If the box freezes hard with bttv ...
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It might be a bttv driver bug. It also might be bad hardware. It also
might be something else ...

Just mailing me "bttv freezes" isn't going to help much. This README
has a few hints how you can help to pin down the problem.

bttv bugs

If some version works and another doesn't it is likely to be a driver
bug. It is very helpful if you can tell where exactly it broke
(i.e. the last working and the first broken version).

With a hard freeze you probably doesn't find anything in the logfiles.
The only way to capture any kernel messages is to hook up a serial
console and let some terminal application log the messages. /me uses
screen. See Documentation/serial-console.txt for details on setting
up a serial console.

Read Documentation/oops-tracing.txt to learn how to get any useful
information out of a register+stack dump printed by the kernel on
protection faults (so-called "kernel oops").

If you run into some kind of deadlock, you can try to dump a call trace
for each process using sysrq-t (see Documentation/sysrq.txt).
This way it is possible to figure where *exactly* some process in "D"
state is stuck.

I've seen reports that bttv 0.7.x crashes whereas 0.8.x works rock solid
for some people. Thus probably a small buglet left somewhere in bttv
0.7.x. I have no idea where exactly, it works stable for me and alot of
other people. But in case you have problems with the 0.7.x versions you
can give 0.8.x a try ...

hardware bugs

Some hardware can't deal with PCI-PCI transfers (i.e. grabber => vga).
Sometimes problems show up with bttv just because of the high load on
the PCI bus. The bt848/878 chips have a few workarounds for known
incompatibilities, see README.quirks.

Some folks report that increasing the pci latency helps too,
althrought I'm not sure whenever this really fixes the problems or
only makes it less likely to happen. Both bttv and btaudio have a
insmod option to set the PCI latency of the device.

Some mainboard have problems to deal correctly with multiple devices
doing DMA at the same time. bttv + ide seems to cause this sometimes,
if this is the case you likely see freezes only with video and hard disk

access at the same time. Updating the IDE driver to get the latest and
greatest workarounds for hardware bugs might fix these problems.

other

If you use some binary-only yunk (like nvidia module) try to reproduce
the problem without.

IRQ sharing is known to cause problems in some cases. It works just
fine in theory and many configurations. Neverless it might be worth a
try to shuffle around the PCI cards to give bttv another IRQ or make
it share the IRQ with some other piece of hardware. IRQ sharing with
VGA cards seems to cause trouble sometimes. I've also seen funny
effects with bttv sharing the IRQ with the ACPI bridge (and
apci-enabled kernel).