ATEN *Tech Note*

TCP Server mode for ATEN Secure Device Server

This tech note applies to the following ATEN Secure Device Server models:

Model	Product Name
SN3001	1-Port RS-232 Secure Device Server
SN3001P	1-Port RS-232 Secure Device Server with PoE
SN3002	2-Port RS-232 Secure Device Server
SN3002P	2-Port RS-232 Secure Device Server with PoE

Table of Contents

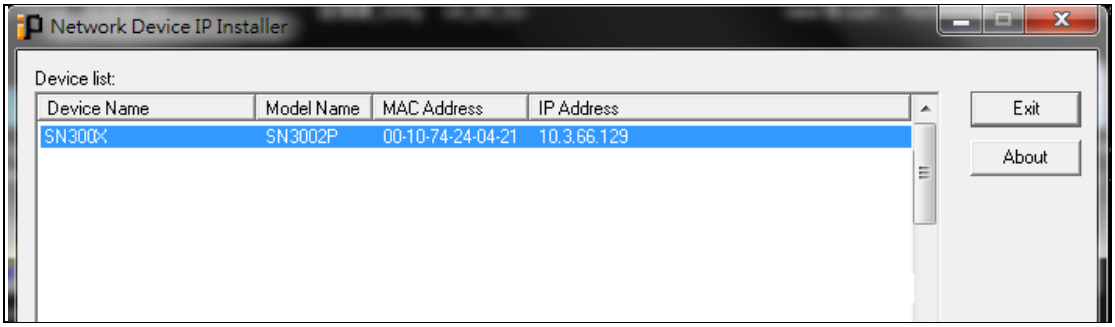
A. What is TCP Server mode?

SN (Secure Device Server) configured as TCP Servers can be connected by host PCs running TCP client programs and securely collect data from them over a network. TCP Server mode can be simultaneously connected to and collect data from up to 16 host PCs.

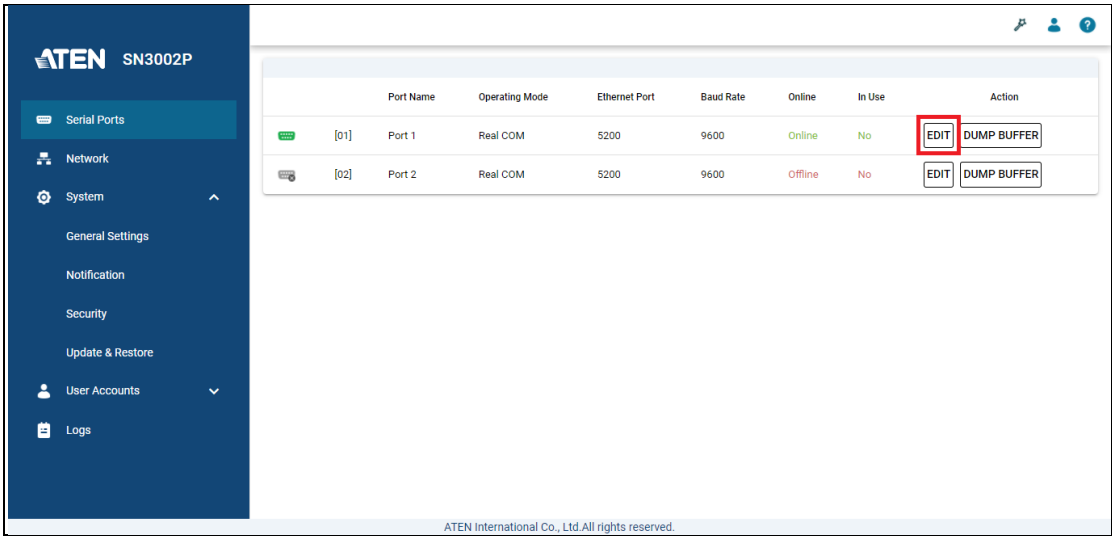
B. How to configure TCP Server mode?

