

# Use-case:

**NSM Interface segregated network services and usage of same VIP-addresses.**

Same VIP addresses used by SCTP, TCP (and UDP) over different NSM interfaces in Pod container.

# Segregated network services and use of VIP-addresses:

Same VIP addresses used by SCTP, TCP and UDP.

## Problem Definition:

- Routing policies are needed in the general case to avoid the default routing of K8s sending the traffic out through the primary interface of the pod. Policy Based Routing on source IP address to override distribution to K8s primary interface.
- Case SCTP: SCTP, here it is assumed a case with path diversity over SCTP segregated network services. For segregated handling of SCTP, the most flexible solution is where Routing Policy measures can be set to direct originating egress traffic and outbound return traffic from Pod to different next-hops based on source VIP address and protocol type.
  - For example, allow that two VIP addresses used for SCTP (reason for two VIPs: two VIPs for paths diversity across separate type of network service) and that the same two VIPs are also used for TCP and UDP in another separate network service, here implying another NSM interface, see figure.
- In order to steer the originating egress traffic (and outbound return traffic packets), Policy-Based Routing taking at least the L-4 protocol into account in the policy is then required.

