

Write and Submit your first Linux Kernel Patch

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[git://github.com/gregkh/kernel-tutorial.git](https://github.com/gregkh/kernel-tutorial.git)

What we are going to cover

- git basics
- Linux kernel coding style
- Fixing a file
- Generating a patch
- Emailing the patch

+++ git

git

the fast version control system



Linux Kernel Coding Style

Why Care?

“It is not merely a matter of aesthetics that programs should be written in a particular style. Rather there is a psychological basis for writing programs in a conventional manner: programmers have strong expectations that other programmers will follow these discourse rules. If the rules are violated, then the utility afforded by the expectations that programmers have built up over time is effectively nullified.”

– Soloway & Ehrlich

Documentation/CodingStyle

Use tabs

All tabs are 8 characters

80 character line limit

```
if (error != -ENODEV) {  
    foo();  
    bar();  
}
```



```
if (error != -ENODEV) {  
    foo();  
    bar();  
} else {  
    report_error();  
    goto exit;  
}
```

```
if (error != -ENODEV)  
    foo();  
else  
    goto exit;
```

```
int function(int *baz)  
{  
    do_something(baz);  
    return 0;  
}
```

scripts/checkpatch.pl

USB: otg: Fix bug on remove path without transceiver

In the case where a gadget driver is removed while no transceiver was found at probe time, a bug in otg_put_transceiver() will trigger.

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--- a/drivers/usb/otg/otg.c

+++ b/drivers/usb/otg/otg.c

@@ -43,7 +43,8 @@ EXPORT_SYMBOL(otg_get_transceiver);

void otg_put_transceiver(struct otg_transceiver *x)

{
- put_device(x->dev);

+ if (x)

+ put_device(x->dev);

}

Developer's Certificate of Origin

- (a) I created this change; or
- (b) Based this on a previous work with a compatible license; or
- (c) Provided to me by (a), (b), or (c) and not modified
- (d) This contribution is public.

git diff

git commit

git show

git format-patch

git send-email

Checklist

- Kernel builds with patch applied
- Correct “From:” address
- Concise “Subject:”
- Explain the patch
- Signed-off-by

