

## MCE Standby Tool

All recent PCs have the ability to enter low-power states like standby (S1/S3), hibernate (S4) and Away mode. When put in such a state some parts of the system are disabled or running in energy saving mode.

The system will consume far less energy compared to the full operation mode, in some situations just as little or hardly more than when switched off. When needed it can return to full operation mode in just a few seconds.

Running such a low-power state depends heavily on a proper cooperation between the systems hardware, operating system, device drivers and installed applications. Quite often this does not work properly out of the box. The MCE Standby Tool can be very helpfull when it comes to resolving this kind of issues.

Originally the MCE Standby Tool was developed to solve a number of standby issues that occurred on the Windows XP Media Center Edition. This was accomplished by properly configuring the system and actively supporting the sleep transitions.

Nowadays the MCE Standby Tool can perfectly handle other Windows version. The current version might be helpful for sleep issues on the following products:

- Windows XP Media Center Edition
- Windows XP x86 (32 bit) and x64 (64 bit)
- Windows XP embedded
- Windows Server 2003
- Windows Vista x86 and x64, with and without Media Center
- MediaPortal

Other Windows versions are not supported (95, 98, ME) or not tested yet.

By selecting the desired sleep state MST will make all the required power management settings, even some which are normally inaccessible.

The tool also has a number of active features that will help a system handle the power transitions properly. Automatic periodic reboots, closing and restarting of the media center applications and media center idleness detection are just a few examples.

Thousands of users from all over the world are using MST by now. The problems MST solved are quite a few. The following list is just a selection of the problems on which MST might be helpful:

- Not properly going into and out of standby.
- Unable to use the right sleep state (fans keep running).
- Not going back to standby after a scheduled recording or guide update.
- Not (reliably) waking for a scheduled recording.
- Unable to wake from S3 standby using remote.
- Unable to put the system standby by remote.
- Hardware drivers preventing entering standby.
- Black screen of death on resume from standby.
- Blank screen requiring a button press on resume from standby.
- Problematic USB devices at resume.

Just search the web to find out more on MST and how it was useful to others. Good sources of information on MST are: [De Groene Knop](#) (Slick Solutions' home forum), [Australian Media Center Community](#) and [The Green Button](#).

### If standby works as it should (without MST)...

MST can still add some value to media center PCs that enter and return from standby or hibernation properly. The idle detection is optimized for media center use. It's way more accurate for that and has a lot more configuration options compared to Windows own idle detection.

When running MST the media center always returns to the same (user defined) screen when "switched on" instead of returning to the state you left it before closing. This is the way most users expect every day devices to work. Therefore it increases the [WAF](#) significantly.

It has fixes to prevent the system to blank the screen or enter standby unexpectedly when using a non Microsoft remote or right afther the playing of video or music ends.

### What's the use of MST on a non media center PC?

MST can be very helpful in configuring the power management settings. The tool does not have to be installed to do so.

The only reason to install MST on a non media center PC is the standby delay. This may help when the system has difficulties when entering or returning from standby or hibernation.

## Installation

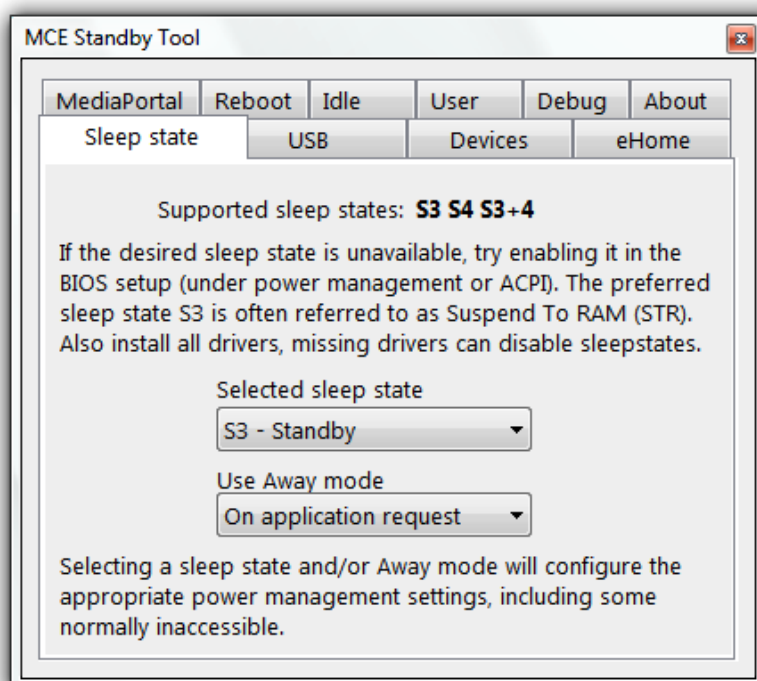
Just run the installer and follow the on-screen instructions. After the reboot a small green standby icon will show up in the task tray. Double-click this icon to further configure the MCE Standby Tool.

