

NAME

`ibv_open_xrcd`, `ibv_close_xrcd` – open or close an XRC protection domain (XRCDs)

SYNOPSIS

```
#include <infiniband/verbs.h>
```

```
struct ibv_xrcd *ibv_open_xrcd(struct ibv_context *context,
                               struct ibv_xrcd_init_attr *xrcd_init_attr);
```

```
int ibv_close_xrcd(struct ibv_xrcd *xrcd);
```

DESCRIPTION

ibv_open_xrcd() open an XRC domain for the RDMA device context *context* *xrcd_init_attr* is an `ibv_xrcd_init_attr` struct, as defined in `<infiniband/verbs.h>`.

```
struct ibv_xrcd_init_attr {
    uint32_t    comp_mask; /* Identifies valid fields */
    int         fd;
    int         oflag;
```

fd is the file descriptor to associate with the XRCD. *oflag* describes the desired creation attributes. It is a bitwise OR of zero or more of the following flags:

O_CREAT

Indicates that an XRCD should be created and associated with the inode referenced by the given *fd*. If the XRCD exists, this flag has no effect except as noted under **O_EXCL** below.

O_EXCL

If **O_EXCL** and **O_CREAT** are set, open will fail if an XRCD associated with the inode exists.

If *fd* equals -1, no inode is associated with the XRCD. To indicate that XRCD should be created, use *oflag* = **O_CREAT**.

ibv_close_xrcd() closes the XRCD *xrcd*. If this is the last reference, the XRCD will be destroyed.

RETURN VALUE

ibv_open_xrcd() returns a pointer to the opened XRCD, or NULL if the request fails.

ibv_close_xrcd() returns 0 on success, or the value of `errno` on failure (which indicates the failure reason).

NOTES

ibv_close_xrcd() may fail if any other resource is still associated with the XRCD being closed.

SEE ALSO

ibv_create_srq_ex(3), **ibv_create_qp_ex(3)**,

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