

INIT Forwarding for SCTP

draft-tuexen-tsvwg-sctp-init-fwd-00

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Overview

- Adds a new parameter to INIT and INIT ACK chunks carrying the address the packet containing the INIT chunk was originally sent to: INIT Forwarding parameter.
- Allows the packet containing the INIT ACK not to use the destination address of the packet containing the INIT chunk.
- SCTP Dynamic Address Reconfiguration (RFC 5061) cannot be used at the initial state of the association.

Anycast Use Case

- The packet containing an INIT chunk is sent to an anycast address.
- Routers will make choices and the packet arrives at one of the destination nodes.
- The selected destination node will respond from one of its unicast addresses listing the anycast address in the INIT Forwarding parameter of the INIT ACK chunk sent back.
- The association will only use unicast addresses of both end points.

Load Balancer Use Case

- Several cluster machines provide the same service and are reachable via a load balancing node (single point of contact)
- The peers send the packets containing the INIT chunk towards the load balancer.
- The load balancer decides which cluster node will serve the incoming association and sends the packet containing the INIT chunk towards this cluster node listing the load balancers address in the INIT Forwarding parameter.
- The load balancing node is not involved in handling established associations.

Next Steps

- Incorporate any feedback.
- Implement this in FreeBSD.