

# 👋 Dasharo User Group #8 🎉



DTS - tiny Dasharo OS for hacking, Q3 and Q4 status, future improvements

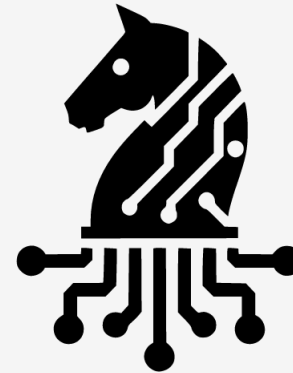




Daniil Klimuk

*Junior Embedded Systems Developer*

-  [daniil.klimuk@3mdeb.com](mailto:daniil.klimuk@3mdeb.com)
-  [linkedin.com/in/daniil-klimuk-9358a1271/](https://www.linkedin.com/in/daniil-klimuk-9358a1271/)



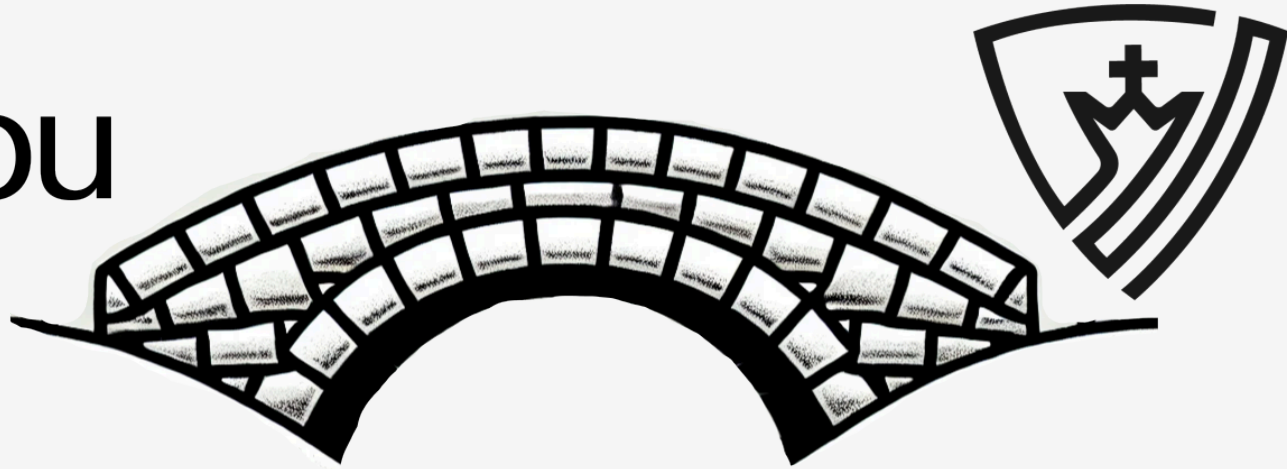
ZARHUS

3mdeb Zarhus team member

