

AHCI FIX (windows wont start-or use achi for SATA drives).txt

for SATA drives you get better performance when in bios the hard drive mode is set to AHCI

problem:
windows 7 wont start. bios may not even start up.

reason:
os doesn't have correct drivers for the hard drive mode the bios is set to.

when does it happen:
when windows boots (new install or typical reboot).

why then:
the drivers were changed or the mode was changed.

Solution

Part 1 (gain access to os immediately):

in bios change the hard drive mode to IDE (windows will have supplied drivers for this mode and so will boot).

if the hang occurs pre bios then you can't make the change in bios.
in that case:
turn machine off and disconnect all power wires.
disconnect the windows hard drive (this removes the conflict).
plug power back in and reboot.
change mode to IDE and save.
turn machine off and disconnect all power wires.
connect back the hard drive.
plug power back in and reboot.

os will run fine here on.

Part 2 (have bios hard drive mode set to AHCI):

tell windows to reset the hard drive mode (this clears windows setting for IDE mode).

in registry, for each value, change the value in the Value Data box to 0 (as shown):

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\msahci ]  
"Start"=dword: 00000000
```

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\pciide]  
"Start"=dword: 00000000
```

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\iaStorV]  
"Start"=dword: 00000000
```

probably only need to do the first one.

click File and exit. reboot and access bios to change hard drive mode to achi.
save and exit and reboot.

windows should boot (not hang as said in the original problem)
windows on boot should install the AHCI drivers.