

VCOM

User Manual

User Manual for VCOM Serial Device Driver

(November 2007)



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1) Introduction

Welcome to the User Manual of the VCOM Driver. VCOM is a Windows-based driver that enables you to remotely manage serial devices that are linked via VCOM-supporting Device Servers.

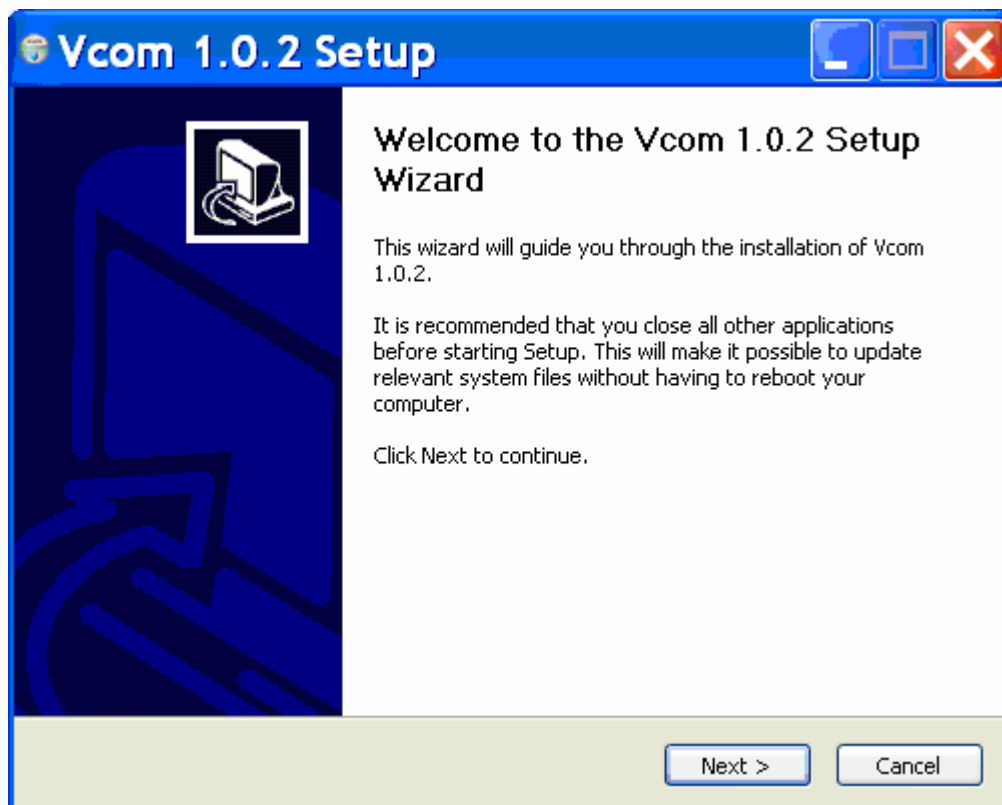
VCOM builds RFC 2217 sessions or raw socket TCP connections with VCOM-supporting Device Servers for carrying serial data across IP networks.