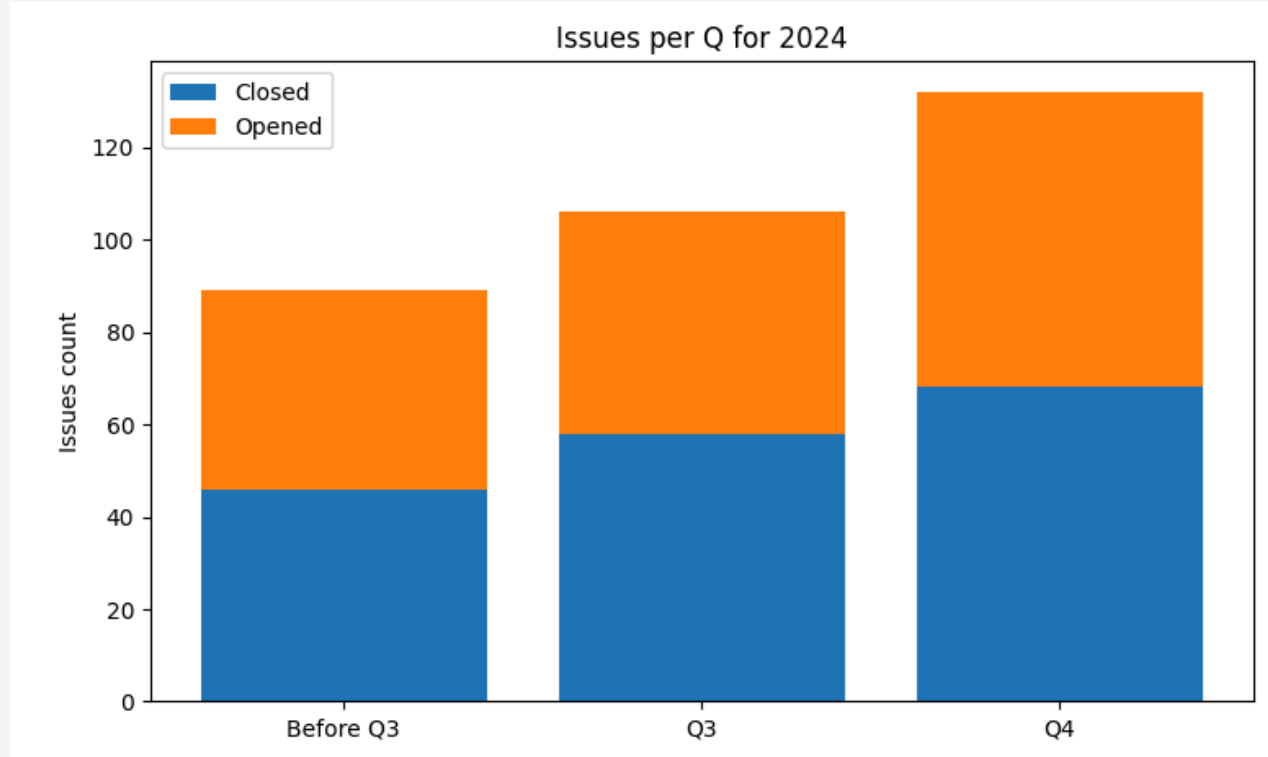
- <https://3mdeb.com>
- [Book a call](#)
- [Sign up for the newsletter](#)

- What is DTS?
- DTS statistics Q3-Q4 2024.
  - Issues
  - Contributions.
  - Features.
  - Hardware support.
- DTS current architecture and tests.
- DTS new architecture and tests.
- Roadmap Q1-Q2 2025
- Q&A

You



Solid and Secure bridge



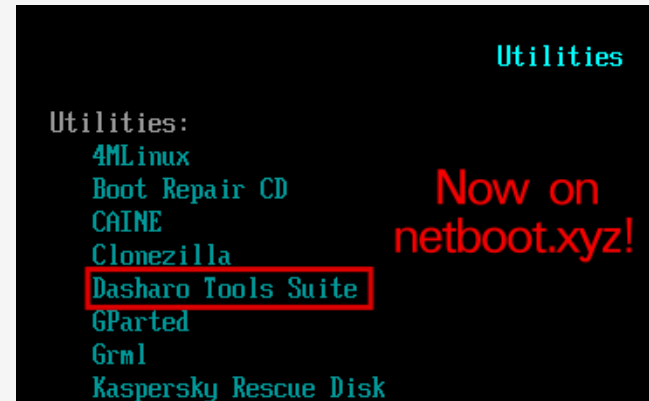
Two big releases: 2.0.0 and 2.1.0!

