

**NAME**

`mlx5dv_create_flow_matcher` – creates a matcher to be used with `mlx5dv_create_flow(3)`

**SYNOPSIS**

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

struct mlx5dv_flow_matcher *
mlx5dv_create_flow_matcher(struct ibv_context *context,
                           struct mlx5dv_flow_matcher_attr *attr)
```

**DESCRIPTION**

**mlx5dv\_create\_flow\_matcher()** creates a flow matcher (mask) to be used with `mlx5dv_create_flow(3)`.

**ARGUMENTS**

Please see `ibv_open_device(3)` for *context*.

*attr*

```
struct mlx5dv_flow_matcher_attr {
    enum ibv_flow_attr_type type;
    uint32_t flags; /* From enum ibv_flow_flags */
    uint16_t priority;
    uint8_t match_criteria_enable; /* Device spec format */
    struct mlx5dv_flow_match_parameters *match_mask;
    uint64_t comp_mask;
    enum mlx5dv_flow_table_type ft_type;
};
```

*type* Type of matcher to be created: `IBV_FLOW_ATTR_NORMAL`: Normal rule according to specification.

*flags* special flags to control rule: 0: Nothing or zero value means matcher will store ingress flow rules. `IBV_FLOW_ATTR_FLAGS_EGRESS`: Specified this matcher will store egress flow rules.

*priority* See `ibv_create_flow(3)`.

*match\_criteria\_enable*

What match criteria is configured in *match\_mask*, passed in device spec format.

*match\_mask*

```
struct mlx5dv_flow_match_parameters {
    size_t match_sz;
    uint64_t match_buf[]; /* Device spec format */
};
```

*match\_sz*

Size in bytes of *match\_buf*.

*match\_buf*

Set which mask to be used, passed in device spec format.

*comp\_mask*

`MLX5DV_FLOW_MATCHER_MASK_FT_TYPE` for *ft\_type*

*ft\_type*

Specified in which flow table type, the matcher will store the flow rules: `MLX5DV_FLOW_TABLE_TYPE_NIC_RX`: Specified this matcher will store ingress flow rules. `MLX5DV_FLOW_TABLE_TYPE_NIC_TX`: Specified this matcher will store egress flow rules. `MLX5DV_FLOW_TABLE_TYPE_FDB`: Specified this matcher will store FDB rules.

**RETURN VALUE**

**mlx5dv\_create\_flow\_matcher** returns a pointer to *mlx5dv\_flow\_matcher*, on error NULL will be returned and `errno` will be set.

**SEE ALSO**

*ibv\_open\_device(3), ibv\_create\_flow(3)*

**AUTHOR**

Mark Bloch <markb@mellanox.com>