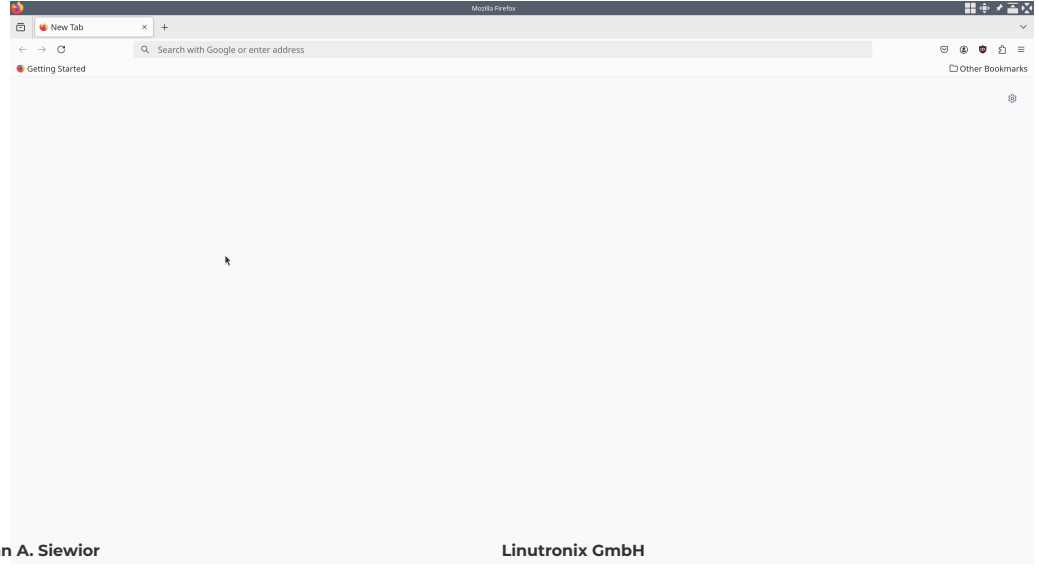
Current overview of PREEMPT_RT

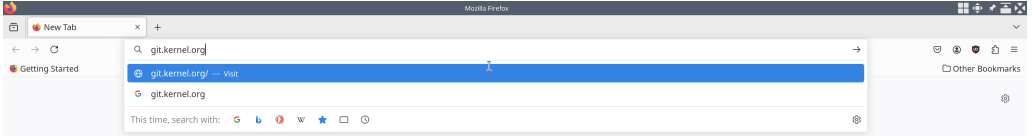
Linux Plumbers Conference

Sebastian A. Siewior

Linutronix GmbH

September 19, 2024


Mozilla Firefox
New Tab
Search with Google or enter address
Getting Started
Other Bookmarks