## Updates:

- Linux Kernel to 6.6.21
- Updates for meta layers

## New features:

- pre-commit now used everywhere
- Some new tools
- Verbose debugging mode
- New GUI
- DTS extensions feature
- UEFI Capsule Update support
- DTS is now in netboot.xyz official support



## New supported platforms:

- Novacustom MTL
- Dell Optiplex 7010/9010
- ODROID-H4
- Updated MSI Z690 and Z790

## Important changes:

- DTS script moved to a separate repository
- Enhanced debugging and testing
- Qemu is now supported

```

*****
**                               FIRMWARE INFORMATION                               **
*****
BIOS Inf.: 3mdeb Dasharo (coreboot+UEFI) v0.2.0
*****
1) Dasharo HCL report
2) Update Dasharo Firmware
4) Load your DPP keys
*****
R to reboot  P to poweroff  S to enter shell
X to launch SSH server  I to enable sending DTS logs
U to enable verbose mode  O to disable verbose mode
Enter an option:
    
```



```

** 1) Dasharo HCL report
+ check_if_dasharo
+ [[ 3mdeb == *3mdeb* ]]
+ [[ Dasharo (coreboot+UEFI) v0.2.0 == *Dasharo* ]]
+ return 0
+ echo -e '\033[0;36m*\033[0;33m      2)\033[0;36m Update Dash
** 2) Update Dasharo Firmware
+ '[' Emulation '!=' QEMU ']'
+ '[' Emulation '!=' Emulation ']'
+ '[' -n '' ']'
+ echo -e '\033[0;36m*\033[0;33m      4)\033[0;36m Load your
** 4) Load your DPP keys
+ '[' -f /var/dasharo-package-manager/packages-scripts/subme
+ show_footer
+ echo -e '\033[0;36m*****
*****
+ echo -ne '\033[0;31mR\033[0m to reboot \033[0m'
R to reboot + echo -ne '\033[0;31mP\033[0m to poweroff \033[0m'
P to poweroff + echo -e '\033[0;31mS\033[0m to enter shell
S to enter shell
+ systemctl is-active sshd.service
+ echo -ne '\033[0;31mX\033[0m to launch SSH server \033[0m'
X to launch SSH server + '[' '' == true ']'
+ echo -e '\033[0;31mI\033[0m to enable sending DTS logs \033[0m'
I to enable sending DTS logs
+ '[' true == true ']'
+ echo -ne '\033[0;31mU\033[0m to disable verbose mode \033[0m'
U to disable verbose mode + echo -ne '\033[0;33mO\033[0m to
Enter an option: + echo
+ read -n 1 OPTION
    
```

```
Dasharo Tools Suite Script 2.1.0
(c) Dasharo <contact@dasharo.com>
Report issues at: https://github.com/Dasharo/dasharo-issues
*****
**                HARDWARE INFORMATION
*****
** System Inf.: Emulation QEMU x86 q35/ich9
** Baseboard Inf.: Emulation QEMU x86 q35/ich9
** CPU Inf.: QEMU Virtual CPU version 2.5+
** RAM Virtual: Not Specified
*****
**                FIRMWARE INFORMATION
*****
** BIOS Inf.: 3mdeb Dasharo (coreboot+UEFI) v0.2.0
*****
** 1) Dasharo HCL report
** 2) Update Dasharo Firmware
** 4) Load your DPP keys
*****
R to reboot P to poweroff S to enter shell
K to launch SSH server L to enable sending DTS logs
U to enable verbose mode
Enter an option:
```

More colors!  
More  
information!

