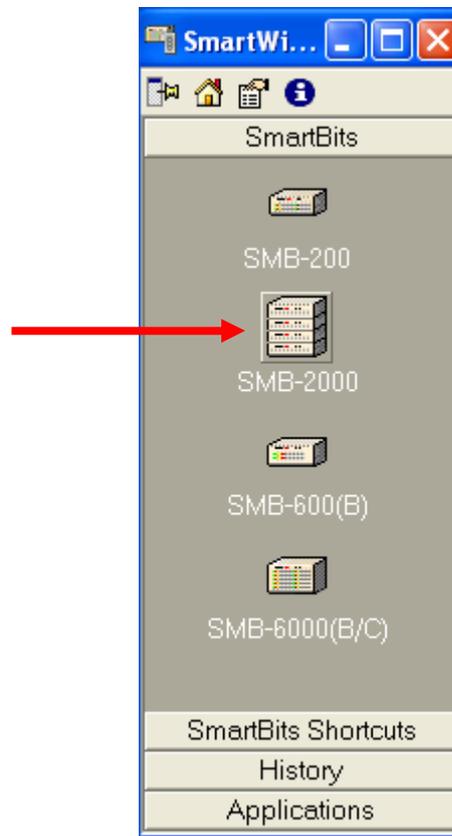


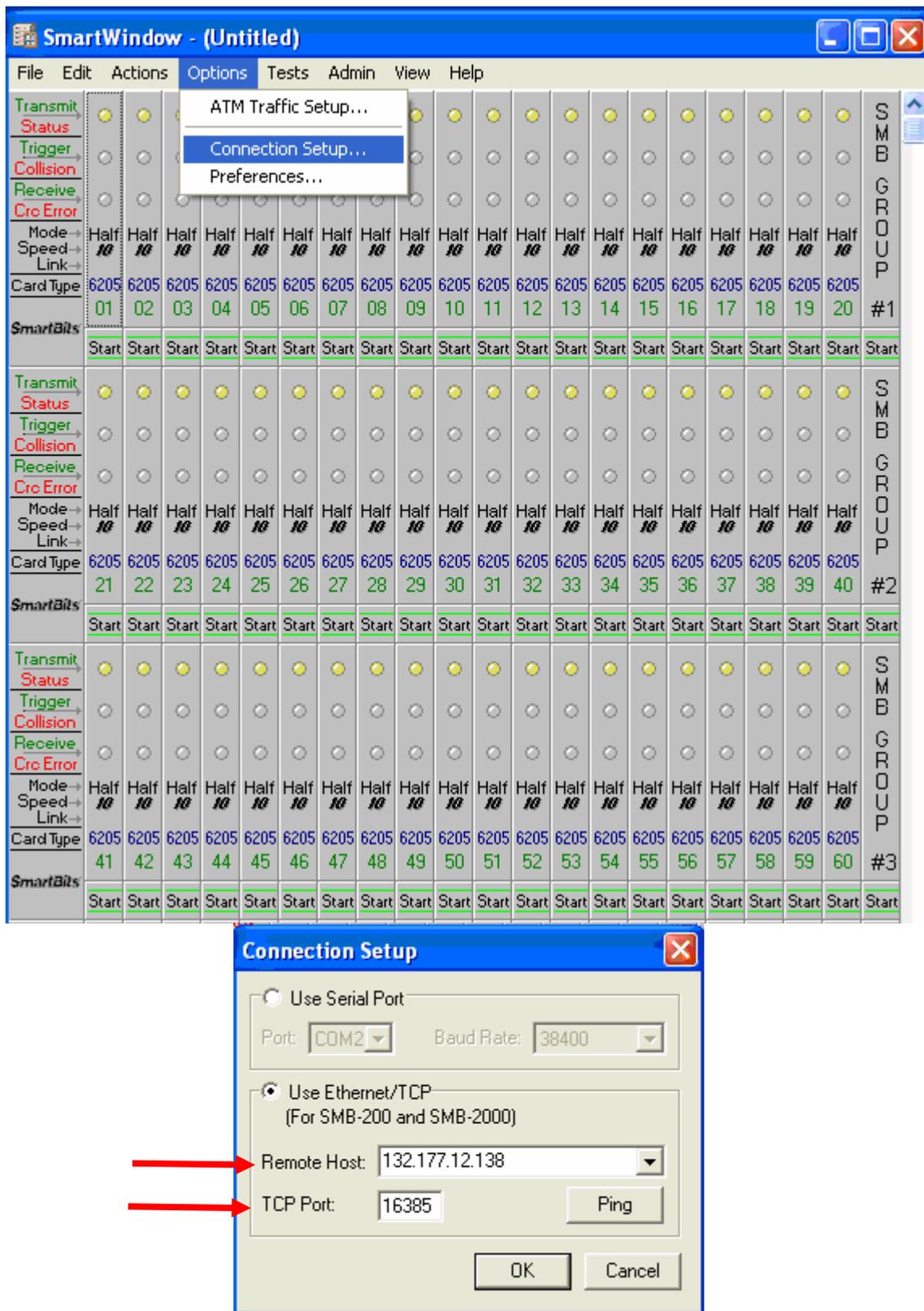
Using SmartBits SMB-2000 Traffic Generator/Analyzer with SmartWindows Application

