province of the kernel

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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
▶ cebberty
▶ me
community and upstream supported (rht and community)

► roland
► dwmw2
► jarod
► ajax
► krh
► airlied
► darktama
► linville
► ...

others
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, pagealloca, ...)
- 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?