ORACLE

GRUB

Project Status Update

Daniel Kiper *Oracle, GRUB upstream maintainer*

FOSDEM 2025, February 1st, 2025

Content

What happened during last year
What is happening in the GRUB project now
Fedora downstream GRUB patches - rough estimates



What happened during last year



- EROFS support
- Disable command line interface access and editing of GRUB menu entries if GRUB image is built with -disable-cli
- Core NX support for EFI platforms
 - Section Alignment of the submitted PE file must be aligned with page size. This must be 4kb, or a larger power of 2 (ex 64kb) *
 - Section Flags must not combine IMAGE_SCN_MEM_WRITE and IMAGE_SCN_MEM_EXECUTE for any given section. *
- SBAT support for ELF files
- Automatic disk unlock with TPM2 on EFI and IEEE1275 PowerPC platforms
- Improved detection of fonts during configure
- Forward porting downstream patches to upstream
- Fixes, cleanups and documentation updates...
- New tests
- ... and many other fixes and cleaunps...
- * https://techcommunity.microsoft.com/t5/hardware-dev-center/new-uefi-ca-memory-mitigation-requirements-for-signing/ba-p/3608714 https://techcommunity.microsoft.com/t5/hardware-dev-center/updated-uefi-signing-requirements/ba-p/1062916

What is happening in the GRUB project now

- The shim loader protocol support for EFI platforms
- TrenchBoot support for Intel and AMD x86 architectures
- BLS and UKI support
- Appended Signature Secure Boot Support for PowerPC
- Update embeded libs to latest versions including libgcrypt (required for Argon2 KDF)
- Forward porting downstream patches to upstream
- Fixes, cleanups and documentation updates...
- Setup Cl infrastructure
- Next code freeze and GRUB release in the following months

Fedora downstream GRUB patches - rough estimates

Stats prepared by Alec Brown from Oracle

GRUB 2.02

- Fedora 21 has 151 patches, 87 patches were backported, 64 new patches, total 64
- Fedora 22 has 162 patches, 89 patches were backported, 9 new patches, total 73
- Fedora 23 has 77 patches, 1 patch was backported, 7 new patches, total 80
- Fedora 24 has 97 patches, 2 patches were backported, 32 new patches, total 112
- Fedora 25 has 97 patches, 2 patches were backported, 0 new patches, total 112
- Fedora 26 has 107 patches, 3 patches were backported, 10 new patches, total 122
- Fedora 27 has 135 patches, 6 patches were backported, 28 new patches, total 150
- Fedora 28 has 219 patches, 3 patches were backported, 110 new patches, total 260
- Fedora 29 has 244 patches, 3 patches were backported, 24 new patches, total 284
- Fedora 30 has 300 patches, 3 patches were backported, 58 new patches, total 342
- Fedora 31 has 237 patches, 30 patches were backported, 28 new patches, total 370

Fedora downstream GRUB patches - rough estimates

... continuation...

GRUB 2.04

- Fedora 32 has 250 patches, 28 patches were backported, 25 new patches, total 395
- Fedora 33 has 196 patches, 0 patches were backported, 42 new patches, total 437

GRUB 2.06

- Fedora 34 has 222 patches, 3 patches were backported, 23 new patches, total 460
- Fedora 35 has 283 patches, 45 patches were backported, 19 new patches, total 479
- Fedora 36 has 296 patches, 48 patches were backported, 40 new patches, total 519
- Fedora 37 has 331 patches, 79 patches were backported, 13 new patches, total 532
- Fedora 38 has 347 patches, 84 patches were backported, 11 new patches, total 543
- Fedora 39 has 348 patches, 84 patches were backported, 1 new patch, total 544
- Fedora 40 has 348 patches, 84 patches were backported, 0 new patches, total 544

Thank you

Daniel Kiper daniel.kiper@oracle.com