## License

MST is free for private use.

In case you are using MST in a commercial environment or building and/or selling media center PCs or parts for them on a commercial base and want to use MST with them or want to use MST for support- or other commercially related purposes please contact me for pricing and conditions.

## Screenshots



### Supported sleep states

These are the sleep states currently supported by the system. This list can be used to verify the support for the desired sleep state (S3 in most cases). If it's not in the list nearly all recent motherboards have the ability to enable the S3 sleep state in the BIOS setup. Search the setup for an option called something like "suspend to RAM", "STR" or "ACPI S3", enable it or select S3. The total lack of sleep states is most of the time caused by missing device drivers.

### Selected sleep state

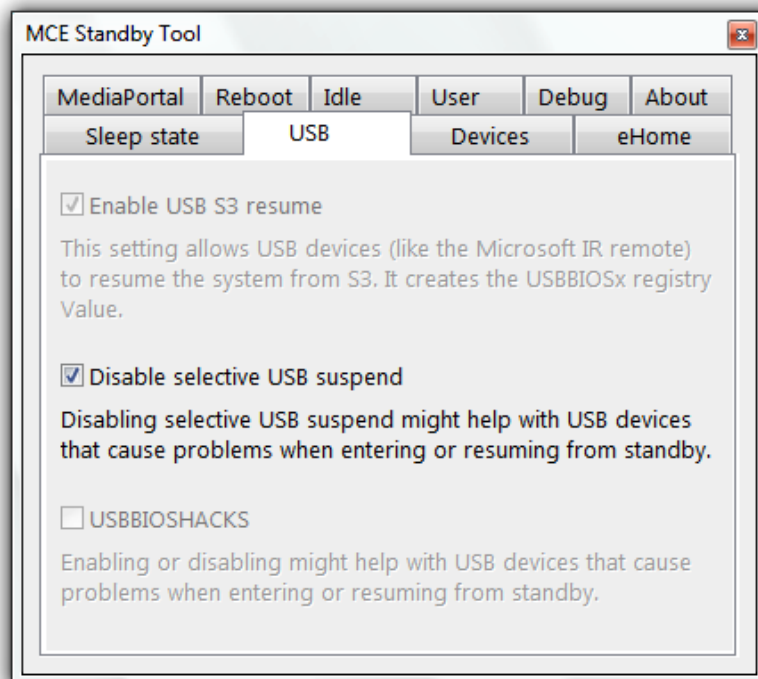
Use this setting to select the desired sleep state. MST will make the appropriate power management settings and create an administrator override (like the MS tool dumpmp.exe does) to force the system to use the selected sleep state when needed.

Most users prefer the S3 sleep state, the power usage is minimal and the system is ready to use within a few seconds. The fans will stop running when the system enters this low power state.

### Use Away mode

Configure the usage of the Away mode here. The best option for most Vista based Media center systems will be "on

application request". Windows XP based systems do not have this option.



### **Enable USB S3 resume (XP only)**

Checking this will enable USB devices to resume the system from standby. For example the Microsoft remote requires this to bring the system out of standby by the remote. This should be checked on almost every MCE system. In case the system wakes directly after putting it to sleep, uncheck this option to see if it's caused by an USB device.

Once "Enable USB S3 resume" is enabled the device manager will show the option "Allow this device to bring the computer out of standby" for the USB devices that can wake the system.

