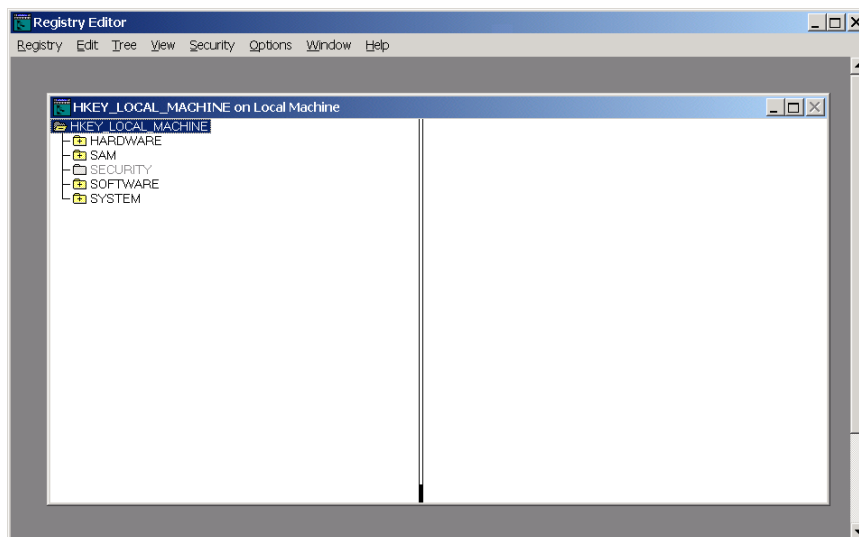**Windows 2000/XP PCMCIA I/O Driver De-Installation**

Under certain circumstances, it may be necessary to uninstall the PCMCIA I/O driver. This may be to correct a faulty driver installation or to install a newer version of the PCMCIA I/O driver. Unfortunately, the standard Windows 2000/XP Add/Remove Hardware Wizard does not remove all elements of the PCMCIA I/O driver so it is necessary to perform a number of manual operations to completely remove all elements of the driver.

The manual steps involve:
- Editing the Windows 2000/XP Registry
- Deleting selected files.

The following section provides a step-by-step procedure for performing the tasks to remove the driver.
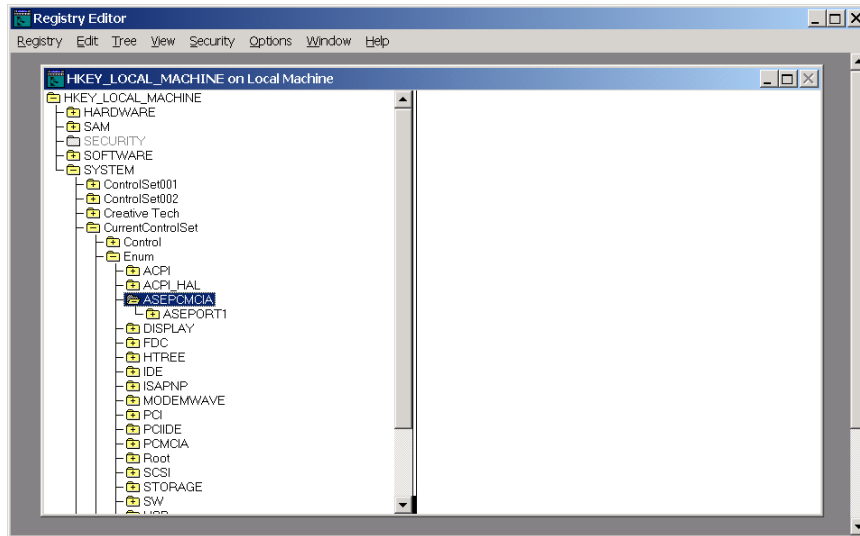
1. From the Windows Start menu, select Run and enter the program name *regedt32*. (Note: The old Registry Edit program, *regedit*, is available for viewing the Registry contents but does not have the full editing capabilities required for this operation.)