The following procedures use SN3002P as an example:

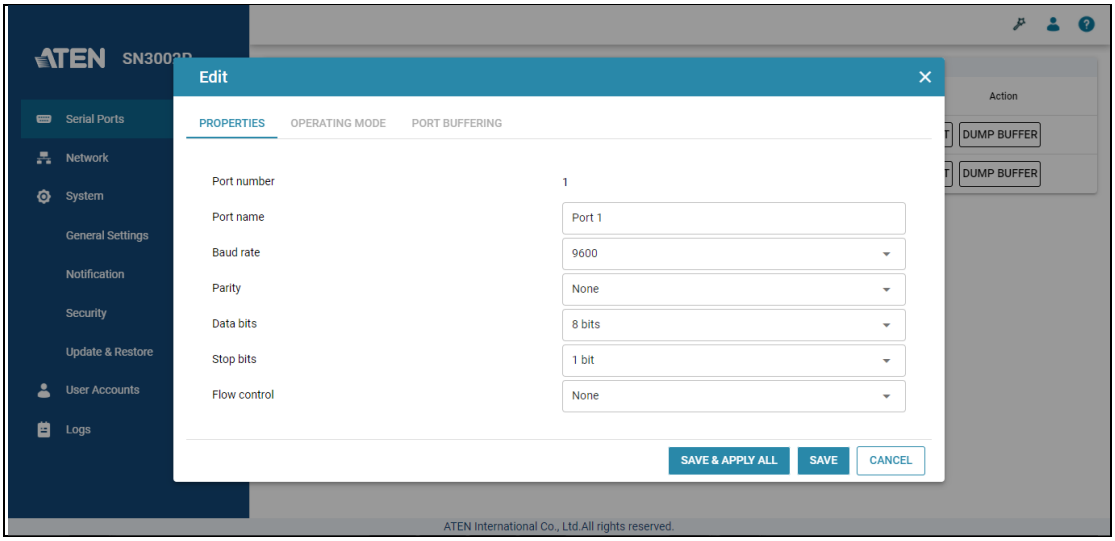
1. Using a null modem cable, connect the SN's serial port 1 to a serial device (e.g. PC's COM port, CNC machine, etc.).
2. Using an Ethernet cable, connect the SN's LAN port to your local network.
3. On a host PC, use IP Installer utility (can be downloaded from SN's product page) to discover the IP address of the SN3002P.



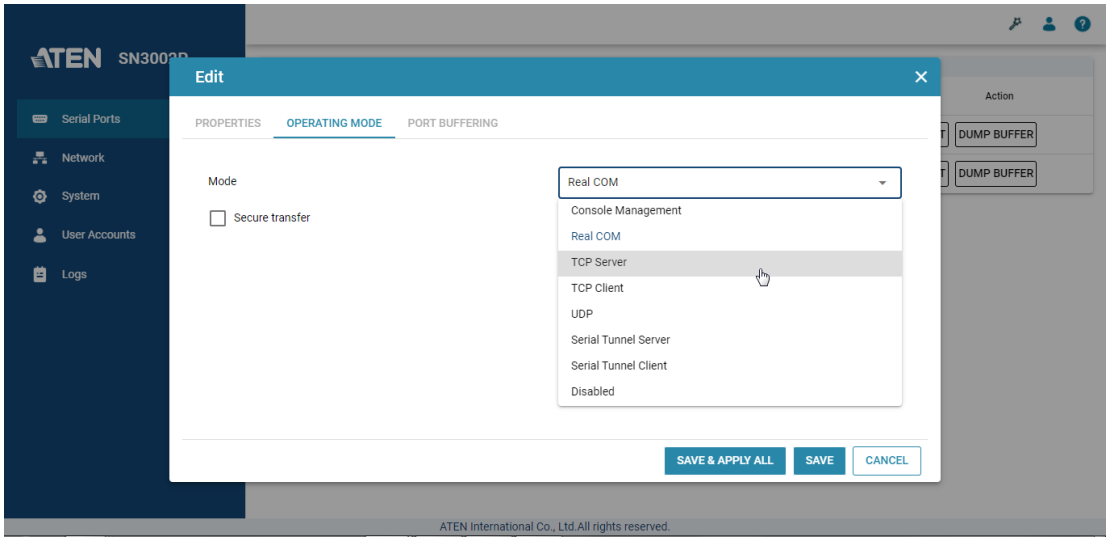
4. Using a web browser, enter the SN3002P's IP address, and log in.
5. Under *Serial Ports*, click the **EDIT** button of *Port 1*.