CONNECTING TO THE DEVICE

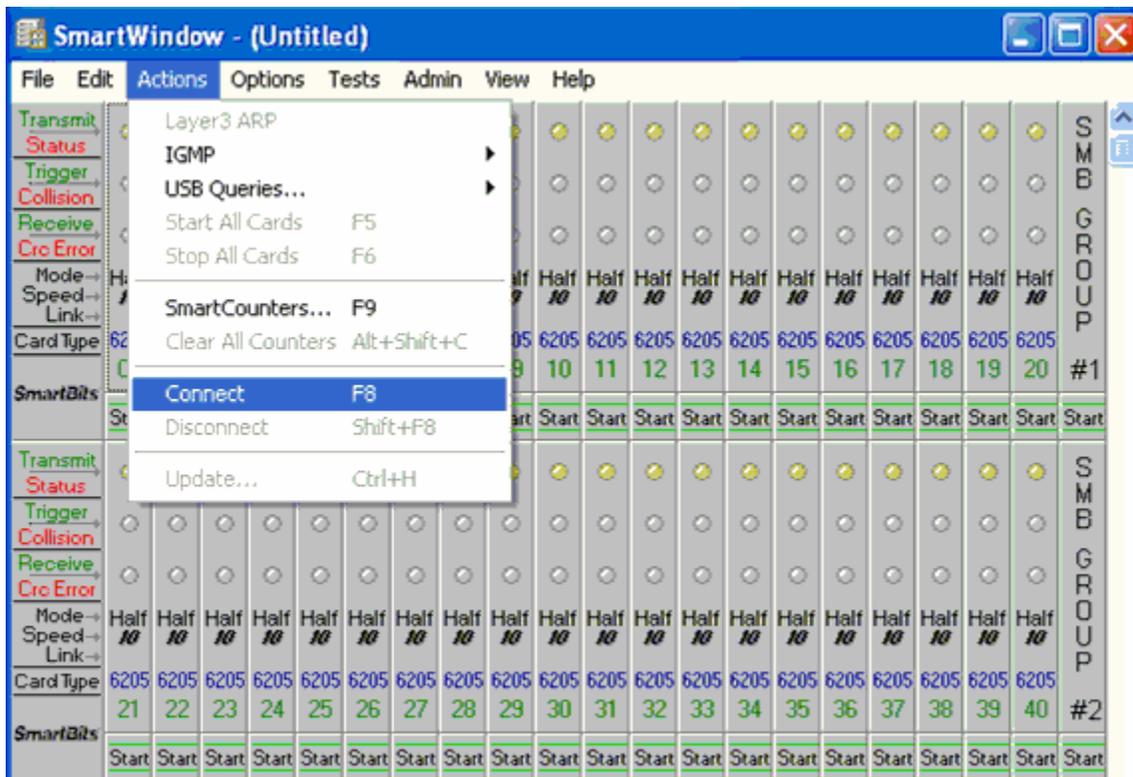
1. Select SMB-2000 by clicking on the icon:



