Comparing Recent Conference DCN Trends/Messages with NENDICA DCN Report

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COVID-19 Delayed Conferences are Virtual

- NetDev 0x14 Linux Networking July 28, Aug 13-14, Aug 17-21
- Hot Chips 32 High Performance Chips Aug 16-18
- Hot Interconnects 27 Interconnection Networks Aug 19-21

Key Trends/Messages in Presentations

- DC Architecture CPU + GPU + DPU/SmartNIC
- IOAM/Telemetry to assist Congestion Control (e.g HPCC++)
- Pull based protocols to avoid Incast (FCP from Fungible)
- Security in DCN and on SmartNIC/DPU via root of trust
- In-Network computing to assist in AllReduce (Al workloads)
- Al powered DCN management
- Co-Packaged Optical/Switch for 400GbE and beyond

NENDICA Report Unique messages/content

- RoCE and TCP traffic mix impact with smart buffering architecture
- PFC Deadlock prevention
- Sending DCQCN CNP from switch