### **Disable selective USB suspend**

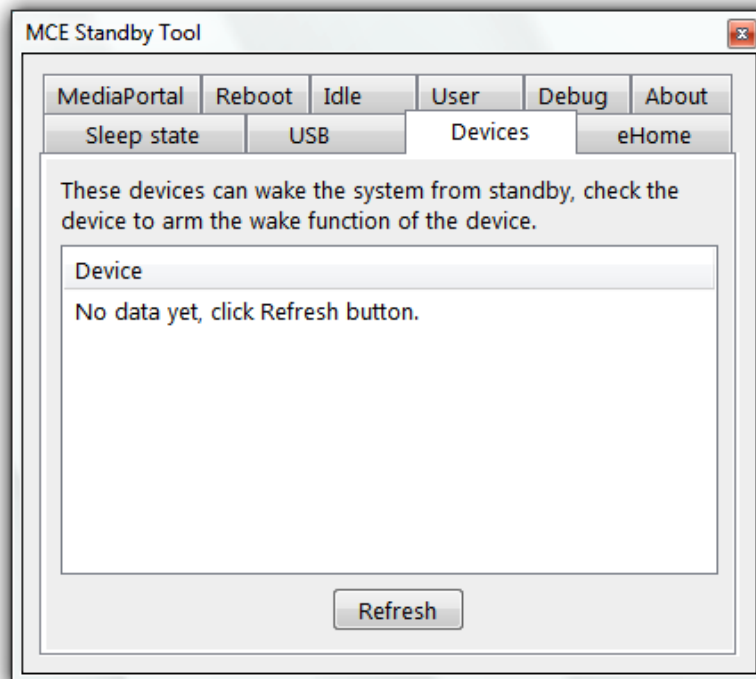
Disabling selective USB suspend might help with devices that cause problems when resuming from standby. The power consumption of some USB devices might increase slightly.

After disabling selective USB suspend the option "Allow the computer to turn off this device to save power" will be disabled (XP) or unchecked (Vista) in the device manager for USB devices.

### **USBBIOSHACKS (XP only)**

This option is officially not supported and Microsoft advises not to use it. In practice it has proven to solve standby problems. On some systems it solves problems when enabled while on other machines it introduces problems. Try both situations to find out if it is useful for your problem.

If USBBIOSHACKS solves your problem, please report the details to me. This way I would like to figure out what it exactly does.



This list shows the devices that can wake the system from standby. Only select the devices you want to use to wake the system. Network cards, (wireless) keyboards and mice are usually responsible for unwanted resumes from standby.

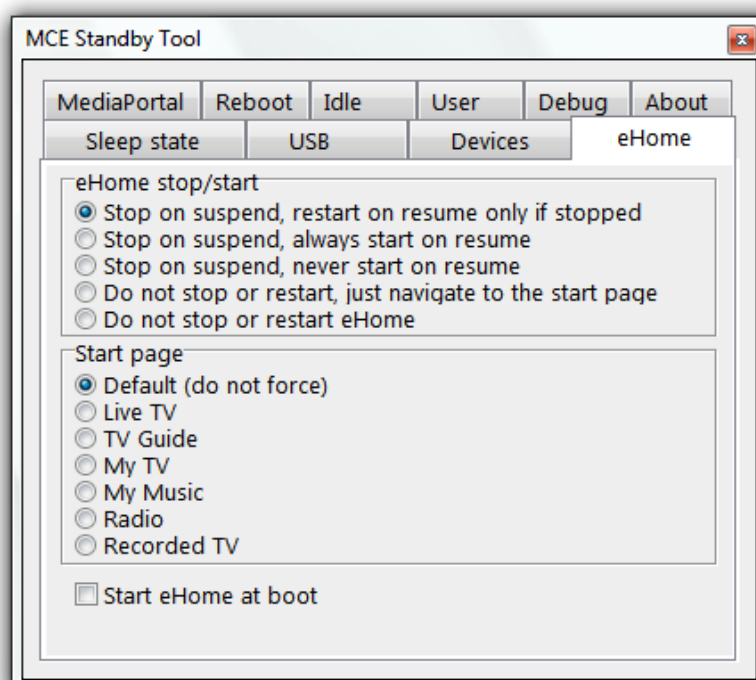
Most network controllers have their own wake on LAN settings, they can be found in the device manager on the advanced settings tab of the device.

Every option in the power settings of the BIOS setup containing "wake" or "resume" is a potential cause of unwanted system resumes as well.

Quite often the PS/2 keyboard and mouse wake settings in the BIOS setup overrule the settings in this tab.

### Refresh

Click this button to refresh the list. This can be required after adding for example an USB device or selecting a new sleep state.



## **eHome stop/start**

When the system suspends MST closes eHome (the actual Media Center application). If eHome is running when waking from standby to perform an automated task (scheduled recording or guide update) eHome often stops the PC from entering standby after this task is done.

