

# UmVirt

## virtualization lab

### annual report

# 2025

In 2025:

- Many projects was started.
- Many important objectives was achieved.
- Many obstacles we faced with.

## New projects

We start new global projects:

- Kernel config checker - tool to check kernel configuration.
- BLFS parser - tool to extract source packages files' download links and checksums.
- Unicodemap - site to check Unicode support in browsers.

New ULFS subprojects:

- Waydroid – Research project aimed to port Waydroid to ULFS.
- Zoneminder –Research project aimed to port ZoneMinder to ULFS.
- Clusters – Research using ULFS to boot (from network) and run multiple computers.

## Achievements

Bellow most important objectives list which was achieved in 2025.

- ULFS 0.2.3 was released
- Over 1700 packages in ULFS 0.2.3
- LFS AutoBuilder and ULFS Customizer is modified to simplify configuration for various environments.
- ULFS packages is now support packages templates. This allows to add many LXQT, KDE and KDE Applications packages which have same build instructions.
- Our site was visited by over 1 500 000 unique visitors in 2025<sup>1</sup>

## Feedback

We got feedback from our friends:

- A problems with Rust cult and Libxml2 has been highlighted by famous tech journalist Bryan Lunduke.
- KDE and KDE Applications packages are still can be built without Rust.

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<sup>1</sup> Most of unique visitors are bots but their amount is raise our mood and motivate to work

# Obstacles

We faced with many obstacles that affect on ULFS development:

1. Software obstacles
2. Hardware obstacles
3. Environment obstacles

## Software obstacles

New software versions are bring new obstacles:

- GCC 15 and CMAKE 4 are broke packages instructions. This lead to more time consumption on packages instruction updates.
- Libxml2 is drop support for SAX parser which used in rust free version of librsvg. Old branch 2.13 is used.
- WxWidgets 3.3 branch is not supported by Audacity. Old branch 2.7 is used.

## Hardware obstacles

Hardware obstacles are gain impact on us:

- Memory prices are skyrocketing.
- We use old hardware which slowdown software building.
- We broke a huge and expensive lead acid batteries. We can't use solar power safely anymore.

## Environment obstacles

We have a lot of local obstacles

- Sanctions
- Broad economic crisis
- Internet blockings
- Various security threats
- Cold winter

## Plans

We hope most mentioned obstacles are temporary.

We have some plans on nearest future.

*Stay tuned!*

*Happy New Year!*