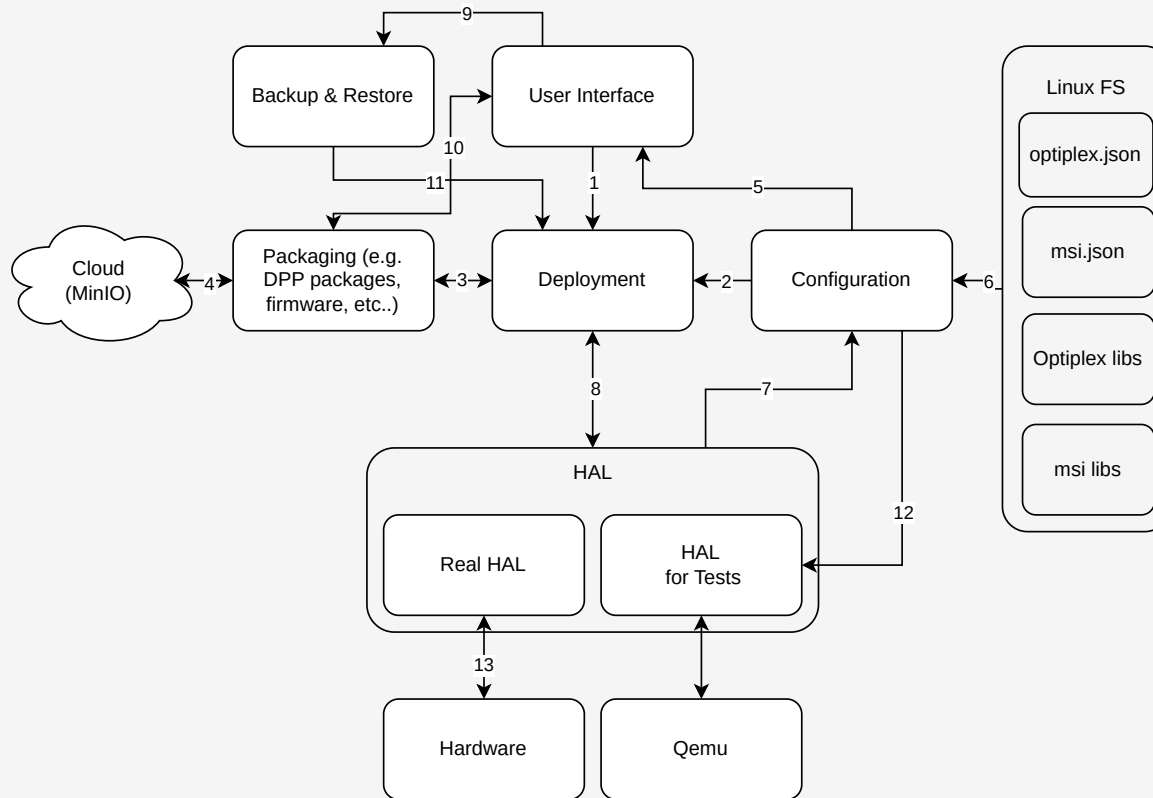


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** RAM Virtual: Not Specified                        **
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**                FIRMWARE INFORMATION                **
*****
** BIOS Inf.: 3mdeb Dasharo (coreboot+UEFI) v0.2.0    **
*****
**                DPP credentials                    **
*****
** Logs key:                                          **
** Download key:                                     **
** Password:                                         **
*****
** 1) Dasharo HCL report                             **
** 2) Update Dasharo Firmware                       **
** 4) Edit your DPP keys                            **
** 5) DTS extensions !                               **
*****
R to reboot P to poweroff S to enter shell
