## CLAIMS

1. A computing power route advertisement method, being applicable to a computing power route ingress node in which a mapping table exists, wherein the mapping table comprises a correspondence between service features and computing-aware traffic steering (CATS) service identifiers (CS-IDs), and the mapping table is generated from a first-type computing power route sent by a computing power route egress node, comprising:

receiving a first service message, wherein the first service message comprises a first service feature;

sending a second-type computing power route to the computing power route egress node if there is no flow table matching the first service feature and there is a first mapping table entry matching the first service feature in the mapping table, wherein the second-type computing power route comprises a first CS-ID corresponding to the first service feature;

receiving a third-type computing power route sent by the computing power route egress node, wherein the third-type computing power route comprises a computing power metric of each of a plurality of computing power service nodes, and the plurality of computing power service nodes correspond to the same first CS-ID;

selecting a target computing power service node according to the computing power metric of each computing power service node and establishing the flow table matching the first service feature, wherein the flow table comprises path information; and

sending the first service message to the target computing power service node in accordance with the path information.

2. The method according to claim 1, wherein the first-type computing power route further comprises a node position of the computing power route egress node, and the mapping table further comprises the node position; and

wherein sending the second-type computing power route to the computing power route egress node comprises:

obtaining a first node position corresponding to the first service feature from the first mapping table entry; and

sending the second-type computing power route to the computing power route egress node in accordance with the first node position.

3. The method according to claim 1 or 2, wherein there is further a metric update table in the computing power route ingress node; and

wherein sending the second-type computing power route to the computing power route egress node comprises:

interrogating the metric update table according to the first CS-ID; and

sending the second-type computing power route to the computing power route egress node if there are no computing power metrics of the plurality of computing power service nodes corresponding to the first CS-ID in the metric update table.

4. The method according to claim 1 or 2, wherein there is further a metric update table in the computing power route ingress node;

wherein receiving the third-type computing power route sent by the computing power route egress node comprises:

receiving a plurality of third-type computing power routes sent by the computing power route egress node, wherein the computing power route egress node sends one third-type computing power route to the computing power route ingress node when the computing power metric of any computing power service node corresponding to the first CS-ID changes; and

wherein after receiving each third-type computing power route, the method further comprises:

recording a correspondence between the first CS-ID and the computing power metric of each of the plurality of computing power service nodes and recording update time of each computing power metric in the metric update table.

5. The method according to claim 4, further comprising:

receiving a second service message, wherein the second service message comprises a second service feature;

interrogating the metric update table according to the first CS-ID if there is no flow table matching the second service feature and there is the first mapping table entry matching the second service feature in the mapping table;

if there are the computing power metrics of the plurality of computing power service nodes corresponding to the first CS-ID in the metric update table and a difference between current time and the update time is less than a threshold, selecting a target computing power service node according to the computing power metric of each computing power service node and establishing the flow table matching the second service feature; and

if there are no computing power metrics of the plurality of computing power service nodes corresponding to the first CS-ID in the metric update table, or if there are the computing power

metrics of the plurality of computing power service nodes corresponding to the first CS-ID in the metric update table and the difference between the current time and the update time is not less than the threshold, sending the second-type computing power route to the computing power route egress node.

6. The method according to claim 4, further comprising:

sending a withdraw route to the computing power route egress node if all flow tables corresponding to the first CS-ID are aged, wherein the withdraw route comprises the first CS-ID and enables the computing power route egress node that receives the withdraw route to stop sending the third-type computing power route directed to the first CS-ID to the computing power route ingress node.

7. The method according to any one of claims 1 to 6, wherein

the first-type computing power route is forwarded from the computing power route egress node to the computing power route ingress node via a route reflector (RR);

the second-type computing power route is forwarded to the computing power route egress node via the RR; and

the third-type computing power route is forwarded from the computing power route egress node to the computing power route ingress node via the RR.

8. The method according to any one of claims 1 to 7, wherein a border gateway protocol (BGP) message comprises a network layer reachability information (NLRI) field, and the NLRI field comprises an address family information field, a route type field and a route type specific key field,

wherein the address family information field being a first designated identifier indicates that the BGP message is targeted at a computing power route; and wherein

the route type field being a first value indicates that the BGP message is the first-type computing power route, and the route type specific key field carries the first CS-ID, wherein the BGP message further comprises a path attribute field related to the NLRI field, and the path attribute field carries the service feature corresponding to the first CS-ID and a node position of the computing power route egress node;

the route type field being a second value indicates that the BGP message is the second-type computing power route, and the route type specific key field carries the first CS-ID; and

the route type field being a third value indicates that the BGP message is the third-type computing power route, and the route type specific key field carries the first CS-ID, wherein when the BGP message is the third-type computing power route, the NLRI field further comprises a route type specific non-key field, and the route type specific non-key field carries the computing power metric of each computing power service node corresponding to the first CS-ID;

wherein the address family information field being a second designated identifier indicates that the BGP message is targeted at an Ethernet virtual private network (EVPN) route; and wherein

the route type field being a fourth value in a preset set indicates that the BGP message is the first-type computing power route, and the route type specific key field carries the first CS-ID, wherein the BGP message further comprises a path attribute field related to the NLRI field, and the path attribute field carries the service feature corresponding to the first CS-ID and a node position of the computing power route egress node;

the route type field being a fifth value in the preset set indicates that the BGP message is the second-type computing power route, and the route type specific key field carries the first CS-ID; and

the route type field being a sixth value in the preset set indicates that the BGP message is the third-type computing power route, and the route type specific key field carries the first CS-ID, wherein when the BGP message is the third-type computing power route, the NLRI field further comprises a route type specific non-key field, and the route type specific non-key field carries the computing power metric of each computing power service node corresponding to the first CS-ID;

wherein values in the preset set are not occupied by EVPN routes.