Mozilla Firefox
New Tab
git.kernel.org
git.kernel.org/ — Visit
git.kernel.org
This time, search with:
Getting Started
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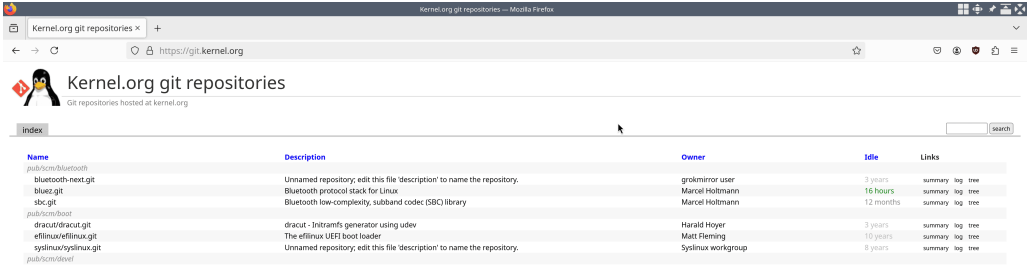
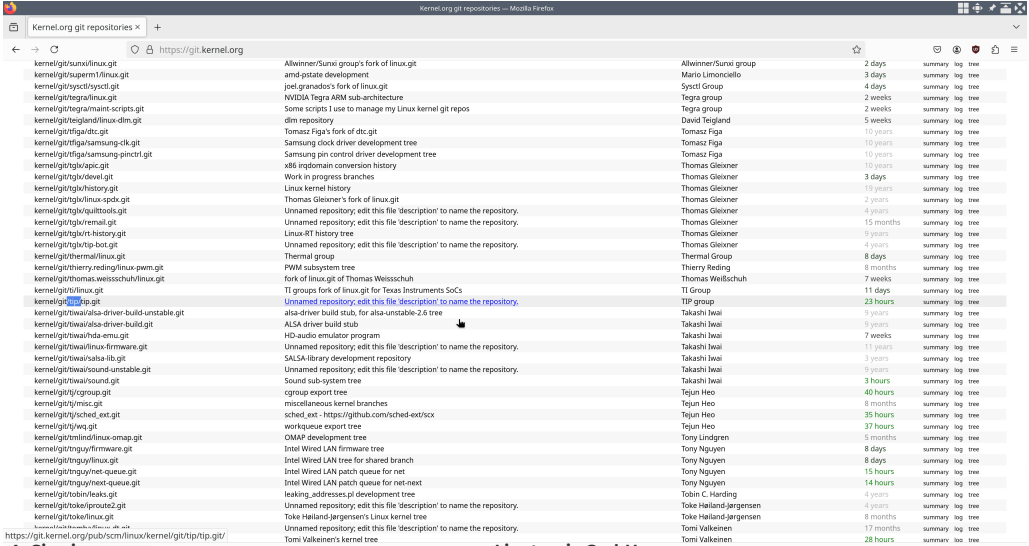
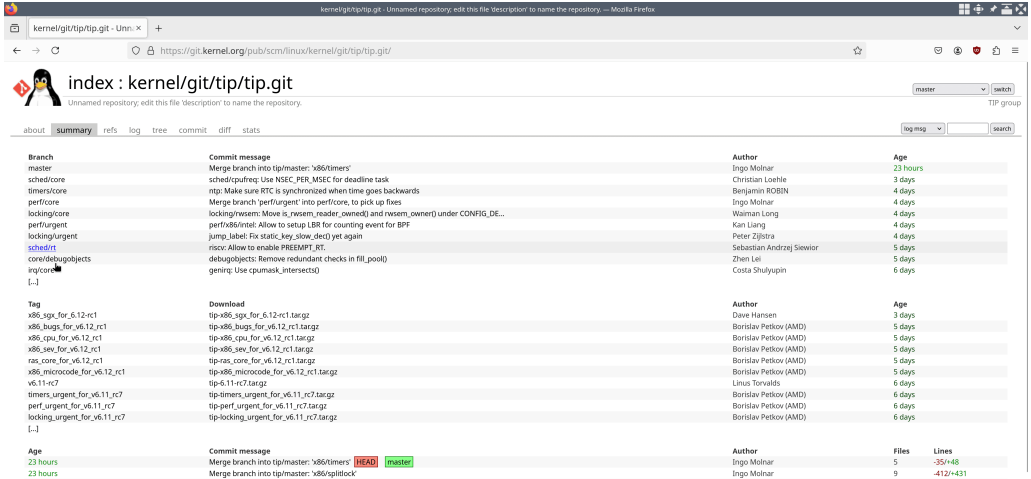
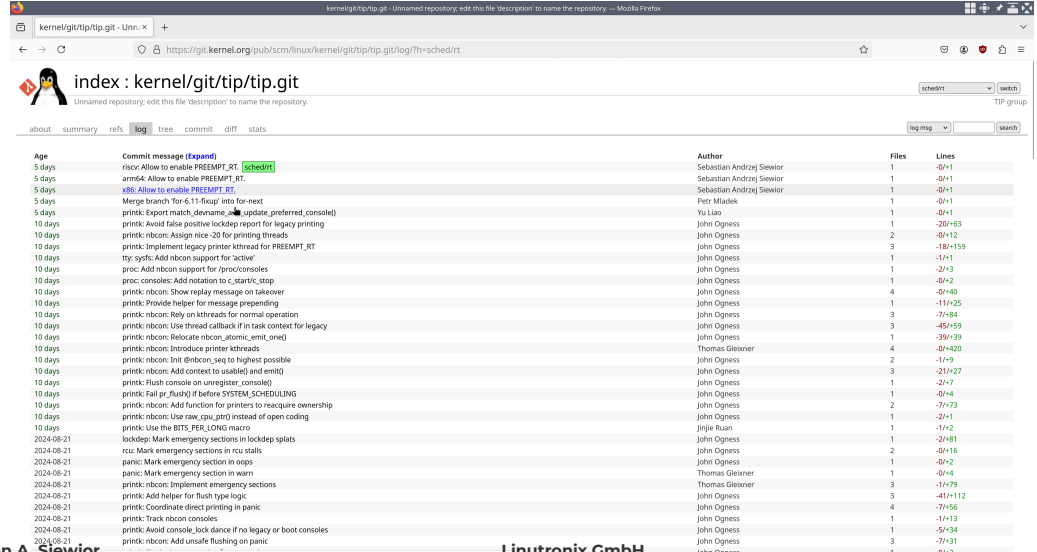