2. Minimize all the windows except the window labeled HKEY_LOCAL_MACHINE. All the Registry editing will be performed in this window. The *regedt32* program presents the Registry contents in a tree-structured format so the elements of the Registry to be edited or deleted will be referenced using "path" notation.

3. Locate the entry:

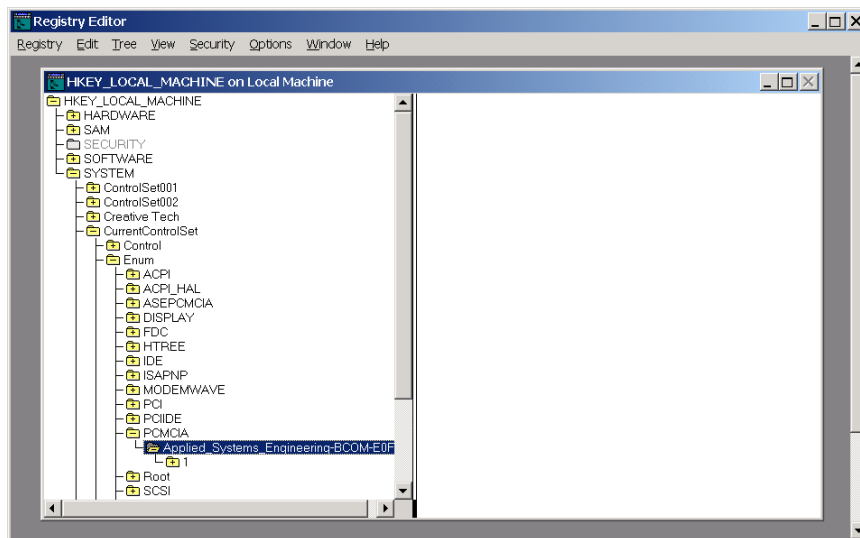HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\ASEPCMCIA

and delete it.

4. Locate the entry:
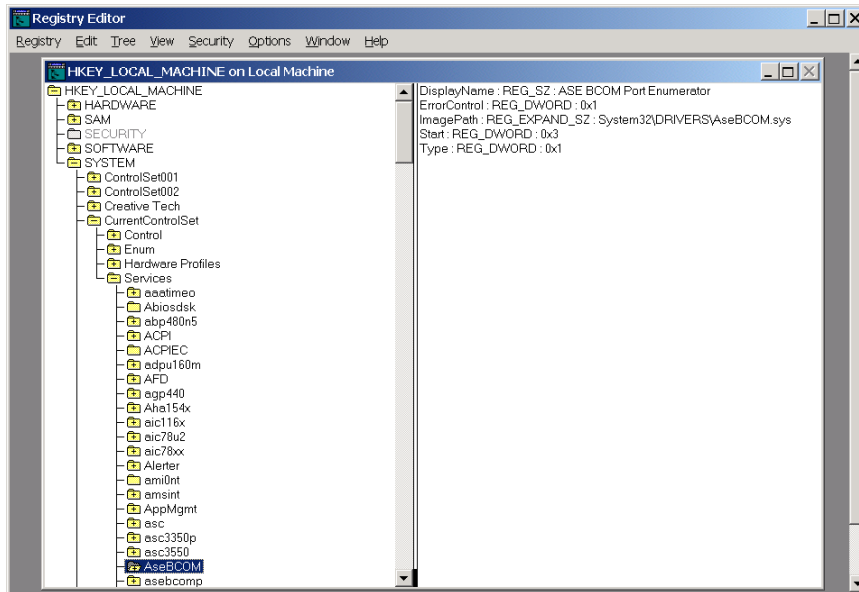
   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\PCMCIA

   and expand it by double clicking on the name, PCMCIA. There should be one or more entries under PCMCIA beginning "Applied Systems Engineering…". Delete each entry beginning "Applied Systems…."