9. A computing power route advertisement method, being applicable to a computing power route egress node, comprising:

sending a first-type computing power route to a computing power route ingress node, wherein the first-type computing power route comprises a service feature and a computing-aware traffic steering (CATS) service identifier (CS-ID) for the computing power route ingress node to generate a mapping table, and the mapping table comprises a correspondence between service features and CS-IDs;

receiving a second-type computing power route sent by the computing power route ingress node, wherein the second-type computing power route comprises a first CS-ID;

obtaining a computing power metric of each of a plurality of computing power service nodes corresponding to the first CS-ID; and

sending a third-type computing power route to the computing power route ingress node, wherein the third-type computing power route comprises the computing power metric of each computing power service node, and is configured for the computing power route ingress node to select a target computing power service node according to the computing power metric of each computing power service node.

10. The method according to claim 9, wherein there is further a metric update table in the computing power route egress node;

wherein after receiving the second-type computing power route sent by the computing power route ingress node, the method further comprises:

recording the first CS-ID and the computing power metric of each computing power service node in the metric update table; and

sending the third-type computing power route to the computing power route ingress node when the computing power metric of any computing power service node corresponding to the first CS-ID changes.

11. The method according to claim 10, wherein after recording the first CS-ID and the computing power metric of each computing power service node in the metric update table, the method further comprises:

deleting, in a case that a withdraw route sent by the computing power route ingress node and comprising the first CS-ID is received, the first CS-ID and the computing power metrics corresponding to the first CS-ID from the metric update table; and

stopping sending the third-type computing power route directed to the first CS-ID to the computing power route ingress node.

12. The method according to any one of claims 9-11, wherein

the first-type computing power route is forwarded to the computing power route ingress node via a route reflector (RR);

the second-type computing power route is forwarded from the computing power route ingress node to the computing power route egress node via the RR; and

the third-type computing power route is forwarded to the computing power route ingress node via the RR.

13. The method according to any one of claims 9 to 12, wherein a border gateway protocol (BGP) message comprises a network layer reachability information (NLRI) field, and the NLRI field comprises an address family information field, a route type field and a route type specific key field,

wherein the address family information field being a first designated identifier indicates that the BGP message is targeted at a computing power route; and wherein

the route type field being a first value indicates that the BGP message is the first-type computing power route, and the route type specific key field carries the first CS-ID, wherein the BGP message further comprises a path attribute field related to the NLRI field, and the path attribute field carries a service feature corresponding to the first CS-ID and a node position of the computing power route egress node;

the route type field being a second value indicates that the BGP message is the second-type computing power route, and the route type specific key field carries the first CS-ID; and

the route type field being a third value indicates that the BGP message is the third-type computing power route, and the route type specific key field carries the first CS-ID, wherein when the BGP message is the third-type computing power route, the NLRI field further comprises a route type specific non-key field, and the route type specific non-key field carries the computing power metric of each computing power service node corresponding to the first CS-ID; or

wherein the address family information field being a second designated identifier indicates that the BGP message is targeted at an Ethernet virtual private network (EVPN) route; and wherein

the route type field being a fourth value in a preset set indicates that the BGP message is the first-type computing power route, and the route type specific key field carries the first CS-ID, wherein the BGP message further comprises a path attribute field related to the NLRI field, and the path attribute field carries a service feature corresponding to the first CS-ID and a node position of the computing power route egress node;

the route type field being a fifth value in the preset set indicates that the BGP message is the second-type computing power route, and the route type specific key field carries the first CS-ID; and

the route type field being a sixth value in the preset set indicates that the BGP message is the third-type computing power route, and the route type specific key field carries the first CS-ID, wherein when the BGP message is the third-type computing power route, the NLRI

field further comprises a route type specific non-key field, and the route type specific non-key field carries the computing power metric of each computing power service node corresponding to the first CS-ID;

wherein values in the preset set are not occupied by EVPN routes.

14. A computing power route ingress node, comprising:

a processor and a machine-readable storage medium storing machine-executable instructions executable by the processor;

wherein the processor is configured to execute the machine-executable instructions to implement the method according to any one of claims 1-8.

15. A computing power route egress node, comprising:

a processor and a machine-readable storage medium storing machine-executable instructions executable by the processor;

wherein the processor is configured to execute the machine-executable instructions to implement the method according to any one of claims 9-13.