1.1) System Requirements

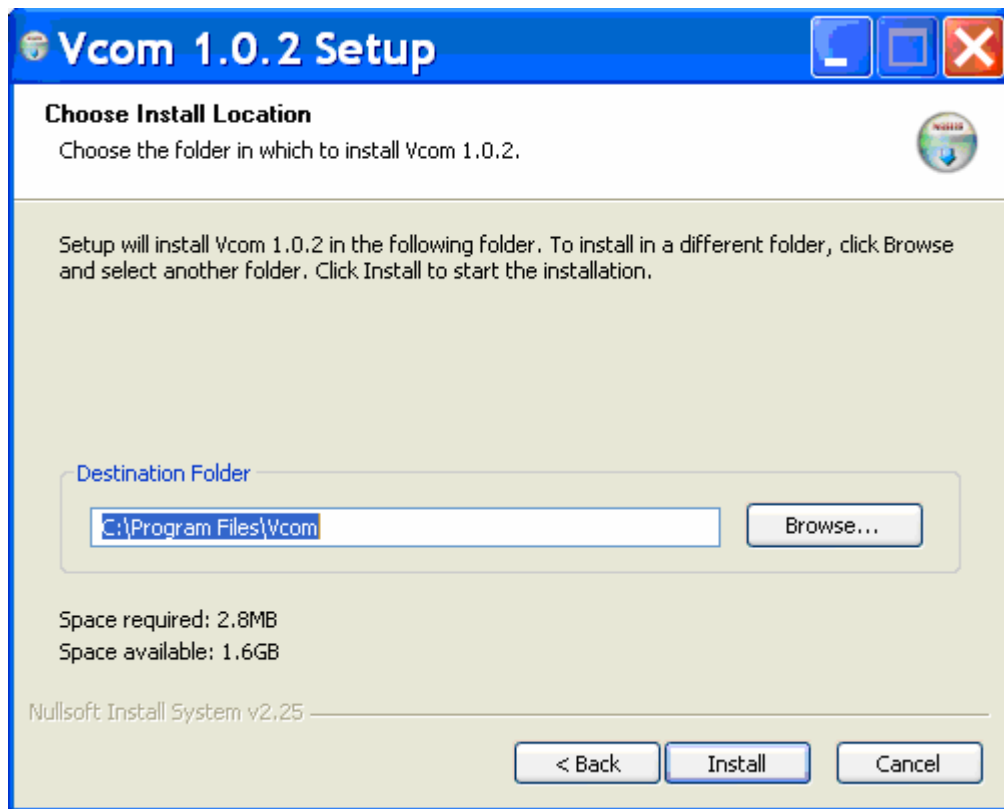
- Windows 2000/XP
- AMD or Intel® Pentium processor
- Minimum 256 MB of RAM
- Minimum 4 MB disk space

1.2) Software Installation

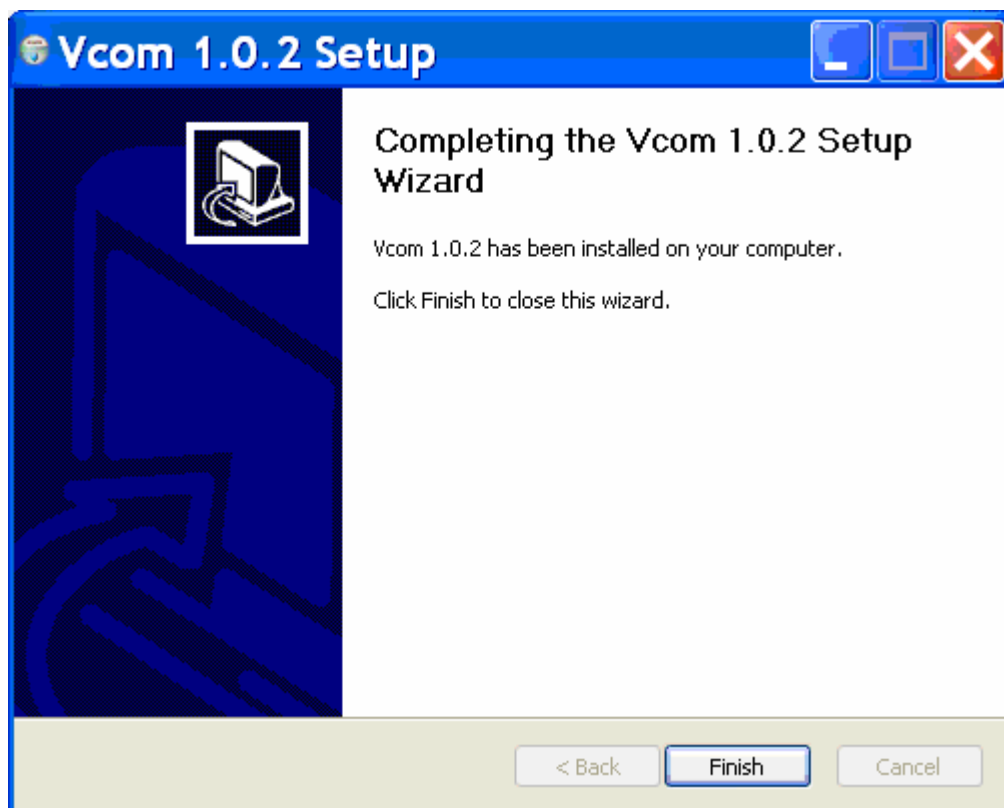
To install the VCOM program, execute the VCOM Setup program Vcom102_Setup.exe (double-click on the file name).



