

Remove All DeviceMaster Devices and Drivers

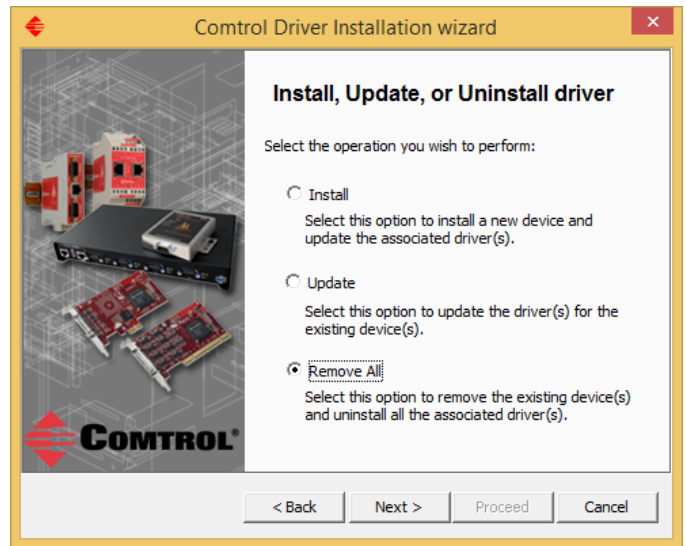
If you have a pre-existing driver that you wish to remove, use these instructions when recommended by your Control Technical Support Representative.

When removing your DeviceMaster with the intent of reinstalling or installing a current driver, start by getting the following basic information from each DeviceMaster found in Control Drivers Management Console. (If you do not have a Control Drivers Management Console then go to the Windows Device Manager > Multi-port serial adapters > DeviceMaster.) Collect the following information: 1) The MAC address, 2) The IP address, and 3) The com numbers assigned with the appropriate ports settings (IE: RS Mode, and any other selected options). This information will be used to configure the new drivers to maintain the same MAC, IP and port settings to avoid having to re-arrange serial cables or change settings in your application. Updating an existing driver will not interfere with these settings. **It is highly recommended NOT to use the update procedure with drivers prior to version 11.XX due to the new features in this driver/firmware combination, but instead, removal of pre-existing drivers and a fresh install of this driver is strongly recommended.**

Keep in mind that whenever a system is changed, it is always a good idea to have a full backup for recovery purposes should something undesirable take place. See your Microsoft documentation for instructions on backing up your registry and/or system hard drive.



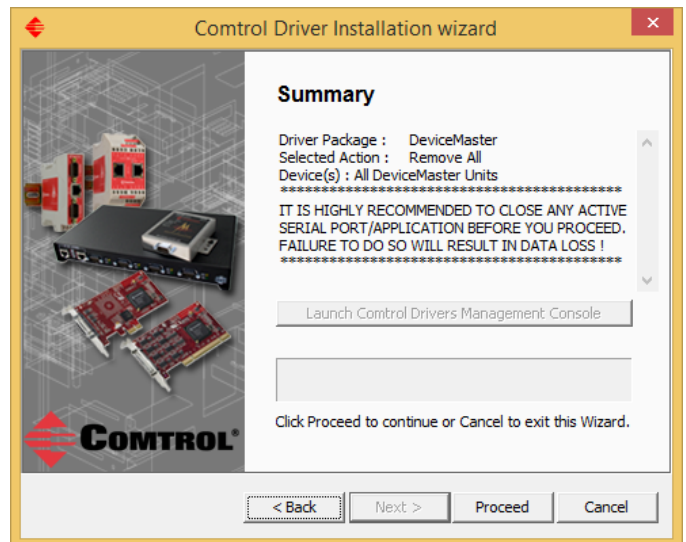
This is the removal of a pre-existing driver, so select the Option to "Remove All"