Name	Description	Owner	Idle	Links
pub/scm/bluetooth				
bluetooth-next.git	Unnamed repository; edit this file 'description' to name the repository.	grokmirror user	3 years	summary log tree
bluez.git	Bluetooth protocol stack for Linux	Marcel Holtmann	16 hours	summary log tree
sbc.git	Bluetooth low-complexity, subband codec (SBC) library	Marcel Holtmann	12 months	summary log tree
pub/scm/boot				
dracut/dracut.git	dracut - Initramfs generator using udev	Harald Hoyer	3 years	summary log tree
efilinux/efilinux.git	The efilinux UEFI boot loader	Matt Fleming	10 years	summary log tree
syslinux/syslinux.git	Unnamed repository; edit this file 'description' to name the repository.	Syslinux workgroup	8 years	summary log tree
pub/scm/devel				
pahole/pahole.git	pahole and other type info tools	Arnaldo Carvalho de Melo	11 days	summary log tree
sparse/chrisl/sparse.git	Chris Li's sparse repository.	Christopher Li	7 years	summary log tree
sparse/sparse-dev.git	Sparse's development tree	Luc Van Oostenryck	7 months	summary log tree
sparse/sparse-logs.git	Raw logs of warnings of Sparse running on the kernel with summary logs.	Luc Van Oostenryck	2 years	summary log tree
sparse/sparse.git	C semantic parser	Luc Van Oostenryck	7 months	summary log tree
pub/scm/docs				
docsko/ieee1394.git	Documentation for Linux FireWire subsystem	Takashi Sakamoto	8 weeks	summary log tree
docsko/korg.git	Source of korg.docs.kernel.org	Kernel.org Docs Group	9 days	summary log tree
kernel/kernel-docs.git	Kernel Documentation tree	Doc Group	11 years	summary log tree
kernel/ksmap.git	Kernel.org keysign map source	Kernel.org users	3 weeks	summary log tree
kernel/pgpkeys.git	Kernel developers PGP keys	Kernel.org Admin	42 hours	summary log tree
kernel/website.git	Kernel.org website source	Website Editors	6 weeks	summary log tree
man-pages/man-pages-posix.git	POSIX manual pages - sections 0p, 1p, 3p	Michael Timothy Kerrisk	3 years	summary log tree
man-pages/man-pages.git	Linux man pages Sections 2, 3, 4, 5, and 7	Michael Timothy Kerrisk	13 days	summary log tree
man-pages/website.git	Website files for /doc/man-pages	Michael Timothy Kerrisk	9 months	summary log tree
tab/tab.git	Unnamed repository; edit this file 'description' to name the repository.	LF TAB	2 weeks	summary log tree
pub/scm/editors				
uemacs/uemacs.git	Micro-emacs	Linus Torvalds	6 years	summary log tree
pub/scm/fs				
ext2/e2fsprogs.git	Ext2/3/4 filesystem userspace utilities	Theodore T'so	4 months	summary log tree
ext2/xfstests-bld.git	Build framework and autorun scripts for xfstests	Theodore T'so	6 weeks	summary log tree
fat/fatattr/fatattr.git	FAT attribute set utility	H. Peter Anvin	16 years	summary log tree
fscrypt/linux.git	fscrypt kernel development tree	FSCrypt FS Group	2 months	summary log tree
fsverity/fsverity-utils.git	fsverity userspace utilities	FSVerity FS Group	6 months	summary log tree
fsverity/linux.git	fsverity kernel development tree	FSVerity FS Group	2 months	summary log tree
fuse/fuse.git	FUSE fs w/ Berkeley DB backend.	Jeff Garzik	16 years	summary log tree
fuse/fuse-ext2.git	FUSE ext2 filesystem driver	Jeff Garzik	18 years	summary log tree



kernel/git/sunxi/linux.git	Allwinner/Sunxi group's fork of linux.git	Allwinner/Sunxi group	2 days	summary log tree
kernel/git/superm1/linux.git	amd-pstate development	Mario Limonciello	3 days	summary log tree
kernel/git/sysctl/sysctl.git	joel.granados's fork of linux.git	Sysctl Group	4 days	summary log tree
kernel/git/tegra/linux.git	NVIDIA Tegra ARM sub-architecture	Tegra group	2 weeks	summary log tree
kernel/git/tegra/maint-scripts.git	Some scripts I use to manage my Linux kernel git repos	Tegra group	2 weeks	summary log tree
kernel/git/teigland/linux-dlm.git	dlm repository	David Teigland	5 weeks	summary log tree
kernel/git/tfiga/dtc.git	Tomasz Figa's fork of dtc.git	Tomasz Figa	10 years	summary log tree
kernel/git/tfiga/samsung-clk.git	Samsung clock driver development tree	Tomasz Figa	10 years	summary log tree
kernel/git/tfiga/samsung-pinctrl.git	Samsung pin control driver development tree	Tomasz Figa	10 years	summary log tree
kernel/git/tglx/apic.git	x86 ingdomain conversion history	Thomas Gleixner	10 years	summary log tree
kernel/git/tglx/devel.git	Work in progress branches	Thomas Gleixner	3 days	summary log tree
kernel/git/tglx/history.git	Linux kernel history	Thomas Gleixner	19 years	summary log tree
kernel/git/tglx/linux-spdx.git	Thomas Gleixner's fork of linux.git	Thomas Gleixner	2 years	summary log tree
kernel/git/tglx/quilttools.git	Unnamed repository; edit this file 'description' to name the repository.	Thomas Gleixner	4 years	summary log tree
kernel/git/tglx/remail.git	Unnamed repository; edit this file 'description' to name the repository.	Thomas Gleixner	15 months	summary log tree
kernel/git/tglx/rt-history.git	Linux-RT history tree	Thomas Gleixner	9 years	summary log tree
kernel/git/tglx/tip-bot.git	Unnamed repository; edit this file 'description' to name the repository.	Thomas Gleixner	4 years	summary log tree
kernel/git/thermal/linux.git	Thermal group	Thermal Group	8 days	summary log tree
kernel/git/thierry.reding/linux-pwm.git	PWM subsystem tree	Thierry Reding	8 months	summary log tree
kernel/git/thomas.weissschuh/linux.git	fork of linux.git of Thomas Weissschuh	Thomas Weißschuh	7 weeks	summary log tree
kernel/git/ti/linux.git	TI groups fork of linux.git for Texas Instruments SoCs	TI Group	11 days	summary log tree
kernel/git/tip/tip.git	Unnamed repository; edit this file 'description' to name the repository.	TIP group	23 hours	summary log tree
kernel/git/tiwai/alsa-driver-build-unstable.git	alsa-driver build stub, for alsa-unstable-2.6 tree	Takashi Iwai	9 years	summary log tree
kernel/git/tiwai/alsa-driver-build.git	ALSA driver build stub	Takashi Iwai	9 years	summary log tree
kernel/git/tiwai/hda-emu.git	HD-audio emulator program	Takashi Iwai	7 weeks	summary log tree
kernel/git/tiwai/linux-firmware.git	Unnamed repository; edit this file 'description' to name the repository.	Takashi Iwai	11 years	summary log tree
kernel/git/tiwai/salsa-lib.git	SALSA-library development repository	Takashi Iwai	3 years	summary log tree
kernel/git/tiwai/sound-unstable.git	Unnamed repository; edit this file 'description' to name the repository.	Takashi Iwai	9 years	summary log tree
kernel/git/tiwai/sound.git	Sound sub-system tree	Takashi Iwai	3 hours	summary log tree
kernel/git/tj/cgroup.git	cgroup export tree	Tejun Heo	40 hours	summary log tree
kernel/git/tj/misc.git	miscellaneous kernel branches	Tejun Heo	8 months	summary log tree
kernel/git/tj/sched_ext.git	sched_ext - https://github.com/sched-ext/scx	Tejun Heo	35 hours	summary log tree
kernel/git/tj/wq.git	workqueue export tree	Tejun Heo	37 hours	summary log tree
kernel/git/tmlind/linux-omap.git	OMAP development tree	Tony Lindgren	5 months	summary log tree
kernel/git/tnguy/firmware.git	Intel Wired LAN firmware tree	Tony Nguyen	8 days	summary log tree
kernel/git/tnguy/linux.git	Intel Wired LAN tree for shared branch	Tony Nguyen	8 days	summary log tree
kernel/git/tnguy/net-queue.git	Intel Wired LAN patch queue for net	Tony Nguyen	15 hours	summary log tree
kernel/git/tnguy/next-queue.git	Intel Wired LAN patch queue for net-next	Tony Nguyen	14 hours	summary log tree
kernel/git/tobin/leaks.git	leaking_addresses.pl development tree	Tobin C. Harding	4 years	summary log tree
kernel/git/toke/iproute2.git	Unnamed repository; edit this file 'description' to name the repository.	Toke Høiland-Jørgensen	4 years	summary log tree
kernel/git/toke/linux.git	Toke Høiland-Jørgensen's Linux kernel tree	Toke Høiland-Jørgensen	8 months	summary log tree
kernel/git/tonk/linux-dt.git	Unnamed repository; edit this file 'description' to name the repository.	Tomi Valkeinen	17 months	summary log tree
kernel/git/tomba/linux.git	Tomi Valkeinen's kernel tree	Tomi Valkeinen	28 hours	summary log tree