A lot of Windows XP MCE users experience this behavior since the installation of the update rollup 2.

The scheduled recordings and guide updates will continue normally, even when eHome is not running. Depending on the primary task of the system a different stop/start strategy can be chosen.

After closing and before restarting eHome MST blanks the screen.

### **Stop on suspend, restart on resume only if stopped (default)**

If eHome was running at the time of entering standby, it will be restarted when resuming.

### **Stop on suspend, always start on resume**

eHome will always be started at resume, no matter if it was running when entering standby. This is the preferred option for dedicated media center systems. Users will never be confronted with the desktop, even after maintenance or reboots.

### **Stop on suspend, never start on resume**

The system will always resume to the desktop. This can be useful when the systems is not primarily a media center.

### **Do not stop or restart, just navigate to the start page**

If it is not required to stop eHome this option can be used to start eHome on a defined page when resuming.

### **Do not stop or restart eHome**

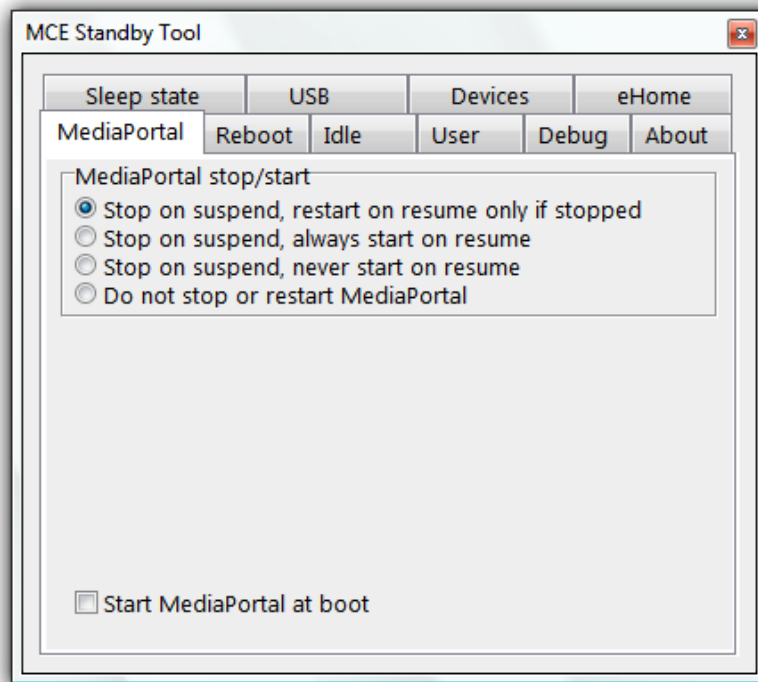
MST will not stop eHome when entering standby.

### **Start Location**

Choose which screen you want to start when resuming from standby.

### **Start eHome at boot (off)**

Start the media center shell after booting the system.



### **MediaPortal stop/start**

When the system is suspended, MST closes MediaPortal. This might improve standby reliability on some systems. Depending on the primary task of the system a different stop/start strategy can be chosen.

After closing and before restarting MediaPortal MST blanks the screen.

#### **Stop on suspend, restart on resume only if stopped (default)**

If MediaPortal was running at the time of entering standby, it will be restarted when resuming.

#### **Stop on suspend, always start on resume**

MediaPortal will always be started at resume, no matter if it was running when entering standby. This is the preferred option for dedicated media center system. Users will never be confronted with the desktop, even after maintenance or reboots.

