

NAME

`ibv_create_cq`, `ibv_destroy_cq` – create or destroy a completion queue (CQ)

SYNOPSIS

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

```
struct ibv_cq *ibv_create_cq(struct ibv_context *context, int cqe,  
                             void *cq_context,  
                             struct ibv_comp_channel *channel,  
                             int comp_vector);
```

```
int ibv_destroy_cq(struct ibv_cq *cq);
```

DESCRIPTION

ibv_create_cq() creates a completion queue (CQ) with at least *cqe* entries for the RDMA device context *context*. The pointer *cq_context* will be used to set user context pointer of the CQ structure. The argument *channel* is optional; if not NULL, the completion channel *channel* will be used to return completion events. The CQ will use the completion vector *comp_vector* for signaling completion events; it must be at least zero and less than *context->num_comp_vectors*.

ibv_destroy_cq() destroys the CQ *cq*.

RETURN VALUE

ibv_create_cq() returns a pointer to the CQ, or NULL if the request fails.

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

NOTES

ibv_create_cq() may create a CQ with size greater than or equal to the requested size. Check the *cqe* attribute in the returned CQ for the actual size.

ibv_destroy_cq() fails if any queue pair is still associated with this CQ.

SEE ALSO

ibv_resize_cq(3), **ibv_req_notify_cq(3)**, **ibv_ack_cq_events(3)**, **ibv_create_qp(3)**

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