Using your PC Internet link for your Psion

This paper is based on the original DsLink web material and an article on the Revoworld web pages.

This paper looks at using DsLink to connect a Psion 5mx to the internet through a PC.

I am currently doing this through my BT Internet Broadband connection. As I do not have any RS232 sockets on my PC I have used a RS232 to USB converter (KeySpan) to emulate the RS232 socket. My PC is running under Windows XP.

What is DsLink?

DsLink is a small windows utility that allows Epoc devices (i.e. a Series 5) running the message suite or a 5MX to connect to the internet via a Windows PC. For example you can use it to log on to your email server (internet) and download your email. Then you can edit during the day on your epoc device and then upload it at the end of the day. Other programs such as newsreaders and web browsers should also work

How do you use DsLink

To use DsLink you need to set up the EPOC tcp stack in the control panel on the series 5. More details can be found later in this paper. Turn off the link on the series 5 and turn off PsiWin on the pc. Copy DsLink.exe to where you want to run it from(i.e. C:\Program Files\DsLink\DsLink.exe) then just run DsLink.exe and that's it.

What does DsLink look like?

When idle (no connection) DsLink displays a broken link but when a connection is made from the Epoc device the link icon will wiggle .
If you double click the wiggly link then the DsLink window will open, right click the wiggly link to quit DsLink.
In the example below DsLink has detected 2 serial ports (DsLink will support connections on up to 63 serial ports simultaneously). The two pictures to the right of the serial port represent the pc and the internet
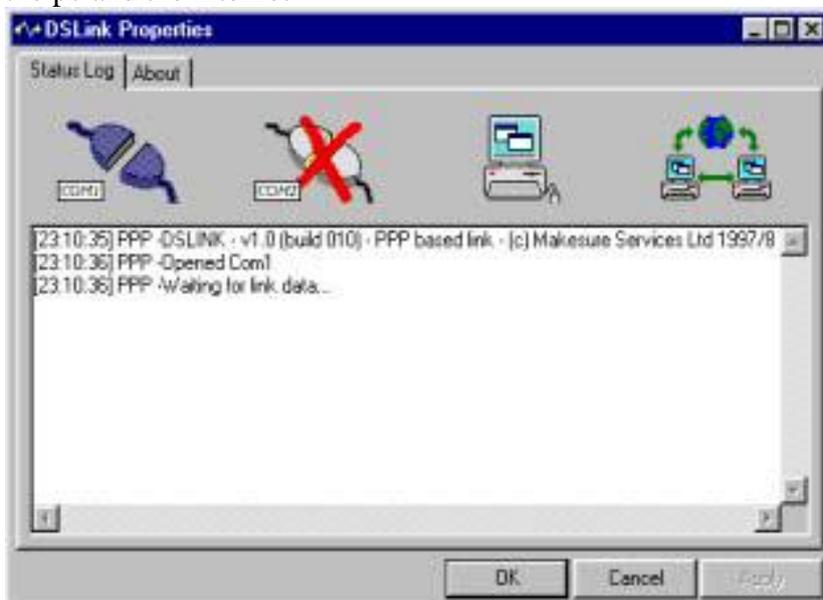
In this example the first serial port (com1) has been enabled but is not connected, the second serial port (com2) has been disabled (this is indicated by a big red cross on top of the port symbol).

Under the pictures of the serial ports is the log for Com1.

To select the log for Com2, click the symbol for the second serial port. To enable and disable serial ports right click on the symbol for that port and select 'enable'. DsLink cannot enable serial ports that are being used by another program (i.e. PsiWin) or a modem. Likewise if you wish to use a modem to connect to the internet, then you must disable that serial port in DsLink so that it can be used by the modem.

When data is detected on any enabled serial port, DsLink attempts to autobaud and configure the connection, as it does this it changes the picture of the relevant serial port to show it is connected, and displays progress information in the log window. More logging information can be turned on in the registry if needed. Once connected outgoing connections to the internet from the epoc device are relayed through DsLink. This allows web browsing and Email sending/receiving while the series 5 is attached to the PC.