kernel/git/tip/tip.git - Unnamed repository; edit this file 'description' to name the repository. — Mozilla Firefox
kernel/git/tip/tip.git - Unn
https://git.kernel.org/pub/scm/linux/kernel/git/tip/tip.git/
index : kernel/git/tip/tip.git
Unnamed repository; edit this file 'description' to name the repository.
master
switch
TIP group
about
summary
refs
log
tree
commit
diff
stats
log msg
search
Branch
Commit message
Author
Age
master
Merge branch into tip/master: 'x86/timers'
Ingo Molnar
23 hours
sched/core
sched/cpufreq: Use NSEC_PER_MSEC for deadline task
Christian Loehle
3 days
timers/core
ntp: Make sure RTC is synchronized when time goes backwards
Benjamin ROBIN
4 days
perf/core
Merge branch 'perf/urgent' into perf/core, to pick up fixes
Ingo Molnar
4 days
locking/core
locking/rwsem: Move is_rwsem_reader_owned() and rwsem_owner() under CONFIG_DE...
Waiman Long
4 days
perf/urgent
perf/x86/intel: Allow to setup LBR for counting event for BPF
Kan Liang
4 days
locking/urgent
jump_label: Fix static_key_slow_dec() yet again
Peter Zijlstra
4 days
sched/rt
riscv: Allow to enable PREEMPT_RT.
Sebastian Andrzej Siewior
5 days
core/debugobjects
debugobjects: Remove redundant checks in fill_pool()
Zhen Lei
5 days
irq/core
genirq: Use cpumask_intersects()
Costa Shulyupin
6 days
[...]
Tag
Download
Author
Age
x86_sgx_for_6.12-rc1
tip-x86_sgx_for_6.12-rc1.tar.gz
Dave Hansen
3 days
x86_bugs_for_v6.12_rc1
tip-x86_bugs_for_v6.12_rc1.tar.gz
Borislav Petkov (AMD)
5 days
x86_cpu_for_v6.12_rc1
tip-x86_cpu_for_v6.12_rc1.tar.gz
Borislav Petkov (AMD)
5 days
x86_sev_for_v6.12_rc1
tip-x86_sev_for_v6.12_rc1.tar.gz
Borislav Petkov (AMD)
5 days
ras_core_for_v6.12_rc1
tip-ras_core_for_v6.12_rc1.tar.gz
Borislav Petkov (AMD)
5 days
x86_microcode_for_v6.12_rc1
tip-x86_microcode_for_v6.12_rc1.tar.gz
Borislav Petkov (AMD)
5 days
v6.11-rc7
tip-6.11-rc7.tar.gz
Linus Torvalds
6 days
timers_urgent_for_v6.11_rc7
tip-timers_urgent_for_v6.11_rc7.tar.gz
Borislav Petkov (AMD)
6 days
perf_urgent_for_v6.11_rc7
tip-perf_urgent_for_v6.11_rc7.tar.gz
Borislav Petkov (AMD)
6 days
locking_urgent_for_v6.11_rc7
tip-locking_urgent_for_v6.11_rc7.tar.gz
Borislav Petkov (AMD)
6 days
[...]
Age
Commit message
Author
Files
Lines
23 hours
Merge branch into tip/master: 'x86/timers'
HEAD
master
Ingo Molnar
5
-35/+48
23 hours
Merge branch into tip/master: 'x86/splitlock'
Ingo Molnar
9
-412/+431
23 hours
Merge branch into tip/master: 'x86/sgx'
Ingo Molnar
1
-13/+21
23 hours
Merge branch into tip/master: 'x86/sev'
Ingo Molnar
2
-65/+69
23 hours
Merge branch into tip/master: 'x86/platform'
Ingo Molnar
1
-1/+0
23 hours
Merge branch into tip/master: 'x86/mm'
Ingo Molnar
20
-60/+664
23 hours
Merge branch into tip/master: 'x86/misc'
Ingo Molnar
7
-466/+1100
23 hours
Merge branch into tip/master: 'x86/microcode'
Ingo Molnar
1
-33/+159
23 hours
Merge branch into tip/master: 'x86/fred'
Ingo Molnar
11
-64/+111
23 hours
Merge branch into tip/master: 'x86/fpu'
Ingo Molnar
5
-2/+109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sched/rt
switch
TIP group
about
summary
refs
log
tree
commit
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search
Age
Commit message (Expand)
Author
Files
Lines
5 days
riscv: Allow to enable PREEMPT_RT. sched/rt
Sebastian Andrzej Siewior
1
-0/+1
5 days
arm64: Allow to enable PREEMPT_RT.
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x86: Allow to enable PREEMPT_RT.
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Merge branch 'for-6.11-fixup' into for-next
Petr Mladek
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printk: Export match_devname_and_update_preferred_console()
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1