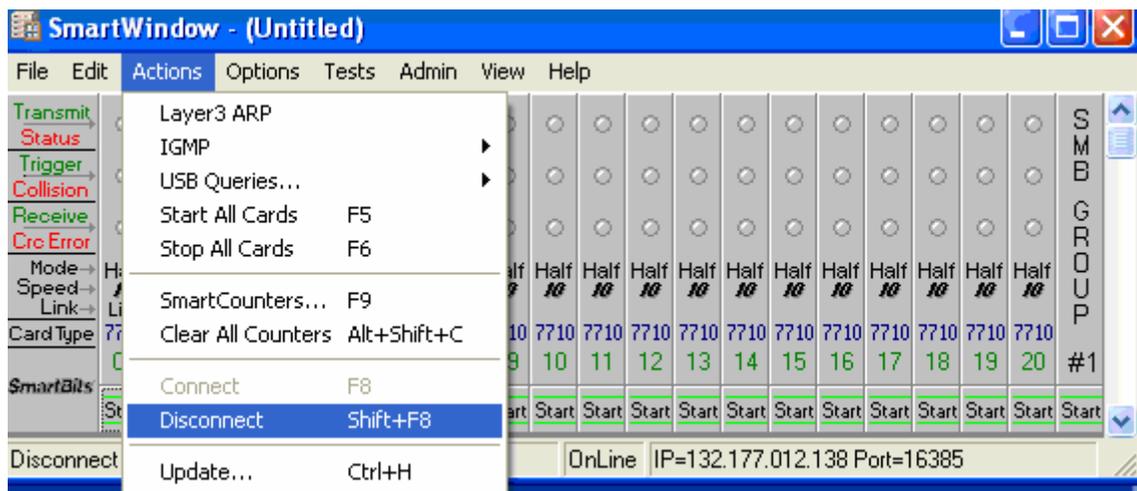
2. Verify the Connection Setup (device IP address and port) under Options menu:



