

NAME

`mlx5dv_create_flow` – creates a steering flow rule

SYNOPSIS

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

struct ibv_flow *
mlx5dv_create_flow(struct mlx5dv_flow_matcher *flow_matcher,
                  struct mlx5dv_flow_match_parameters *match_value,
                  size_t num_actions,
                  struct mlx5dv_flow_action_attr actions_attr[])
```

DESCRIPTION

mlx5dv_create_flow() creates a steering flow rule with the ability to specify specific driver properties.

ARGUMENTS

Please see `mlx5dv_create_flow_matcher(3)` for *flow_matcher* and *match_value*.

num_actions

Specifies how many actions are passed in *actions_attr*

actions_attr

```
struct mlx5dv_flow_action_attr {
    enum mlx5dv_flow_action_type type;
    union {
        struct ibv_qp *qp;
        struct ibv_counters *counter;
        struct ibv_flow_action *action;
        uint32_t tag_value;
        struct mlx5dv_devx_obj *obj;
    };
};
```

type `MLX5DV_FLOW_ACTION_DEST_IBV_QP` The QP passed will receive the matched packets.
 `MLX5DV_FLOW_ACTION_IBV_FLOW_ACTION` The flow action to be applied.
 `MLX5DV_FLOW_ACTION_TAG` Flow tag to be provided in work completion.
 `MLX5DV_FLOW_ACTION_DEST_DEVX` The DEVX destination object for the matched packets.
 `MLX5DV_FLOW_ACTION_COUNTERS_DEVX` The DEVX counter object for the matched packets.

qp QP passed, to be used with *type MLX5DV_FLOW_ACTION_DEST_IBV_QP*.

action Flow action, to be used with *type MLX5DV_FLOW_ACTION_IBV_FLOW_ACTION* see `mlx5dv_create_flow_action_modify_header(3)` and `mlx5dv_create_flow_action_packet_reformat(3)`.

tag_value

tag value to be passed in the work completion, to be used with *type MLX5DV_FLOW_ACTION_TAG* see `ibv_create_cq_ex(3)`.

obj DEVX object, to be used with *type MLX5DV_FLOW_ACTION_DEST_DEVX* or by *MLX5DV_FLOW_ACTION_COUNTERS_DEVX*.

RETURN VALUE

mlx5dv_create_flow returns a pointer to the created flow rule, on error NULL will be returned and `errno` will be set.

SEE ALSO

`mlx5dv_create_flow_action_modify_header(3)`, `mlx5dv_create_flow_action_packet_reformat(3)`,
`mlx5dv_create_flow_matcher(3)`, `mlx5dv_create_qp(3)`, `ibv_create_qp_ex(3)` `ibv_create_cq_ex(3)` `ibv_create_counters(3)`

AUTHOR

Mark Bloch <marb@mellanox.com>