

No.	441	Updated on	2006/4/28	Query Count	13116																																		
Question	I plan to locate NPort behind NAT router to use private IP. And I want to install it as real COM port on my system. What shall I do?																																						
Applies To:	NPort Server Pro: DE-303/308 NPort Server Lite: DE-301/302/304/331/332/334 NPort Express: DE-211/DE-311/311M NPort 5110 NPort 5200 Series: 5210/5230/5232/5232I NPort 5400 Series: 5410/5430/5430I NPort 5600 Series: 5610-16/5610-8 Network Enabler: NE-4100T/4110S/4110A/NE-4120S/4120A																																						
Answer	If you want to allow NPort to use private IP behind your NAT/firewall, you should use NAPT protocol to map the Public IP to NPort's private IP in your NAT router. Most of routers/firewalls all support this function now. For example, when you configure NPort's private IP as 192.168.1.1, and the NAT router's Public IP is 61.x.x.x. Next, you should map TCP/UDP port numbers shown as follow,																																						
	[For DE-311/211/30x/33x]																																						
	<table><tr><td>Protocol</td><td>Public IP</td><td>Port No.</td><td>NPort Private IP</td><td>Port No.</td></tr><tr><td>TCP</td><td>61.x.x.x</td><td>23</td><td>192.168.1.1</td><td>23</td></tr><tr><td>TCP</td><td>61.x.x.x</td><td>4000</td><td>192.168.1.1</td><td>4000</td></tr><tr><td>TCP</td><td>61.x.x.x</td><td>950(~965)</td><td>192.168.1.1</td><td>950(~965)</td></tr><tr><td>TCP</td><td>61.x.x.x</td><td>966(~981)</td><td>192.168.1.1</td><td>966(~981)</td></tr><tr><td>UDP</td><td>61.x.x.x</td><td>1029</td><td>192.168.1.1</td><td>1029</td></tr></table>					Protocol	Public IP	Port No.	NPort Private IP	Port No.	TCP	61.x.x.x	23	192.168.1.1	23	TCP	61.x.x.x	4000	192.168.1.1	4000	TCP	61.x.x.x	950(~965)	192.168.1.1	950(~965)	TCP	61.x.x.x	966(~981)	192.168.1.1	966(~981)	UDP	61.x.x.x	1029	192.168.1.1	1029				
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No.	443	Updated on	2005/12/30	Query Count	14178
Question	I've installed NPort/NE series Driver properly, but why can not my application program (AP) open ports successfully?				
Applies To:	NPort Server Pro: DE-303/308. NPort Server Lite: DE301/302/304/331/332/334. NPort Express: DE-211/DE-311/311M. NPort 5200 Series: 5210/5230/5232/5232I NPort 5400 Series: 5410/5430/5430I NPort 5600 Series: 5610-16/5610-8 NPort5110 Network Enabler: NE-4100T/4110S/4110A/NE-4120S/4120A				
Answer	<p>[POSSIBILITIES]</p> <ol style="list-style-type: none"> 1. Improper IP configuration. 2. Improper OP_mode. 3. DHCP issue. 4. Access authorization. 5. COM port No. conflicts with other devices. 6. Your firewall filter rule discards the specific TCP packet. 7. DE-311/211 has a DIP SW1 setting error. 8. Port is occupied. 9. Forget to click 'Apply' and 'Save' button. <p>[SOLUTIONS]</p> <ol style="list-style-type: none"> 1. Make sure that your Host is able to PING the NPort. 2. Your operation mode must be [Host Based / Driver Mode] or [Real COM Mode]. 3. If your Host and NPort are in DHCP environment: <ol style="list-style-type: none"> a) You have to assign a fixed IP address to NPort & your Host. b) Under DHCP environment, you can map a specific IP address to your NPort's & Host's MAC address. 4. Use NPort Configurator or Administrator to check the NPort's access control list; your Host IP must exist in NPort's access control list. 5. Check if there is any other installation using the same COM port number, e.g., internal modem on COM3. 6. Check filter rules to open TCP port # 950(to 965) & # 966(to 981). 7. The DE-311/211's DIP SW1 must be OFF for data communication. 8. Telnet NPort's IP address, and check the "Conn. Status" message under [Monitor]. It must be set to "listen" before you open the port. 9. Please remember click 'Apply' button after setting COM Mapping with NPort5000/NE series. And click 'Save' button after installing Driver with NPort Server Family. 				

