

2.6.3-mjb2

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2004-02/7749.html>

From: Martin J. Bligh (mbligh_at_aracnet.com)

Date: 02/29/04

Date: Sat, 28 Feb 2004 23:54:58 -0800
To: linux-kernel <linux-kernel@vger.kernel.org>

The patchset is meant to be pretty stable, not so much a testing ground.
Main differences from mainline are:

1. Better performance & resource consumption, particularly on larger machines.
2. Diagnosis tools (kgdb, early_printk, etc).
3. Updated arch support for AMD64 + PPC64.
4. Better support for sound, especially OSS emulation over ALSA.
5. Better support for video (v4l2, bttv, ivtv).
6. Kexec support.

I'd be very interested in feedback from anyone willing to test on any platform, however large or small.

<ftp://ftp.kernel.org/pub/linux/kernel/people/mbligh/2.6.3/patch-2.6.3-mjb2.bz2>

Since 2.6.3-mjb1 (~ = changed, + = added, - = dropped)

Notes:

Now in Linus' tree:

Dropped:

- gcov Hubertus / Paul Larson
- gcov_warning_fix
 - Breaks vmware build
- sysfs_backing_store1 Maneesh Soni
- sysfs_backing_store2 Maneesh Soni
- sysfs_backing_store3 Maneesh Soni
- sysfs_backing_store4 Maneesh Soni
- sysfs_backing_store5 Maneesh Soni
- sysfs_backing_store6 Maneesh Soni
 - John Stultz was seeing a panic on x440.

Linux-Kernel: 2.6.3-mjb2

- vsyscall_gtod_B2 John Stultz
Panics init on NUMA-Q with 4/4 split.

New:

- ~ sched_domains Nick Piggin
Updated to the patchset in 2.6.3-mm4
- + ivtv Kevin Thayer / Steven Fuerst
Driver for ivtv (includes Hauppauge PVR 250 / 350)
Written by Kevin Thayer, ported to 2.6 by Steven Fuerst
- + aio_cancel_fix IBM
AIO support
- + aio_pipe IBM
AIO support
- + raw Badari
Support many raw devices.

Pending:

local_balance_exec
reluctance in cross-node balance (less_bouncy)
sched tunables patch
emulex update
NUMA membinding API
x86_64 update
config_numasched
sched tunables (reinstante)
list_of_lists
Child runs first (akpm)
Netdump

Present in this patch:

- mjb Martin J. Bligh
Add a tag to the makefile
- netpoll Jeff Garzik / mpm
Polled net drivers for kgdb et al.
- kgdb Various
Stolen from akpm's 2.6.0-mm1, includes fixes
- kgdboe_netpoll Matt Mackall et al.
Kgdb over ethernet support that works with the netpoll infrastructure
- kgdboe_build_fix Andrew Morton
Fix kgdboe stuff so non-ia32 platforms build

kgdb_x86_64 Jim Houston
Support kgdb on x86_64

kgdb_gdb6_patches Jim Houston
Patches for gdb to support kgdb on x86_64, under scripts/kgdb/

ppc64_reloc_hide Anton Blanchard / Paul Mackerras
PPC 64 fixups

spinlock_inlining Andrew Morton & Martin J. Bligh
Inline spinlocks for profiling. Made into a ugly config option by me.

lockmeter John Hawkes / Hanna Linder
Locking stats.

lockmeter_ia64 Ray Bryant
Add a config option for lockmeter on ia64

oops_dump_preceding_code Andrew Morton
dump opcodes preceding and after the offending EIP.

4g4g Ingo Molnar
Provide a 4G/4G user/kernel split for 32 bit memory luses.

4g_zap_low_mappings Martin Lorenz
stop zap_low_mappings from being __init

4g4g_locked_copy Dave McCracken
Fix locking bug in 4/4 split

lotsa_sds Badari
Enable lots of scsi disks

build_options_on_oops Andrew Morton
Print out the build options when we oops.

sched_domains Nick Piggin
sched_domains code

sched_balance_fix Rick Lindsley
Fix balancing problem in the sched domains code.

early_printk Dave Hansen / Keith Mannthey
Allow printk before console_init

confighz Andrew Morton / Dave Hansen
Make HZ a config option of 100 Hz or 1000 Hz

config_page_offset Dave Hansen / Andrea
Make PAGE_OFFSET a config option

Linux–Kernel: 2.6.3–mjb2

numameminfo Martin Bligh / Keith Mannthey

Expose NUMA meminfo information under /proc/meminfo.numa

partial_objrmap Dave McCracken

Object based rmap for filebacked pages.

