

**NAME**

`ibv_create_wq`, `ibv_destroy_wq` – create or destroy a Work Queue (WQ).

**SYNOPSIS**

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

```
struct ibv_wq *ibv_create_wq(struct ibv_context *context,
                             struct ibv_wq_init_attr *wq_init_attr);
```

```
int ibv_destroy_wq(struct ibv_wq *wq);
```

**DESCRIPTION**

**ibv\_create\_wq()** creates a WQ associated with the `ibv_context` *context*. The argument *wq\_init\_attr* is an `ibv_wq_init_attr` struct, as defined in `<infiniband/verbs.h>`.

```
struct ibv_wq_init_attr {
    void *wq_context; /* Associated context of the WQ */
    enum ibv_wq_type wq_type; /* WQ type */
    uint32_t max_wr; /* Requested max number of outstanding WRs in the WQ */
    uint32_t max_sge; /* Requested max number of scatter/gather (s/g) elements per WR */
    struct ibv_pd *pd; /* PD to be associated with the WQ */
    struct ibv_cq *cq; /* CQ to be associated with the WQ */
    uint32_t comp_mask; /* Identifies valid fields. Use ibv_wq_init_attr_mask */
    uint32_t create_flags; /* Creation flags for this WQ, use enum ibv_wq_flags */
};
```

```
enum ibv_wq_flags {
    IBV_WQ_FLAGS_CVLAN_STRIPPING = 1 << 0, /* CVLAN field will be stripped from incoming packets */
    IBV_WQ_FLAGS_SCATTER_FCS = 1 << 1, /* FCS field will be scattered to host memory */
    IBV_WQ_FLAGS_DELAY_DROP = 1 << 2, /* Packets won't be dropped immediately if no CQ */
    IBV_WQ_FLAGS_PCI_WRITE_END_PADDING = 1 << 3, /* Incoming packets will be padded to 4 bytes */
    IBV_WQ_FLAGS_RESERVED = 1 << 4,
};
```

The function **ibv\_create\_wq()** will update the *wq\_init\_attr->max\_wr* and *wq\_init\_attr->max\_sge* fields with the actual WQ values of the WQ that was created; the values will be greater than or equal to the values requested.

**ibv\_destroy\_wq()** destroys the WQ *wq*.

**RETURN VALUE**

**ibv\_create\_wq()** returns a pointer to the created WQ, or NULL if the request fails.

**ibv\_destroy\_wq()** returns 0 on success, or the value of `errno` on failure (which indicates the failure reason).

**SEE ALSO**

**ibv\_modify\_wq(3)**,

**AUTHORS**

Yishai Hadas <yishaih@mellanox.com>