Moxa Setup for the ELBNK-M83 product. (any CE product that use the NE4100T module)

Hardware things to check are the Dip Switch on the board for baud rate and address and the slide switches for which interface. For the Ethernet you need slide switch S7 to ETH and slide switch S3 to U/E.

1. Install the Network Enabler Administration software. Next you can run the Start\Programs\Network Enabler Administration\ Network Enabler Administrator

Network Enabler Admini	strator-Con	figuration				
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Function			Configuration	n - O Network I	Enabler Module(s)	
Network Enabler Admit Configuration Gonfiguration Monitor Port Monitor Port Monitor P Address Report		Model	MAL Address			
Message Log - 0 Monitor Log	-0]					
No Time		Description				
	No	w: 1/28/2009 2:19	9:40 PM			

- Next need to find the unit you can either use the Configuration\broadcast search if the PC and unit are on the same subnet or you can use the Configuration\Specify by IP address if you know the IP address of the unit.
- 3. You can also configure the unit using the web interface (type the IP address in your web browser) but you still need to use the software to install the virtual serial port.

## [Broadcast Search]

Use this function to search the LAN for all connected Network Enablers. Administrator will automatically the list view. If the Network Enabler is not on LAN and fail to contact, it will be removed from list.

Note 1: The search is done by UDP broadcast, Network Enablers connected outside the PC hostils LAN (on WAN, cross the router) will not be able to locate.

Note 2: If the Network Enabler in the list is specify by IP Address (<u>status is fixed</u>), broadcast search will not update it even if the Network Enabler is not present.

## [Specify by IP Address]

This function is used to search for a single Network Enabler. You can use ping (ICMP) to make sure the host can reach the specified Network Enabler.

Note 1: The Network Enabler added to list by this function will be marked by <u>"fixed" status</u>. This Network Enabler will be listed until you leave Administrator.

Once that is done the NE-4100T will be listed in the table on the right. You can then double click on the item to bring up the Configuration screen.

nformation	Auto Warning IP Address Report Password Digital IO Serial CMD
Model	Basic Network Advanced Network Serial Operating Mode Accessible IF
NE-41001	
MAC Address	Modify
00:90:E8:17:A1:60	Device Name NE-4100T_9367
Serial Number	
9367	
	🔽 Enable Web Console
Firmware Ver.	Enable Teinet Console
Ver 4.1	
BIOS Ver.	
Ver 2.1	
	Time Zone (GMT) Greenwich Mean Time: Dublin, Edinbur 👻
Status	Local Date 1/ 1/2000 🔻
Data Mode	Local Time 12:17:15 AM
	Time Comme

## [Configure]

This function allows you to modify the following settings: Basic, Network, Serial, Operating Mode, Accessible IP, Auto Warning, IP Location, and Password. To modify settings, you must click on the Modify checkbox that appears near the top of each Configure page.

Typically you will need to click on the Network Tab and then modify the IP address as needed for your network. As a Default CE will set the IP address to 192.168.127.254. I suggest changing the IP address to something else.

nformation	Auto Warning IP Add	ress Report 📔 Passwor	d Digital IO	Serial CMD
Model	Basic Network Advar	nced Network Serial	Operating Mode	Accessible IP:
NE-41001				
MAC Address		100 100 1 101		
00:90:E8:17:A1:60	IP Address	192,168,1,161		
	- Modify			
Serial Number	Netmask	255.255.255.0		
3367	Galowou			
Firmware Ver.	Gateway			
Ver 4.1	IP Configuration	Static	•	
DIOC V	DNS Server 1			
Ver 2.1	DNS Server 2			
Status	Modify			
Data Mode	2	Enable SNMP		
	Community Name	public		
	Location			
	Contact			

Please also MAKE SURE that the Operating Mode is set to Real Com Mode. If this is set to something else then the virtual serial port will NOT work. CE will typically set this at the factory but still check to be sure.

nformation	Auto Warnin	g   IP Addre	ss Report   Passwor	rd Digital IO	Serial CMD
Model NE-4100T	Basic Net	work Advanc	ed Network Serial	Operating Mode	e   Accessible IPs
MAC Address		lodify			1
00:90:E8:17:A1:60	Port	Alias	OP Mode		
Serial Number 9367	1		Real COM Mode	e	
Firmware Ver.					
Ver 4.1					
BIOS Ver. Ver 2.1					
Status					
Data Mode			Vie	ew Settings	Settings

Press Ok after you had made the changes to save the changes to the unit.

