

province of the kernel

kyle mcmartin
kyle@redhat.com

red hat, inc.

2009-12-05

the fedora kernel team

reflections about fedora 12

what's new in 2.6.32

what's coming in 2.6.33

linux-next & fedora

what could be coming in 2.6.34

how to get help?

how to help out?

the team

3 full time folks at red hat

- ▶ davej
- ▶ ceibert
- ▶ me

others

community and upstream supported (rht and community)

- ▶ roland
- ▶ dwmw2
- ▶ jarod
- ▶ ajax
- ▶ krh
- ▶ airlied
- ▶ darktama
- ▶ linville
- ▶ ...

perf counters

- ▶ hw performance counters
- ▶ events
- ▶ software events
- ▶ perf top
- ▶ inspecting userspace code

shiny shiny

- ▶ usb3 (xhci)
- ▶ wpan
- ▶ kmemcheck
- ▶ kmemleak
- ▶ fsnotify
- ▶ better intel iommu support (out of tree)

holy moley kms

amazing major work done by airlied, krh, ajax, darktama
out of the box modesetting on most popular graphics

- ▶ intel check (upstream)
- ▶ radeon check (backported)
- ▶ nouveau check (out of tree)

what's new in 2.6.32

rawhide now, f12 very soon, f11 early next week

generic

- ▶ ksm (MADV_MERGEABLE)
- ▶ hwpoison
- ▶ trim/discard (ssd)
- ▶ tracing (perf counters are now perf events)
 - ▶ perf timechart (bootchart)
 - ▶ perf sched (scheduler latency tracing)
 - ▶ tracepoints (syscalls, modules, skb, pagealloc, ...)
- ▶ cgroups soft memory limits
- ▶ dynamic percpu

virt

- ▶ ioeventfd
- ▶ irqfd
- ▶ syscall/sysenter emulation
- ▶ gigabyte pages
- ▶ vmx (real mode)

filesystems

- ▶ btrfs improvements
 - ▶ -ENOSPC
 - ▶ snapshots
 - ▶ deletion
 - ▶ performance
- ▶ ext4
 - ▶ writeback improvements
 - ▶ async commit with barrier
 - ▶ fallocate
- ▶ xfs — alloc speedups (free inode search)

drivers

- ▶ b43 lpphy (dell netbooks and more)
- ▶ ti wl12xx wireless
- ▶ broadcom ssb sdio support
- ▶ r600/r700 modesetting
- ▶ moorestown/simple firmware interface (sfi)
- ▶ mac80211 improvements (background scanning, more wext in cfg80211)
- ▶ vmware vmxnet
- ▶ ath9k (new chipsets), ath5k (hw crypto)
- ▶ video4linux2/dvb improvements
- ▶ acpi4

staging

- ▶ rt3090/rt3070/rt2870
- ▶ htc dream (android phone)
- ▶ hyperv (microsoft virt)

what's next?

linux-next

crystal ball

things which would be really nice...

- ▶ poulsbo?
- ▶ more staging migration
- ▶ rt2xxx/rt3xxx wifi?

how to get help?



how to help out?

