Fujitsu Siemens Comments on Draft 2 Version 5.0 ENERGY STAR Computer Specification
9/26/08

Small Scale Server

Definition
We believe the definition does not exactly fit the market :
"not designed to process information for other systems or run web servers as a primary function".
A small server (print spooling, wikis, recording, ..) does process information for other systems.
Our small scale server do extend the list of OS listed : we would support **Win Server 2003**, Win Small Biz Server, ….
With current OS list, we would only qualify with our HomeServer.
128 MB Graphics for a server function seems not fit typical server applications - Small Scale Servers are mostly head/gfx-less
or support only limited Graphics functionality.

Test Procedure - Idle Mode testing OS impact

A way of getting **consistent result with Windows Vista**

Power measurement for EPA „Idle Mode Testing" is done 15 minutes after boot for 5 minutes.
There is also an hint regarding "one-time/periodic processes" under UUT Preparation.

88 7. If necessary, run the initial operating system setup and allow all preliminary file indexing and other
89 one-time/periodic processes to complete.
(For more detail see "Test Procedure - DT and NB Categories" under
http://www.energystar.gov/index.cfm?c=revisions.computer_spec)

Vista preinstalled on an typical computer system has plenty of such "one-time/periodic processes" in the first days of usage especially when many "Languages Packs" are included.
During our investigation we found that rather often tasks like "LPRemove", "Windows Search", "Volume Shadow Copy", "SuperFetch", "Defender" or "Windows Error Reporting" causing system activity which leads to significant increase of power consumption. The result is that measurement results are not consistent.

Taking into consideration what EPA already proposes for "UUT Preparation" in would recommend to define following steps for Vista:

Vista Preparation for UUT:

1) Modify Power Management Settings in order to prevent automatic Standby

2) Run following commands a least twice
Following commands will start IdleTasks immediately and start deleting of unwanted "Language Packs" from multilingual preloads. Reboot is necessary to complete that downstream setup processes.
For more information see http://www.microsoft.com/whdc/system/sysperf/Vista_perf.mspx.

Start /wait Rundll32.exe advapi32.dll,ProcessIdleTasks

Start /wait LPRemove
shutdown /r /t 300
----

3) Run following commands to disable background tasks (reboot needed)
We recommend to disable following services which sometimes cause some
system load randomly:
"Windows Search", "Volume Shadow Copying", "SuperFetch", "Windows Update",
"Windows Defender", "Windows Error Reporting"

```
sc config Wsearch       start= disabled
sc config vss          start= disabled
sc config SysMain       start= disabled
sc config wuauserv      start= disabled
sc config WinDefend     start= disabled
sc config WerSvc        start= disabled
```

Notebooks

We do support the presented Idea of **more/different categories** to account for lower end (e.g. Netbooks) and
higher end Notebooks (High Performance, discrete Graphics) apart from the mainstream notebooks with integr. Graphics.
Allowances for specific functionalities would help to keep user choices.
This will definitely be more end-user friendly and beneficial for the Energy Star Program.

Thin Clients

We fully support the suggestion of the introduction for **more categories** for Thin Clients.
The spec should account for low end Thin Clients and also for more capable Thin Clients which support
multimedia apps and better graphics.
We appreciate the re-evaluation of the low power modes.

I hope these comments are helpful and still in time to be considered.

We will work on providing more input and some more data on certain product segments until next week.

Thanks a gain for hosting this meeting today.

Best Regards
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