



Contribution ID: 40

Type: **not specified**

A NVMe/TCP backend for vDPA-blk in Kernel

NVMe/TCP and vDPA are two important techniques in the fields of storage and virtualization, and their integration has attracted quite a lot of attention in today's data center infrastructure.

An example is the usage of the 'vduse' in certain private cloud environments. The implementation leverages the 'qemu-storage-daemon' and the NVMe/TCP kernel initiator as vDPA-blk backend. However, in a public cloud setting, it would be beneficial to have a direct NVMe/TCP backend from the kernel space for vDPA-blk.

By introducing this feature, we not only shorten the datapath of storage within virtual machines but also redefine the granularity of NVMe volume management, shifting the focus from the entire host to the individual virtual machine. This adjustment better aligns with the requirements of a multi-tenant scenario.

Lastly, we should also consider incorporating "nvme-tcp receive offloads" to enhance performance acceleration.

Primary author: YAN, Liang

Session Classification: Birds of a Feather (BoF)

Track Classification: Birds of a Feather (BoF)