Aggregated Metrics on Egress Node and Corresponding Routing Mechanism

IETF 120
CATS (Computing-Aware Traffic Steering) WG
draft-du-cats-aggregated-metrics-on-egress-00
duzongpeng@chinamobile.com
A general procedure of CATS is shown as follows

- **Step 1:** the client sends out a packet with an anycast destination address, which is also called a Service ID in CATS, while many places in the network can fulfill the job.
- **Step 2:** the network will work like a virtual Load Balancing equipment, enabling the traffic to be forwarded to one proper service point.
Forwarding on Ingress and on Egress

• In the step2
  • Step2.1: The Ingress needs to select a proper Egress, and tunnel the packet to it
  • Step2.2: After receiving the packet, the Egress needs to forward the packet to a proper service point
**Two options here**

- **Option1 (one LB point):**
  - The Ingress can decide the Egress and the service point, and tunnel the packet to the Egress with a proper END.DX function
  - It is described in [I-D.lbdd-cats-dp-sr]

- **Option2:**
  - The Ingress can only decide the Egress, and Egress is responsible for selecting the service point locally connected
Two options here

• Option1:
  • The Ingress can decide the Egress and the service point, and tunnel the packet to the Egress with a proper END.DX function
    • It is described in [I-D.lbdd-cats-dp-sr]

• Option2 (two LB points):
  • The Ingress can only decide the Egress, and Egress is responsible for selecting the service point locally connected
Option2 and related metric merging mechanism

In CATS, we consider aggregated metrics, and three levers of computing metrics can be considered:

1. The metrics that a service point reports at the granularity of the service point.
2. The merged metrics that a service site reports at the granularity of the service site.
3. The merged metrics that an Egress node reports at the granularity of the Egress Node.

The third one is for Option2 described in this draft. It is more complicated, but the advantage is that we can reduce the metric information that needs to be announced in the network.
Next step

• Call for comments and contributions
Thanks and welcome for comments