-20/+63
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printk: nbcon: Assign nice -20 for printing threads
John Ogness
2
-0/+12
10 days
printk: Implement legacy printer kthread for PREEMPT_RT
John Ogness
3
-18/+159
10 days
tty: sysfs: Add nbcon support for 'active'
John Ogness
1
-1/+1
10 days
proc: Add nbcon support for /proc/consoles
John Ogness
1
-2/+3
10 days
proc: consoles: Add notation to c_start/c_stop
John Ogness
1
-0/+2
10 days
printk: nbcon: Show replay message on takeover
John Ogness
4
-0/+40
10 days
printk: Provide helper for message prepending
John Ogness
1
-11/+25
10 days
printk: nbcon: Rely on kthreads for normal operation
John Ogness
3
-7/+84
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printk: nbcon: Use thread callback if in task context for legacy
John Ogness
3
-45/+59
10 days
printk: nbcon: Relocate nbcon_atomic_emit_one()
John Ogness
1
-39/+39
10 days
printk: nbcon: Introduce printer kthreads
Thomas Gleixner
4
-0/+420
10 days
printk: nbcon: Init @nbcon_seq to highest possible
John Ogness
2
-1/+9
10 days
printk: nbcon: Add context to usable() and emit()
John Ogness
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printk: Flush console on unregister_console()
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printk: Fail pr_flush() if before SYSTEM_SCHEDULING
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printk: Use the BITS_PER_LONG macro
Jinjie Ruan
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2024-08-21
lockdep: Mark emergency sections in lockdep splats
John Ogness
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rcu: Mark emergency sections in rcu stalls
John Ogness
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-0/+16
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panic: Mark emergency section in oops
John Ogness
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-0/+2
2024-08-21
panic: Mark emergency section in warn
Thomas Gleixner
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-0/+4
2024-08-21
printk: nbcon: Implement emergency sections
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2024-08-21
printk: Add helper for flush type logic
John Ogness
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-41/+112
2024-08-21
printk: Coordinate direct printing in panic
John Ogness
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printk: Track nbcon consoles
John Ogness
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printk: Avoid console_lock dance if no legacy or boot consoles
John Ogness
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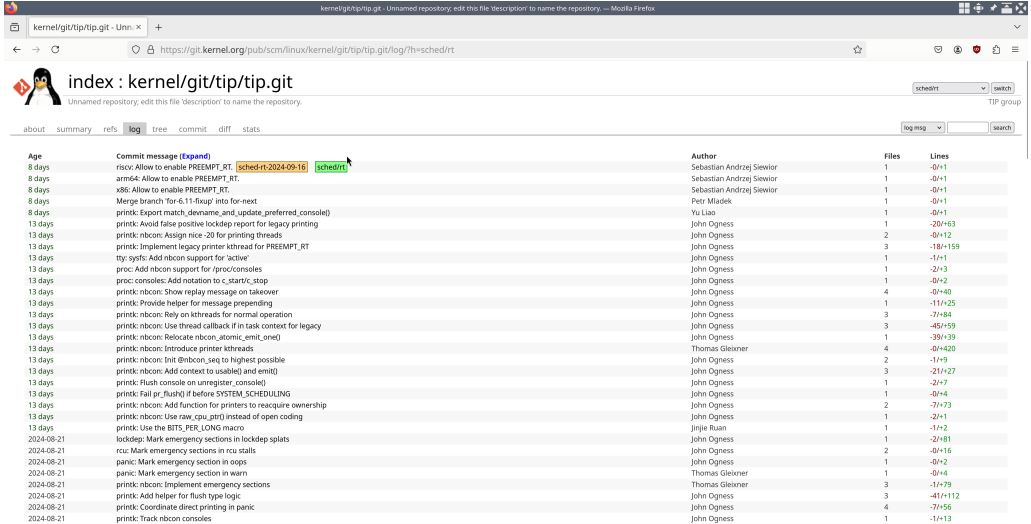
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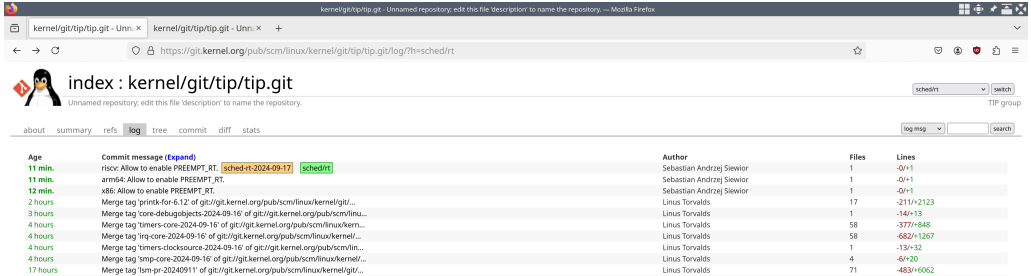
1
-5/+34
2024-08-21
printk: nbcon: Add unsafe flushing on panic
John Ogness
3
-7/+31
2024-08-21
printk: Flush nbcon consoles first on panic
John Ogness
1
-0/+3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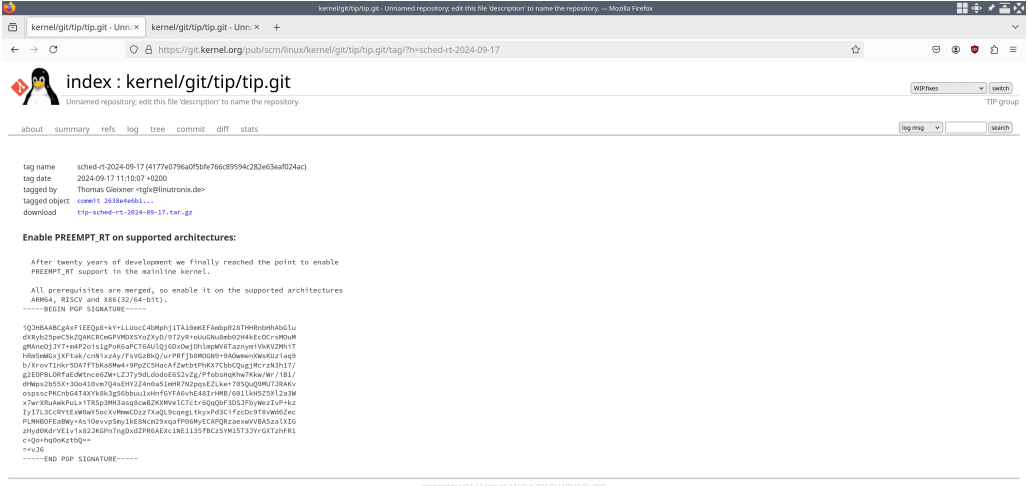
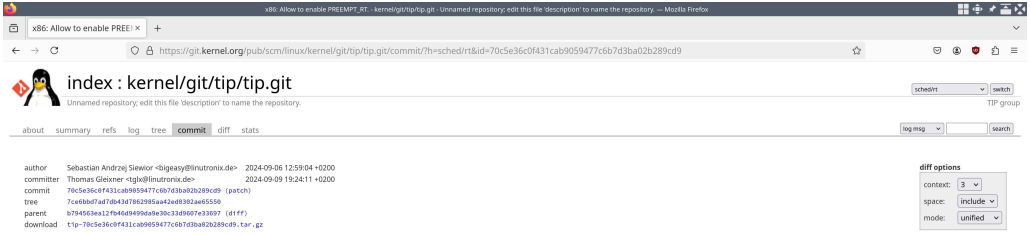
kernel/git/tip/tip.git - Unn
kernel/git/tip/tip.git - Unn
https://git.kernel.org/pub/scm/linux/kernel/git/tip/tip.git/log/?h=sched/rt
index : kernel/git/tip/tip.git
Unnamed repository; edit this file 'description' to name the repository.
sched/rt
switch
TIP group
about
summary
refs
log
tree
commit
diff
stats
log msg
search
Age
Commit message (Expand)
Author
Files
Lines
11 min. riscv: Allow to enable PREEMPT_RT. sched-rt-2024-09-17 sched/rt Sebastian Andrzej Siewior 1 -0/+1
11 min. arm64: Allow to enable PREEMPT_RT. Sebastian Andrzej Siewior 1 -0/+1
12 min. x86: Allow to enable PREEMPT_RT. Sebastian Andrzej Siewior 1 -0/+1