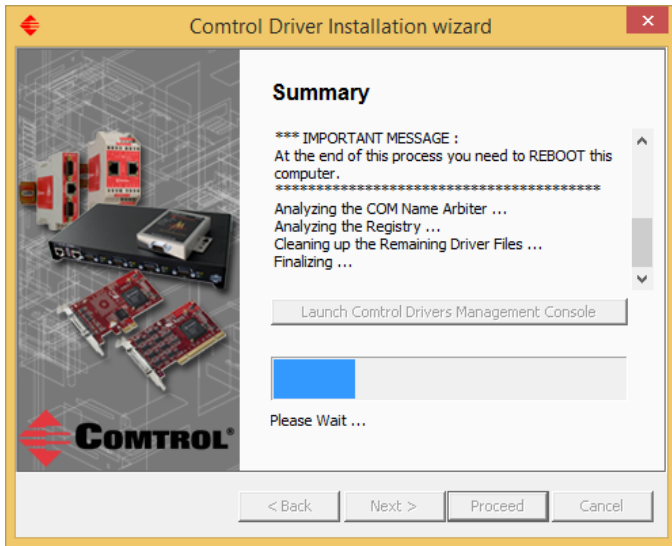
Click Next



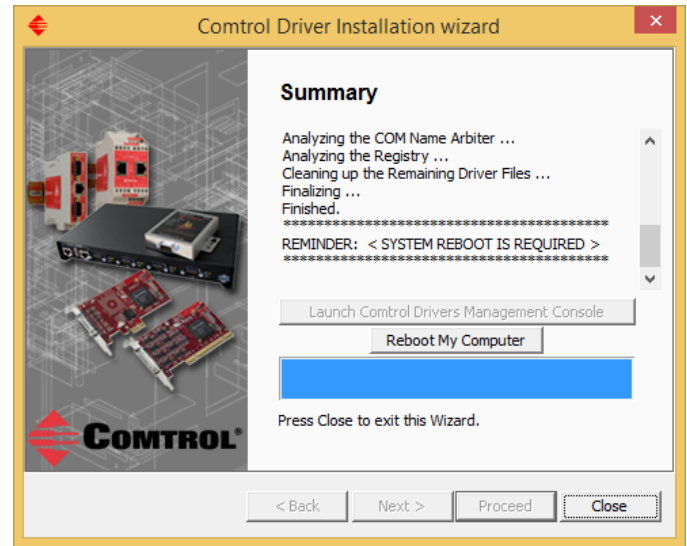
Information page. Click "Next"



Confirmation page: Click "Proceed"

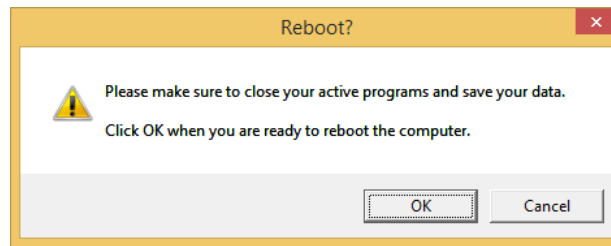


Summary page



Click the "Reboot My Computer" to reboot now.

Click "Close" to exit the wizard and manually reboot the PC later.

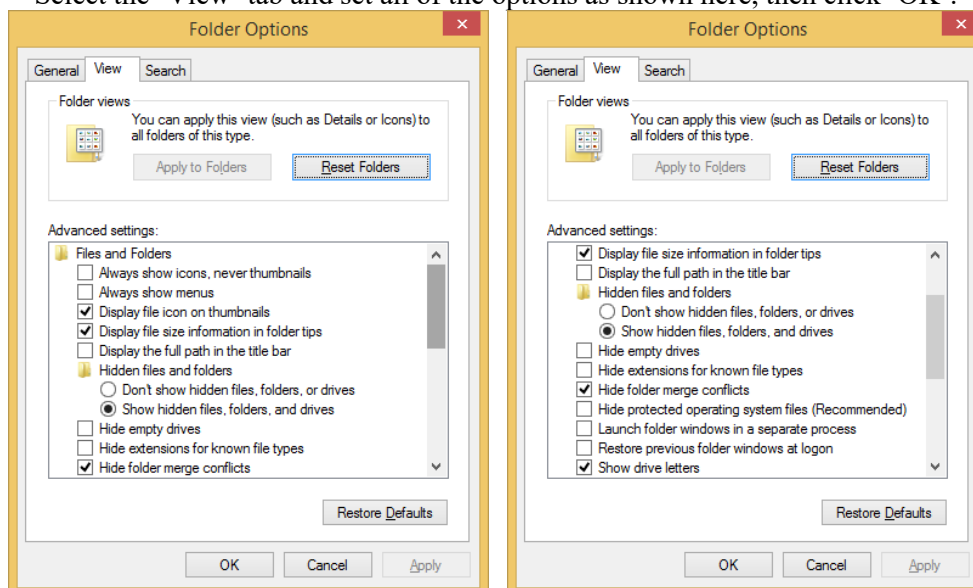


For the moment, click Cancel.

(The PC must be rebooted before new DeviceMaster drivers are installed.)

In the following procedure, be aware that not all entries will be present. That is normal due to the driver removal procedure already completed. In the event the entry does not exist, just continue to the next step.

