

NAME

`rdma_create_srq` - Allocate a shared receive queue.

SYNOPSIS

```
#include <rdma/rdma_verbs.h>
```

```
int rdma_create_srq (struct rdma_cm_id *id, struct ibv_pd *pd, struct ibv_srq_init_attr *attr);
```

ARGUMENTS

`id` RDMA identifier.

`pd` Optional protection domain for the SRQ.

`attr` Initial SRQ attributes.

DESCRIPTION

Allocate a SRQ associated with the specified `rdma_cm_id`.

RETURN VALUE

Returns 0 on success, or -1 on error. If an error occurs, `errno` will be set to indicate the failure reason.

NOTES

The `rdma_cm_id` must be bound to a local RDMA device before calling this function, and the protection domain, if provided, must be for that same device. After being allocated, the SRQ will be ready to handle posting of receives.

If a protection domain is not given - `pd` parameter is NULL - then the `rdma_cm_id` will be created using a default protection domain. One default protection domain is allocated per RDMA device.

The initial SRQ attributes are specified by the `attr` parameter. The `ext.xrc.cq` fields in the `ibv_srq_init_attr` is optional. If a completion queue is not specified for an XRC SRQ, then a CQ will be allocated by the `rdma_cm` for the SRQ, along with corresponding completion channels. Completion channels and CQ data created by the `rdma_cm` are exposed to the user through the `rdma_cm_id` structure.

The actual capabilities and properties of the created SRQ will be returned to the user through the `attr` parameter. An `rdma_cm_id` may only be associated with a single SRQ.

SEE ALSO

`rdma_bind_addr(3)`, `rdma_resolve_addr(3)`, `rdma_create_ep(3)`, `rdma_destroy_srq(3)`,

`ibv_create_srq(3), ibv_create_xsrq(3)`