Updating your Windows NT 4.0 operating system to provide APM Support

Summary

SoftLINK's ability to power on or off your client computers relies on the whether the client hardware and operating system is configured and is able to support Advanced Power Management (APM). In order to use SoftLINK's power on function, a Wake-on-LAN enabled network card is also required.

Windows NT 4.0 did not originally provide APM Support. APM Support was introduced to NT 4.0 in Service Pack 4, so it may be necessary to update your Windows NT operating system to provide this support for your computer. This article explains how to properly update your Windows NT 4.0 Clients to work with SoftLINK's Power Management functions.

Details

Advanced Power Management support within Windows NT is done through the Hardware Abstraction Layer (HAL). An updated HAL.DLL (named HAL.DLL.SOFTEX) is available in NT 4.0 Service Pack 4 and higher. You need to extract this file from the service pack and install it manually as it is not installed when the service pack is applied.

To obtain the HAL.DLL.SOFTEX (HALMPS.DLL.SOFTEX for multi processor systems) run the service pack executable of the service pack that is currently installed with the command line parameter /X . This will extract all the files in the service pack to a temporary directory without actually installing them. You will find HAL.DLL.SOFTEX and HALMPS.DLL.SOFTEX among the extracted files.

To install the updated HAL.DLL on a client workstation:

Create an Emergency Repair Disk.
Run the Service Pack 4 executable SP4I386.EXE from a command line with the parameter /X.
When prompted, specify a temporary directory to extract the Service Pack files to.
Rename WINNT\SYSTEM32\HAL.DLL to HAL.OLD.
For Single processor systems copy the extracted file HAL.DLL.SOFTEX to WINNT\SYSTEM32 and rename it HAL.DLL.
For Multi processor systems copy the extracted file HALMPS.DLL.SOFTEX to WINNT\SYSTEM32 and rename it HAL.DLL.
Shutdown and Restart the workstation.