Open Windows Explorer by right clicking on the "Start" button and selecting "Explore" from the pop-up menu. Manually delete the files listed in **File Deletions:** below. Use the path of \winnt\ or \windows\ as appropriate for your PC. Note: The \inf\ directory is normally a hidden system directory. To view this directory, go to the 'Folder Options...'. Select the 'View' tab and set all of the options as shown here, then click 'OK'.



Select the option to "Show hidden files, folders, and drives."
Remove the option of "Hide protected Operating System files (Recommended)"

Use Windows Explorer for the following (or your favorite file manager)

File Deletion List:

```
del c:\comtrol*. * This folder may not exist due to different driver versions
del c:\Program Files (x86)\Comtrol\DeviceMaster\ All files and all subfolders in this folder (64bit system)
del c:\Program Files\Comtrol\DeviceMaster\ All files and all subfolders in this folder (32bit system)
del c:\%system%\inf\ctmaport.inf
del c:\%system%\inf\ctmaport.pnf
del c:\%system%\inf\ctmproto.inf
del c:\%system%\inf\ctmproto.pnf
del c:\%system%\inf\ctmsport.inf
del c:\%system%\inf\ctmsport.pnf
del c:\%system%\inf\netctmrk.inf
del c:\%system%\inf\netctmrk.pnf
del c:\%system%\system32\ctmnsInt.cat
del c:\%system%\system32\ctmsclas.dll
del c:\%system%\system32\ctmsclasx64.dll
del c:\%system%\system32\ctmsport.inf
del c:\%system%\system32\sisetup.dll
del c:\%system%\system32\sisetup.chm
del c:\%system%\system32\sisetupx64.dll
del c:\%system%\system32\drivers\devmast.bin
del c:\%system%\system32\drivers\devmast2.bin
del c:\%system%\system32\drivers\rpshsi.bin
del c:\%system%\system32\drivers\rpshsi2p.bin
del c:\%system%\system32\drivers\rpshsi.sys
del c:\%system%\system32\drivers\rpshsix64.sys
del c:\%system%\system32\rpshsi\*. *
del c:\Windows\System32\DriverStore\FileRepository\netctmsi.inf* (see section "FileRepository" below)
del c:\Windows\System32\DriverStore\FileRepository\ctmproto.inf* (see section "FileRepository" below)
del c:\Windows\System32\DriverStore\FileRepository\ctmsport.inf* (see section "FileRepository" below)
The last three files will have long extensions and if the wildcard (*) is not used, the files will not be located.
```

After deleting the above files, you must locate some additional specific .INF and .PNF files. When a DeviceMaster driver is installed, Windows creates at least three additional .INF and .PNF files under the %SYSTEM%\inf hidden folder. They will be named oemX.INF and will be accompanied by an oemX.PNF where X is some number, and is the same for both files. The .inf file is a text file that will open in Notepad when it is double clicked. Open each, and every one, of these INF files in notepad and find the ones that pertain to the Comtrol. There may be multiple instances of each of these files, so be sure to continue to check all of the oemx files.

It will show something like this at the very top of the file:

```
; -----
; netctmnsI.inf - NS Link install script(WinXP) INF file.
; Control Corp., Handles the Device.
;
; Inf for Windows XP
; -----
```

Here are the lines that you will be looking for in the .INF files. This is the first line of text in the INF file, so you do not need to look past the first line of the file.

```
netctmnsI.inf - NS Link install script (WinXP) INF file.
CTMPROTO.INF -- RPSHSi Protocol Driver
CtmSPort.inf – NS Link port install script INF file
```

Remove both the INF and PNF files of the same number. NOTE! Delete ONLY Comtrol INF and PNF files! Other INF and PNF files are used for other products such as video cards, printers, etc. Removal of these other INF files could severely impact the operation of your PC.

You may discover an INF file that shows this text for the first line;

PVDrv.INF – PortVision Plus NDIS Protocol Driver

This file and the associated PNF may be left as is, without deletion, as these files are used by PortVision

Editing the Registry:

(Caution:

Before editing the Registry, it is highly recommended that you perform a backup of the registry. Consult your Microsoft Windows manuals for information on registry backup procedures. Any careless editing in the registry may cause Irreparable damage with disastrous results, possibly requiring a reinstall of the Microsoft Windows operating system.)

