





# Before starting

- Have a complete testing setup
- Have a lot of time
  - Several weeks to months
- List all major features to check
- Read release notes
- Moving from LTS to LTS?

# Yocto not backward compatible...



- Major syntax change in honister release:
  - Convert with *poky/scripts/contrib/convert-overrides.py*  
*<layer\_path>*
- Variable renaming like this one in kirkstone:
  - *BB\_ENV\_EXTRAWHITE* → *BB\_ENV\_PASSTHROUGH\_ADDITIONS*
- Network disabled by default for non *do\_fetch()* tasks in kirkstone
  - Fix: *do\_taskname[network] = "1"*
- End of official support for Python 2 in dunfell



# ... BSP layer as well

- Read release notes of BSP vendor
  - Introduces SCMI for clock and power management
  - sdma firmware in → out of kernel tree
  - Refactored device trees
  - Etc.
- Not too complex, but a lot of little tasks



# When kernel is moving fast

- No stable internal API
  - iio subsystem improvements
  - changes in device tree options
  - OCOTP driver: sysfs files → char device file
  - Etc.
- Need to adapt custom patches or drivers
- And to retest them

# Toolchain or ecosystem issues



- Examples:
  - API changes for libraries: *openssl* from 1.1 to 3.0
  - GCC stricter by default
  - *systemd-boot* requires *default* entry with *.conf* suffix after v245
- Require a lot of testing
- Some code and config changes

# Reducing the effort? Contribute!



- Upstreaming: recipes, drivers, own patches
  - Maintainers manage breaking changes
  - Return the favor to OpenSource projects
  - Receive external bug fixes / features
- Testing own software against recent system
- Detect and fix issues before update



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# Questions?

