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(54) **DATA TRANSMISSION METHOD, SYSTEM, AND APPARATUS**

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(57) **ABSTRACT**

In a data transmission method, a second network device connected to a terminal device sends a first packet to a first network device, where the first packet includes a MAC address of the terminal device and a first management VLAN identifier. The first management VLAN identifier indicates a management VLAN configured for a first port on the second network device. The first port is configured to connect the second network device and the terminal device. After receiving the first packet, the first network device establishes a first association relationship between the MAC address, the first management VLAN identifier, and a first logical port based on information in the first packet, where the first logical port is located on the first network device and corresponds to the first port.

FIRST NETWORK DEVICE   SECOND NETWORK DEVICE

S201: OBTAIN A MAC ADDRESS OF A TERMINAL DEVICE CONNECTED TO A FIRST PORT

S202: OBTAIN A FIRST PACKET, WHERE THE FIRST PACKET INCLUDES THE MAC ADDRESS AND A FIRST MANAGEMENT IDENTIFIER

S203: SEND THE FIRST PACKET TO THE FIRST NETWORK DEVICE

S204: ESTABLISH A FIRST ASSOCIATION RELATIONSHIP BETWEEN THE MAC ADDRESS, THE FIRST MANAGEMENT IDENTIFIER, AND A FIRST LOGICAL PORT BASED ON THE FIRST PACKET, WHERE THE FIRST LOGICAL PORT CORRESPONDS TO THE FIRST PORT