🎆 Dasharo Tools Suite 🎆

Getting started and roadmap

DASHARO

- What?
- How?
- Why?
- List of features
- Demo on MSI PRO Z690-A DDR4
- Upcoming releases
- Roadmap

- Dasharo Tools Suite a.k.a. DTS
- Set of tools and scripts running in minimal Linux environment
  - swiss army knife for Dasharo users and open-source firmware community
  - aims to provide a comprehensive solution for firmware flashing, gather information about hardware
  - documentation
- First publicly available release on 2022-08-09
  - since then four more releases
  - releases
- Dasharo Tools Suite test cases
  - performed on MSI PRO Z690-A DDR4 and DDR5 also on NovaCustom NV4x and NS5x/7x
  - test cases

DASHARO

- Build based on Yocto Project
  - compatible with Kirkstone release
  - dependent on minimal set of additional layers
  - kas used to manage the compilation
  - provided documentation about how to build manually
- Meta layer stored on Dasharo GitHub organization
  - two main branches `main` and `develop`
  - meta-dts
- Available artifacts
  - iso and compressed images on releases subpage
  - kernel and cpio to boot from iPXE
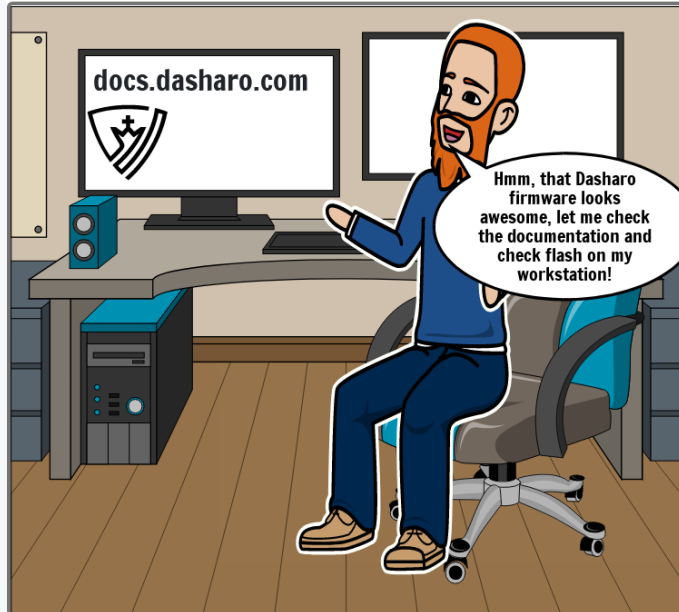
- Dasharo zero-touch initial deployment
  - automates Dasharo firmware flashing, while also dumping flash content before to create backup
  - supported on ASUS KGPE-D16, Dell OptiPlex 7010/9010, MSI PRO Z690-A DDR4 and DDR5, NovaCustom NV4x and NS5x/7x
  - more information
- Dasharo Hardware Compatibility List Report (HCL Report)
  - powerful option, allows to get information about your hardware
  - dumped as compressed tarball in rootfs of DTS, also can be send to Dasharo Team
  - `results` file in dump
  - more information
- Latest versions of important utilities
  - e.g. `fwupd`, `flashrom`, `coreboot-utils` from Dasharo forks
  - allows to compile, test and upstream
  - in future, we want to provide whole SBoM

DEMO

Dasharo Tools Suite - Initial deployment and rollback

- **DTS v1.2.0**
  - ETA: March 2023
- Key features
  - enable Dasharo firmware update already available on develop build
  - bug fixing
- **DTS v2.0.0**
  - ETA: April/May 2023
  - [GitHub Milestone](#)
- Key features
  - add QEMU image with sets of basic tests of the system
  - update UI; make it shiny, beautiful and what more important - user friendly
  - enable Dasharo zero-touch initial deployment on Dell Precision T1650
  - work on DTS logo
  - introduce nightly/develop builds

- Device authentication to improve Dasharo firmware update
  - client authentication mechanism working with updates
  - ETA: Q3 2023
  - GitHub issue
- Expanding DTS root file system via NFS or other solution
  - adds posibility to load custom kernel modules
  - protects against endless growth of root file system size
  - ETA: Q3 2023
  - GitHub issue
- DTS zero touch initial deployment for firmware `as is`
  - facilitate entry into the world of open-source firmware
  - ETA: Q4 2023
  - GitHub issue
- DTS security features provisioning
  - improve the trustworthiness of computing device
  - ETA: Q1 2024
  - GitHub issue

Q&A