#### **Stop on suspend, never start on resume**

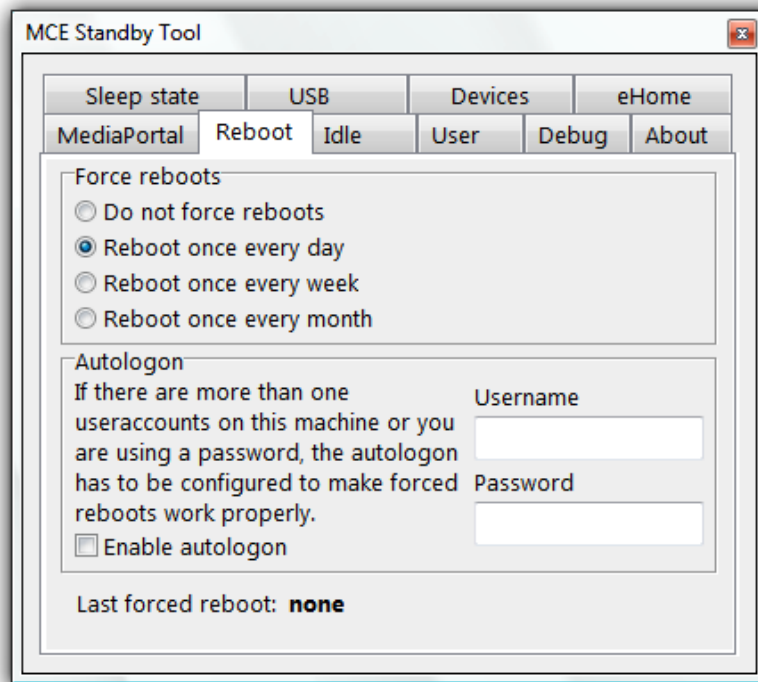
The system will always resume to the desktop. This can be useful when the system is not primary used as a media center.

#### **Do not stop or restart MediaPortal**

MST will not stop MediaPortal when entering standby.

#### **Start MediaPortal at boot (off)**

Start the MediaPortal application after booting the system.



### Force reboots

Select how often your system will be forced to reboot. Running a Windows system for a long period sometimes makes it cranky or even unstable. A reboot now and then will give you a "fresh" system.

When the systems returns to standby after an automated task (guide update or scheduled recording), MST checks if its time for a reboot. If so, it will cancel the standby process and force the system to reboot. When the system comes back up MST puts the system into standby.

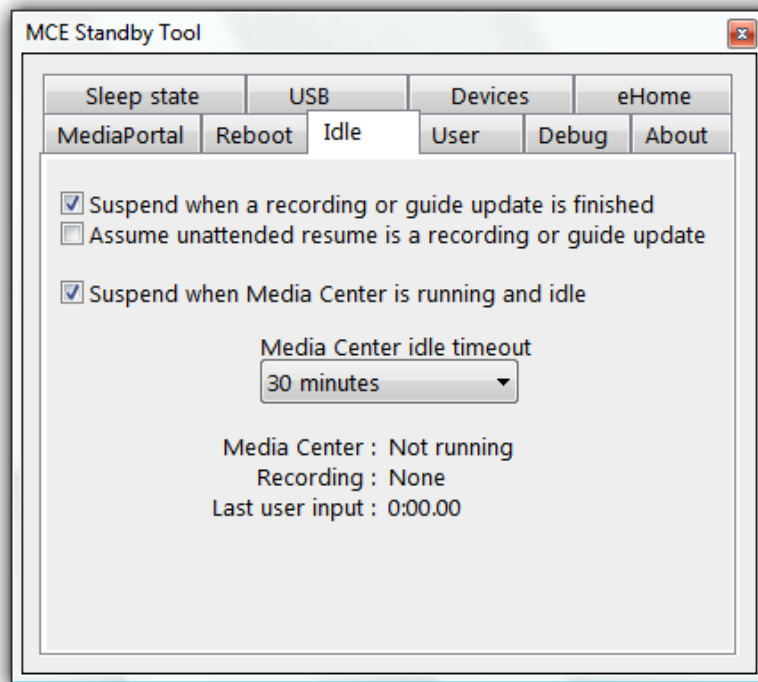
On most systems this means the reboot is done right after the guide update.

Since Windows Vista does no longer have the ability to cancel the standby process a different approach is used. On Vista based systems this option requires the idle detection to be enabled.

### Autologon

When using forced reboots the system should not get stuck in the logon procedure. If you are using a password or multiple user accounts, configure the autologon. Leave the "password" field empty when your account does not have a password.

Be careful, the password will be stored in the registry unencrypted!



The media center idle detection detects Windows media center activity only. Therefore this tab will not be available on MediaPortal only or non media center systems.

#### **Suspend when a recording or guide update is finished (on)**

When the system awakes for an automated task (scheduled recording or guide update) it should return to standby after the task is finished. Unfortunately this is not happening in a lot of situations. By enabling this function MST will detect the task is finished suspend the system anyhow.

#### **Assume unattended resume is a recording or guide update (off)**

When enabled MST treats a resume as a recording or guide update as long as no user activity is detected. This is very useful on systems that are unable to do automatic-resumes. (For example those using hibernate (S4) as sleep state).