5. Locate the entry:

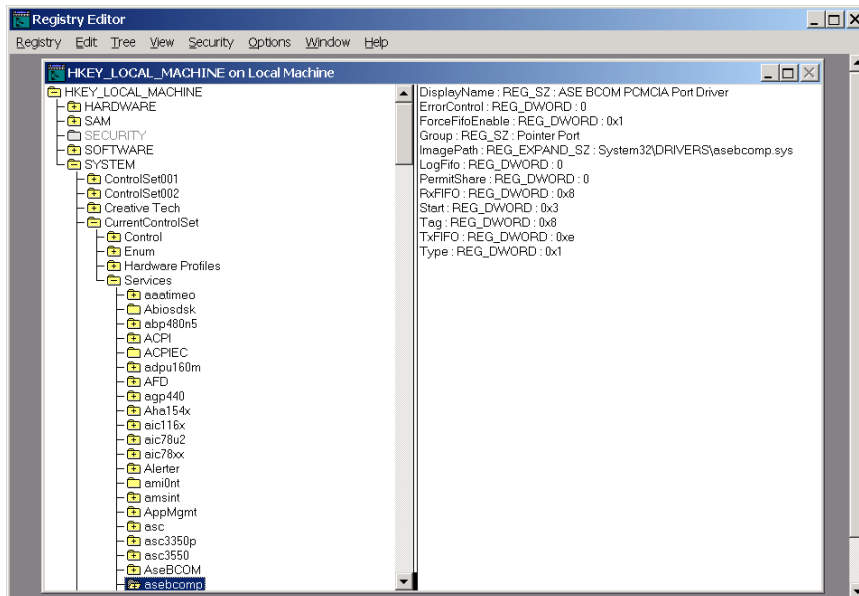   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\AseBCOM

and delete it.

6. Locate the entry:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\asebcomp
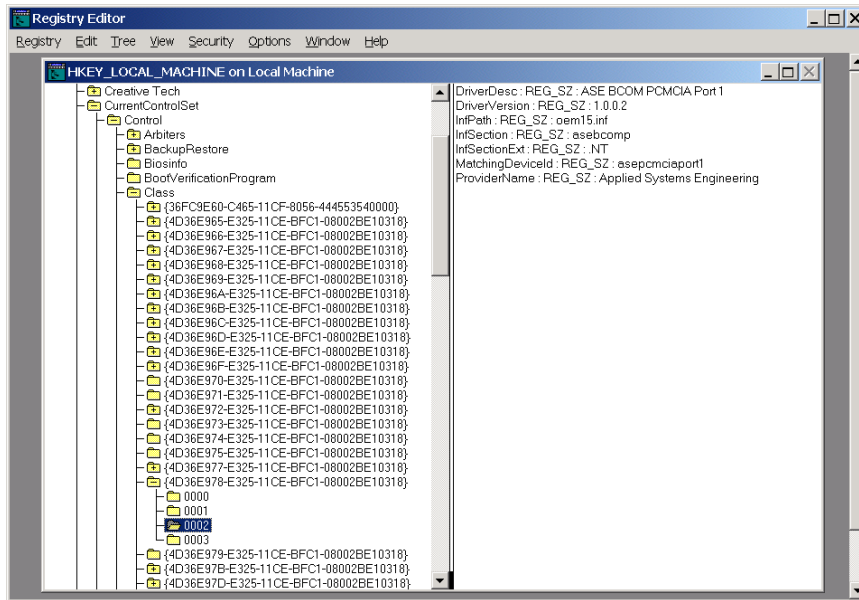
   and delete it.