K to launch SSH server L to enable sending DTS logs
U to enable verbose mode
Enter an option:
```

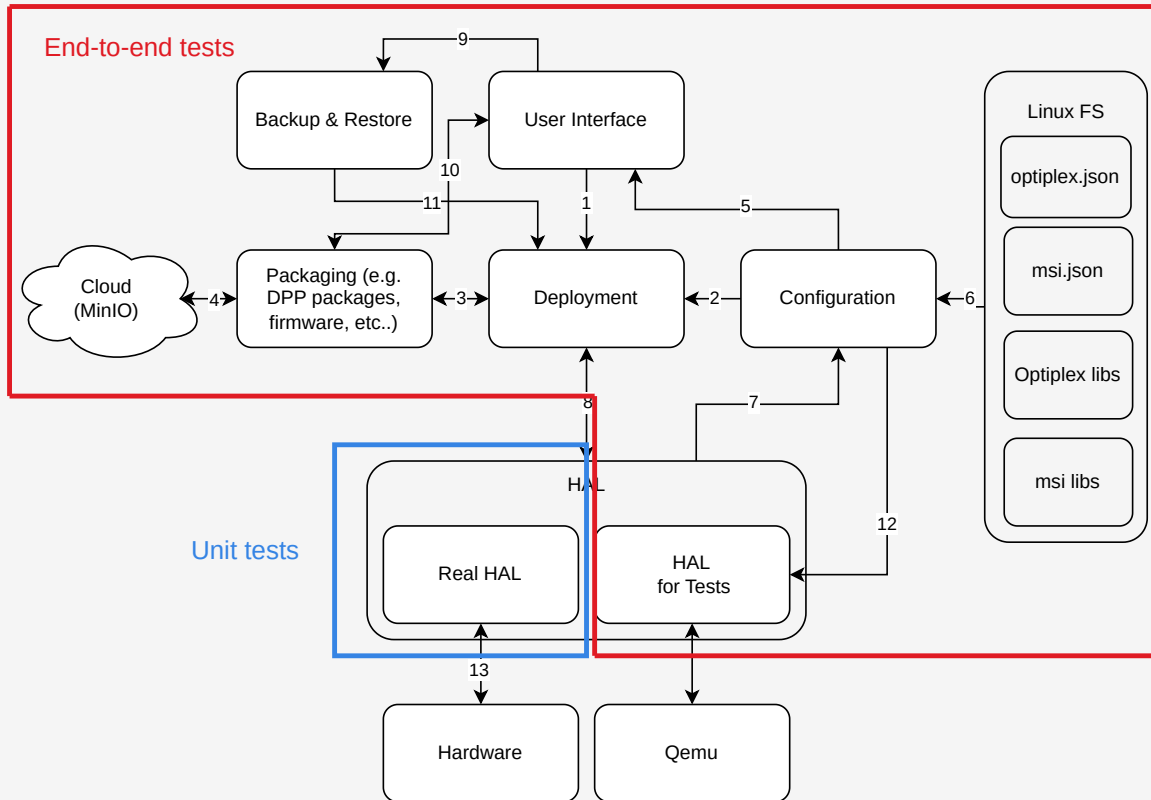
```
Dasharo Tools Suite Script 2.1.0
(c) Dasharo <contact@dasharo.com>
Report issues at: https://github.com/Dasharo/dasharo-issues
*****
** 1) Start Dasharo TrustRoot provisioning           **
** Q) Return to main menu                           **
*****
R to reboot P to poweroff S to enter shell
K to launch SSH server L to enable sending DTS logs
U to enable verbose mode
Enter an option:
```

Adding custom DTS extensions is now possible!





More inf.: <https://github.com/Dasharo/dasharo-issues/issues/1067>



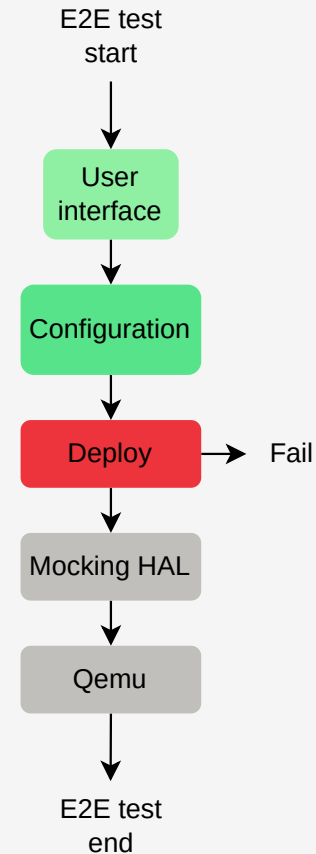
More inf.: <https://github.com/Dasharo/dasharo-issues/issues/1067>

### End-to-end tests:

- Will be launched by OSFV
