



## Establishing a PPP Connection Using a Dialup Modem

In order to access web services or update firmware over the air using a dialup modem it is necessary to use a PPP connection to your logger. This can be done via land lines (PSTN) or mobile networks using Circuit Switched Data (CSD). Land lines can operate at speeds of 230,400 baud and greater, which is suitable for updating firmware, accessing FTP services and using the basic web interface. The maximum throughput whilst using any GSM modem (SMSX included) is 9600 baud, which is only suitable for updating the base firmware and not for browsing the web interface; this is a limitation of CSD networks.

If you intend to use the dEX web interface over a mobile connection then it is highly recommended to use high speed packet-data services such as GPRS, 3G and NextG. These services are potentially several hundred times faster than those methods described within this document.

### 1 Prerequisites

- TN0032 - Connecting a DT80 Range Logger to an SMSX Modem (if using SMSX)

### 2 Requirements

- *dataTaker* DT80 range data logger running firmware V7.08 or above
- *dataTaker* SMSX GSM modem
- PC running DeTransfer software
- A dial-up modem connected to and correctly installed on the PC

### 3 Method

#### 3.1 *dataTaker* settings

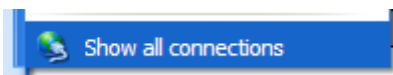
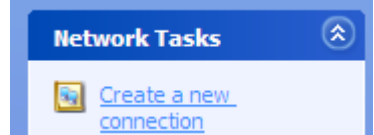
Ensure the PPP, HOST\_PORT and MOST\_MODEM profile settings in the dataTaker are correct by entering the following commands into DeTransfer:

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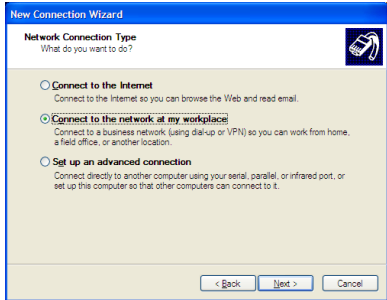
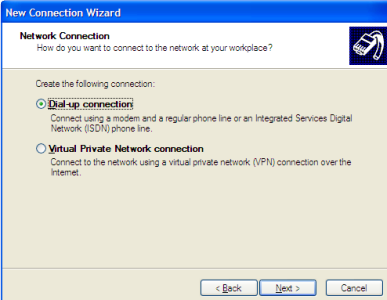
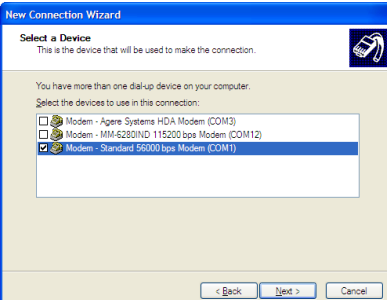
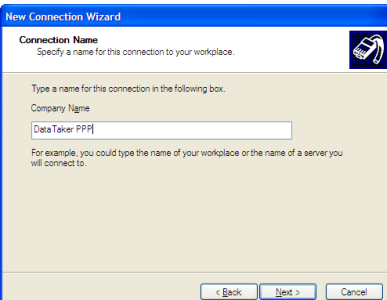
PROFILE "PPP" "HOST_IP_ADDRESS"="1.2.3.4"
PROFILE "PPP" "HOST_REMOTE_IP_ADDRESS"="1.2.3.1"
PROFILE "PPP" "USER"="ANONYMOUS"
PROFILE "PPP" "PASSWORD"="PASSWORD"
PROFILE "HOST_PORT" "FUNCTION"="PPP"

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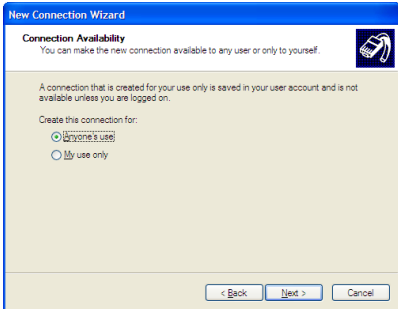
#### 3.2 Create a PPP connection in Windows

<p>Open up 'Network Connections' by clicking →Start →Connect to →Show all connections.</p>	
<p>Click <b>Create a new connection</b></p>	