Do not use this when the system is used for remote tasks (remote desktop, WebGuide, file/printer server etc.).

#### **Suspend when Media Center is running and idle (on)**

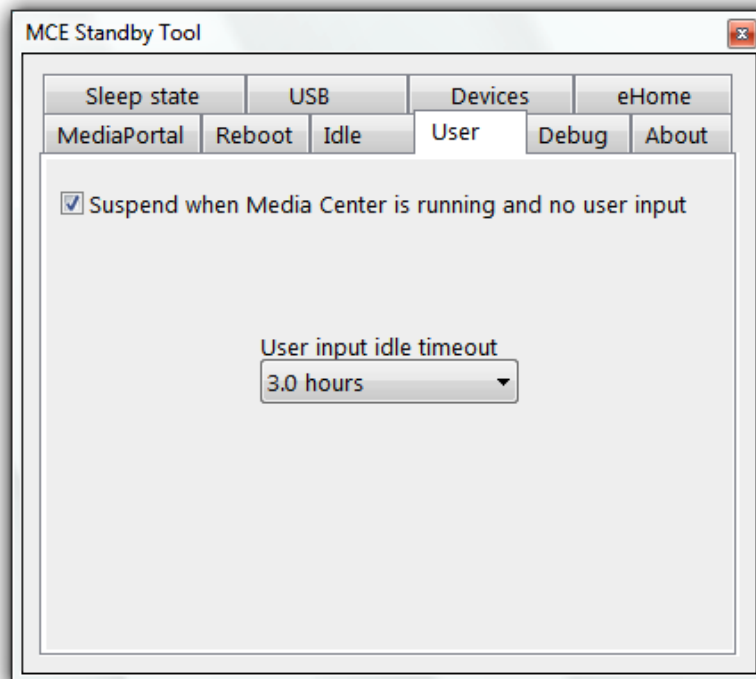
The Windows idle detection is often not able to put a MCE system standby when it is not being used. When the media center application is running and not being used, MST will detect this and put the system standby (after the selected timeout). The buffering of live TV will not stop this from happening, any running recording will be finished.

The use of an extender is not being detected yet. A solution for this is being developed.

#### **Media Center Idle timeout (30 minutes)**

This is the period the media center application has to be inactive before MST suspends the system.





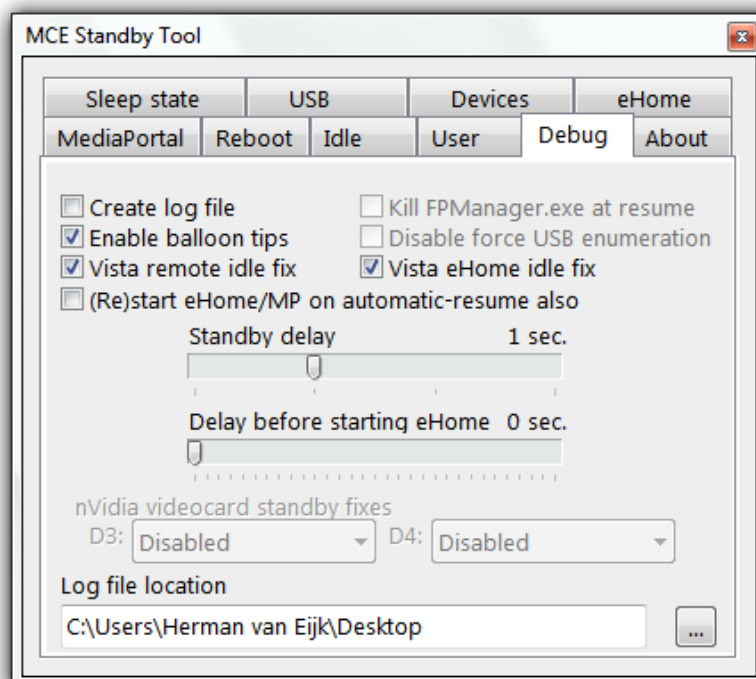
The user idle detection is able to detect recording activity of Windows media center only. Therefore this tab will not be available on MediaPortal only or non media center systems.

### **Suspend when Media Center is running and no user input (on)**

This option will suspend the system when there is no user input detected (keyboard, mouse or remote activity) for a period of time. Typical example scenarios are: the TV/monitor is switched off but the media centre isn't, the user has fell asleep or left the room and forgot to switch off the media center.