3. Connect the application to the device:

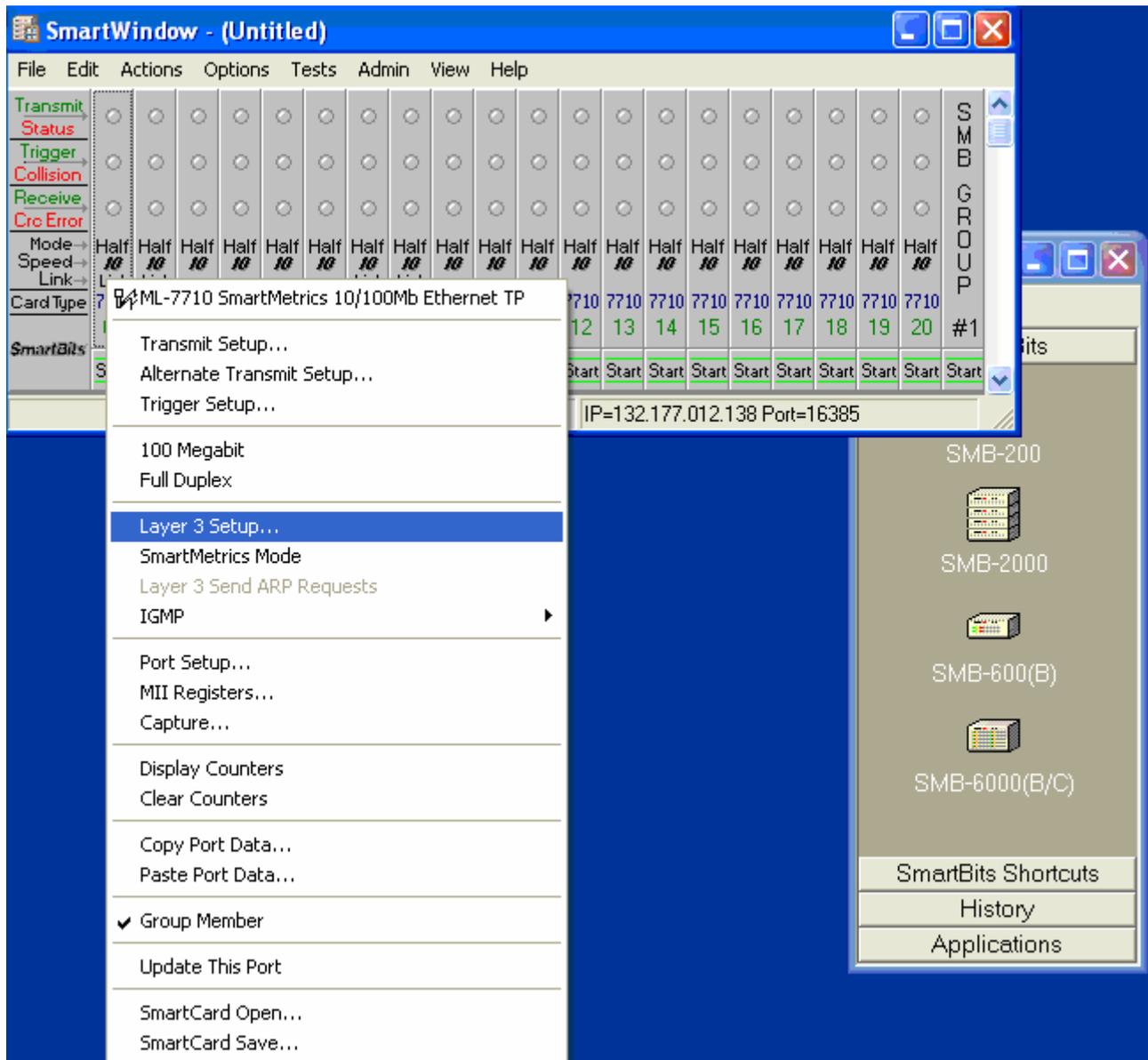


4. Remember to disconnect when done:

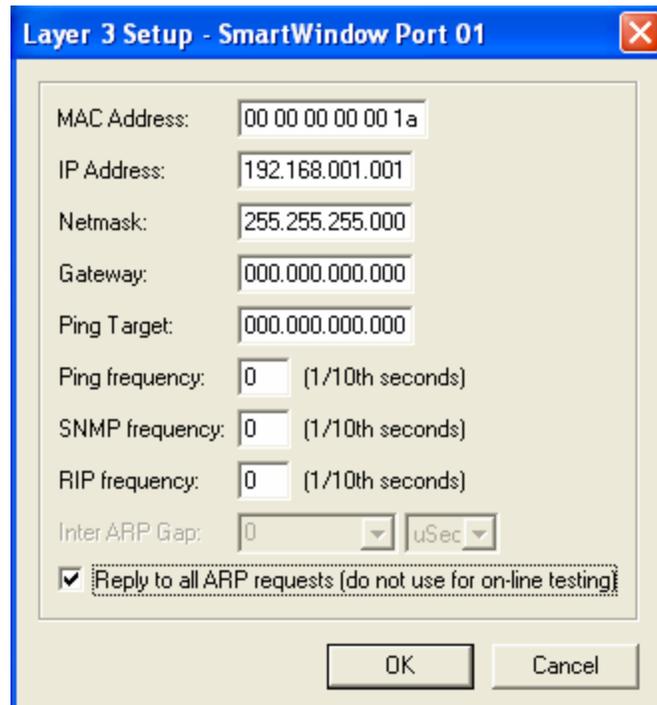


HOW TO SETUP LAYER 3 PROPERTIES:

1. Select Layer 3 Setup (menu opens by clicking on the interface card).



2. Fill the Layer 3 details. Make sure to check box Reply to all ARP requests



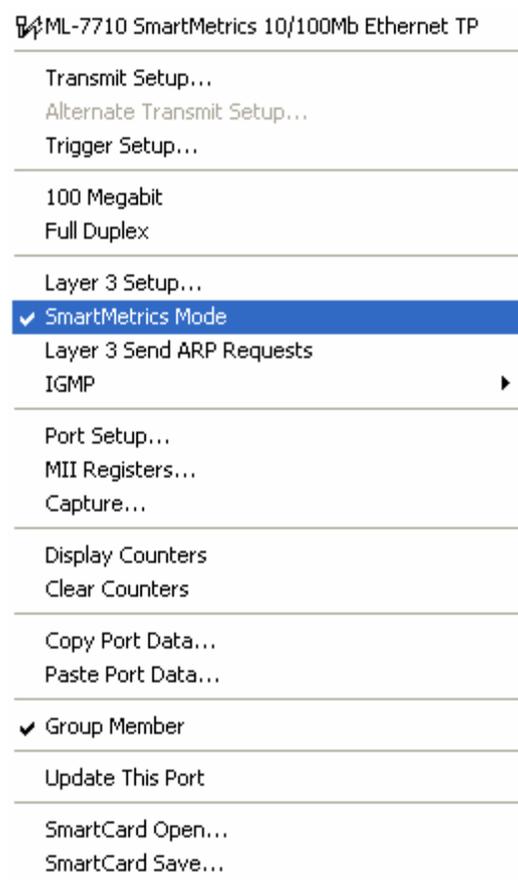
The image shows a dialog box titled "Layer 3 Setup - SmartWindow Port 01". It contains several input fields and a checked checkbox. The fields are: MAC Address (00 00 00 00 00 1a), IP Address (192.168.001.001), Netmask (255.255.255.000), Gateway (000.000.000.000), Ping Target (000.000.000.000), Ping frequency (0 (1/10th seconds)), SNMP frequency (0 (1/10th seconds)), RIP frequency (0 (1/10th seconds)), and Inter ARP Gap (0 uSec). The checkbox "Reply to all ARP requests (do not use for on-line testing)" is checked. There are OK and Cancel buttons at the bottom.