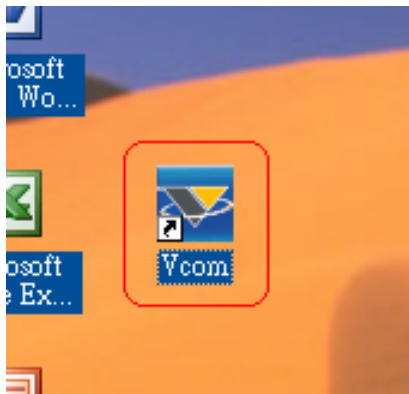
Click 'Next'.



Enter the destination folder path and then click 'Install'.



Click 'Finish' and the VCOM setup procedure is done. Usually, a VCOM shortcut will automatically appear on the desktop screen.

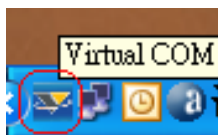


If the shortcut does not appear automatically, the program can be activated by clicking on the “Start” menu and then on the “All programs” menu. The program’s startup buttons should be found in this list.

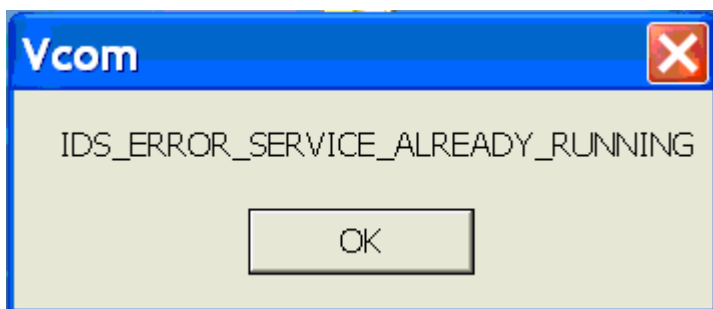
1.3) System Startup

Start up the VCOM program by clicking on its shortcut on the desktop screen. If this shortcut is not visible, click on the green Windows desktop “Start” button and then click on the “All Programs” button to see a list of all the programs. Highlight the VCOM link and then click on the VCOM button on the right to start the program.

Wait a few seconds for the VCOM Control Panel to appear. This panel will automatically minimize to a small icon on the right of taskbar, **the program will keep on running.**

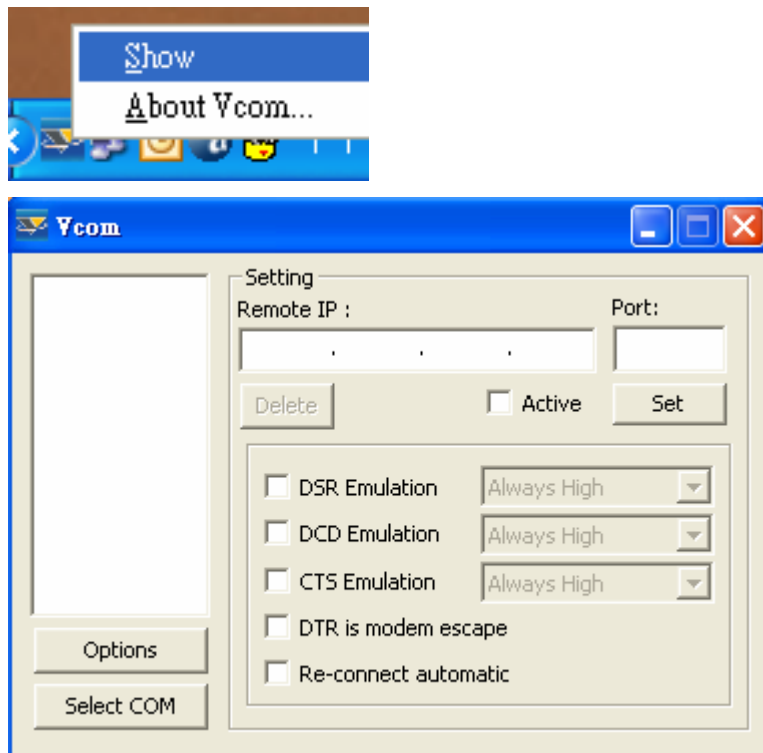


Don’t click the VCOM shortcut again, otherwise an error message will appear.



To show the VCOM Control Panel again, right-click on the small VCOM icon on the bottom right of your screen and click “Show”. Then the

control panel will display on your desktop.