2 hours Merge tag 'printk-for-6.12' of git://git.kernel.org/pub/scm/linux/kernel/git/... Linus Torvalds 17 -211/+2123
3 hours Merge tag 'core-debugobjects-2024-09-16' of git://git.kernel.org/pub/scm/linu... Linus Torvalds 1 -14/+13
4 hours Merge tag 'timers-core-2024-09-16' of git://git.kernel.org/pub/scm/linux/kern... Linus Torvalds 58 -377/+848
4 hours Merge tag 'irq-core-2024-09-16' of git://git.kernel.org/pub/scm/linux/kernel/... Linus Torvalds 58 -682/+1267
4 hours Merge tag 'timers-clocksource-2024-09-16' of git://git.kernel.org/pub/scm/lin... Linus Torvalds 1 -13/+32
4 hours Merge tag 'smp-core-2024-09-16' of git://git.kernel.org/pub/scm/linux/kernel/... Linus Torvalds 4 -6/+20
17 hours Merge tag 'lsm-pr-20240911' of git://git.kernel.org/pub/scm/linux/kernel/git/... Linus Torvalds 71 -483/+6062
18 hours Merge tag 'selinux-pr-20240911' of git://git.kernel.org/pub/scm/linux/kernel/... Linus Torvalds 8 -76/+68
18 hours Merge tag 'audit-pr-20240911' of git://git.kernel.org/pub/scm/linux/kernel/gi... Linus Torvalds 3 -4/+4
19 hours cifs: Remove redundant setting of NETFS_SREQ_HIT_EOF David Howells 1 -2/+0
19 hours cifs: Fix cifs readv callback merge resolution issue David Howells 1 -1/+1
21 hours Merge tag 'for-6.12/io_uring-discard-20240913' of git://git.kernel.dk/linux Linus Torvalds 10 -24/+209
22 hours Merge tag 'for-6.12/block-20240913' of git://git.kernel.dk/linux Linus Torvalds 64 -1301/+1711
22 hours Merge tag 'for-6.12/io_uring-20240913' of git://git.kernel.dk/linux Linus Torvalds 20 -260/+723
22 hours Merge tag 'erofs-for-6.12-rc1' of git://git.kernel.org/pub/scm/linux/kernel/g... Linus Torvalds 12 -299/+544
22 hours Merge tag 'for-6.12-tag' of git://git.kernel.org/pub/scm/linux/kernel/git/kda... Linus Torvalds 65 -1597/+1583
22 hours Merge tag 'affs-for-6.12-tag' of git://git.kernel.org/pub/scm/linux/kernel/gi... Linus Torvalds 2 -3/+2
23 hours Merge tag 'vfs-6.12.netfs' of git://git.kernel.org/pub/scm/linux/kernel/git/v... Linus Torvalds 42 -1986/+3523
24 hours Merge tag 'vfs-6.12.mount' of git://git.kernel.org/pub/scm/linux/kernel/git/v... Linus Torvalds 6 -13/+197
26 hours Merge tag 'vfs-6.12.procfs' of git://git.kernel.org/pub/scm/linux/kernel/git/... Linus Torvalds 6 -13/+127
26 hours Merge tag 'vfs-6.12.fallocate' of git://git.kernel.org/pub/scm/linux/kernel/g... Linus Torvalds 7 -187/+258
26 hours Merge tag 'vfs-6.12.file' of git://git.kernel.org/pub/scm/linux/kernel/git/vf... Linus Torvalds 33 -271/+744
26 hours Merge tag 'vfs-6.12.folio' of gitolite.kernel.org:pub/scm/linux/kernel/git/vf... Linus Torvalds 83 -1064/+994
27 hours Merge tag 'vfs-6.12.misc' of gitolite.kernel.org:pub/scm/linux/kernel/git/vfs... Linus Torvalds 66 -310/+662
27 hours Merge tag 'thermal-6.12-rc1' of git://git.kernel.org/pub/scm/linux/kernel/git... Linus Torvalds 36 -928/+1160
27 hours Merge tag 'pm-6.12-rc1' of git://git.kernel.org/pub/scm/linux/kernel/git/rafa... Linus Torvalds 63 -407/+1416
28 hours Merge tag 'acpi-6.12-rc1' of git://git.kernel.org/pub/scm/linux/kernel/git/ra... Linus Torvalds 66 -607/+1561
28 hours Merge tag 'for-linus-non-x86' of git://git.kernel.org/pub/scm/virt/kvm/kvm Linus Torvalds 62 -408/+4039
28 hours Merge tag 'cmpxchg.2024.09.15a' of git://git.kernel.org/pub/scm/linux/kernel/... Linus Torvalds 6 -2/+12
28 hours Merge tag 'arm64-upstream' of git://git.kernel.org/pub/scm/linux/kernel/git/a... Linus Torvalds 125 -891/+3393
28 hours Merge tag 'mips_6.12' of git://git.kernel.org/pub/scm/linux/kernel/git/mips/l... Linus Torvalds 13 -161/+6
28 hours Merge tag 'x86_sgx_for_6.12-rc1' of git://git.kernel.org/pub/scm/linux/kernel... Linus Torvalds 1 -13/+21


