

Re: removable setting

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- *From:* "Anna" <myname@xxxxxxxxxx>
 - *Date:* Wed, 26 Apr 2006 19:51:59 -0400
-

I want to remove a "Hot Swappable" drive as if it was a USB memory stick

--Tony

Todd (or Tony):

First of all, don't be too concerned about potential responders to your query (whatever it might be) "go(ing) off on a tangent". It's really best to provide as much relevant & detailed information as you can re your problem and objective(s) together with the specifics of the software and/or hardware involved. Frankly, it's when the poster **doesn't** provide this kind of information that causes the responders to "go off on a tangent".

Anyway, back to your problem...

If your SATA HD has been designated by its manufacturer that it has "hot-swappable" (more precisely, "hot-pluggable") capability, **and** its controller provides similar capability, then the drive is hot-pluggable in the sense that you can connect or disconnect the drive while the system is running without data loss or corruption or damage to the drive. While there's no need to access Device Manager or other internal XP process, the user should check his/her BIOS to determine if there's any element that bears on hot-plugging (hot-swapping) and set that element accordingly.

In addition to the preceding, the SATA specifications for "hot-plugging" call for:

1. Power to the SATA HD be through its 15-pin SATA power connector and **not** the Molex connector, and,
2. That the power and signal/data cables be **simultaneously** connected/disconnected.

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It would seem that the only practical way this could be achieved is through the use of mobile racks designed for SATA HDs whereby the removable tray can simply be inserted or removed in the rack to effect these simultaneous connects/disconnects.

One other consideration...

SATA native hot plug as defined by the specification requires the use of the 15-pin SATA power connector, *not* the 4-pin Molex power plug commonly used to connect IDE devices and frequently found on SATA HDs alongside the SATA power connector. Furthermore, the specification also calls for a requirement that the power signal cables be connected/disconnected *simultaneously* in order for native SATA hot plugging to be supported. (In our case, we accomplish this by mounting the external SATA HDs in the removable tray/caddy in mobile racks so a simple push or pull on the removable tray's handle simultaneously connects/disconnects both the power/signal cables.)

I have to admit that every SATA-IO HD (the 3 Gb/s data transfer interface) that we've worked with for nearly a year now (including WD, Hitachi, Samsung, and Seagate, all SATA-IO drives) has proven to be hot-pluggable. I would add that in many instances while experimenting with the hot-plugging capability of the afore-mentioned SATA drives while they were connected as external devices, we've connected/disconnected the drives without regard to any simultaneous connection or disconnection of the data & power connectors and we suffered no ill effects that we're aware of in terms of data loss/corruption or damage to the drives. At least none to date. Even in cases where the SATA HD received its power through the Molex plug we didn't run into any problems, but we really did not do extensive testing using that configuration. In nearly every case power was applied to the SATA HD through its 15-pin power connector.

Anna

Hi Anna,

"Todd and Margo Chester" <ToddMargoChester@xxxxxxxxxxxx> wrote in message [news:e2ourg\\$936\\$1@xxxxxxxxxxxxxxxxxxxx](mailto:news:e2ourg$936$1@xxxxxxxxxxxxxxxxxxxx)

Although you did not answer the question, I do appreciate your detailed explanation of how things work. Do you know the answer? If it helps, here is a more detailed description of my system:

My system is also multiboot. My backup drive, the one in question here, has all the gismos needed to pull it in and out (hot swap carrier, hot swap adapter). As a matter of fact, it is very easy to remove and swap drives under Cent OS 4.1 (Linux).

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To remove:

umount /backup

turn the key off and pull the drive out of the carrier

To mount:

insert the drive and turn the key on

mount /backup

It is a total pain in the butt to have to power off W2K-Pro and XP-Pro to swap the drive.

What I want is for this drive to act as a removable drive, like a USB memory stick. That way I can click on the removable drive ejector in the task bar and tell it to eject my removable drive. W98 had such a setting in device manager. It seems to have disappeared in W2K & XP. (P.S., I suspect that "removable" can be forced as a registry setting, but ...)

--Todd

Todd:

As I previously indicated – it would have been much better if, in your original posting, you had furnished the details re your system and your objective, rather than a generalized query that really begs for more information before an intelligent response can be made that will be useful to you.

Be that as it may, here we are...

As I previously indicated, if the SATA HD is specified to be "hot-pluggable" and the SATA controller to which it is connected is also specified to be "hot-pluggable", then the device is "hot-pluggable". Again, this means the device can be connected/disconnected while the system is running with no presumed data corruption/data loss or damage to the drive. Again, please review what I've previously indicated re the *precise* specifications for a SATA HD to be hot-pluggable.

If your SATA HD/controller combination meet the specifications as indicated (as I presume they do from your latest comments), then the device is "hot-pluggable". There is no need, as I previously stated, to invoke any setting in Device Manager. There is no need to use the Safely Remove Hardware icon in the Notification Area (I assume that's what you were referring to as the "removable drive ejector"). You can simply disconnect the drive by turning the keylock of your "carrier" to the OFF position and remove the drive from its removable tray. (I'm assuming the device you're working with is a mobile rack designed for a SATA HD or something similar – you never indicated what this "carrier" is). You perform the reverse operation when connecting the drive. There is no need to power off the machine.

Anna

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