CLAIMS

What is claimed is:

1. A method for forwarding data, comprising:

when a virtual load balancer VLB receiving a pending response data packet sent by a Linux virtual server LVS from a front terminal sub interface, sending the pending response data packet to a real server RS through a rear terminal sub interface, wherein the forward network port of the VLB corresponds to at least one front terminal sub interface, and one of the front terminal sub interface corresponds to a carrier's data interface; and

the RS receiving and responding to the pending response data packet, getting a response data packet and sending the response data packet to the VLB from the rear terminal sub interface; and

the VLB receiving the response data packet, transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet;

wherein the block of when a VLB receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface comprises:

when the protocol layer of the VLB receives the pending response data packet sent by the LVS from the front terminal sub interface, adding a first identification information to the pending response data packet; and

transmitting the pending response data packet that comprises the first identification information to the application layer of the VLB, for the application layer to receive the pending response data packet and delete the first identification information from the pending response data packet, and send the pending response data packet to the RS through the rear terminal sub interface according to a default route;

the block of the VLB receiving the response data packet, transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet comprises:

the application layer of the VLB receiving the response data packet, and setting a second identification information corresponding to the first identification information according to a preset parameter; and

selecting a routing table according to the second identification information, and sending the

response data packet to the LVS from the front terminal sub interface that receives the pending response data packet according to the routing table.

2. The method of claim 1, wherein the block of the VLB receiving the response data packet, transmitting the response data packet to the LVS from the front terminal sub interface that receiving the pending response data packet comprises:

the VLB receiving the response data packet, changing a source address and a destination address of the response data packet, and obtaining a modified response data packet; and

transmitting the modified response packet to the LVS from the front terminal sub interface that receives the pending response data packet.

3. The method of claim 1, further comprising, prior to the block of when a VLB receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface:

selecting the VLB according to a scheduling algorithm when the LVS receiving the pending response data packet; and

modifying the physical address of the pending response data packet, and transmitting the modified pending response data packet to the VLB.

4. The method of claim 3, further comprising, prior to the block of selecting the VLB according to a scheduling algorithm when the LVS receiving the pending response data packet:

converting the destination address of the pending response data packet into a destination address in preset form when a firewall receives the pending response data packet sent by a client, and sending the pending response data packet with the destination address converted to a switch; and

the switch receiving the pending response data packet, selecting an equivalent route according to scheduling algorithm, and sending the pending response data packet to the LVS.

5. The method of claim 1, further comprising, prior to the block of when a VLB receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface:

selecting the VLB according to a scheduling algorithm when the LVS receiving the pending response data packet; and

modifying the physical address of the pending response data packet, and transmitting the modified pending response data packet to the VLB.

6. The method of claim 5, further comprising, prior to the block of selecting the VLB according to a scheduling algorithm when the LVS receiving the pending response data packet:

converting the destination address of the pending response data packet into a destination address of a preset form when the firewall receives the pending response data packet sent by a client, and sending the pending response data packet with the destination address converted to a switch; and

the switch receiving the pending response data packet, selecting an equivalent route according to scheduling algorithm, and sending the pending response data packet to the LVS.

7. A virtual load balancer, the virtual load balancer comprising a memory, a processor, a data forwarding program stored in the memory and performed by the processor, the processor being configured to execute the data forwarding program stored in the memory to perform the following operations:

when receiving a pending response data packet sent by a Linux virtual server LVS from a front terminal sub interface, sending the pending response data packet to a real server RS through a rear terminal sub interface, wherein the forward network port of the VLB corresponds to at least one front terminal sub interface, and one of the front terminal sub interface corresponds to a carrier's data interface; and;

receiving a response data packet from the RS, the RS obtaining the response data packet after receiving and responding to the pending response data packet; and

transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet;

further comprising a protocol layer and an application layer, wherein the block of when receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface comprises:

adding a first identification information to the pending response data packet when the

pending response data packet sent by the LVS is received from the front terminal sub interface through the protocol layer;

transmitting the pending response data packet that comprises the first identification information to the application layer, for the application layer to receive the pending response data packet and delete the first identification information from the pending response data packet, and send the pending response data packet to the RS through the rear terminal sub interface according to a default route;

the block of transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet comprises:

in the application layer, setting a second identification information corresponding to the first identification information according to a preset parameter;

selecting a routing table according to the second identification information, and sending the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet according to the routing table.

8. The virtual load balancer of claim 7, wherein the block of transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet comprises:

changing the source address and the destination address of the response data packet, and obtaining a modified response data packet; and

transmitting the modified response packet to the LVS from the front terminal sub interface that receives the pending response data packet.

9. The virtual load balancer of claim 7, wherein prior to the block of when receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface, the processor is further configured to execute the data forwarding program stored in the memory to perform the following operations:

receiving the pending response data packet after the physical address is modified by the LVS.

10. A computer-readable storage medium that stores one or more programs, which can be executed by one or more processors to perform the following operations:

when receiving a pending response data packet sent by a Linux virtual server LVS from a front terminal sub interface, sending the pending response data packet to a real server RS through a rear terminal sub interface, wherein the forward network port of the VLB corresponds to at least one front terminal sub interface, and one of the front terminal sub interface corresponds to a carrier's data interface; and

receiving the response data packet from the RS, the RS obtaining the response data packet after receiving and responding to the pending response data packet; and

transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet;

wherein the block of when receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface comprises:

adding a first identification information to the pending response data packet when the pending response data packet sent by the LVS is received from the front terminal sub interface through the protocol layer; and

transmitting the pending response data packet that comprises the first identification information to the application layer, for the application layer to receive the pending response data packet and delete the first identification information from the pending response data packet, and send the pending response data packet to the RS through the rear terminal sub interface according to a default route;

the block of transmitting the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet comprises:

in the application layer, setting a second identification information corresponding to the first identification information according to a preset parameter;

selecting a routing table according to the second identification information, and sending the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet according to the routing table.

11. The computer-readable storage medium of claim 10, wherein the block of transmitting

the response data packet to the LVS from the front terminal sub interface that receives the pending response data packet comprises:

changing the source address and the destination address of the response data packet, and obtaining a modified response data packet; and

transmitting the modified response packet to the LVS from the front terminal sub interface that receives the pending response data packet.

12. The computer-readable storage medium of claim 10, wherein prior to the block of when receiving a pending response data packet sent by a LVS from a front terminal sub interface, sending the pending response data packet to a RS through a rear terminal sub interface, the one or more programs can be executed by the one or more processors to further perform the following operations:

receiving the pending response data packet after the physical address is modified by the LVS.