7. Locate the entry:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Class

and expand it by double clicking on the name Class. This will expose a long list of alphanumeric class IDs. Locate the entry
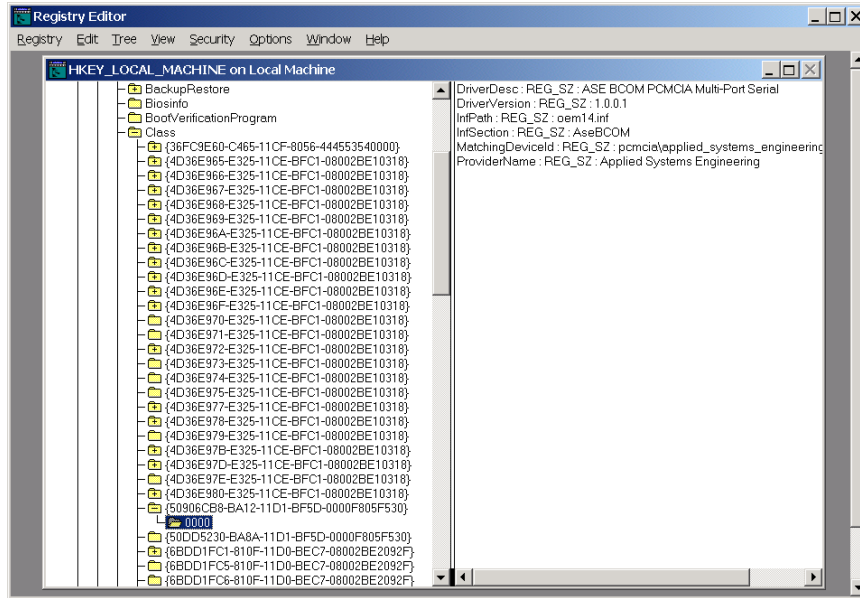
{4D36E978-E325-11CE-BFC1-08002BE10318}

This is the entry for "Ports (COM & LPT)". Double-click on the name to expose the next lowest levels. The lowest level elements will appear as: 0000, 0001, 0002, 0003, etc. There is one entry for each serial and parallel port. Double-click on each low level element to locate the entries containing a **ProviderName** value of "Applied Systems Engineering". For these entries, record for later use, the file name specified in **InfPath.** The file name will be in the form oem*xx*.inf, where *xx* is a numeric value. This is the name of the driver information file that will be deleted later. After the driver information file name has been recorded, delete the entry. There will be one entry per port, normally a total of two.