No.	444	Updated on	2006/1/17	Query Count	11729
Question	I can PING and Telnet NPort, but why can not my own TCP Client program successfully connect with NPort?				
Applies To:	NPort Server Pro: DE-303/308. NPort Server Lite: DE301/302/304/331/332/334. NPort Express: DE-211/DE-311/311M. NPort 5200 Series: 5210/5230/5232/5232I NPort 5400 Series: 5410/5430/5430I NPort 5600 Series: 5610-16/5610-8 Network Enabler: NE-4100T/4110S/4110A/NE-4120S/4120A				
Answer	<p>[POSSIBILITIES]</p> <ol style="list-style-type: none"> 1. Improper operation mode. 2. NPort's listening TCP port is not correct. 3. DHCP issue. 4. Improper DIP switch settings on DE-311/211. 5. NPort is occupied. 6. Access right authentication. 7. Firewall filtering rules. <p>[SOLUTIONS]</p> <ol style="list-style-type: none"> 1. Your operation mode must be [TCP Server mode]. 2. The NPort's listening TCP Port must match your own TCP Client program. 3. If your Host and NPort are in a DHCP environment: <ol style="list-style-type: none"> a) You must assign a fixed IP address to NPort & your Host. b) Under a DHCP environment, you can map a specific IP address to your NPort's & Host's MAC address. 4. The DE-311/211's DIP SW1 must be OFF for data communication. 5. Telnet NPort's IP address, and check the "Conn. Status" message under [Monitor]. It must be set to "listen" before executing your program . 6. a)NPort Server Pro/Lite/Express:check if [Desti.IP] column is proper. b)NPort 5210/5230/5410/5430/5430I/5610-8/5610-16:check if [Accessible IP Settings] is proper. 7. Make sure that your firewall can open the listening TCP port. 				

No.	445	Updated on	2006/1/17	Query Count	11266
Question	I can PING & Telnet NPort, but why can not NPort connect with my own TCP Server program properly?				
Applies To:	NPort Server Pro: DE-303/308. NPort Server Lite: DE-301/302/304/331/332/334. NPort Express: DE-211/DE-311/311M. NPort 5200 Series: 5210/5230/5232/5232I NPort 5400 Series: 5410/5430/5430I NPort 5600 Series: 5610-16/5610-8 Network Enabler: NE-4100T/4110S/4110A/NE-4120S/4120A				
Answer	<p>[POSSIBILITIES]</p> <ol style="list-style-type: none"> 1. Improper operation mode. 2. NPort's connecting TCP port is not correct. 3. DHCP issue. 4. Improper [Desti. IP] setting. 5. NPort is connected to another TCP Server. 6. Firewall filtering rules. 7. Improper DIP switch settings on DE-311/211. <p>[SOLUTIONS]</p> <ol style="list-style-type: none"> 1. Your operation mode must be [TCP Client mode]. 2. The NPort's TCP Port must match your own TCP Server program. 3. If your Host and NPort are in a DHCP environment: <ol style="list-style-type: none"> a) You have to assign a fixed IP address to NPort & your Host. b) Under a DHCP environment, you can map a specific IP address to your NPort's & Host's MAC address. 4. Your [Desti.IP] must be the same as your host's current IP. 5. Telnet NPort's IP address, and check the "Conn. Status" message under [Monitor]. It must shows "Remote x.x.x.x" (x.x.x.x must be your host's IP). 6. Make sure that your firewall can open the TCP port. 7. The DE-311/211's DIP SW1 must be OFF for data communication. 				

No.	449	Updated on	2006/1/17	Query Count	11777
Question	I can PING & Telnet NPort. Why can not my own UDP program Rx/Tx data via NPort properly?				
Applies To:	NPort Server Pro: DE-303/308. NPort Server Lite: DE-301/302/304/331/332/334. NPort Express: DE-211/DE-311/311M. NPort 5200 Series: 5210/5230/5232/5232I NPort 5400 Series: 5410/5430/5430I NPort 5600 Series: 5610-16/5610-8 Network Enabler: NE-4100T/4110S/4110A/NE-4120S/4120A				
Answer	<p>[POSSIBILITIES]</p> <ol style="list-style-type: none"> 1. Improper operation mode. 2. NPort's UDP port is not correct. 3. DHCP issue. 4. Improper [Desti. IP] setting. 5. Firewall filtering rules. 6. Improper DIP switch settings on DE-311/211. 7. Data loss. <p>[SOLUTIONS]</p> <ol style="list-style-type: none"> 1. Your operation mode must be [UDP mode]. 2. The NPort's UDP Port must match your own UDP program. 3. If your Host and NPort are in a DHCP environment: <ol style="list-style-type: none"> a) You have to assign a fixed IP address to NPort & your Host. b) In a DHCP environment, you can map a specific IP address to your NPort's & Host's MAC address. 4. Your [Desti.IP] must be the same as your host's current IP. 5. Make sure that your firewall can open the TCP port. 6. The DE-311/211's DIP SW1 must be OFF for data communication. 7. Initially, UDP can NOT guarantee data won't be lost. But we still can do something for this problem. That is, <ol style="list-style-type: none"> a) Purify your network traffic as best as you can. b) Your program should be able to handle a resending mechanism when the data is lost. c) Change to use TCP Server / Client architecture. 				