To avoid accidental switch-off and resultant data loss, the VCOM program will keep on running and cannot be switched off until the computer itself is switched off.

1.4) Uninstall VCOM

Cause VCOM program was a 'Terminate and Stay Resident' program, before you uninstall VCOM, you must **stop 'Vcom.exe' process from 'Windows Task Manager'**. Then you can uninstall the VCOM program by click on the 'Uninstall' button that appears above the "VCOM" button on the program menu.



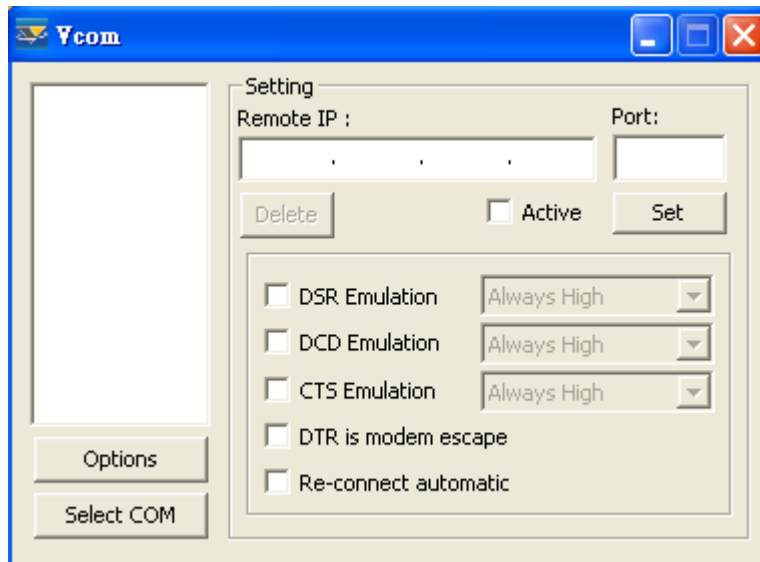
Choose 'Yes' to completely remove VCOM and its components, and a task bar will appear, Choose 'Yes' to reboot the system, before you install another new version VCOM program.

2) Configuration

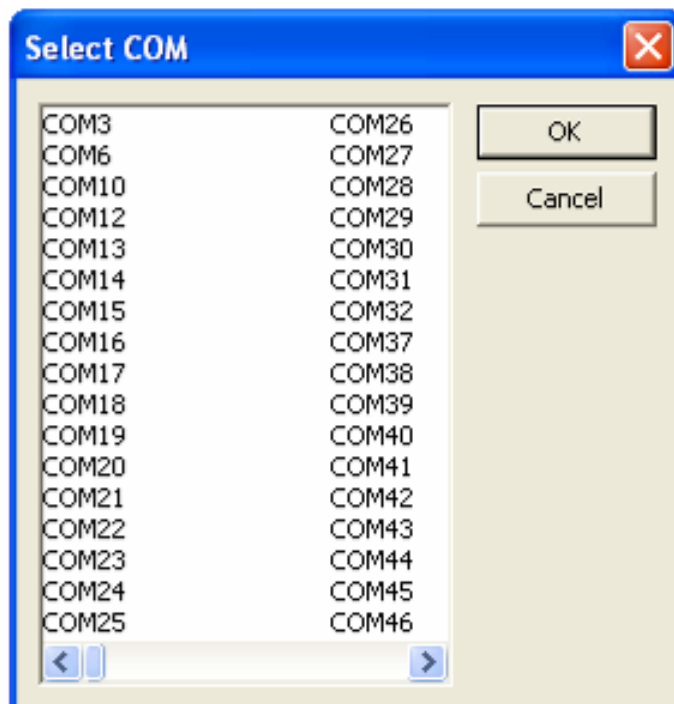
Before using the VCOM program and the device server, the user should first create Virtual COM ports and configure their connection options.

2.1) Virtual COM Ports

Here is the VCOM program's main configuration window.

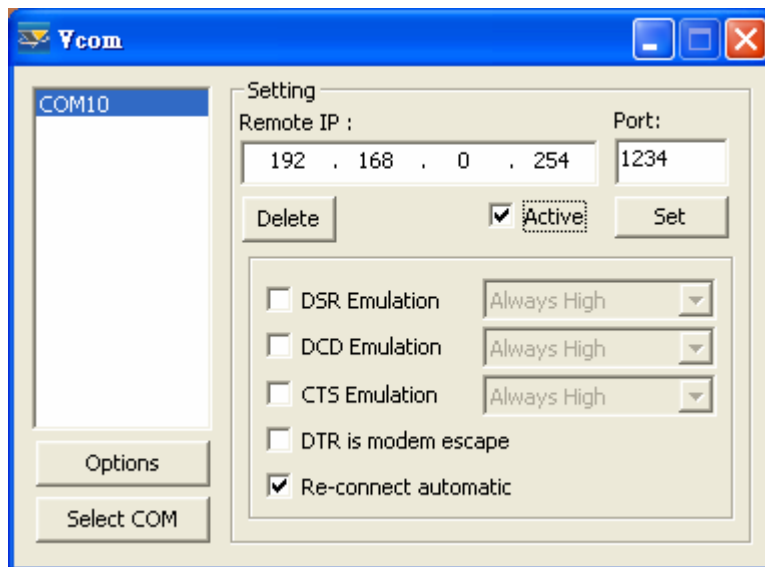


Click the “Select COM” button to select a COM port number that is not already used for a physical or virtual COM port.



After selecting a COM port number, enter the remote IP address and TCP port number of the Device Server in the boxes on the right. Check the box marked as “Active” to activate the selected COM port whenever the configuration is set or the VCOM program is started.

Also, configure the virtual COM port options including DSR, DCD, CTS, and DTR. If “Re-connect automatic” is checked, VCOM will automatically reconnect the session whenever it is disconnected. Click the button “Set” to let the virtual COM port configurations take effect and save the configurations permanently if it is active. Click the “Delete” button to delete the selected virtual COM port if desired.



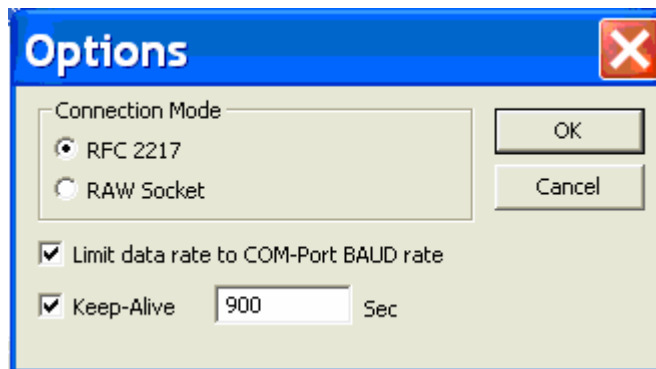
The following lists descriptions of signals:

Item	Status	Description
DSR Emulation	Always High	Set 'Data Set Ready' signal to Force ON
	Always Low	Set 'Data Set Ready' signal to OFF
	Up to connection	Signal controlled by Terminal Program.
DCD Emulation	Always High	Set 'Data Carrier Detect' signal to Force ON
	Always Low	Set 'Data Carrier Detect' signal to OFF
	Up to connection	Signal controlled by Terminal Program
CTS Emulation	Always High	Set 'Clear To Send' signal to Force ON
	Always Low	Set 'Clear To Send' signal to OFF
	Up to connection	Signal controlled by Terminal Program
DTR is modem escape		When 'Data Terminal Ready' signal is OFF, session is disconnected between Device Server and Remote Device.

Typically, you don't have to check these items, except there were some special configurations about your remote device.

2.2) Connection Options

Click the “Options” button to set the connection options for the selected virtual COM port.

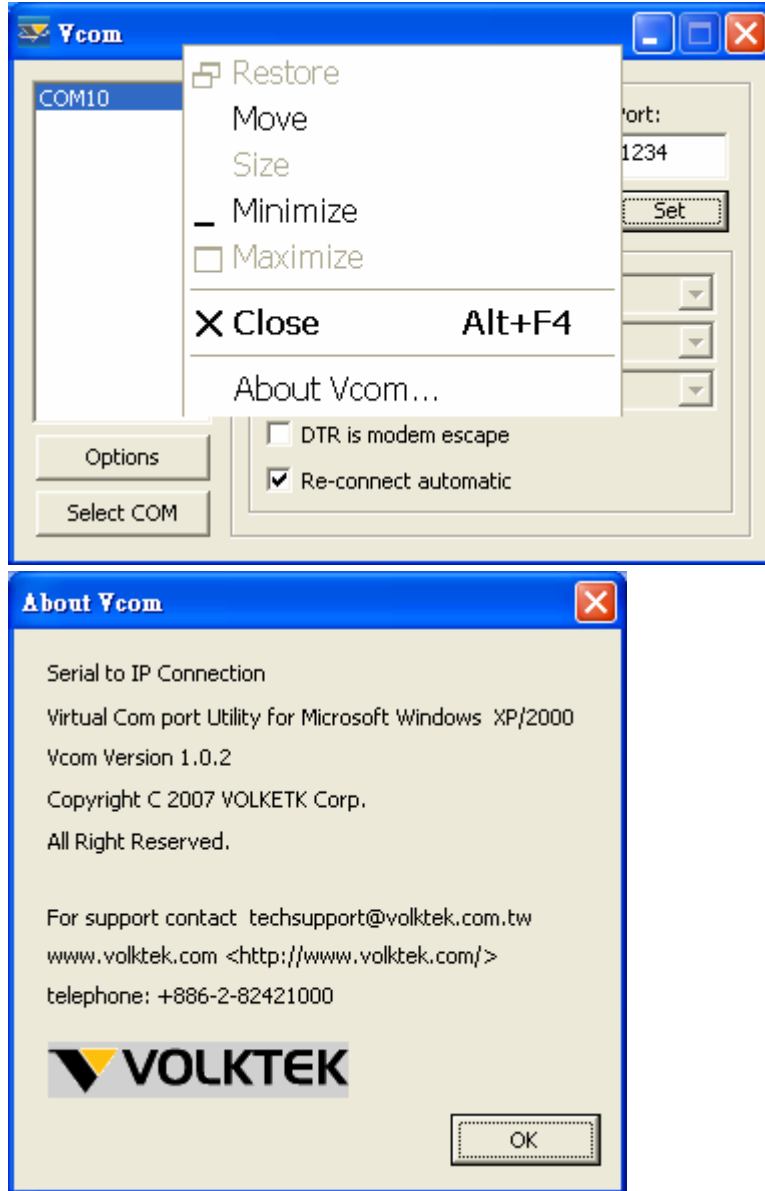


The following is a description of all the parameters in this task bar:

Parameter	Meaning
RFC 2217	The connection mode is RFC 2217. VCOM is the RFC 2217 Client and the Device Server must be set to “Device Server” mode – it now acts as an RFC 2217 Server. The serial interface settings of the Device Server will be automatically configured by VCOM in RFC 2217 mode.
RAW Socket	The connection is a raw TCP session. VCOM is the TCP Client and the user should set the Device Server to “TCP Server” mode. The user should set the serial interface configurations of the Device Server manually, e.g., via Web Management.
Limit data rate to COM-Port BAUD rate	Check this option to enable flow control for the virtual COM port according to the baud rate setting of the port.
Keep-Alive	VCOM will issue a Keep-Alive message to the Device Server after the specified number of seconds.

3) About VCOM

To see more information about VCOM, click on the VCOM logo at the top left corner of the main Window. After the pop-up window appears, click on “About Vcom” to pop up the “About Vcom” window. This shows the version number information.