MAC Address:	00 00 00 00 00 1a
IP Address:	192.168.001.001
Netmask:	255.255.255.000
Gateway:	000.000.000.000
Ping Target:	000.000.000.000
Ping frequency:	0 (1/10th seconds)
SNMP frequency:	0 (1/10th seconds)
RIP frequency:	0 (1/10th seconds)
Inter ARP Gap:	0 uSec
<input checked="" type="checkbox"/>	Reply to all ARP requests (do not use for on-line testing)

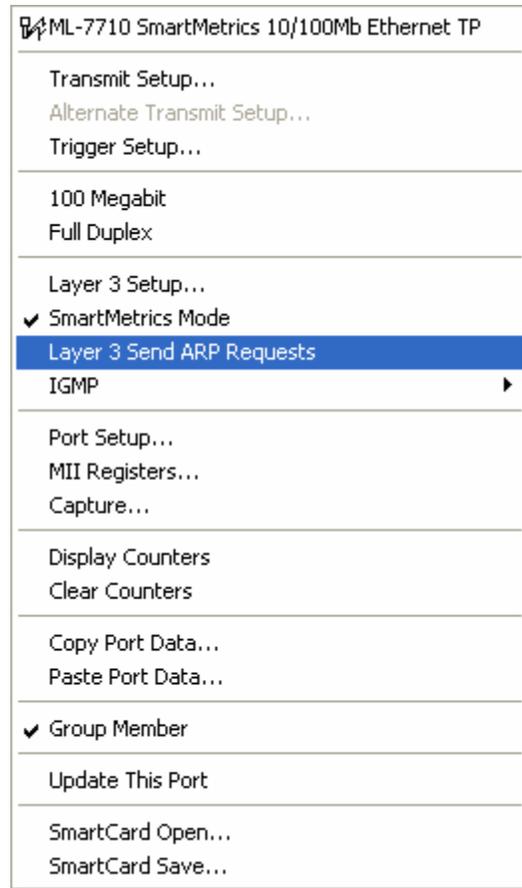