kernel/git/tip/tip.git - Unnamed repository; edit this file 'description' to name the repository. — Mozilla Firefox
kernel/git/tip/tip.git - Unn
kernel/git/tip/tip.git - Unn
https://git.kernel.org/pub/scm/linux/kernel/git/tip/tip.git/tag/?h=sched-rt-2024-09-17
index : kernel/git/tip/tip.git
Unnamed repository; edit this file 'description' to name the repository.
WIP.fixes
switch
TIP group
about summary refs log tree commit diff stats
log msg
search
tag name sched-rt-2024-09-17 (4177e0796a0f5bfe766c89594c282e63eaf024ac)
tag date 2024-09-17 11:10:07 +0200
tagged by Thomas Gleixner <tglx@linutronix.de>
tagged object commit 2638e4e6b1...
download tip-sched-rt-2024-09-17.tar.gz
Enable PREEMPT_RT on supported architectures:
After twenty years of development we finally reached the point to enable PREEMPT_RT support in the mainline kernel.
All prerequisites are merged, so enable it on the supported architectures ARM64, RISCV and X86(32/64-bit).
-----BEGIN PGP SIGNATURE-----
1QJHBAABCgAxFiEEQp8+kY+LLUocC4bMphj1TA10mKEFAmbpR28THHRnbHhAbG1u
dXRyb25peC5kZQAKCRCmGPVMDXSYoZXyD/972yR+oUuGNu8mbO2H4kEcOCrsMOuM
gMAnmOj3Y7+mAP2ot1gPoKGaPCT6AUlQ5QkvOwjQhlmgWV6TazxymtVkKVZMhtT
hRm5mWGxJXFtak/cnN1xzAy/FsVGzBkQ/urPRfjb8MOGN9+9AOWmenXWsKUz1aq9
b/XrovTlnkrSOA7fTbKa8Mw4+9PpZC5HacAfZwtbtPhKX7CbbCQugjMcrzN3h17/
gZEOP8LORfaEdWtnce6ZW+LZJ7y9dLdoGoE6S2vZg/PfGbsHpKhw7KkW/Wr/tBl/
dHWps2b55X+3Oo410vm7Q4sEHY2Z4n0a5ImHR7N2pqsEZLke+705QuQ9MU7JRAKv
ospsscPKCnbG4T4XYk8k3g5GbbuuIxHnfGYFA6vhE4bIrHMB/G0IlkH5Z5Xl2a3W
x7wrXRuWaKPuLxTRSp3MH3asq8cwBZK4KVelCTctrGQuQOFJO5JFbyWezIvP+kz
IyI7L3CcRYtExW8WY5ocXvMmwCDzz7XaQL9cqegLtkyxPd3CifzcDc9T8vW06Zec
PLMHBOFEaBWy+As1OevvpSmy1kE8Ncm29xqafPO6MyECAPQRzaexaWVVBA5zalXIG
zHyd0KdrVEiv1x82JKGPn7ngDxdZPR6AEXciNE1i35fBCz5YRlST3JV/GXTzhFR1
c+Qo+hqOoKztbQ==
=+vJ6
-----END PGP SIGNATURE-----
generated by cgit 1.2.3-korg (git 2.43.0) at 2024-09-17 09:16:03 +0000