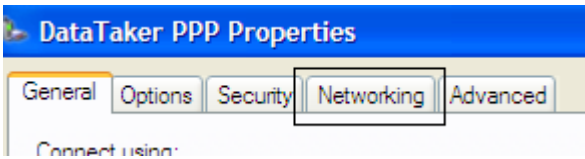
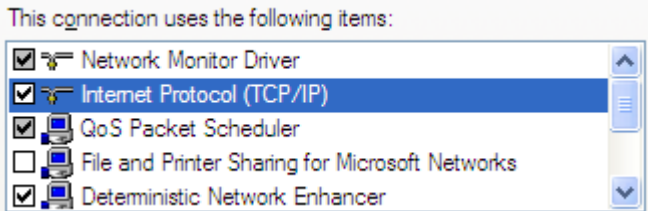
<p>The <b>New Connection Wizard</b> will begin</p> <p>Click <b>Next</b></p>	 <p>The screenshot shows the 'New Connection Wizard' window. The title bar reads 'New Connection Wizard'. The main content area says 'Welcome to the New Connection Wizard' and lists two options: 'Connect to the Internet' and 'Connect to a private network, such as your workplace network'. At the bottom, there are buttons for '&lt; Back', 'Next &gt;', and 'Cancel'.</p>
<p>Select <b>Connect to the network at my workplace</b></p> <p>Click <b>Next</b></p>	 <p>The screenshot shows the 'New Connection Wizard' window with the title 'Network Connection Type'. It asks 'What do you want to do?' and has three radio button options: 'Connect to the Internet', 'Connect to the network at my workplace' (which is selected), and 'Set up an advanced connection'. At the bottom, there are buttons for '&lt; Back', 'Next &gt;', and 'Cancel'.</p>
<p>Select <b>Dial-up Connection</b></p> <p>Click <b>Next</b></p>	 <p>The screenshot shows the 'New Connection Wizard' window with the title 'Network Connection'. It asks 'How do you want to connect to the network at your workplace?' and has two radio button options: 'Dial-up connection' (which is selected) and 'Virtual Private Network connection'. At the bottom, there are buttons for '&lt; Back', 'Next &gt;', and 'Cancel'.</p>
<p>Check only the modem that you will use for your dialup connection</p> <p>Click <b>Next</b></p>	 <p>The screenshot shows the 'New Connection Wizard' window with the title 'Select a Device'. It asks 'This is the device that will be used to make the connection.' and lists three modem options in a list box: 'Modem - Agere Systems HDA Modem (COM3)', 'Modem - HUA-42201ND 115200bps Modem (COM12)', and 'Modem - Standard 56000bps Modem (COM1)' (which is selected). At the bottom, there are buttons for '&lt; Back', 'Next &gt;', and 'Cancel'.</p>
<p>Type the company name as "dataTaker PPP"</p> <p>Click <b>Next</b></p> <p>On the following page enter the DATA phone number of the SIM card in the SMSX</p> <p>Click <b>Next</b></p>	 <p>The screenshot shows the 'New Connection Wizard' window with the title 'Connection Name'. It asks 'Specify a name for this connection to your workplace.' and has a text box labeled 'Company Name' containing the text 'Data Taker PPP'. At the bottom, there are buttons for '&lt; Back', 'Next &gt;', and 'Cancel'.</p>



<p>On the <b>Connection Availability</b> screen</p> <p>Select <b>Create this connection for Anyone's use</b></p> <p>Click <b>Next</b></p>	
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A connection will now be visible in the **Control Panel** → **Connections** list, which can be edited by clicking **Start**→**Connect To**→**DataTaker PPP**.

### 3.3 Configuring the PPP connection in Windows

<p>Click on <b>Start</b>→<b>Connect To</b>→<b>DataTaker PPP</b> and the following screen should then appear (the Username, Password and Phone number may be different).</p> <p>Click the <b>Properties</b> button, this will open the <b>dataTaker PPP Properties</b> window</p>	
<p>Click the <b>Networking</b> Tab</p>	
<p>Double click the <b>Internet Protocol (TCP/IP)</b> item</p>	



Click on **Use the following IP address**

Type the address **1.2.3.1** into the spaces provided

Click **OK**

Click **OK** again to close the PPP properties window

Obtain an IP address automatically

Use the following IP address:

IP address:

### 3.4 Establishing a connection to your dataTaker

- Enter your username as **ANONYMOUS** and your password as **PASSWORD** (unless you specified different values in the *dataTaker* profile in step 1)
- Click **Dial** (The SMSX modem will answer the incoming call and establish a PPP connection with your modem, similar to dialling a connection to the internet)
- Open up your web browser and type in the address <http://1.2.3.4> to view the web interface or you may FTP into your logger at the address <ftp://DATATAKER:DATATAKER@1.2.3.4> (again, the FTP login details may be different if you had changed them in the *dataTaker* profile settings)