Run Regedt32 and make the following modifications. Please note that you may not have some of the folders referenced here. The driver removal may have already correctly removed the folder; in which case do not be concerned if it is not present. If while attempting to delete one of the keys, a message is displayed saying it is 'unable to delete this key' a permission needs to be set. While the desired key to delete is highlighted, go to the 'Edit' or 'Security' drop down menu (dependant on OS) in the command bar and select 'Permissions', then select 'Everyone' and place a checkmark in the 'Full Control' option. Now when you try the delete, it should be successful.

HKEY_LOCAL_MACHINE on Local Machine
SYSTEM

|--ControlSet001

|--Enum

| |--CtmPort

| | |--SiPort <-- Delete this folder

| | |--1&173424ed&2&Portxxxx (where xxxx is a 4 digit port number)

| | |--Additional listings of same format

| |--Root

| |--MULTIPORTSERIAL

| |--0000 <--Delete this folder IF Mfg= Control Corporation

|--Services

| |--rpshsi <-- Delete this folder including the subfolders

| |--Enum

| |--+Parameters

| |--Security

| |--rpshsix64 <-- Delete this folder including the subfolders

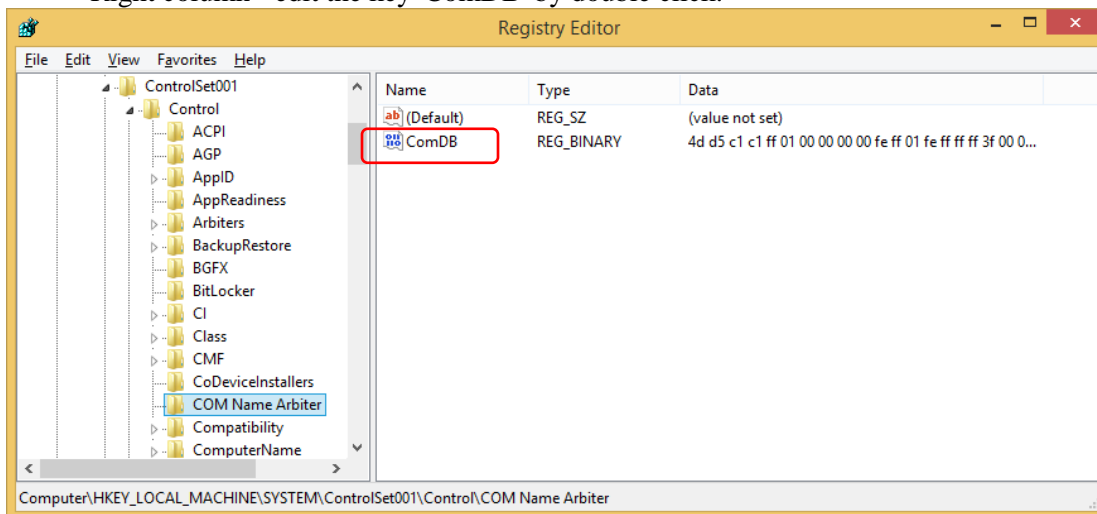
| |--Enum

| |--+Parameters

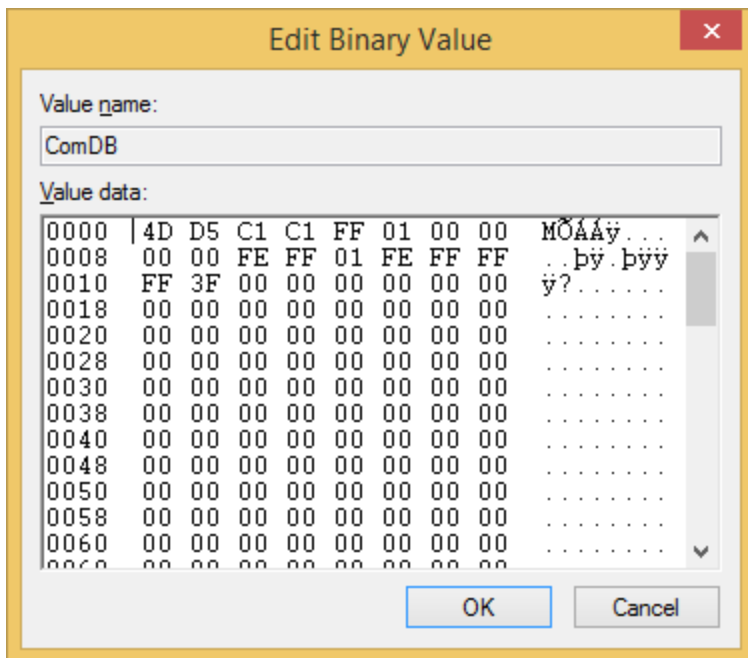
|--Control

|--COM Name Arbiter

Right column - edit the key 'ComDB' by double click.