x86: Allow to enable PREEMPT_RT. - kernel/git/tip/tip.git - Unnamed repository; edit this file 'description' to name the repository. — Mozilla Firefox
x86: Allow to enable PREE
https://git.kernel.org/pub/scm/linux/kernel/git/tip/tip.git/commit/?h=sched/rt&id=70c5e36c0f431cab9059477c6b7d3ba02b289cd9
index : kernel/git/tip/tip.git
Unnamed repository; edit this file 'description' to name the repository.
sched/rt
switch
TIP group
about summary refs log tree commit diff stats
log msg
search
author Sebastian Andrzej Siewior <bigeasy@linutronix.de> 2024-09-06 12:59:04 +0200
committer Thomas Gleixner <tglx@linutronix.de> 2024-09-09 19:24:11 +0200
commit 70c5e36c0f431cab9059477c6b7d3ba02b289cd9 (patch)
tree 7ce6bbd7ad7db43d7862985aa42ed8392ae65550
parent b794563ea12fb46d9499da9e30c33d9607e33697 (diff)
download tip-70c5e36c0f431cab9059477c6b7d3ba02b289cd9.tar.gz
diff options
context: 3
space: include
mode: unified
x86: Allow to enable PREEMPT_RT.
It is really time.
x86 has all the required architecture related changes, that have been
identified over time, in order to enable PREEMPT_RT. With the recent
printk changes, the last known road block has been addressed.
Allow to enable PREEMPT_RT on x86.
Signed-off-by: Sebastian Andrzej Siewior <bigeasy@linutronix.de>
Signed-off-by: Thomas Gleixner <tglx@linutronix.de>
Link: https://lore.kernel.org/all/20240906111841.562402-2-bigeasy@linutronix.de
Diffstat
-rw-r--r-- arch/x86/Kconfig 1
1 files changed, 1 insertions, 0 deletions
diff --git a/arch/x86/Kconfig b/arch/x86/Kconfig
index 007bab9f2a0e39..8768d38396bdad 100644
--- a/arch/x86/Kconfig
+++ b/arch/x86/Kconfig
@@ -122,6 +122,7 @@ config X86
select ARCH_USES_CFI_TRAPS if X86_64 && CFI_CLANG
select ARCH_SUPPORTS_LTO_CLANG
select ARCH_SUPPORTS_LTO_CLANG_THIN
+ select ARCH_SUPPORTS_RT
select ARCH_USE_BUILTIN_BSWAP
select ARCH_USE_CMPXCHG_LOCKREF if X86_CMPXCHG64
select ARCH_USE_MEMTEST

PREEMPT_RT related problems

- The local-BH lock is worked on
  - locking/local_lock: Add local nested BH locking infrastructure. merged into v6.11-rc1.
  - More audit/ work is outstanding based on that.
- ARM, PowerPC i915 need to be carried along. Same for PREEMPT_AUTO.
- printk: atomic console support for 8250 and other, more driver.
- Anything else?

Thank you for your attention

Special thanks to the Linux Foundation for supporting our efforts to bring PREEMPT_RT mainline.

<bigeasy@linutronix.de>