Korenix JetPort 5601 Serial Device Server

User's Manual

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JetPort 5601 is a smart 1-port RS-232/422/485 to Redundant Ethernet Serial Device Server. The serial interface is configurable in software and supports speed as fast as 921.6kbps. The Dual Ethernet ports can support RTTD (Redundant to the Device) or connect as Daisy Chain. With RTTD, the redundant Ethernet ports can auto-recover in less than 200ms if the master link breaks, as a result guaranteeing a non-stop connection, which provides users the complete Redundant Ethernet Solution.

JetPort serial device server connects the serial port of devices such as card readers, measurement devices, or data acquisition terminals, over Ethernet just like locally attached. It eliminates the limitation of single host and transmission distance of traditional serial communications by creating access for multiple hosts in Ethernet. The compact size and various mounting options further create installation flexibility.

This chapter describes:

- Serial to Ethernet Technology Overview
- Product features
- Product specification
- Package checklist

Serial to Ethernet Technology Overview

Korenix JetPort serial device servers provide perfect solution to manage serial devices via Ethernet in flexible ways, such as TCP server, TCP client, UDP, or Windows Real/Virtual COM. JetPort creates a transparent gateway for the serial communication to Ethernet. If the control program uses network standard API, you can choose TCP or UDP as the communication protocol. If the control program uses COM port, you can install the Windows driver to add Real/Virtual COM ports.

Product Features

JetPort 5601 has the following features:

- 3-in-1 RS232, RS422, RS485 to Redundant Ethernet Solution
- Max. Serial Speed: 921.6 kbps
- Dual Ethernet Ports for Daisy Chain or RTTD (Redundant to the Device, Auto-Recovery in less than 200ms)
- Dual Power Inputs by 12-48VDC Terminal Block and 9-30V DC Jack.
- Secured Management by HTTPS and SSH.
- JetPort Commander, Korenix Windows Utility for Device Discovery, Multiple Device Setting and Monitoring.
- Versatile Serial Modes: Real/Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Up to 5 Simultaneous Real/Virtual COM, TCP Server, TCP Client Connections
- Event Warning by Syslog, Email, SNMP trap
- Real/Virtual COM driver for Windows Win 10/8/7/Vista/XP/2008/2003/2000
- Operating Temperature: -20~70°C

Product Specification

Network Interface	
Ethernet	2 x 10/100BaseTX Ports
Connector	RJ-45 Auto MDI/MDI-X
Feature	Redundant Dual Ethernet, auto-recovery in less than 200ms
Protection	Built-in 1.5 KV magnetic isolation protection
Protocols	IP, TCP, UDP, ICMP, DHCP, BootP, ARP/RARP, SSH, SNMP, HTTPS, SNTP, SMTP

Serial Communication		
Serial Ports	1 x RS-232,RS-422, 2/4-wire RS-485	
Connectors	Male DB9	
Baud Rates	50 bps to 921.6K bps	
Data Bits	7, 8	
Stop Bits	1, 2	
Parity	None, Even, Odd, Space, Mark	
RS-232	DCD, RXD, TXD, DTR, GND, DSR, RTS, CTS,RI	
RS-422	Tx-, Tx+, Rx+, Rx-, GND	
RS-485(4-wire)	Tx-, Tx+, Rx+, Rx-, GND	
RS-485(2-wire)	Data-, Data+, GND	
Flow Control	XON/XOFF, RTS/CTS	
Serial Line Protection	15KV ESD	
Long Distance Termination	120ohm	
Features		
LED	Power : Power On(Green) Ethernet 1/Ethernet 2 : 10/100M Link(Green) Serial: Transmitting data(Green), Receiving data(Red)	
Configuration	Windows Utility-JetPort Commander, HTTPS, SSH	
Serial Service	Real/Virtual COM, TCP Server, TCP Client, TCP Tunnel and UDP	
Reset	Software reload default, Hardware reset button	
SNTP	For time management	
Access IP Table	16 IP addresses to prevent illegal users	
Monitor	Devices' status, Real/Virtual COM status	
SNMP	RFC1213 MIB II, RFC1317 RS232_like and SNMP Trap	
E-Mail Alert	Automatic e-mail warning by pre-defined events	
System Log	Trap to Syslog server or local display	
System Event	Cold/Warm Start, Login Failed, IP and Password Changed, Access IP Blocked, Serial Port	

DCD/RI/DSR/CTS changed, Serial Port connected/disconnected.

