



FREE eBook

LEARNING

linux-device-driver

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**#linux-
device-
driver**

Table of Contents

About.....	1
Chapter 1: Getting started with linux-device-driver.....	2
Remarks.....	2
Examples.....	2
Installation or Setup.....	2
Hello World device driver.....	2
Credits.....	4

About

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Chapter 1: Getting started with linux-device-driver

Remarks

This section provides an overview of what linux-device-driver is, and why a developer might want to use it.

It should also mention any large subjects within linux-device-driver, and link out to the related topics. Since the Documentation for linux-device-driver is new, you may need to create initial versions of those related topics.

Examples

Installation or Setup

Detailed instructions on getting linux-device-driver set up or installed.

Hello World device driver

hello_world.c

```
#include <linux/module.h>
#include <linux/kernel.h>
#include <linux/init.h>

#define AUTHOR "Bruce Lee"
#define DESC "Hello World driver"

static int __init init(void)
{
    printk(KERN_DEBUG "Hello World\n");
    return 0;
}

static void __exit deinit(void)
{
    printk(KERN_DEBUG "Goodbye World\n");
}

module_init(init);
module_exit(deinit);

MODULE_LICENSE("GPL");
MODULE_AUTHOR(AUTHOR);
MODULE_DESCRIPTION(DESC);
```

Makefile:

```
KDIR ?= /lib/modules/`uname -r`/build
obj-m += hello_world.o

all:
    make -C $(KDIR) M=$(PWD) modules

clean:
    make -C $(KDIR) M=$(PWD) clean
```

How to compile:

```
$ make
```

How to insert the module:

```
$ sudo insmod hello_world.ko
```

How to see print messages

```
$ dmesg
```

How to list module/s

```
$ lsmod | grep hello_worlds
```

How to remove the module

```
$ sudo rmmod hello_world
```

Read [Getting started with linux-device-driver](https://riptutorial.com/linux-device-driver/topic/5421/getting-started-with-linux-device-driver) online: <https://riptutorial.com/linux-device-driver/topic/5421/getting-started-with-linux-device-driver>

Credits

S. No	Chapters	Contributors
1	Getting started with linux-device-driver	Community , nachiketkulk