

**NAME**

**mlx5dv\_alloc\_dm** – allocates device memory (DM)

**SYNOPSIS**

```
#include <infiniband/mlx5dv.h>

struct ibv_dm *mlx5dv_alloc_dm(struct ibv_context *context,
                               struct ibv_alloc_dm_attr *dm_attr,
                               struct mlx5dv_alloc_dm_attr *mlx5_dm_attr)
```

**DESCRIPTION**

**mlx5dv\_alloc\_dm()** allocates device memory (DM) with specific driver properties.

**ARGUMENTS**

Please see *ibv\_alloc\_dm(3)* man page for *context* and *dm\_attr*.

**mlx5\_dm\_attr**

```
struct mlx5dv_alloc_dm_attr {
    enum mlx5dv_alloc_dm_type type;
    uint64_t comp_mask;
};
```

*type*     The device memory type user wishes to allocate:

**MLX5DV\_DM\_TYPE\_MEMIC** Device memory of type MEMIC – On-Chip memory that can be allocated and used as memory region for transmitting/receiving packet directly from/to the memory on the chip.

**MLX5DV\_DM\_TYPE\_STEERING\_SW\_ICM** Device memory of type STEERING SW ICM – This memory is used by the device to store the packet steering tables and rules. Can be used for direct table and steering rules creation when allocated by a privileged user.

**MLX5DV\_DM\_TYPE\_HEADER\_MODIFY\_SW\_ICM** Device memory of type HEADER MODIFY SW ICM – This memory is used by the device to store the packet header modification tables and rules. Can be used for direct table and header modification rules creation when allocated by a privileged user.

*comp\_mask*

Bitmask specifying what fields in the structure are valid: Currently reserved and should be set to 0.

**RETURN VALUE**

**mlx5dv\_alloc\_dm()** returns a pointer to the created DM, on error NULL will be returned and *errno* will be set.

**SEE ALSO**

**ibv\_alloc\_dm(3)**,

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