Real COM	32bit & 64bit OS	
Windows Utility		
Windows OS	Win 10/8/7/Vista/XP/2008/2003/2000	
JetPort Commander	Device Discovery, Auto IP, Network Setting, Device and Serial Port Setting and monitoring, Notification setting, Firmware Upgrade, Configuration Backup and Restore, Group Configuration Wizards	
Serial Service Mode	Real/Virtual COM, TCP Server, TCP Client, TCP Tunnel and UDP	
Advanced Serial Setting	TCP Alive Check Timeout, Inactivity Idle Timeout, Performance mode, Delimiter, Force TX Timeout for Data Packing, Force TX interval time, Force TX data length and Long Distance Termination	
Group Configuration Wizards	JetPort Commander: Group IP Wizard, Group firmware upgrade, Group Backup/Restore, Real/Virtual COM and TCP Tunnel Setup Wizard	
Power Requirements		
System Power	PWR1: 12~48VDC with 3-pinTerminal Block PWR2: 9~30VDC Power Jack	
Power Line Protection	1 KV Burst (EFT), EN61000-4-4 0.5 KV Surge, EN61000-4-5	
Power Consumption	Maximum 3.7 Watts	
Mechanical		
Dimension	110mm(W) x 114mm(D) x 29.6mm(H)	
Regulatory Approvals FCC Class A, CE Class A, UL(compliance), RoHS		
Environmental		
Operation Temperature	-20~70°C	
Operation Humidity	5%~95%, (non-condensing)	
Storage Temperature	-40~85°C	
Warranty	5 years	

Package Checklist

JetPort is shipped with the following items:

- JetPort 5601 Serial Device Server
- Mounting kit
- Quick Installation Guide



If any of the above items is missing or damaged, please contact your local sales representative.

Optional Accessories

JetPort 5601 is equipped with two types of power inputs, the terminal block and power jack. If any need of power adapter, please contact your local sales representative.

Power Adapter	
PWA1208-US	Power Adapter 12VDC 0.8A, 100-240VAC US plug
PWA1208-EU	Power Adapter 12VDC 0.8A, 100-240VAC EU plug
PWA1208-UK	Power Adapter 12VDC 0.8A, 100-240VAC UK plug
PWA1208-AU	Power Adapter 12VDC 0.8A, 100-240VAC AU plug

2 Hardware Installation

JetPort serial device server can be configured by Windows utility, web browser, or Telnet console. Advanced management features include SNMP support and Email alert. JetPort Commander is a powerful Windows utility that supports device discovery, group setup, group firmware update, and monitoring functions.

This chapter introduces how to quick start JetPort

- Panel and LED
- Reset Button
- Connecting the Power
- Connecting the Network
- Connection the Serial Device
- Din-Rail Mounting Installation

Panel and LEDs

Panel and Interfaces



LED Indicators

There are 5 LEDs in 5601, indicating real-time system status.

LED	Color	Indication	
	Green	Power is on and functioning normally.	
PVVR	Off	Power is off, or power error condition exists.	
Eth 1	Green	Solid : Ethernet Link Blinking : Ethernet Activity	
	Off	Ethernet cable is disconnected, or has a short.	
Eth 2	Green	Solid : Ethernet Link Blinking : Ethernet Activity	
	Off	Ethernet cable is disconnected, or has a short.	
	Green	Serial port is transmitting data.	
Serial	Red	Serial port is receiving data.	
	Off	No data is being transmitted or received through the serial port.	

Reset Button

The Reset button provides users with a quick and easy way to restore the default settings of JetPort. Press reset button for 10 seconds. JetPort will restore to default value including default IP address (192.168.10.2), and no password. When the Power LED turns green, the device is ready to function.

Connecting the Power

Terminal Block (PWR1):

1. Insert the positive and negative wires of your DC supply into the V+ and V- contacts of the terminal block connector.



2. Tighten the terminal screws to prevent the DC wires from coming loose.



Power Jack (PWR2):

Connect the power jack input with power adapter. If any need of power adapter, please contact your local sales representative.

If the power input (PWR 1 or PWR 2) is connected, the power LED will turn green.

Note: If the 2 power inputs are connected (PWR 1, PWR 2), the JetPort 5601 will be powered from the highest connected voltage. The unit will not alarm for loss of DC IN power, the alarm function only applies to loss of power at PWR1 or PWR2.

Connecting the Network

Connect the Ethernet cable to the JetPort 5601 10/100M Ethernet port 1, 2 or both. The interfaces support auto MDI/MDIX. If both of the Ethernet port 1 and 2 are connected when startup device, the Ethernet port 1 will be the master port, Ethernet port 2 will be the backup. But, if Ethernet port 2 is attached first before attach port 1, the Ethernet port 2 will remain the master port.

