

13. The network access device of claim 10, the logic for identifying and transmitting being performed by a kernel of the network access device or being performed by a network interface card of the network access device.

14. The network access device of claim 10, the stored program logic further comprising:

logic, executed by the processor, for monitoring connection states between the network access device and the plurality of network connection management devices; and

logic, executed by the processor, for retransmitting the target data in response to determining that a connection between the network access device and a network connection management device is restored.

15. The network access device of claim 10, the logic for transmitting the target data to a plurality of network connection management devices connected to the network access device comprising logic, executed by the processor, for transmitting the target data on all of the plurality of physical network ports of the bond port.

16. The network access device of claim 12, the network configuration information comprising a mapping relationship between a network address of a network device and a physical address of the network device.

17. The network access device of claim 12, the logic for identifying that to-be-transmitted data comprises target data to be broadcast comprising logic, executed by the processor, for identifying that the to-be-transmitted data matches a data format of target data associated with network configuration information.

18. The network access device of claim 10, the logic for transmitting the target data further comprising:

logic, executed by the processor, for establishing direct communication links with each of the plurality of network connection management devices, and

logic, executed by the processor, for transmitting the target data to each of the plurality of network connection management devices through the respective communication links.