CLAIMS

1. A traffic management method, wherein the method is applied to a service mesh system, the service mesh system comprises a first service node and a proxy cluster, the first service node hosts a first transport-layer L4 proxy and a first service container group of a first tenant, the proxy cluster hosts a first application-layer L7 proxy, the first L7 proxy comprises configuration information of a plurality of services, different services in the plurality of services belong to a same tenant or different tenants, and the configuration information of the services is used by the first L7 proxy to perform traffic management on data packets of the services; and the method comprises:

receiving, by the first L4 proxy, a first data packet sent by the first service container group;

sending, by the first L4 proxy, an identifier of the first tenant and the first data packet to the first L7 proxy;

identifying, by the first L7 proxy, configuration information of a first service from the configuration information of the plurality of services based on the identifier of the first tenant, wherein the first service belongs to the first tenant; and

performing, by the first L7 proxy, traffic management on the first data packet based on the configuration information of the first service.

2. The method according to claim 1, wherein the first service node further hosts a second service container group of a second tenant; and the method comprises:

receiving, by the first L4 proxy, a second data packet sent by the second service container group;

sending, by the first L4 proxy, an identifier of the second tenant and the second data packet to the first L7 proxy;

identifying, by the first L7 proxy, configuration information of a second service from the configuration information of the plurality of services based on the identifier of the second tenant, wherein the second service belongs to the second tenant; and

performing, by the first L7 proxy, traffic management on the second data packet based on the configuration information of the second service.

3. The method according to claim 1 or 2, wherein the first service comprises a service corresponding to the first data packet and another service; and

performing, by the first L7 proxy, traffic management on the first data packet based on the configuration information of the first service comprises:

identifying, by the first L7 proxy based on an identifier of the service corresponding to the first data packet, configuration information of the service corresponding to the first data packet

from the configuration information of the first service; and

performing, by the first L7 proxy, traffic management on the first data packet based on the configuration information of the service corresponding to the first data packet.

4. The method according to claim 3, wherein the proxy cluster hosts a plurality of L7 proxies; and sending, by the first L4 proxy, the identifier of the first tenant and the first data packet to the first L7 proxy comprises:

identifying, by the first L4 proxy based on the identifier of the first tenant, L7 proxies comprising configuration information of services of the first tenant from the plurality of L7 proxies; and

identifying, by the first L4 proxy based on the identifier of the service corresponding to the first data packet, an L7 proxy comprising the configuration information of the service corresponding to the first data packet from the L7 proxies comprising the configuration information of the services of the first tenant, to obtain the first L7 proxy.

5. The method according to any one of claims 1 to 4, wherein the proxy cluster further hosts a second L7 proxy, and the second L7 proxy comprises configuration information of at least one service; and

sending, by the first L4 proxy, the identifier of the first tenant and the first data packet to the first L7 proxy comprises:

when a quantity of services belonging to the first tenant in the plurality of services is greater than a quantity of services belonging to the first tenant in the at least one service, sending, by the first L4 proxy, the identifier of the first tenant and the first data packet to the first L7 proxy.

6. The method according to any one of claims 1 to 4, wherein the proxy cluster further hosts a second L7 proxy, and the second L7 proxy also comprises the configuration information of the first service; and

sending, by the first L4 proxy, the identifier of the first tenant and the first data packet to the first L7 proxy comprises:

when a load of the second L7 proxy is higher than that of the first L7 proxy, sending, by the first L4 proxy, the identifier of the first tenant and the first data packet to the first L7 proxy.

7. The method according to any one of claims 1 to 6, wherein the service mesh system further comprises a console connected to the proxy cluster; and

the method further comprises: sending, by the console, configuration information of two or more services to a same L7 proxy in the proxy cluster, wherein the two or more services belong to a same tenant, or an output of one of the two or more services is an input of another service.

8. The method according to claim 7, wherein the proxy cluster hosts the plurality of L7 proxies, wherein in the plurality of L7 proxies, the same L7 proxy comprises configuration

information of the fewest services, or the same L7 proxy comprises configuration information of the fewest tenants.

9. The method according to any one of claims 1 to 8, wherein the service mesh system further comprises a second service node, and the second service node hosts a second L4 proxy and a third service container group;

performing, by the first L7 proxy, traffic management on the first data packet based on the configuration information of the first service comprises:

selecting, by the first L7 proxy, the third service container group as a target container group of the first data packet; and

sending, by the first L7 proxy, the first data packet and the identifier of the first tenant to the second L4 proxy; and

the method further comprises:

determining, by the second L4 proxy based on the identifier of the first tenant, that the first tenant and a tenant to which the third service container group belongs are a same tenant; and

sending, by the second L4 proxy, the first data packet to the third service container group.

10. A service mesh system, wherein the service mesh system comprises a first service node and a proxy cluster, the first service node hosts a first L4 proxy and a first service container group of a first tenant, the proxy cluster hosts a first L7 proxy, the first L7 proxy comprises configuration information of a plurality of services, different services in the plurality of services belong to a same tenant or different tenants, and the configuration information of the services is used by the first L7 proxy to perform traffic management on data packets of the services, wherein

the first L4 proxy is configured to receive a first data packet sent by the first service container group;

the first L4 proxy is configured to send an identifier of the first tenant and the first data packet to the first L7 proxy;

the first L7 proxy is configured to identify configuration information of a first service from the configuration information of the plurality of services based on the identifier of the first tenant, wherein the first service belongs to the first tenant; and

the first L7 proxy is configured to perform traffic management on the first data packet based on the configuration information of the first service.

11. The service mesh system according to claim 10, wherein the first service node further hosts a second service container group of a second tenant;

the first L4 proxy is further configured to receive a second data packet sent by the second service container group;

the first L4 proxy is further configured to send an identifier of the second tenant and the second data packet to the first L7 proxy;

the first L7 proxy is further configured to identify configuration information of a second service from the configuration information of the plurality of services based on the identifier of the second tenant, wherein the second service belongs to the second tenant; and

the first L7 proxy is further configured to perform traffic management on the second data packet based on the configuration information of the second service.

12. The service mesh system according to claim 10 or 11, wherein the first service comprises a service corresponding to the first data packet and another service; and

the first L7 proxy is configured to:

identify, based on an identifier of the service corresponding to the first data packet, configuration information of the service corresponding to the first data packet from the configuration information of the first service; and

perform traffic management on the first data packet based on the configuration information of the service corresponding to the first data packet.

13. The service mesh system according to any one of claims 10 to 12, wherein the proxy cluster further hosts a second L7 proxy, and the second L7 proxy comprises configuration information of at least one service; and

the first L4 proxy is configured to send the identifier of the first tenant and the first data packet to the first L7 proxy when a quantity of services belonging to the first tenant in the plurality of services is greater than a quantity of services belonging to the first tenant in the at least one service.

14. The service mesh system according to any one of claims 10 to 12, wherein the proxy cluster further hosts a second L7 proxy, and the second L7 proxy also comprises the configuration information of the first service; and

the first L4 proxy is configured to send the identifier of the first tenant and the first data packet to the first L7 proxy when a load of the second L7 proxy is higher than that of the first L7 proxy.

15. The service mesh system according to any one of claims 10 to 14, wherein the service mesh system further comprises a console connected to the proxy cluster; and

the console is configured to send configuration information of two or more services to a same L7 proxy in the proxy cluster, wherein the two or more services belong to a same tenant, or an output of one of the two or more services is an input of another service.