- Will be launched on Qemu
- Will test DTS logic as well as user experience
- Some of them will be used in CIs
- First version of it is already in integration (check [open-source-firmware-validation/dts](#))

### What we will get:

- More stable and secure DTS
- Strictly defined and tracked user experience features
- Less time wasted on SW tests

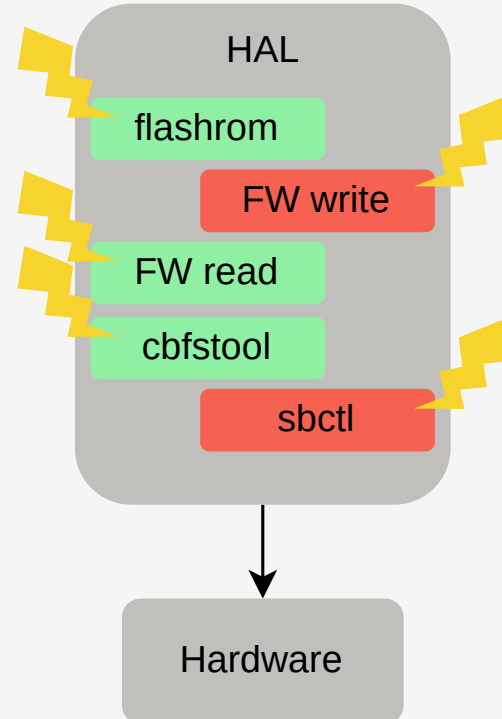


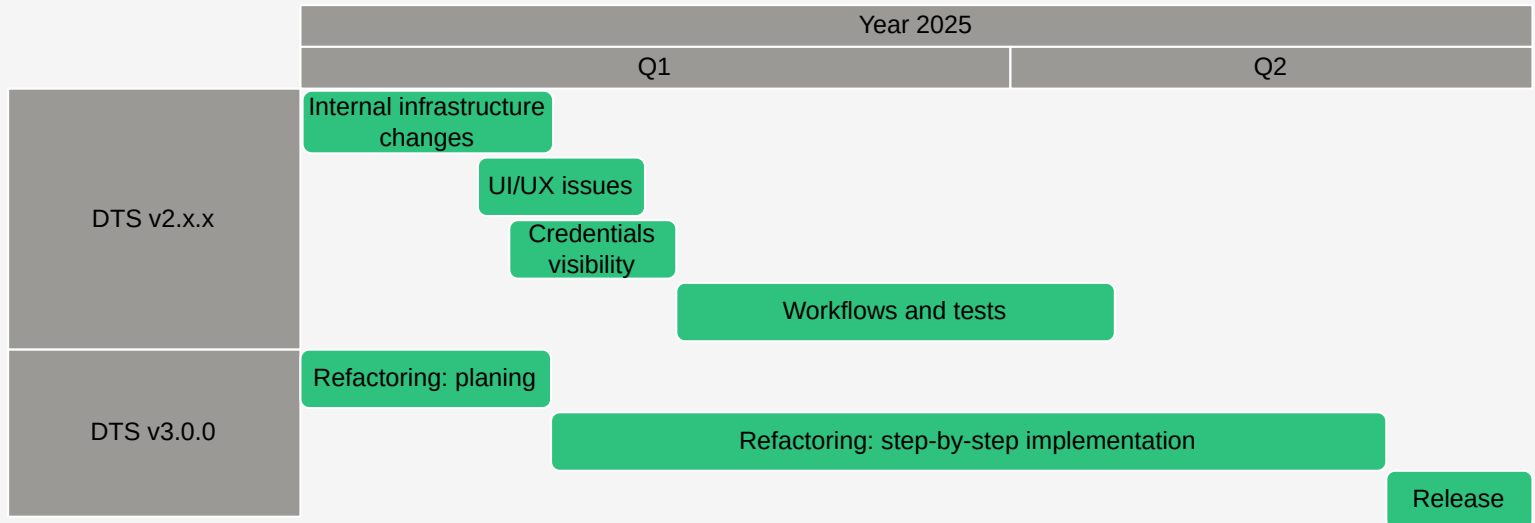
### Unit tests:

- Will be launched by OSFV
- Will be launched on real HW
- Will test HW-specific logic
- Will be used in every HW-related release

### What we will get:

- Separate HW tests from SF tests
- More stable and secure DTS
- Less time wasted on HW releases



Dasharo Tools Suite roadmap  
subject to change

Some simultaneous development out there!

# Q&A