

**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.