### **User input idle timeout (3.0 hours)**

The period of user inactivity before suspending the system. Don't use the lower settings, they are for debugging purposes only.



## **Debug**

These options can be helpful when isolating the cause of standby problems. Here you can find some options which still are in a experimental stage also.

### **Create log file (unchecked)**

By checking this option, the file "MST Log.txt" will be generated on the desktop. The information in this file is very useful when investigating standby problems.

### **Enable balloon tips (checked)**

After closing and before restarting eHome the screen will be blanked. Unchecking this will prevent the system from showing balloontips that might disturb the black screen.

### **Vista remote idle fix**

For several non Microsoft IR remotes the keystrokes are not properly registered when running Vista. The windows idle detection still kicks in and it's impossible to return from the monitor-off situation by pressing a key on the remote. Checking this will enable a workaround for this issue.

### **(Re)start eHome/MP on automatic resume also (unchecked)**

Normally eHome and MediaPortal are not being restarted when the system wakes for an automatic resume. Checking this starts the applications at automatic resume also. Some (tuner card) drivers and tools require this to work properly.

### **Kill FPManger.exe at resume (unchecked)**

On some Intel barebone based systems (Paradigit Enjoy TV2005) this might fix a improper functioning display at resume.

### **Disable Force USB enumeration (unchecked)(XP only)**

Could possibly fix problematic USB devices at resume.

Please report if this option is of any use. When there are no reports this option will be removed from MST.

### **Vista eHome idle fix**

When playing media Windows Vista might blank the screen or enter standby directly after the media has ended or is being interrupted by another application or user activity. Checking this will activate a fix for this issue.

### **Standby delay (XP 5 sec./ Vista 1 sec.)**

When te system enters standby it will be delayed for the selected time. This might solve problems which arise when resuming the system.

If closing eHome manually works OK and closing it automatically does not, adding a delay might work. Increase it on slow systems (Athlon XP 2000+ and below).

Caution: setting the Standby Delay too low (0 or 1 sec.) might cause missed recordings on XP MCE systems!

### **Delay before starting eHome (0 sec.)**

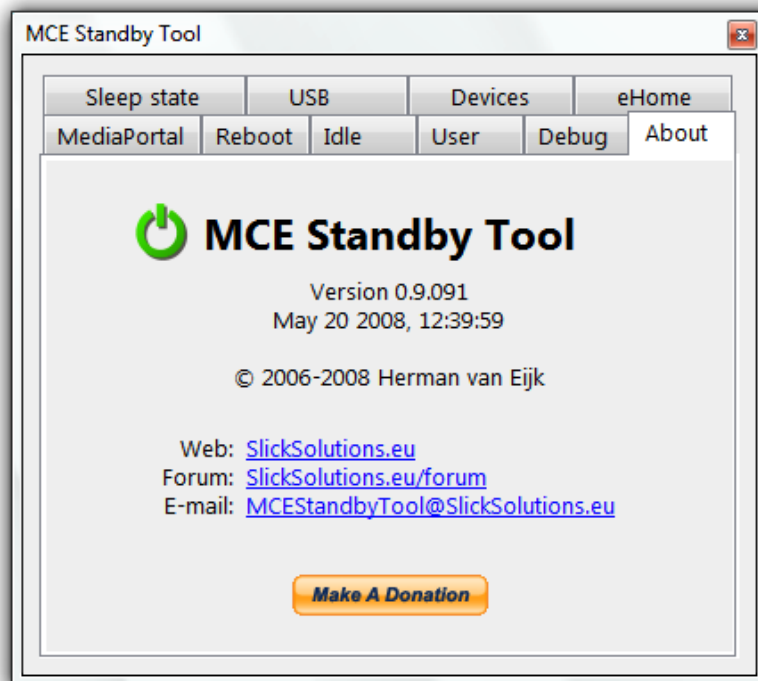
Wait the selected time before starting eHome or MediaPortal after resuming form standby. This might solve problems with starting eHome or MediaPortal. For example the "Your video card or drivers are not compatible with Media Center" error.

### **nVidia videocard standby fixes (Disabled)**

These setting control which low power state the video card uses during suspend. Selecting a different low power state might solve issues like black screens on resume.

### **Logfile Location (desktop)**

Here the MST log files will be stored.



## About

The usual version information, links, e-mail and of course the option to donate.