ATEN *Tech Note*

# Console Management 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 |
| SN3401 | 1-Port RS-232/422/485 Secure Device Server |
| SN3401P | 1-Port RS-232/422/485 Secure Device Server with PoE |
| SN3402 | 2-Port RS-232/422/485 Secure Device Server |
| SN3402P | 2-Port RS-232/422/485 Secure Device Server with PoE |

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## A. What is Console Management mode?

In Console Management mode, an SSH (secure channel) or Telnet session is initiated from the network. The serial device (e.g. network switch) waits for the network host to initiate the connection. Typically, Console Management mode is used for console server applications in server rooms, where a host PC needs to access a device's console port for configuration or maintenance via SSH or Telnet connection.

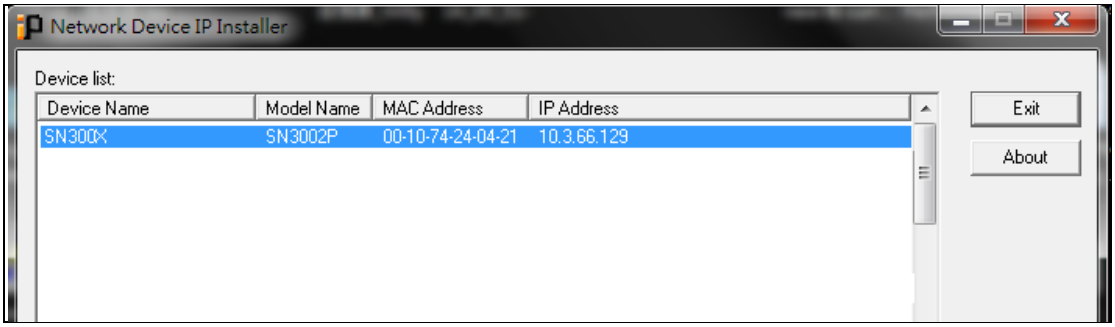
## B. How to configure Console Management mode?

The following procedure uses SN3002P as an example:

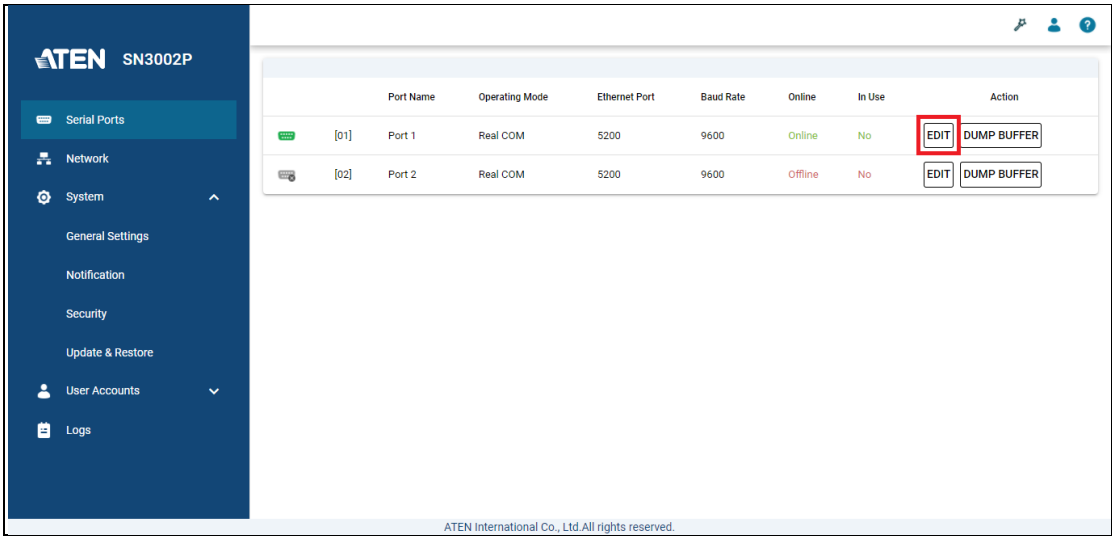
1. Using a null modem cable, connect the SN's serial port 1 to a serial device (e.g. network switch, router, etc.).

   **Note:** For a Cisco network switch with an RJ-45 console port, please use a Cisco console cable.

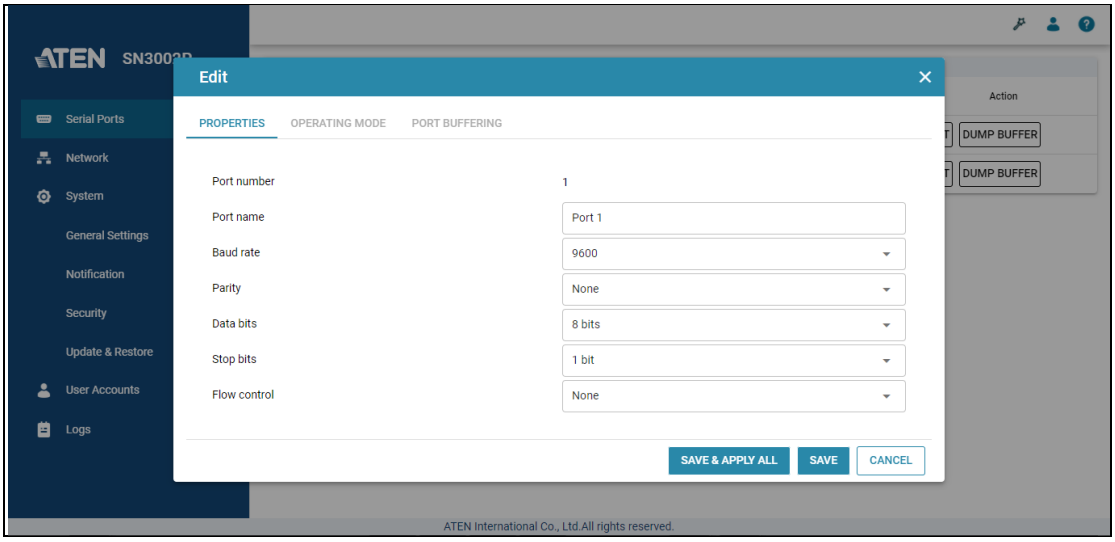
2. Using an Ethernet cable, connect the SN's LAN port to your local network.
3. On a host PC, use IP Installer utility (can be downloaded from SN's product page) to discover the IP address of the SN3002P.



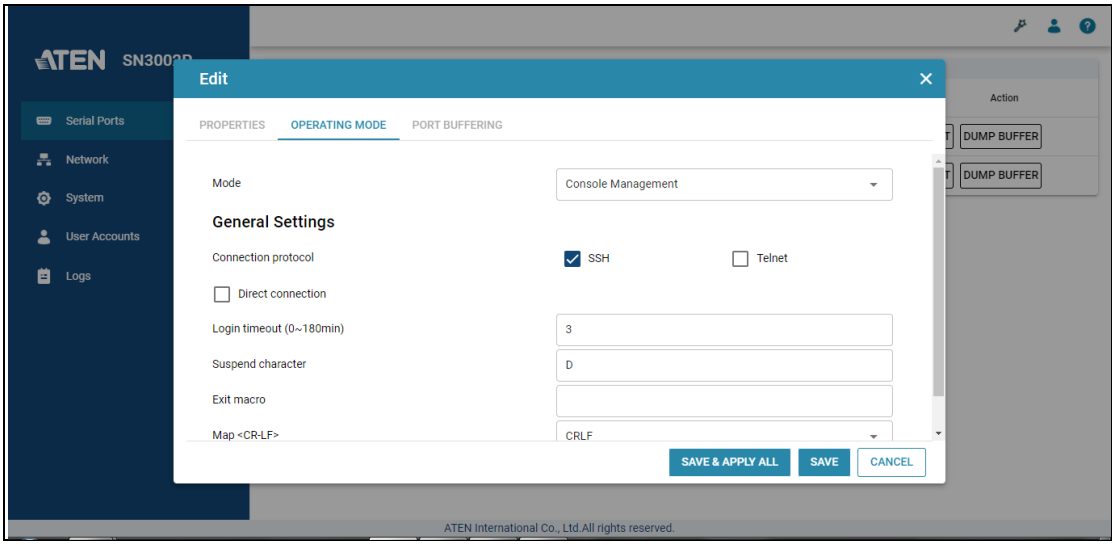

4. Using a web browser, enter the SN3002P's IP address, and log in.
5. Under *Serial Ports*, click the **EDIT** button of *Port 1*.



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

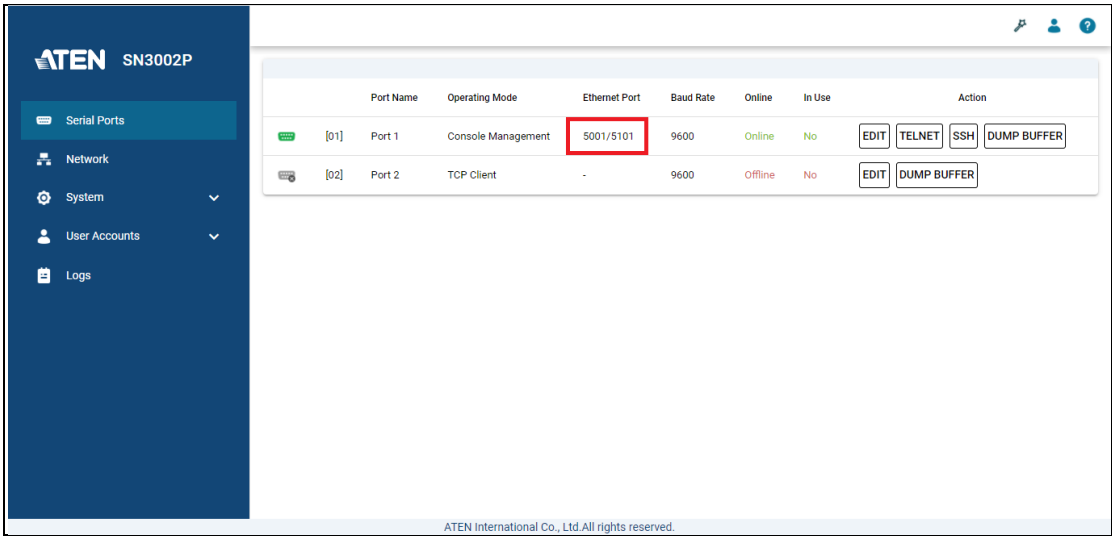



7. Under *OPERATING MODE*, select **Console Management** from the drop-down list and select the one or both of the communication protocols.




