

**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\_xrzd()** 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)**,

**AUTHORS**

Sean Hefty <sean.hefty@intel.com>