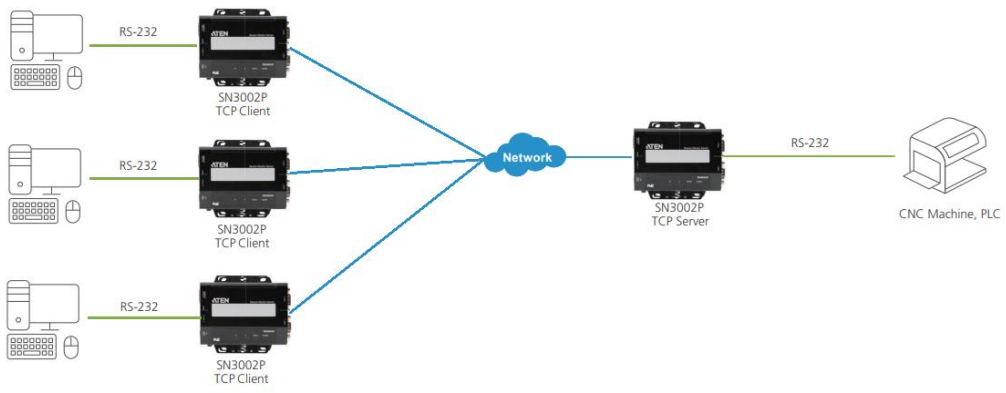
6. Under *PROPERTIES*, configure the necessary serial communication settings (e.g. baud rate, parity, etc.) to match with the connected serial device.



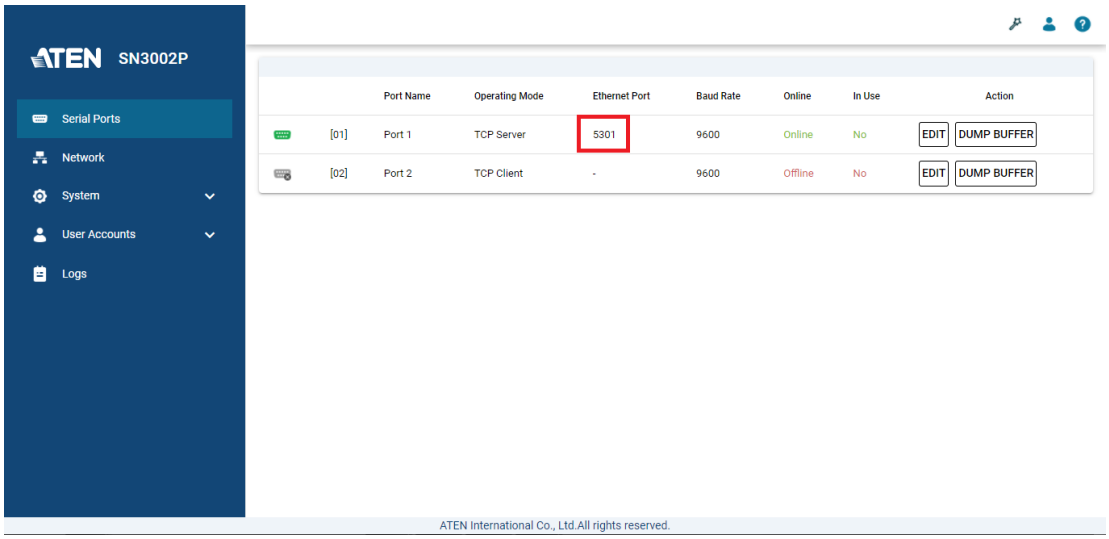
7. Under *OPERATING MODE*, select **TCP Server** from the dropdown list. Optionally enable the **Secure transfer** option if you want the data to be encrypted and transmitted securely over a network.



Note: When *Secure transfer* is enabled for secure connection, every connecting serial device must be connected via another SN device, in *TCP Client* mode with *Secure transfer* enabled.



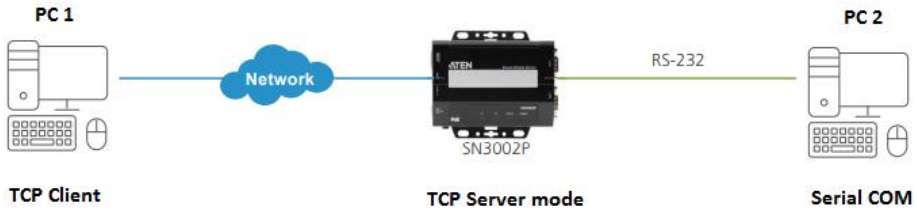
8. Once configured, the Ethernet port of SN3002P's port 1 is assigned to 5301, the port number for TCP communication.



