Boosting Applications Performance with RDMA

RDMA-Core GitHub Repo

The official RDMA core repository which holds userspace libraries, daemons and code examples
https://github.com/linux-rdma/rdma-core

Glossary

RDMA Objects:

SR – Send Request

RR – Receive Request

CQ – Completion Queue

RDMACM – RDMA Connection Manager

Command	Action
`rdma_connect()`	Connect to the remote server
`rdma_accept()`	Accept the connection request
`rdma_bind_addr()`	Set the local port number to listen on
`rdma_listen()`	Begin listening for connection requests
`rdma_create_qp()`	Allocate a QP for the communication on the new `rdma_cm_id`
`rdma_post_send()`	Post a buffer to send a message

libibverbs code examples

Memory Registration

https://github.com/tomerlior/RDMA-GTC2022/blob/main/Code%20Examples/MemoryReg.c

Send Request

https://github.com/tomerlior/RDMA-GTC2022/blob/main/Code%20Examples/SendRequest.c

Receive Request

https://github.com/tomerlior/RDMA-GTC2022/blob/main/Code%20Examples/ReceiveRequest.c

Request Completion

https://github.com/tomerlior/RDMA-GTC2022/blob/main/Code%20Examples/RequestCompletion.c

RC Ping Pong app

https://github.com/tomerlior/RDMA-GTC2022/blob/main/Code%20Examples/rc_pingpong.c

More `libibverbs` code examples

https://github.com/linux-rdma/rdma-core/tree/master/libibverbs/examples