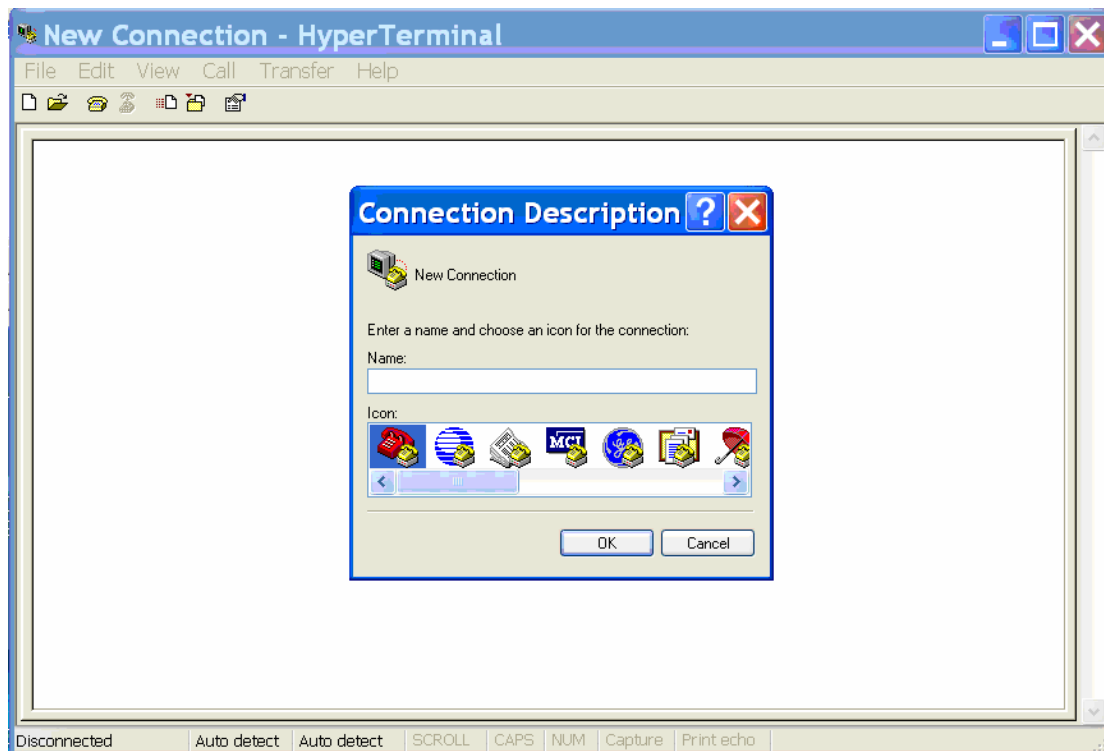


4) Connect to Remote Device

After you setup virtual COM port(s), you can connect to remote device(s) via terminal emulation program such as 'Hyper Terminal' on 'Windows'.

4.1) Start a New Connection

Click 'start' → 'All Programs' → 'Accessories' → 'Communications' → 'Hyper Terminal' to start a communication session.



4.2) Naming the Connection

At the 'connection description' dialog box, select an icon and type a name for this connection, then click 'OK'.



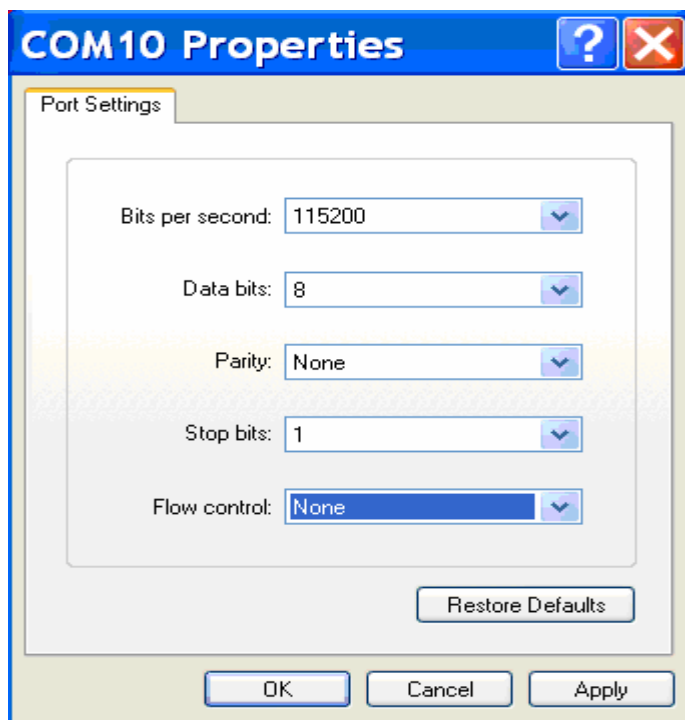
4.3) Select a COM Number

At the 'connect to' dialog box, select a COM number you created and configured using the VCOM program previously, then click 'OK'.



