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Bad flow entry priority error Extension

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Contents

1	Introduction	2
2	How it works	2
3	Priority error Experimenter ID	2
4	Priority error message	2

1 Introduction

This document describes an ONF extension for OpenFlow version 1.3.X that returns errors for invalid flow entry priorities.

2 How it works

A new error code is defined for bad flow entry priority. This is useful for tables that have constraints in the priorities they accept, for example Longest Prefix Match tables.

3 Priority error Experimenter ID

The Experimenter ID of this extension is:

```
ONF_EXPERIMENTER_ID = 0x4F4E4600
```

4 Priority error message

The following errors are defined by this extension:

```
/* Error codes */
enum onf_error_exp_type {
    ONFERR_ET_BAD_PRIORITY = 2360    /* Unsupported flow entry priority value. */
};
```

The error ONFERR_ET_BAD_PRIORITY uses the following structure:

```
/* Message structure for all errors. */
struct onf_error_msg {
    struct ofp_header header;
    uint16_t type;           /* OFPET_EXPERIMENTER. */
    uint16_t exp_type;       /* One of ONFERR_ET_* above. */
    uint32_t experimenter;   /* ONF_EXPERIMENTER_ID. */
    uint8_t data[0];        /* Up to 64 bytes of failed request. */
};
```

```
};  
OFP_ASSERT(sizeof(struct onf_error_header) == sizeof(struct ofp_error_experimenter_msg));
```

The `type` field must be set to `OFPET_EXPERIMENTER`.

The `experimenter` field is the Experimenter ID (see 3).

The `data` fields contains a copy of the failed request message, truncated to 64 bytes.

The `exp_type` field is set to `ONFERR_ET_BAD_PRIORITY`.