Next, locate the entry

{50906CB8-BA12-11D1-BF5D-0000F805F530}

This is the entry for "Multi-port Serial Adapters". Double-click on the name to expose the next lowest levels. The lowest level elements will appear as: 0000, 0001, 0002, 0003, etc. There is one entry for each Multi-port Serial Adapter. Double-click on each low level entry to locate the entry containing a **ProviderName** value of "Applied Systems Engineering". Record for later use, the file name specified in **InfPath.** The file name will be in the form oem*xx*.inf, where *xx* is a numeric value. This is the name of the driver information file that will be deleted later. After the driver information file name has been recorded, delete the entry.
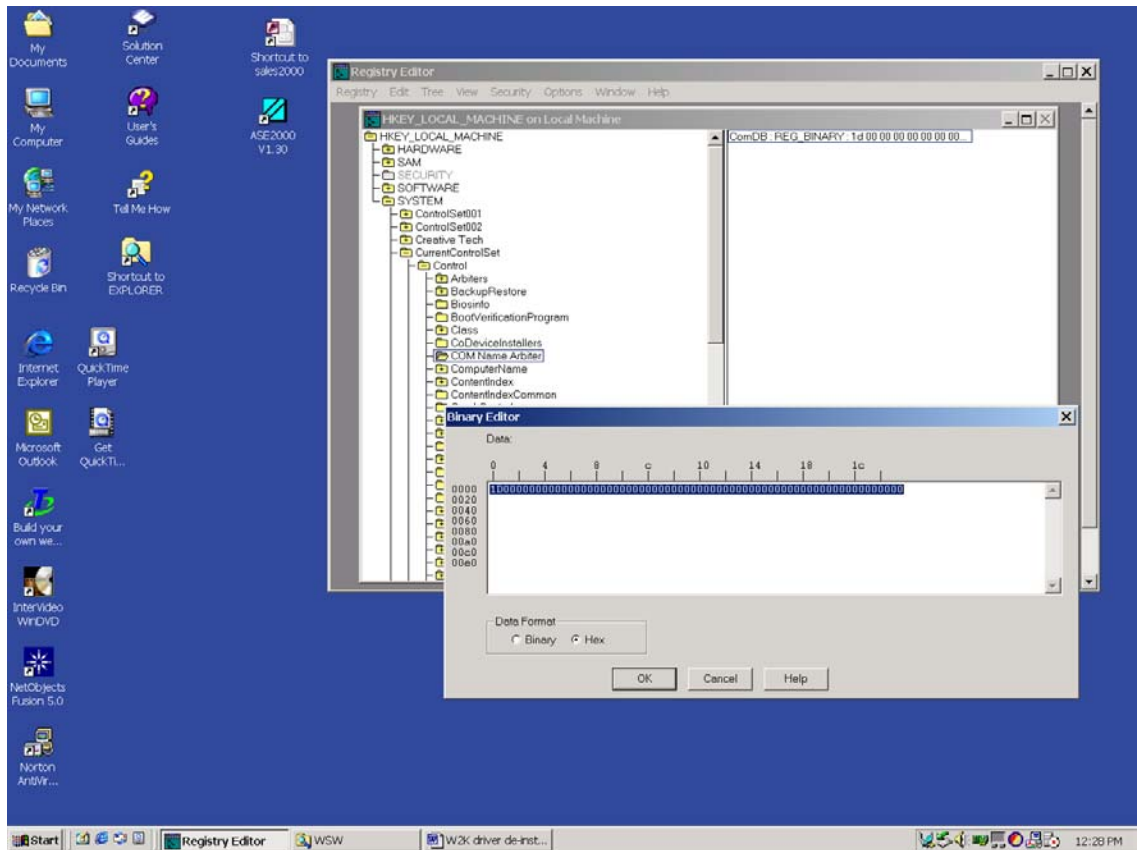
8. Locate the entry:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\COM Name Arbiter

   When this entry is selected, the contents will be displayed in the right pain of the window. The contents are identified with the name **"ComDB"** and the contents are displayed as a series of hex bytes. The contents are interpreted as a bit mask with each bit representing a possible COM port number. A one (1) in the mask indicates that the COM port number has been reserved. This bit mask must be edited to un-reserve the COM port numbers assigned to the PCMCIA channels. The following example shows a **ComDB** value of [1d 00 00 00 00 00 00 00 00 …] This indicates that COM ports 1, 3, 4, and 5 are assigned to existing devices. The leftmost byte contains the mask for COM ports 1 – 7, the adjacent byte contains the mask for COM ports 8 – 15 and so on. Since the ASE PCMCIA card was assigned COM ports 4 and 5, these bits must be re-set to zero as part of the deinstall process. The bit position to COM port number mapping is as follows:

Bit Position							
7	6	5	4	3	2	1	0
COM Port Assignment							
8	7	6	5	4	3	2	1

   To change the contents of the mask, double-click on **ComDB** line to launch the Binary Editor window. Using the mouse, highlight the byte(s) to be modified and type the new values. In the example described above, the value of the first byte is changed from 1d to 05 to un-reserve COM ports 4 and 5.
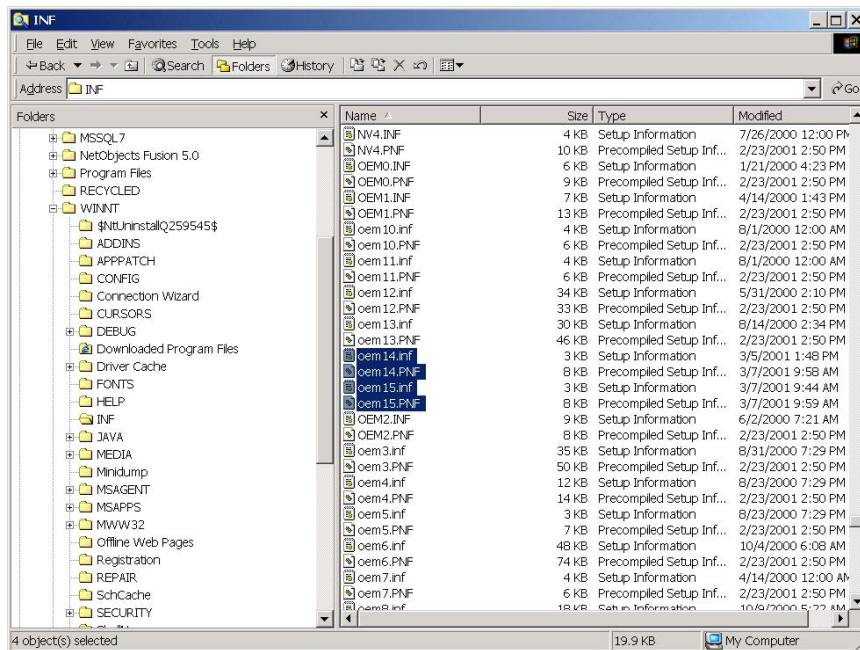
9. This concludes the Registry editing portion of the procedure. Next, Windows Explorer will be used to locate and delete driver information files and the actual driver files.

10. Launch Windows Explorer and open the folder:

- "C:\WINNT\INF" for Windows 2000
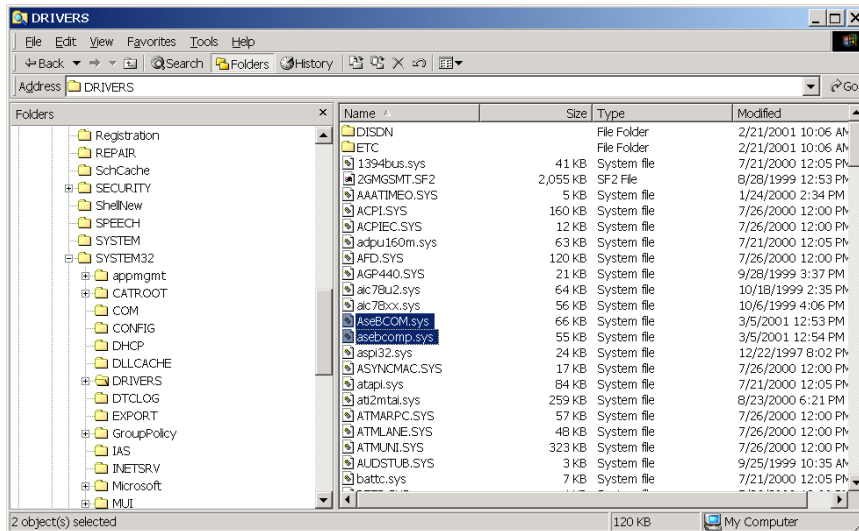- "C:\WINDOWS\INF" for Windows XP

11. Within the INF folder, locate and delete all the Driver Information Files identified in step 7 above. NOTE: There will be two files with different file name extensions for each name. For example, the Driver Information File **oemxx** will have the files **oemxx.PNF** and **oemxx.INF**. Delete both files.

12. Open the folder:
- "C:\WINNT\SYSTEM32\DRIVERS" for Windows 2000
- "C"\WINDOWS\SYSTEM32\DRIVERS" for Windows XP

13. Locate the files AseBCOM.sys and asebcomp.sys. Delete both files.

At this point, the ASE PCMCIA I/O driver should have been completely removed from the system.

To re-install the driver, eject the PCMCIA card if it is currently in the machine and re-insert it. This will trigger the Windows Hardware Install Wizard. Follow the on-screen instructions to perform the installation.