By clicking on the picture of the PC or the internet, you can view the diagnostic information for these parts of DsLink. Normally this information is turned off, To view this information you need to turn on the diagnostic output in the registry
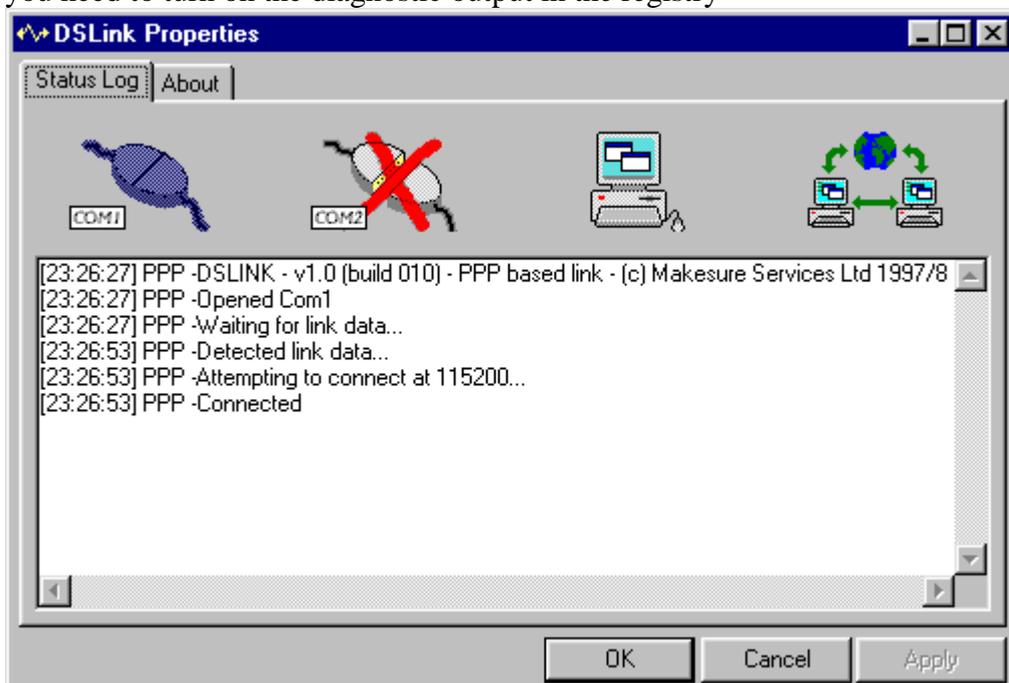
Things to remember

DsLink needs an existing connection (i.e. a modem , router or a LAN) to connect to the internet, at one level it is only a relay.
Because of the way DsLink is written it is a little bit like a Firewall and so programs that accept incoming connections (i.e. FTP apps) may not work. The author was looking at possible solutions to this limitation including SOCKS support (which would also need to be implemented on the epoc device).
To exit DsLink you need to right click the tray icon and select close - If you close the dialog box it actually does not close but just hides the dialog and keeps running. - This is intentional.
DsLink will not run at the same time as PsiWin is running - so you may need to close psiwin to get DsLink to run.
Since Dslink normally tries to monitor all serial ports, you may need to disable comports (as shown above) if you have modems on those ports. (especially if you want to connect to the internet via dialup networking with it).

The following is extracted from "Revoworld"

Before anything you have to install DS Link on your PC. Simply double-click the install file and it will sit on your Start menu.
1.
Once DS Link is installed, exit Psiwin by right-clicking on the connection icon on the task bar, and selecting 'Close.'

2.
Now, on the Revo, go to the Today View (System > Today) and double-click the 'Link' icon, and select 'off' from the list. This will disable the connection between your PC and Revo completely.
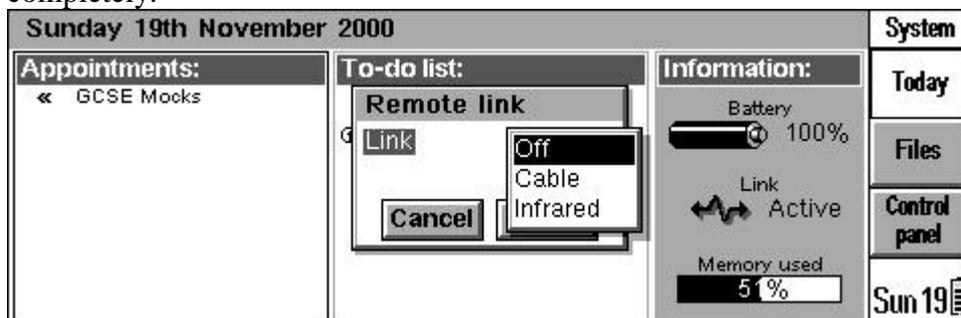
With PsiWin not running and the link disconnected, you know have to set up the Revo to recognise DS Link as a modem connected to it. You will need to follow these steps exactly to get this right...
3.
Go to System > Control Panel > Modems. Then click 'New' or press Ctrl + N. Enter the name of the modem as whatever you want, so you can recognise it in the future, but for now I will refer to it as 'DS Link Connection.'
4.
Under the 'Modem' tag in this Control Panel window, set these options:

Name = DS Link Connection (or whatever you wish)
Speed = 115200 baud
Connect via = Serial
Fax Class = Auto

Settings for modem "DSLink"

Modem | Options | Initialisation | Advanced

Name   DSLink
Speed   115200 baud
Connect via   Serial
Fax class   Auto ⦿   1○   2○   2.0○

Note: See your modem manual for details of appropriate settings for your modem.
If you have problems connecting, you may need to reduce the speed for
communication between your machine and this modem

5.
Under the 'Options' tag, set these options:
Loudspeaker in use = Until call answered
Volume = Quiet
Pause time for "," = 0 seconds
6.
Under the 'Initialisation' tag, set these options:
ALL FIELDS TO BE BLANK.
7.
Under the 'Handshaking' tag, set these options:
Flow control = none
Terminal detect (DSR/STR) = (Not ticked)
Carrier detect (DCD) = (Not ticked)
Now the modem is set up on the Revo, and we need to set up the Internet service provider.
The Revo, here does not need any information, just a few settings altered:
8.
Go to System > Control Panel > Internet and click 'New' or press Ctrl + N. Now choose
Based upon = 'Standard Settings' and click 'OK.' Now enter a recognition name for this
method of connection. NB: If you already have connections set up for other Modems, it is
important to set up a special one for connecting to the PC. What happens is DS Link uses the
dialler on the PC to dial, not the Revo's dialler. So follow these instructions to set up the right
connection service.
9.
Under the 'Service' tag set these options:
Connection type = Direct
(This will then disable the other options)
10.
Under the 'Account' tab, tick the box next to 'Manual Login,' and this will disable the other
options.
11.
Under the 'Addresses' tab, tick the 'Get IP Address from Server' and 'Get DNS address from
server' boxes. This will disable other options that you should leave blank.
12.
Under the 'login' tab, make sure the 'Use Login Script' box is not ticked. If it isn't, the other
options will be disabled.
13.
Finally, under the 'Advanced' tab, make sure ALL the boxes are un-ticked. Now click 'Done'
or press Ctrl + D and it will be ready.
14.

OK, now the Revo is ready for connecting. Now, on the PC go to the 'Start' menu, find where you have kept DS Link, and launch it from there. Once this has loaded, you will a similar line on the task-bar as the PsiWin logo:

DS Link Logo
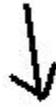
Now double-click on this logo, and the DS Link window will open. Here you can see the status of the PC's Com ports:
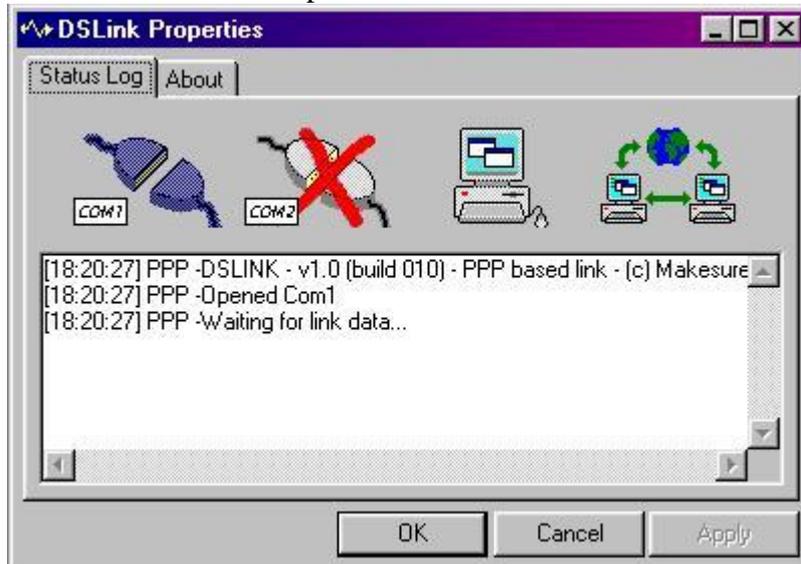
The 'COM 2' port should have a cross through it because most PCs use COM 2 as their modem, but providing you have disconnected your Revo correctly, the Com 1 port should be enabled. If it is not, right-click on the port's icon, and click enable.
15.
Now that the port is enables, your Revo is set up for DS Link access, it should be easy. Simply fire-up either Email or Web (or whatever else you might use) and click 'connect to the internet.' The connect box should appear on the screen of the Revo...
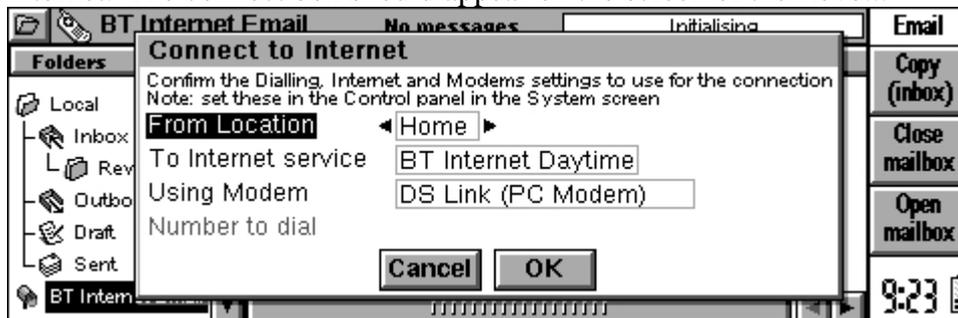
Now click connect and things should start happening on the DS Link status window. You should notice that the 'cable connector's icon should move together, and text (as shown below) should appear on the DS Link window...
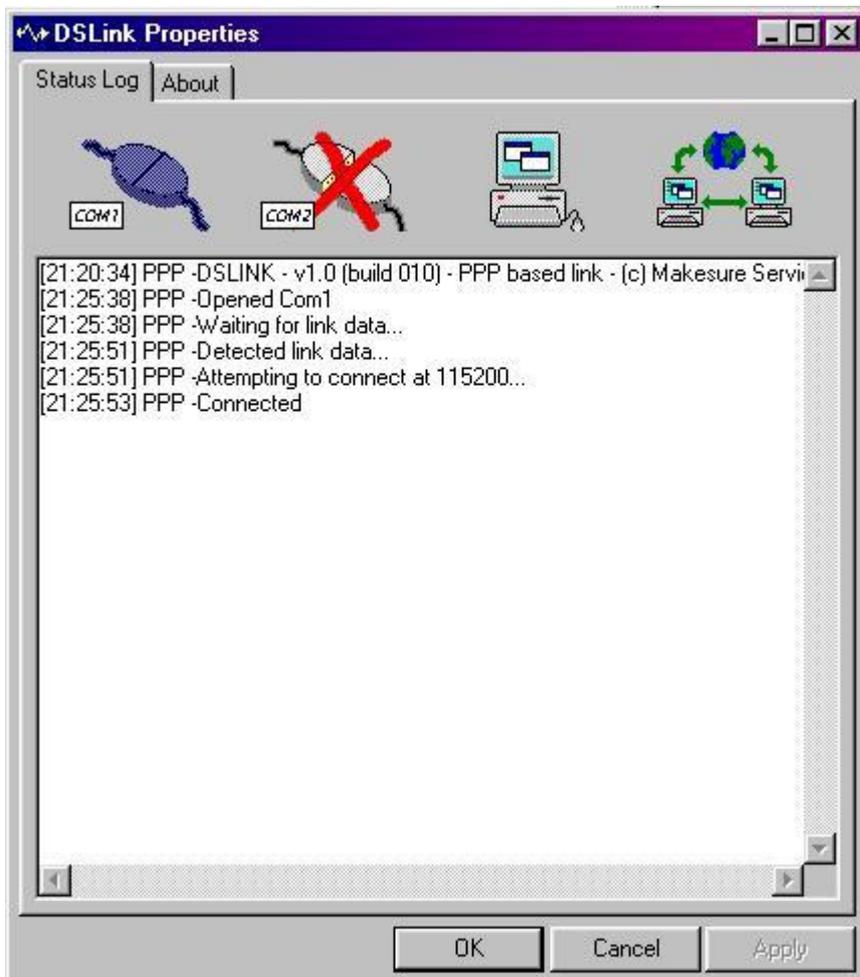
If your PC is not already connected to the internet, it will attempt to dial up (you will now see why it is unnecessary to enter login details on the Revo.) The Revo now believes it is connected to the internet. Even if you disconnect on the PC the Revo will still think it's connected, which means you must select 'Disconnect from Internet' from the menus (usually) to tell the Revo to disconnect.

This connection can be very dodgy sometimes, but having said this it does work well and fast! I find it very useful for several things, and I'm sure it can be used to do more than send emails and browse the web - I haven't tried, but it should enable WAP viewing and Fax usage from the docking-station of the Revo.