2018-08-09

Attendees

Joseph Gasparakis (Intel)

Henry Fowler (AT&T)

Eyal Lavee (Mellanox)

Manoj Panicker (Marvell)

Ashutosh Mishra (Marvell)

Deepak S (Marvell)

(note, there were more participants on the call)

Minutes

Statistics through GOM

Question: How would stats be collected by vrouter for flows offloaded to smartnics?

Polling is needed, interval TBD. Polling is from the GOM to the driver. Then the GOM will communicate that information to the vRouter.

Flow aging:

Stats could also be collected when requested by the vrouter agent. Perhaps a mix of polling versus on-time collection may be required but it depends on the type of stats and the importance of it being up-to-date for analytics purposes.

Al: Henry will poll within AT&T regarding the frequency that is needed for collecting data; i.e., how stale can the data be? Eyal pointed out that the requirements need to be considered for flows, and for statistics.

Enable/Disable GOM

Question: How would vrouter determine if GOM support is needed in deployment?

Presence of SmartNIC can be detected to allow GOM to be used in an installation. The mechanisms of this detection are TBD but may require capabilities exchange to be implemented. This could potentially lead to new API that drivers or DPDK PMD may need to support.

For a start, inclusion of GOM can be selected manually at vrouter load time while an appropriate mechanism is determined.

Another thought: Perhaps GOM gets invoked every time by vrouter. The implementation of detecting presence of SmartNIC offload then becomes a GOM to driver interface. GOM can indicate readiness for offload vs pure host-mode operation to vrouter.

Other

Identifying additional functionality in TC/DPDK extensions for vrouter offload is TBD.

Need to prioritize TC and DPDK extensions at some point, but internal reviews by the different teams should be initiated soon.

Plan for meeting every two weeks on smartnic design items.