Next click on COM Mapping in the Function Column then Right click on COM Mapping and pick Add Target to create a virtual comport for this unit. It should show you a list of NE-4100T units OR you can select Input manually and enter the IP address (PLEASE note you will need to change the Model to NE-4100T.)

Select F	rom List	Re	scan	Select	All	Clear All
No	Model		MAC Add	ess	IP Addre	88
<b>1</b>	NE-4100T		00:90:E8:	17:A1:60	192.168	.1.161
) Input ma	nually	IP A	ddress			
		Mod	del	NE-411	0S	
		Por	ts	1 Port(s)		

Press OK and then you can double click on the item to change its COM number if you want.

እ Network Enabler Admin	istrator-CO	M Mapping					
Eile Function COM Mappi	ng View <u>H</u>	<u>H</u> elp					
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Function			C	OM Ma	pping - 1 C	ОМ	
🖃 🔊 Network Enabler Admir	No 🛆	Model	IP Address	Port	COM Port	Mode	Parameter
Configuration	1	NE-4100T	192.168.1.161	1	COM11	Hi-Performance, FIFO Ena	9600, None, 8, 1, Nor
Monitor	-						
IP Address Report	-						
	<u> </u>						
	-						
	-						
I F	4						•
Message Log - 7 Monitor Lo	g.0]						
No Time		Description					<b>_</b>
3 1/28/2009 2:3	6:33 PM	Configuration Char Bott Monitor Starts	iged: NE-4100T (00:90	):E8:17:A1:	60)		_
5 1/28/2009 2:4	15:39 PM	Port Monitor Stopp	u. ed.				
6 1/28/2009 2:4 7 1/28/2009 2:4	15:40 PM 15:52 PM	Port Monitor Starte Monitor Started.	d.				
							<u> </u>
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You can do a limited port check by clicking on the Port Monitor under functions then Right clicking on Port Monitor and pick Load Configured Com Port. This should load under the monitor all of the ports you have configured. Right click again on Port Monitor and pick Go. Now the line will be updated with the status of the unit. Please note there are some setup issue which will not be found by this monitor so you could still get and error in the Transfer when you scan for serial ports.

💸 Network Enabler Admini	strator-Po	rt Monitor						
Eile Function Port Monitor	View <u>H</u> e	þ						
🛛 🕑 GO 🔗 📠								
Function			Port Mon	itor - Running	- 1 Po	rt(s)		
Network Enabler Administ	No 🛆	Model	MAC Address	IP Address	Port	OP Mode	Alive	
	<b>⊡</b> 1	NE-4100T	00:90:E8:17:A1:60	192.168.1.161	1	Real COM Mode	Alive	
	<u> </u>							
Port Monitor								
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Message Log - 9 Monitor Log	g-0	-						
No Time	5 00 DH	Description						<u> </u>
6 1/28/2009 2:4	5:39 PM 5:40 PM	Port Monitor Stopped. Port Monitor Started.						
7 1/28/2009 2:4	5:52 PM	Monitor Started.						
9 1/28/2009 2:5	9:37 PM	Port Monitor Stopped. Port Monitor Started.			-			
<u></u>								<u> </u>
	1/	28/2009 2:59:37 PM Sta	arted 0:0:1:	41				11.

The unit and driver should now be setup and you can go to the Transfer application and Scan for serial ports.

ComPort	Status	Device Type	
COM4	Available	\Device\QtFtsSer2k0	
COM6	Available	\Device\QtFtsSer2k1	
СОМЗ	Available	\Device\VCP0	
COM20	Can Not Connect to Nport	Npser20	
COM13	Available	Npser13	
COM12	Available	NEdrv12	
COM14	Unknown Error: 1450	NEdrv14	-

In the example above please note the various Device Types.

\Device\VCP0 - this is a USB virtual serial port like the URXTX or the USB port on the new smart mux CE3341 board.

NPser20, and NPser13 are DE-211 devices using Real Com installer. (what our previous Moxa product used.)

NEdrv12 and NEdrv14 are NE-4100T devices – the new type driver discussed in this document.

The Status of "Unknown Error:1450" is what happens with there is a problem with the virtual serial port. Suggest you use the Port Monitor in the Network Enabler software to see if you can determine the issue.