

MICROSERVICE CALL METHOD AND APPARATUS, DEVICE, AND MEDIUM

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TECHNICAL FIELD

[0003] This application relates to the field of computer technologies, and in particular, to a microservice call method and apparatus, a device, and a computer-readable storage medium.

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BACKGROUND

[0004] When developers use conventional monolithic architectures (monolithic architecture) to develop applications, for example, large-scale applications such as a customer relationship management (customer relationship management, CRM) system and an enterprise resource planning (enterprise resource planning, ERP) system, it becomes more difficult for the developers to update and repair these large-scale monolithic applications as new requirements continuously increase. Based on this, the industry proposes a new architecture, that is, a microservice architecture (microservice architecture).

[0005] The microservice architecture aims to break down functions into discrete services to decouple solutions. In this way, developers can easily update and repair applications. In addition, a fault of one service does not affect an entire application, so that robustness of the application is improved.

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CLAIMS

1. A microservice call method, wherein the method comprises:

receiving(S206), by a network interface card, service call requests separately generated by a plurality of first services deployed on a first device, wherein each of the plurality of first services
5 is corresponding to one second service, and the second service is used to process first data of a service call request generated by the first service corresponding to the second service; and

sending(S214), by the network interface card, the service call request to the second service based on service governance logic related to the first data.

2. The method according to claim 1, wherein the sending, by the network interface card, the
10 service call request to the second service based on service governance logic related to the first data comprises:

determining(S208), by the network interface card based on the service governance logic related to the first data, an address of a second device providing the second service; and

sending, by the network interface card, the service call request to the second service based on
15 the address of the second device.

3. The method according to claim 1, wherein the method further comprises:

sending, by the network interface card, a traffic check request to a governance center, wherein the traffic check request is used to perform traffic check for N service call requests, and N is a positive integer;

20 receiving, by the network interface card, a traffic check result sent by the governance center; and

sending the service call request to the second service when the traffic check result indicates that the check succeeds.

4. The method according to claim 1, wherein the method further comprises:

25 receiving, by the network interface card, a service call response sent by the second service, wherein the service call response comprises second data obtained by processing the first data by the second service;

generating, by the network interface card, a service call log based on at least one of the service call request and the service call response; and

30 sending, by the network interface card, the service call log to a data collection center in

batches.

5. The method according to any one of claims 1 to 4, wherein the method further comprises:
subscribing, by the network interface card, to a change message for a service provider list, to
determine, from a changed service provider list, the address of the second device providing the

5 second service.

6. The method according to any one of claims 1 to 5, wherein the method further comprises:
subscribing, by the network interface card, to a change message for a service governance rule;
and

running, by the network interface card, the service governance logic for the first data
10 according to a changed service governance rule.

7. The method according to any one of claims 1 to 6, wherein the network interface card is a
smart network interface card.

8. A microservice call apparatus, wherein the apparatus comprises:

a communications module(1242), configured to receive service call requests separately
15 generated by a plurality of first services deployed on a first device, wherein each of the plurality
of first services is corresponding to one second service, and the second service is used to process
first data of a service call request generated by the first service corresponding to the second service;
and

the communications module(1244) is further configured to send the service call request to the
20 second service based on service governance logic related to the first data.

9. The apparatus according to claim 8, wherein the communications module is specifically
configured to:

determine, based on the service governance logic related to the first data, an address of a
second device providing the second service; and

25 send the service call request to the second service based on the address of the second device.

10. The apparatus according to claim 8, wherein the communications module is further
configured to:

send a traffic check request to a governance center, wherein the traffic check request is used
to perform traffic check for N service call requests, and N is a positive integer;

30 receive a traffic check result sent by the governance center; and

send the service call request to the second service when the traffic check result indicates that

the check succeeds.

11. The apparatus according to claim 8, wherein the communications module is further configured to:

5 receive a service call response sent by the second service, wherein the service call response comprises second data obtained by processing the first data by the second service;

the apparatus further comprises:

a generation module, configured to generate a service call log based on at least one of the service call request and the service call response; and

the communications module is further configured to:

10 send the service call log to a data collection center in batches.

12. The apparatus according to any one of claims 8 to 11, wherein the apparatus further comprises:

15 a subscription module, configured to subscribe to a change message for a service provider list, to determine, from a changed service provider list, the address of the second device providing the second service.

13. The apparatus according to any one of claims 8 to 12, wherein the apparatus further comprises:

the subscription module, configured to subscribe to a change message for a service governance rule; and

20 a service governance module, configured to run the service governance logic for the first data according to a changed service governance rule.

14. The apparatus according to any one of claims 8 to 13, wherein the microservice call apparatus is a smart network interface card.

25 15. A computer-readable storage medium, wherein the computer-readable storage medium comprises instructions, and the instructions instruct a network interface card to perform the microservice call method according to any one of claims 1 to 7.