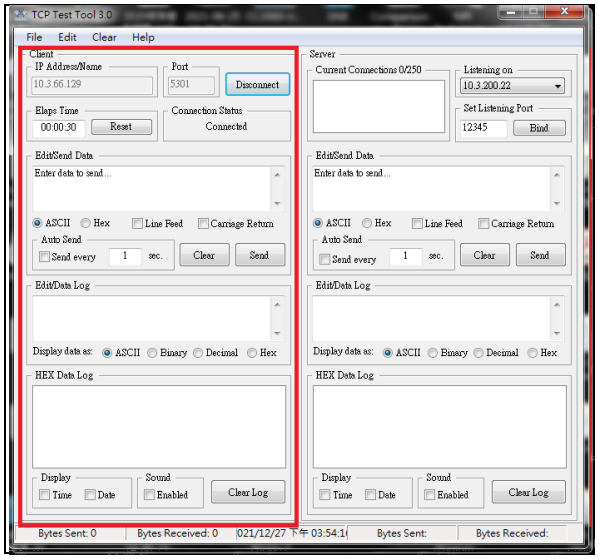
Note: The Ethernet port is assigned based on **base socket** settings in *System > General Settings > Service Ports.*

C. How to test TCP Server mode?

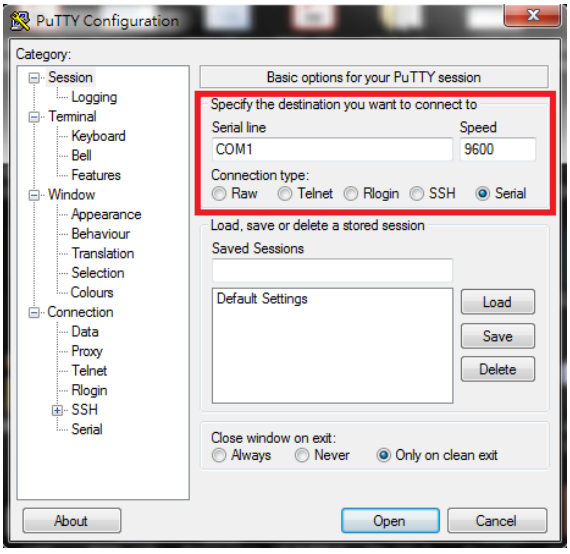
Using PC1 as the TCP client and PC2's COM port as a serial device, presume the settings of the SN3002P have been properly configured, as mentioned in the previous section.



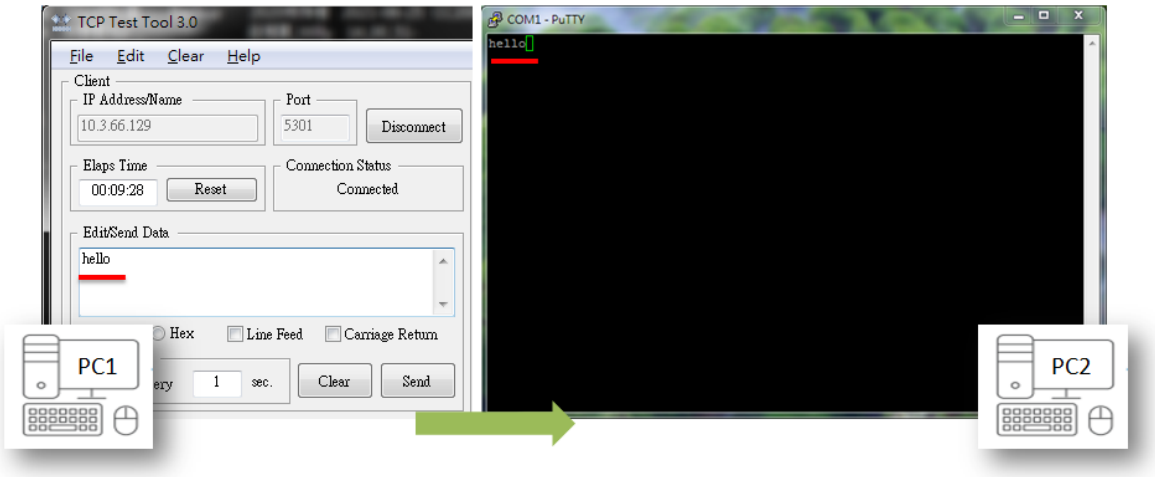
1. On PC1, use TCP Test Tool, a third-party utility, to send or receive data to or from PC2, as illustrated below.



2. On PC2, use Putty, a third-party utility, to configure its serial communication settings, as illustrated below.



3. On the TCP Test Tool of PC1 (host), you can enter any text to test if it can be received by the Putty of PC2 (serial device), as exemplified below.



Note: Conversely, you can also enter any text on the Putty of PC2 to test if it can be received by the TCP Test Tool of PC1.

D. Appendix

ATEN Secure Device Server Pin Assignment

Pin	Configuration
	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS