# How to configure the serial tunneling using 2 PS110s

2009/06/30 HJ Jeon

You can configure the serial tunneling using 2 PS110s as below. PC -(Serial)- PS110 -(Ethernet)- PS110 -(Serial)- PC(or loop back)

# 1.Test Preparation.

1-1. PS110(2EA),
DB9 Serial Cross Cable(1EA),
Power 9V 700mA(2EA),
PC or Laptop (1EA),
Loop back connector(2-3, 4-6, 7-8 Cross)



#### 1-2. Ethernet connection

PC---(Eth)---Switch---(Eth)---PS110[Server] Switch---(Eth)---PS110[Client]

1-3. PS110 Connection

- Connect power and Ethernet cable
- Select RS232 mode on Serial Mode switch(1-ON, 2-OFF, 3-OFF)
- Check Link LED and Power LED.
- Select Data/Console switch to Data side



## 2. PS110 – Server configuration.

2-1. Run Hello device Manager V2

You can download HelloDevice Manager V2 as below URL

http://sena.com/download/software/setup\_hdmgr-v2.0.5.exe



## 2-2. Probe

- Select Search -> Probe
- You can see PS110s on your network.
- Select your PS110[Server] and Click Add

🍜 HelloDevice Manager V2						
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2-3. Login and IP configuration

- You can see your PS110 on DeviceList
- The factory default IP address is 192.168.161.5.
- You can see ID/Password windows when click your PS110 on DeviceList.

Connect As: root, Password :root

🐨 HelloDevice Manager V2	
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In	correct password or unknown ID for the device :
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- Please configure IP address of PS110[Server]

### IP:192.168.10.15



- Select menu Device -> Set



2-4. Serial configuration.

- You can configure serial parameter using WEB interface

- Select Web on HelloDevice manager (Click '+')

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Device         IP         MAC           ✓PS110         192, 168, 10, 15         00:01:95:06:d	class       /System       /System       /System       /System       /System       /System       /Network/IP       /Network/IP       /Network/IP       /Network/IP       /Network/Locating s       /Network/Locating s	parameter Serial number Erimware revision Ethernet address Device name IP mode IP address Subnet mask Gateway Primary DNS Secondary DNS Locating server service Locating server pt Locating server pt Locating server pt Locating server interval (s	Value ps110-070310326 v1.4.2 00-01-95-06-d8-7a ProSeries static IP 132,168,10,115 255,256,0.0 132,168,1,1 168,126,63,2 Disable 192,168,1,1 9000 30			
Configure the selected device through web interface						

- Login the WEB, You can see below screen

🖉 Device server, Pro series	Management - Sena Technologies, Inc.	- Windows Internet Explorer	
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SENA	Pro series PS110 Manageme	ent	
Network configuration	System status : /system/sysstatus		
IP configuration	System information		
Dynamic DNS configuration	Device name :	ProSeries	
SMTP configuration	Serial No. :	ps110-070310326	
SYSLOG configuration	F/W Rev. :	v1,4,2	
Locating server configuration	MAC address :	00-01-95-06-d8-7a	
TCP configuration	Current time :	01/01/1970 00:01:25	
Serial port configuration	System logging :	Enable	
Configuration	Send system log by email :	Disable	
Sustam administration	IP information		
Sustam status	IP mode :	Static	
System logging	IP address :	192, 168, 10, 15	
Device name	Subnetmask :	255, 255, 0, 0	
Change password	Gateway :	192, 168, 1, 1	
User administration	Receive/Transmit errors :	0/0	
Factory reset Configuration management	Primary DNS :	168, 126, 63, 1	
Firmware upgrade	Secondary DNS :	168, 126, 63, 2	
System statistics			_
Network interfaces	Copyright 2005 Sena	a Technologies, Inc. All rights reserved,	
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- Select Serial port configuration - configuration

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SENA	- 1 -	Pro .	series PS11	) Management				
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Dynamic DNS configuration		1	Port #1	TCP	7001	RS_232	9600 N 8 1 None	
SM IP configuration IP filtering configuration SYSLOG configuration Locating server configuration NFS configuration TCP configuration				Copyright 2005 Sena Tec	hnologies,	Inc, All rights reserve	d.	
Serial port configuration								
Configuration								
System administration								
System status System logging Device name Date and time Change password User administration Factory reset Configuration management Firmware upgrade								
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- Below is 19200bps configuration

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SENA	Pro series PS110 Management	
Network configuration	Serial port parameters : /serial/*1/parameter/	
IP configuration SNMP configuration	Enable/Disable this port Enable 👻	
Dynamic DNS configuration	Port title Port #1	
SMTP configuration IP filtering configuration	Host mode configuration	
SYSLOG configuration	Serial port parameters	
Locating server configuration NFS configuration	UART type RS_232	
TCP configuration	Baudrate 19200 🗸	
Serial port configuration	Data bit 8 bits 🔽	
Configuration	Stop bit	
System administration	Parity bit None V	
System status	Flowcontrol None V	
System logging Device name	Inter character time-out (U-10000 msec)	
Date and time	Port logging configuration	
Change password	Port event handling configuration	
Factory reset	Save Save & Apply Cancel	
Configuration management Firmware upgrade	Convright 2005 Sena Technologies, Inc. All rights rese	erved
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- Click Save & Apply
- \* This PS110 works Server mode.

# 3. PS110 Client Configuration

3-1. IP, Serial setting

- This is same as PS110[Server] configuration except IP Address

- Please configure IP address of PS110[Client]

IP:192.168.10.16

🐨 HelloDevice Manager V2				
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DeviceList ×	Configuration	Monitor		
Device [IP [MAC ]		parameter	Value	
PS110 192, 168, 10, 15 00:01:95:06:d,	/System	Serial number	ps110-070620136	
▼PS110 192,168,10,16 00:01:95:07:6,	/System /System	Firmware revision Ethernet address	v1.4.2 00-01-95-07-6c-f8	
	/System	Device name	ProSeries	
	/Network/IP	IP address	192, 168, 10, 16	
	/Network/IP	Subnet mask Gateway	255, 255, 0, 0	
	/Network/IP	Primary DNS	168, 126, 63, 1	
	/Network/IP /Network/Locating s	Secondary DNS Locating server service	168, 126, 63, 2 Disable	
	/Network/Locating s	Locating server ip	192, 168, 1, 1	
	/Network/Locating s	Locating server interval (s	30	
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#### 3-2. Configure Remote Host

- Add the remote host(PS110[Server])
- Host : PS110[Server] IP Address 192.168.10.15
- Port : PS110[Server] Port 7001
- PS110[Client] connects to PS110[Server] when received serial data



### 4. Send/Receive Test

- Connect the loop back connector to PS110[Server] Server
- Connect the Serial cable to PS110[Client]
- Below is data communication flow
  - PC(COM1)-(Serial)- PS110(Client) -(Ethernet)-PS110(Server) → Loop back
  - PS110(Server)---(Ethernet)---PS110(Client)---(COM1)PC



- Open the Hyper Terminal(19200,N,8,1,NoFC)
- You can see below screen on PC serial port.

