

# VSCode for kernel development

# Disclaimer: not a war!



# Why ?

- 01 Lower the bar to entry (e.g. interns)
- 02 Improve reproducibility (e.g. syzkaller bugs)
- 03 Interoperability between tools that “do one thing”

01

# Existing tools

# Mailing list tools

01 git format-patch

02 checkpatch

03 get\_maintainers

04 git send-email

05 lore

06 Patchwork

07 Mutt

08 b4

# Build tools

01 defconfig

02 make

03 ccache

04 clang

05 clang-format

06 clangd

07 CROSS\_COMPILE

# VM tools

01 Debootstrap

02 QEMU

03 GDB

04 Symbolize\_backtrace

05 SSH

06 Chroot

07 9pfs

# Automation tools

- 01 Autostart script
- 02 Selftests run
- 03 [cgit.kernel.org](https://cgit.kernel.org) links
- 04 Interactive workflows



02

# VSCode integration demo

# Demo

- 01 Mailing list
- 02 Build
- 03 VM
- 04 Automation

03

How does it work ?

# Install:

```
$ git clone https://github.com/FlorentRevest/linux-kernel-vscode .vscode/
```

```
$ .vscode/tasks.sh update
```

# Update:

```
$ .vscode/tasks.sh update
```

# What's in there ? (JSON)

```
$ ls .vscode/*.json
```

**extensions.json**

**launch.json**

**settings.json**

**tasks.json**

# What's in there ? (shell)

```
$ ls .vscode/*.sh
```

```
tasks.sh
```

```
local.sh
```

# What's in there ? (Notebooks)

```
$ ls .vscode/*.ipynb
```

```
lisa.ipynb
```

```
syzbot.ipynb
```

# What's in there ? (autostart)

```
$ ls .vscode/autostart/
```

```
autostart.c
```

```
autostart.service
```

```
autostart.sh
```





**Thank you!**