8. Optionally enable the **Direct connection** option if you want to allow direction SSH and/or Telnet connection from the host PC to the connected serial device without going through the SN3002P's console page.

9. Once configured, the Ethernet port of SN3002P's port 1 is assigned to 5001/5101, the port number for Telnet/SSH communication.

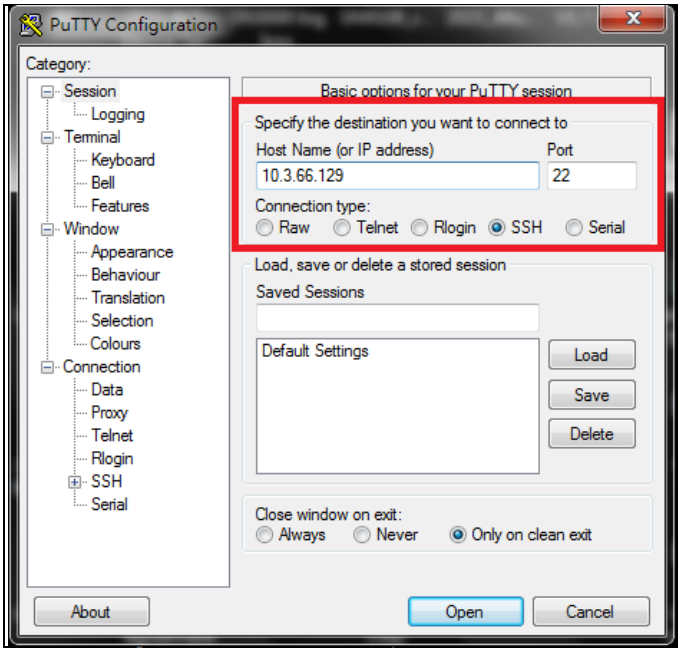



**Note:** The Ethernet port is assigned based on **base socket** settings in *System > General Settings > Service Ports.*

## C. How to test Console Management mode?

Using PC as a host and the network switch's console port as a serial device, presume the settings of SN3002P have been properly configured, as mentioned in the previous section.

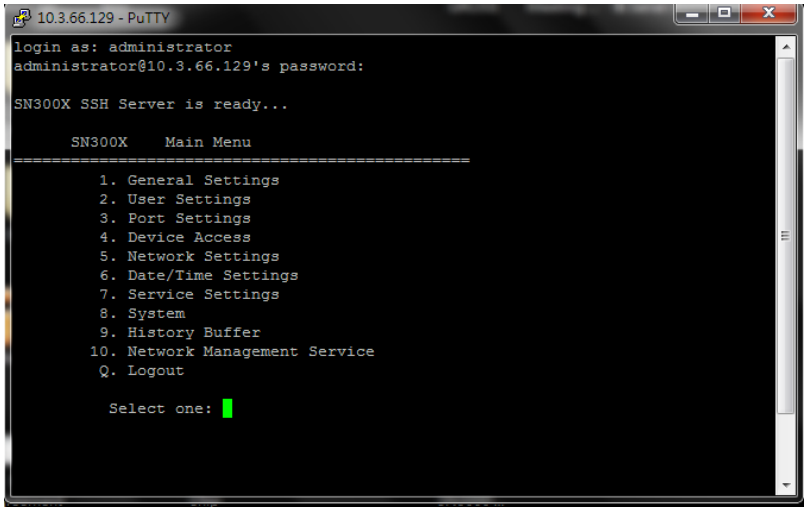

1. On the host PC, use Putty, a third-party utility, enter SN3002P's IP address and 22 as the port number for SSH communication, as illustrated below.




**Note:** If you prefer direct connection to the network switch, please use port number 5101 instead.

2. Once the connection is established, enter the login credentials of SN3002P to see its console page.

3. To access the console port of the network switch, go to **4. Device Access** > **1. Port: 1 Port 1**.




**Note:** If the **Direct connection** option is enabled, you will see the console port of the network switch once logged in.

## D. Appendix

Cisco Console Cable

ATEN Secure Device Server Pin Assignment

| Pin | Configuration | | |
|---|---|---|---|
| | RS-232 | RS-422/RS-485 (4-wire) | RS-485 (2-wire) |
| 1 | DCD | RxD- (A) | |
| 2 | RxD | RxD+ (B) | |
| 3 | TxD | TxD+ (B) | Data+ (B) |
| 4 | DTR | TxD- (A) | Data- (A) |
| 5 | GND | GND | GND |
| 6 | DSR | - | |
| 7 | RTS | - | |
| 8 | CTS | - | |
| 9 | - | - | - |