

NAME

rdma_reg_read - register data buffer(s) for remote RDMA read access.

SYNOPSIS

```
#include <rdma/rdma_verbs.h>
```

```
struct ibv_mr * rdma_reg_read (struct rdma_cm_id *id, void *addr, size_t length);
```

ARGUMENTS

id A reference to a communication identifier where the message buffer(s) will be used.

addr The address of the memory buffer(s) to register.

length The total length of the memory to register.

DESCRIPTION

Registers a memory buffer that will be accessed by a remote RDMA read operation. Memory buffers registered using `rdma_reg_read` may be targeted in an RDMA read request, allowing the buffer to be specified on the remote side of an RDMA connection as the `remote_addr` of `rdma_post_read`, or similar call.

RETURN VALUE

Returns a reference to the registered memory region on success, or `NULL` on error. If an error occurs, `errno` will be set to indicate the failure reason.

NOTES

`rdma_reg_read` is used to register a data buffer that will be the target of an RDMA read operation on a queue pair associated with an `rdma_cm_id`. The memory buffer is registered with the protection domain associated with the identifier. The start of the data buffer is specified through the `addr` parameter, and the total size of the buffer is given by `length`.

All data buffers should be registered before being posted as a work request. Users must deregister all registered memory by calling `rdma_dereg_mr`.

SEE ALSO

`rdma_cm(7)`, `rdma_create_id(3)`, `rdma_create_ep(3)`, `rdma_reg_msgs(3)`, `rdma_reg_write(3)`, `ibv_reg_mr(3)`, `ibv_dereg_mr(3)`, `rdma_post_read(3)`