OK Cancel

HOW TO ENABLE ARP PROTOCOL

1. To send ARP requests check SmartMetrics Mode (the menu appears after clicking on the interface card).



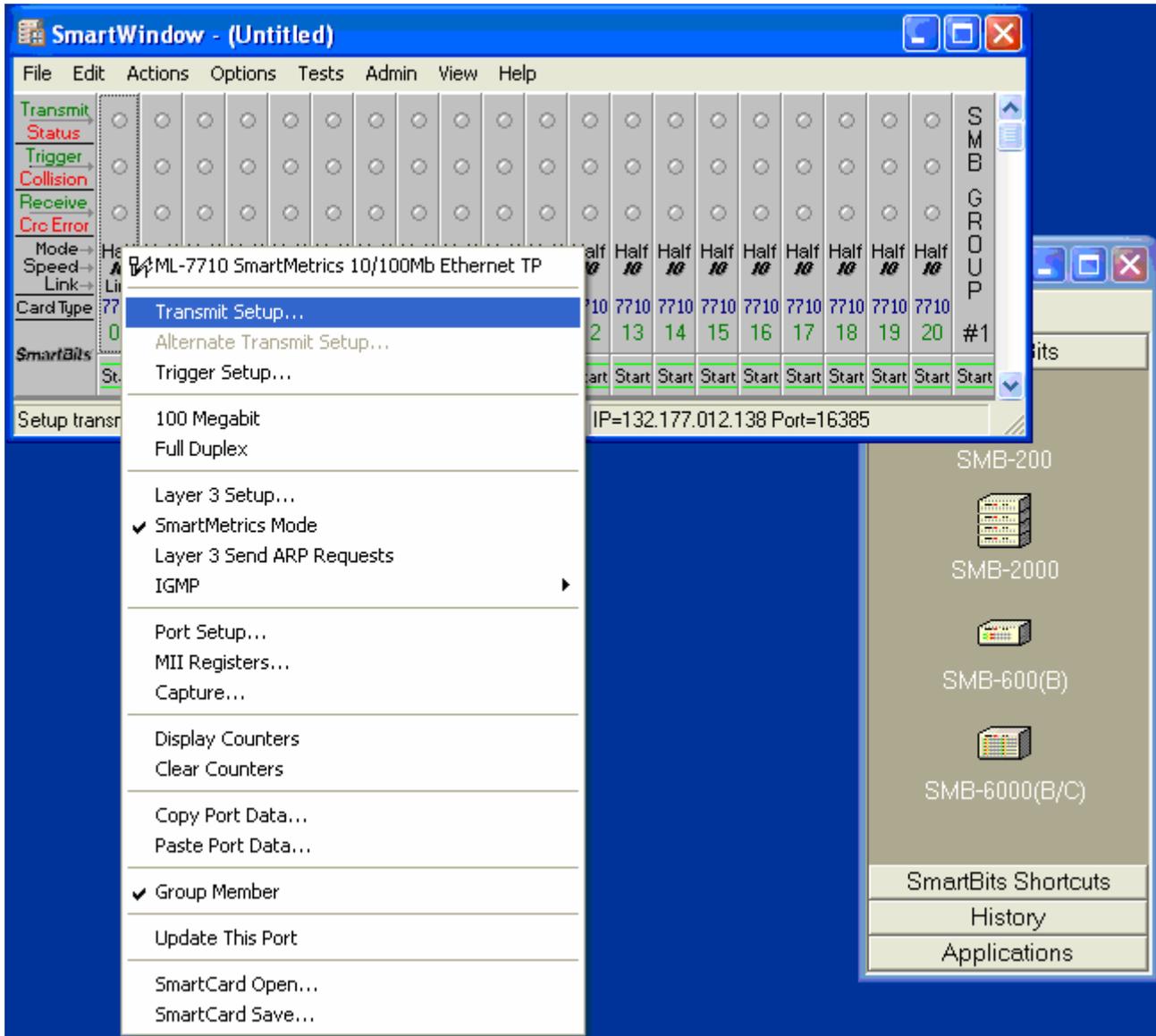
2. Then select Layer 3 Send ARP Requests



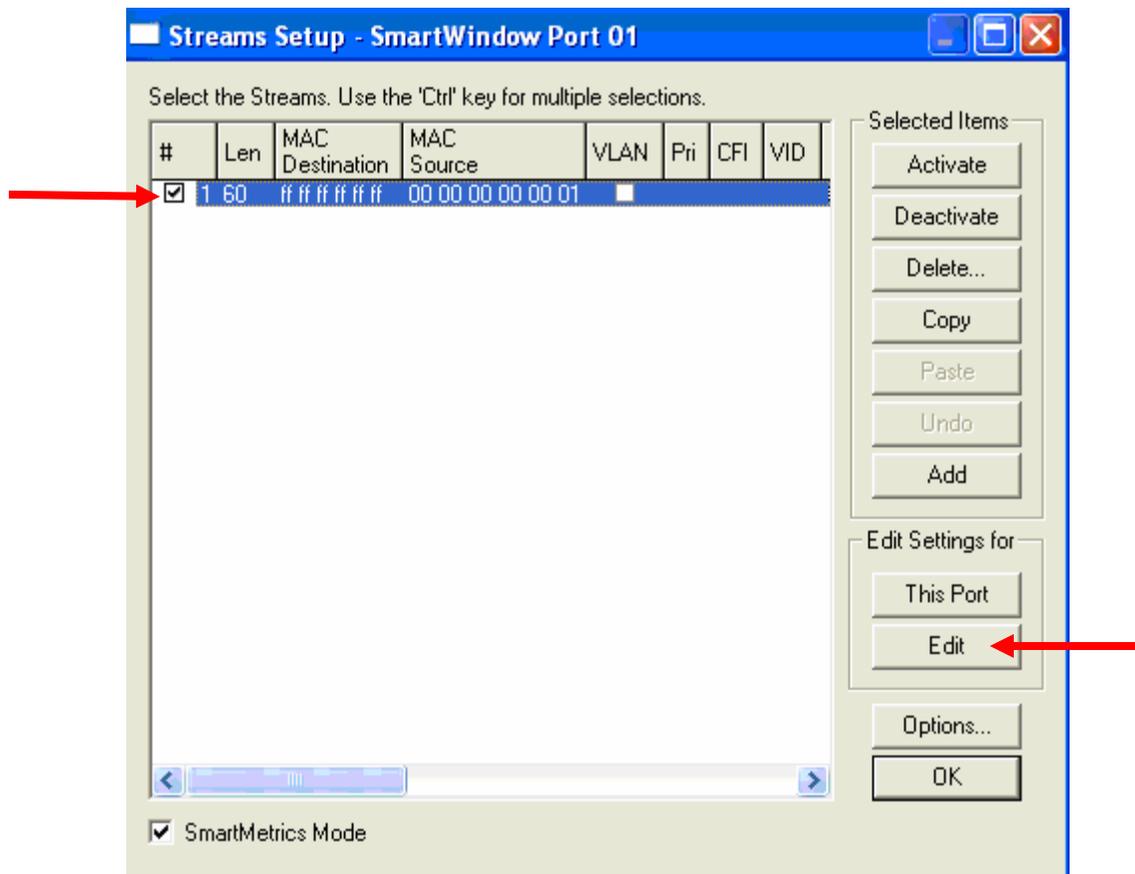
3. Ping the SmartBits interface card from the router. This will add an ARP entry for the card to the ARP table of the router.

