

**NAME**

`ibv_create_ah`, `ibv_destroy_ah` – create or destroy an address handle (AH)

**SYNOPSIS**

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

```
struct ibv_ah *ibv_create_ah(struct ibv_pd *pd,
                             struct ibv_ah_attr *attr);
```

```
int ibv_destroy_ah(struct ibv_ah *ah);
```

**DESCRIPTION**

**ibv\_create\_ah()** creates an address handle (AH) associated with the protection domain *pd*. The argument *attr* is an `ibv_ah_attr` struct, as defined in `<infiniband/verbs.h>`.

```
struct ibv_ah_attr {
    struct ibv_global_route grh;      /* Global Routing Header (GRH) attributes */
    uint16_t                dlid;     /* Destination LID */
    uint8_t                 sl;       /* Service Level */
    uint8_t                 src_path_bits; /* Source path bits */
    uint8_t                 static_rate; /* Maximum static rate */
    uint8_t                 is_global; /* GRH attributes are valid */
    uint8_t                 port_num;  /* Physical port number */
};

struct ibv_global_route {
    union ibv_gid          dgid;      /* Destination GID or MGID */
    uint32_t               flow_label; /* Flow label */
    uint8_t                sgid_index; /* Source GID index */
    uint8_t                hop_limit;  /* Hop limit */
    uint8_t                traffic_class; /* Traffic class */
};
```

**ibv\_destroy\_ah()** destroys the AH *ah*.

**RETURN VALUE**

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

**NOTES**

If port flag `IBV_QPF_GRH_REQUIRED` is set then **ibv\_create\_ah()** must be created with definition of `'struct ibv_ah_attr { .is_global = 1; .grh = {...}; }'`.

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

**SEE ALSO**

**ibv\_alloc\_pd(3)**, **ibv\_init\_ah\_from\_wc(3)**, **ibv\_create\_ah\_from\_wc(3)**

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