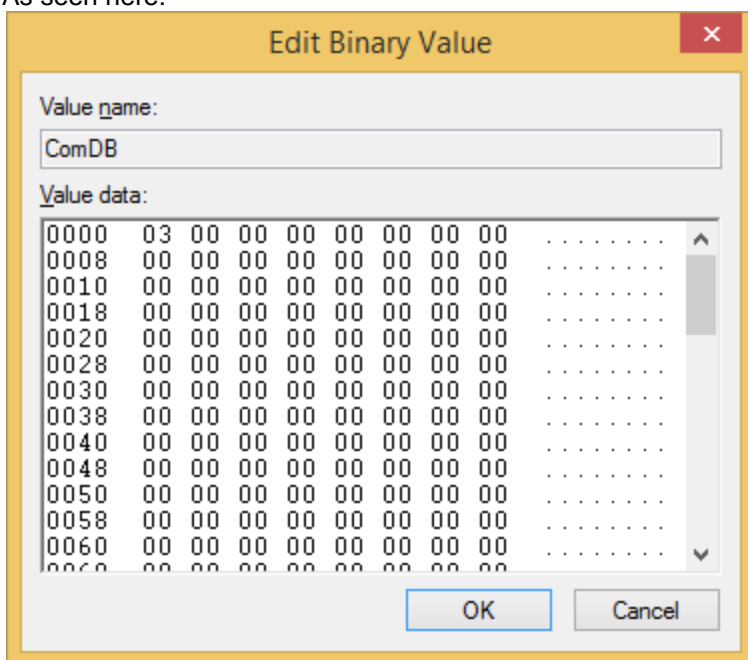


The Data Edit window will open.



Modify the data to display 03 00 00 00

As seen here:



Click "OK"

Optionally, repeat this process in HKEY_LOCAL_MACHINE\SYSTEM\ControlSet002
Close regedt32.

FileRepository

To delete the entries in the FileRepository folder requires special procedures.

For a 64 bit Operating System the folders are located here and named as:

c:\Windows\System32\DriverStore\FileRepository\netctmsi.inf_amd64_*
C:\Windows\System32\DriverStore\FileRepository\ctmproto.inf_amd64_*
C:\Windows\System32\DriverStore\FileRepository\ctmsport.inf_amd64_*

For a 32 bit Operating System the folders are located here and named as:

c:\Windows\System32\DriverStore\FileRepository\netctmsi.inf_x86_neutral_*
C:\Windows\System32\DriverStore\FileRepository\ctmproto.inf_x86_neutral_*
C:\Windows\System32\DriverStore\FileRepository\ctmsport.inf_x86_neutral_*
(The numbers following the word neutral will be different in each PC)

Download Sysinternals PSTools from Microsoft and extract to a clean folder:

<https://technet.microsoft.com/en-us/sysinternals/bb897553.aspx>

Open a command window (run as admin) in the extraction folder and enter “**psexec -s cmd**” (without quotes) and press Enter.

This should open a command window in ‘System’ mode (The title bar should now show [\\PC_NAME:cmd](#) and change to the c:\windows\system32 folder)

At the c:\windows\system32> command prompt enter “**cd driverstore**” (without quotes) and press Enter.

At the c:\windows\system32\driverstore> command prompt enter “**cd filerepository**” (without quotes) and press Enter.

You should now be in the C:\Windows\System32\DriverStore\FileRepository folder

At the command prompt enter “**dir ctm***” (without quotes) and press Enter.

This will show any Control folders that are to be deleted.

At the command prompt enter “**cd [the folder name discovered in the previous step].**”

(without quotes) and press Enter. Use caution as typos will prevent success.

This will change your prompt into this folder

At the command prompt enter “**dir**” (without quotes) and press Enter.

This will list the folder contents

At the command prompt enter “**del *.***” (without quotes) and press Enter.

You may be prompted to confirm.

This should delete all contents of this folder

At the command prompt enter “**cd..**”(without quotes) and press Enter.

This will take you back one folder level.

At the command prompt enter “**rd [the folder name discovered in the previous step]**” (without [quotes]) and press Enter. This should remove the folder.

Repeat for all ctmsport.inf_ folders

Repeat for all ctmproto.inf_ folders

Repeat for all netctmsi.inf_ folders

Reboot PC and check Device Manager and Event Viewer for any errors.

Correct any and all errors reported by Event Viewer.

Once the PC has rebooted, install the current driver.