HOW TO SETUP A UDP STREAM

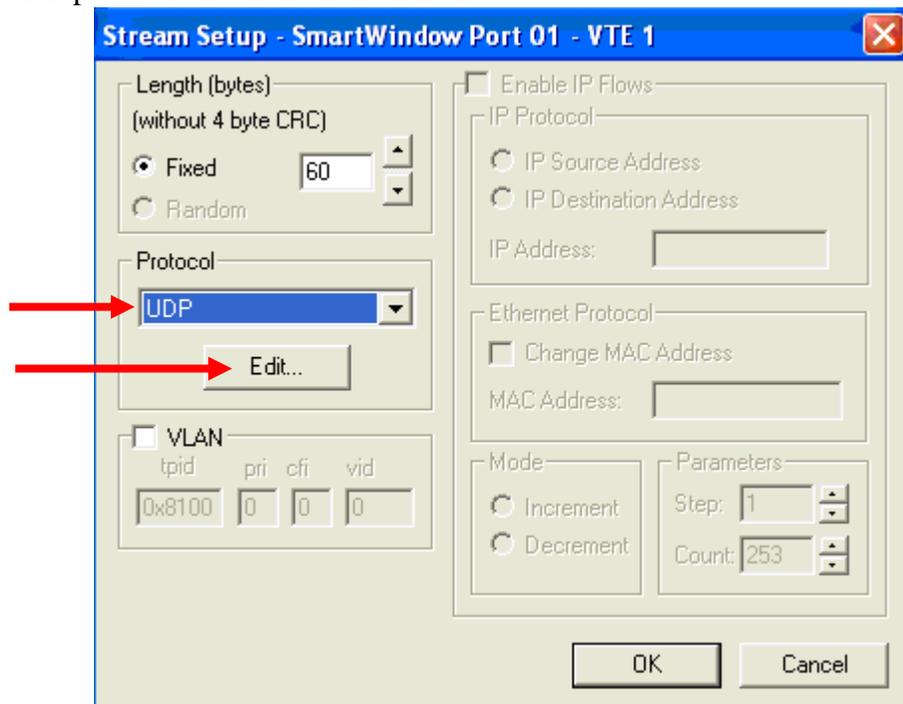
1. Select Transmit Setup for the card from which the data are to be transmitted.



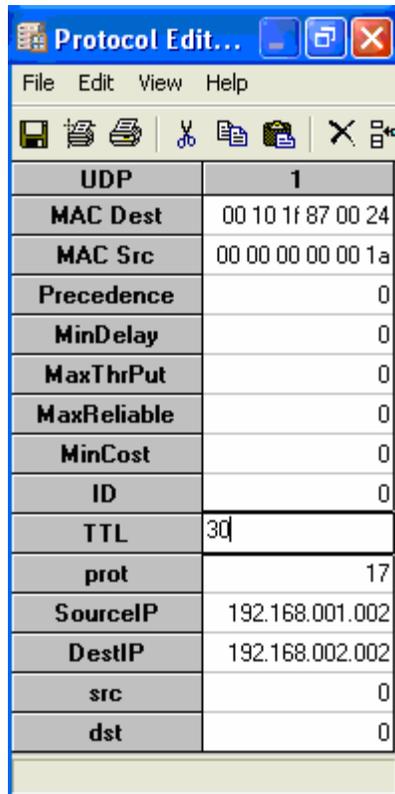
2. Select the stream and then click on Edit