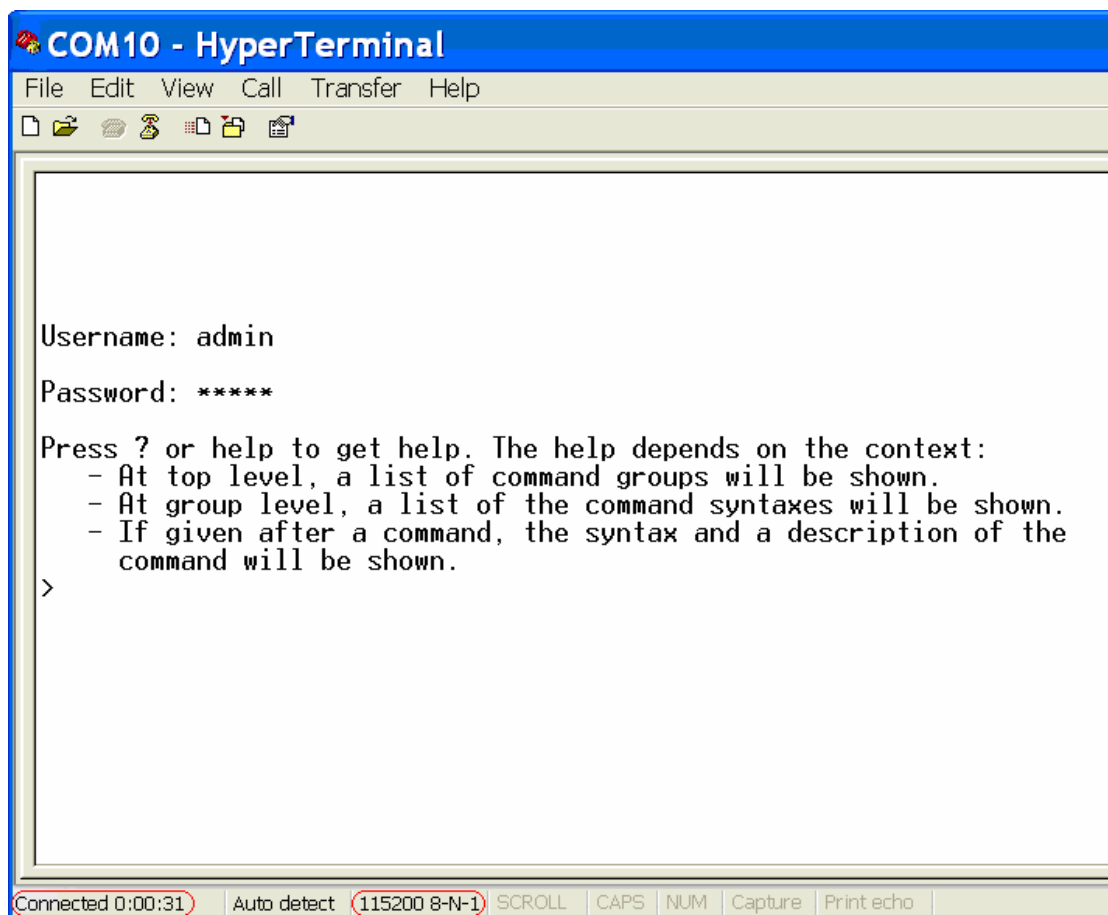
4.4) Properties

Click 'Setting' to open the properties dialog box, set all needed parameters to match settings of remote device, then click "OK".

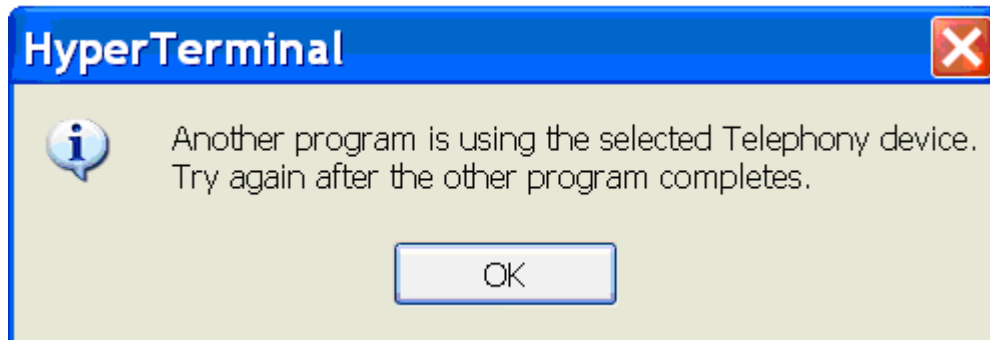


4.5) Connected

Press 'Enter' key to connect to a remote device, it must display 'Connected' on the bottom left.



Attention: Be sure your device server is on line. If the TCP session couldn't be established between your computer and device server, a caution dialog box will pop up.



5) Contact Information

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