CLAIMS

1. A control apparatus for a gateway functioning as the endpoint of a core network in a mobile communication system, characterized in that

the gateway includes a first server configured to receive data from a user apparatus and one or more second servers configured to transfer the data received by the first server to an external network, and

the control apparatus performs

an operation of changing performance of the one or more second servers,

an operation of monitoring a processing status of the one or more second servers, and

an operation of selecting, from the one or more second servers in accordance with the processing status of the one or more second servers, a second server as a transfer destination of the data received from the user apparatus by the first server.

2. The control apparatus according to claim 1, characterized in that

a common address is set in the one or more second servers, and

the first server receives data having the common address as a destination from the user apparatus.

3. The control apparatus according to claim 2, characterized in that the common address is different from an address set in the one or more second servers

in order to cause the first server to communicate with the one or more second servers.

4. The control apparatus according to claim 2 or 3, characterized in that

the first server transfers the received data to the second server selected by the control apparatus, and

the second server selected by the control apparatus performs processing in one of a network layer and an application layer for data transferred from the first server.

5. The control apparatus according to claim 2 or 3, characterized in that

the first server transfers the received data to the second server selected by the control apparatus, and

the second server selected by the control apparatus transfers, to another server configured to perform processing in one of a network layer and an application layer for data, the data transferred from the first server.

6. The control apparatus according to any one of claims 1 to 5, characterized in that

the first server receives data from the user apparatus via an L2 tunnel, and

the first server transfers the data, via an L2 tunnel different from the L2 tunnel, to the second

server selected by the control apparatus.

7. The control apparatus according to any one of claims 1 to 5, characterized in that

the gateway includes a plurality of first servers,

the first server receives data from the user apparatus via an L2 tunnel, and

the control apparatus selects the second server serving as a transfer destination of data received from the user apparatus by the first server so as not to overlap identifiers of the L2 tunnels in the second servers.

8. The control apparatus according to any one of claims 1 to 7, characterized in that

the gateway includes one or more first servers,

the one or more first servers are virtual machines on a cloud,

the control apparatus further performs

an operation of changing performance of the one or more second servers, and

an operation of monitoring a processing status of the one or more second servers, and

the control apparatus performs a change in performance of the one or more first servers and the change in performance of the one or more second servers based on different criteria.

9. The control apparatus according to claim 8, characterized in that the control apparatus performs

the change in the performance of the one or more first servers based on network performance, and the change in the performance of the one or more second servers based on calculation performance.

10. The control apparatus according to any one of claims 1 to 9, characterized in that the second server and the external network communicate with each other via the L2 tunnel.

11. The control apparatus according to any one of claims 1 to 9, characterized in that the second server and the external network communicate with each other via an L3 connection.

12. A program for causing a computer to operate as a control apparatus of a gateway functioning as the endpoint of a core network in a mobile communication system, characterized in that

the gateway includes a first server configured to receive data from a user apparatus and one or more second servers configured to transfer the data received by the first server to an external network, and

the program causes the computer to perform

an operation of changing performance of the one or more second servers,

an operation of monitoring a processing status of the one or more second servers, and

an operation of selecting, from the one or more second servers in accordance with the processing status

of the one or more second servers, a second server as a transfer destination of the data received from the user apparatus by the first server.

13. The control apparatus according to any one of claims 1 to 11, characterized in that the one or more second servers are virtual machines on a cloud.