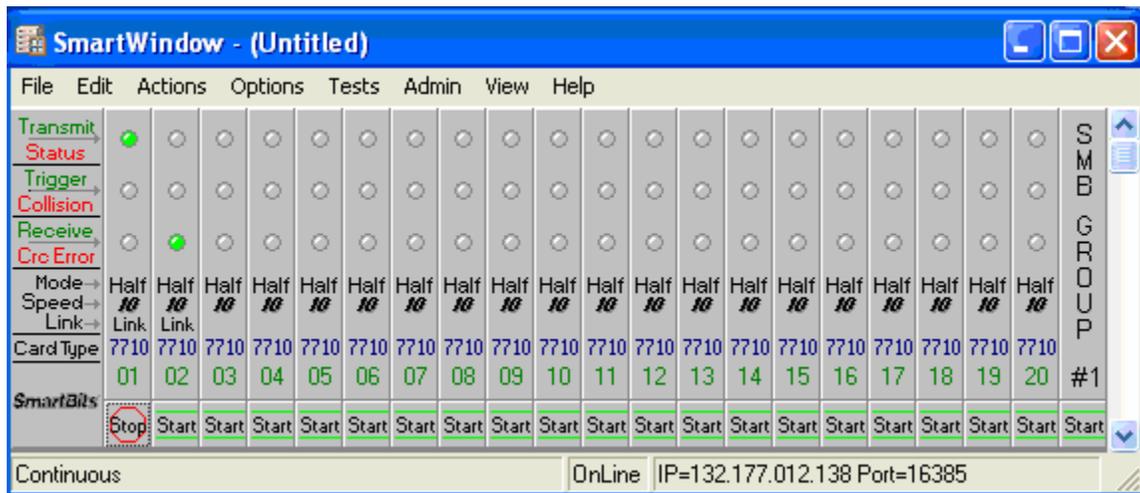
3. Select UDP protocol and then click on Edit:



- Edit UDP header fields for the stream. Make sure to enter correct MAC destination address, MAC source address, TTL, Protocol type (17 = UDP), source IP address, destination IP address. Unlike the values in the figure, the source and destination port numbers should be set to non-zero values.



- Close all the stream setup windows and hit the Start button on the card. If everything is correct, you would see green transmit light for the transmitting card and green receive light for the receiving card.



2. The counters for the receiving card are invoked in the same way.

The screenshot shows the SmartWindow interface with a main status window and two counter windows. The main window displays a grid of status indicators for 20 ports, with port 01 selected. The status for port 01 shows 'Transmit Status' as green, 'Receive' as green, and 'SmartBits' as 'Stop'. The status bar indicates 'OnLine IP=132.177.012.138 Port=16385'. The right sidebar shows 'SmartBits' for SMB-200, SMB-2000, and SMB-600(B).

Two counter windows are open, showing detailed statistics for SmartWindow Port 01 and SmartWindow Port 02.

	Events	Rates
Tmt. Packets	1,960,614	14,881
Rcv. Packets	82	0
Collisions	63	0
CRC Errors	0	0
Align. Errors	0	0
OverSize	0	0
Frag/UnderSize	0	0
Rx Bytes	9,130	0
Trig 1	0	0
Tx Packets	0	0
Tags	0	0
Tx from stack	6	0

	Events	Rates
Tmt. Packets	0	0
Rcv. Packets	1,958,486	14,881
Collisions	0	0
CRC Errors	0	0
Align. Errors	0	0
OverSize	0	0
Frag/UnderSize	0	0
Rx Bytes	125,346,716	952,384
Trig 1	0	0
Tx Packets	0	0
Tags	1,958,406	0
Tx from stack	1	0

3. You can select different events/rates to monitor from the drop down menu.

The screenshot shows a window titled "Counters - SmartWindow Port 01". It has two checked checkboxes: "Show Events" and "Show Rates". Below these are two columns: "Events" and "Rates". The data is as follows:

	Events	Rates
Tmt. Packets	3,032,025	14,881
Rcv. Packets	90	0
Collisions	74	0
Frag/UnderSize	0	0
OverSize	0	0
Collisions	0	0
Tags	0	0
Tx from stack	0	0
Rx to stack	0	0
ARP requests sent	9,943	0
ARP replies sent	0	0
ARP replies rcvd	0	0
PING replies sent	0	0
PING requests sent	0	0
PING requests rcvd	0	0
Tags	0	0
Tx from stack	6	0

At the bottom of the window are two buttons: "Clear Counters" and "Close".