tcp_speedup Martin J. Bligh

Speedup TCP (avoid double copy) as suggested by Linus

disable preempt Martin J. Bligh

I broke preempt somehow, temporarily disable it to stop accidents

aiofix2 Mingming Cao

fixed a bug in ioctx_alloc()

config_irqbal Keith Mannthey

Make irqbalance a config option

percpu_real_loadavg Dave Hansen / Martin J. Bligh

Tell me what the real load average is, and tell me per cpu.

per_node_rss Matt Dobson

Track which nodes tasks mem is on, so sched can be sensible.

pfn_to_nid Martin J. Bligh

Dance around the twisted rats nest of crap in i386 include.

pfn_valid Martin J. Bligh

Fix pfn_valid to cope with memory holes

no_numa_pc Martin J. Bligh

Disallow NUMA on PC subarch

gfp_node_strict Dave Hansen

Add a node strict binding as a gfp mask option

irqbal_fast Adam Litke

Balance IRQs more readily

kcg Adam Litke

Acylic call graphs from the kernel. Wheeeeeeeeeeeee!

kcg_gcc_detect Adam Litke

Detect older gcc versions that don't work with mcount, and crap out

numa_mem_equals Dave Hansen

mem= command line parameter NUMA awareness.

autoswap Con Kolivas

Auto-tune swapiness

emulex driver Emulex

Driver for emulex fiberchannel cards

multiple_emulex Mike Anderson

Allow multiple Emulex cards

protocol254 Paul Mackerras / Omkhar

Allow protocol 254

slabtune Dave McCracken

Take slab in bigger bites on larger machines

topdown Bill Irwin

Turn userspace upside down for fun & profit

stacktrace Adam Litke

Stack backtracing via frame pointers

fasync_lock_rcu Manfred Spraul

Use RCU for fasync_lock

aio–retry Suparna, Janet, et al.

4g4g–aio–hang–fix

aio–retry–elevated–refcount

aio–splice–runlist

aio–wait–page

aio–fs_read

aio–upfront–readahead

O_SYNC–speedup

aio–O_SYNC

gang_lookup_next

aio–gang_lookup–fix

aio–O_SYNC–short–write

aio–read–immediate

Filesystem AIO support

lazy–readahead–adapt Ram Pai

Improve the readahead algorithm

kexec Eric Biederman et al.

Exec a kernel for breakfast today.

alsa_100rc2 ALSA project

New code drop of sound infrastructure – fixes various bugs.

force_wholefrag Martin J. Bligh et al.

OSS emulation sounds like crap without wholefrag. Revert that change.

lockmeter_notsc Martin J. Bligh

Lockmeter does not require CONFIG_X86_TSC.

Linux–Kernel: 2.6.3–mjb2

smp_boot_id Martin J. Bligh

Fix panic if boot cpu's phys apicid doesn't match expected.

ivtv Kevin Thayer / Steven Fuerst

Driver for ivtv (includes Hauppauge PVR 250 / 350)

Written by Kevin Thayer, ported to 2.6 by Steven Fuerst

tiocgdev Gerd Knorr

distribute_boot_allocs Manfred Spraul

Distribute boot allocations across NUMA nodes

vma_statistics Martin J. Bligh

Provide per VMA stats

schedstats Rick Lindsley

Provide lotsa scheduler statistics

vsyscall_gtod_B2 John Stultz

Vsyscall gettimeofday for faster syscalls

implicit_huge_pages Adam Litke / wli / Brian T.

Implicit huge pages for mmap and shmem

mmu_context_to_struct Adam Litke

Prep to make hugetlb on PPC64 a dynamic area.

hugetlb_dyn_as Adam Litke

Make hugetlb on PPC64 a dynamic area.

irq_vector James Cleverdon

Fix irq vector limits for Summit

aio_cancel_fix IBM

AIO support

aio_pipe IBM

AIO support

raw Badari

Support many raw devices.

–

To unsubscribe from this list: send the line "unsubscribe linux–kernel" in the body of a message to majordomo@vger.kernel.org

More majordomo info at <http://vger.kernel.org/majordomo–info.html>

Please read the FAQ at <http://www.tux.org/lkml/>