Supporting OFED over Non-InfiniBand SANs

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Abstract—OpenFabrics Enterprise Distribution (OFED) is open-source software, committed to provide common communication stack to all RDMA capable System Area Networks (SANs). It supports high performance MPIs and legacy protocols for HPC domain and Data Centre community. Currently, it supports InfiniBand (IB) and Internet Wide Area RDMA Protocol (iWARP). This paper presents a technique to support OFED software stack over non-IB RDMA capable SAN. We propose the design of Virtual Management Port (VMP) to enable IB subnet management model. Integration of VMP with IB-Verbs interface driver prevents hardware and OFED modifications and enables connection manager that is mandatory to run user applications. The performance evaluation shows that VMP is lightweight.