

NAME

BUS_DESCRIBE_INTR, **bus_describe_intr** - associate a description with an active interrupt handler

SYNOPSIS

```
#include <sys/param.h>
```

```
#include <sys/bus.h>
```

int

```
BUS_DESCRIBE_INTR(device_t dev, device_t child, struct resource *irq, void *cookie,  
const char *descr);
```

int

```
bus_describe_intr(device_t dev, struct resource *irq, void *cookie, const char *fmt, ...);
```

DESCRIPTION

The **BUS_DESCRIBE_INTR**() method associates a description with an active interrupt handler. The *cookie* parameter must be the value returned by a successful call to **BUS_SETUP_INTR**(9) for the interrupt *irq*.

The **bus_describe_intr**() function is a simple wrapper around **BUS_DESCRIBE_INTR**(). As a convenience, **bus_describe_intr**() allows the caller to use **printf**(9) style formatting to build the description string using *fmt*.

When an interrupt handler is established by **BUS_SETUP_INTR**(9), the handler is named after the device the handler is established for. This name is then used in various places such as interrupt statistics displayed by **systat**(1) and **vmstat**(8). For devices that use a single interrupt, the device name is sufficiently unique to identify the interrupt handler. However, for devices that use multiple interrupts it can be useful to distinguish the interrupt handlers. When a description is set for an active interrupt handler, a colon followed by the description is appended to the device name to form the interrupt handler name.

RETURN VALUES

Zero is returned on success, otherwise an appropriate error is returned.

SEE ALSO

systat(1), **vmstat**(8), **BUS_SETUP_INTR**(9), **device**(9), **printf**(9)

HISTORY

The **BUS_DESCRIBE_INTR**() method and **bus_describe_intr**() functions first appeared in FreeBSD 8.1.

BUGS

It is not currently possible to remove a description from an active interrupt handler.