Connecting the Serial Device

Connect the serial device to the unit DB9 male port by the pin assignment table.

Pin Assignment



Pin #	RS232	RS422	RS485 (4 wire)	RS485(2 wire)
1	DCD	TX-	TX-	DATA-
2	RXD	TX+	TX+	DATA+
3	TXD	RX+	RX+	
4	DTR	RX-	RX-	
5	GND	GND	GND	GND
6	DSR			
7	RTS			
8	CTS			
9	RI			

Din-Rail Mounting Installation

Follow these steps to mount the unit to the rail/track.

1. Use a screwdriver to secure the D3in-Rail mounting kit to the ear.





Wall-Mounting Kits.

2. Lightly push the 5601 into the rail/track.



The figures show the 5601 is attached on the rail/track well.

3. To remove the unit from the rail/track, reverse steps 1-3.

Notice: Due to the safety concern, Korenix requests users to vertically mount the 5601 device to the rail when using the Terminal Block as the power input. Use the certificated power supply, assured power construction in your factory as the power source.

JetPort serial device server provides powerful Windows management tool for multiple device management.

Below are the major functions in JetPort Windows Commander. This chapter introduces you the **Software Quick Setup.** You can know how to install the JetPort Commander and setup the Real/Virtual COM mode.

The "JetPort Commander Manual" introduces the full configuration of JetPort commander. You can download from Korenix web site. www.korenix.com



- Broadcast
- Configuration
- General
- Locate
- Security
- Networking
- > Notification
- > Management
- > Firmware Update
- Save / Reload
- Port Configuration
 - Port Serial Settings
 - Port Service Mode
 - Port Notification
- Setup Wizard
 - > Real/Virtual COM Wizard
 - > Serial Tunnel Wizard
 - ➢ Group IP Wizard
 - Group Setup Wizard
 - > Group Firmware Wizard
- IP Collection
- Monitor

Software Quick Setup

JetPort Commander is an easy-to-use utility with auto device discovery in a LAN or adding devices on the public network. All of the configurations on the serial server can be done in the JetPort Commander. You can also apply configurations of one serial server to the other serial servers. This document shows you how to quick setup the software. The full functions and configurations' description, please refer to the JetPort Commander Manual which you can download from Korenix web site.

Install JetPort Commander

- Download JetPort Commander program on the Korenix website. Korenix website ► Support ► Download Center ► JetPort Commander ► Software (http://www.korenix.com/support-jetport-software.htm).
- Run JetPort Setup.exe to install Windows utility, JetPort Commander. It will automatically detect OS of your PC. After installation, you should reboot your PC for the settings to take effect.



 Broadcast the JetPort unit: JetPort Commander will broadcast the network and search all available JetPort units in the network. The default IP address of JetPort is "192.168.10.2".

🔪 🛃 🖳	Com Device Firmware Wizard Wizard Wizard	
dcast Add Device Device	Map DOM Linnap COM Wizard	
Configuration	Befrech L	
The Monitor	Broadcast Searching	
- 🔏 IP Collection		
↓ tytten/tog		
	Cancel Clear All Select All Add	
	A lot of IPs need to be re-config? Click here	
	Your best choice. Group IP Wizard.	

Ş

Product Tip: If you have multiple Network Adapters (i.e. wireless and wired), please activate ONLY ONE Network Adapter that can locate the JetPort devices, and CLOSE the rest Network Adapters. Otherwise, JetPort Commander may broadcast INCORRECTLY.

4. Configuring the JetPort unit:

4.1 Click on the JetPort unit and select "Add" for further configuring the unit.

100	1.000	20.00		
Broadcast Searching				
New Devices	Port5801v3-DEEA	LILT JetPort5801v	3 Alive Logged in	
Cancel	Clear All	Select All	Add	
A lot of IPs need to be re-config? Click here				
You You	Your best choice. Group IP Wizard.			

4.2 Go to "Configuration", and choose the device. Select "Networking" to the network settings page. Select "Using Static IP" if you want to specify the network parameters, or select "DHCP/BooTP" if you want dynamic configuration for the JetPort unit.

File Device Configuration CO	M Configuration Options Help
Broadcast	Hap COM Unsup COM
⊡ 🕞 JetPort	General Security Networking Wireless Notification Manageme
⊡	Wire Wireless
y port1	🔽 Using Static IP 🔲 Using DHCP/BOOTP
	Static IP Settings
IP Collection	IP Address 192.168.10.2
	Netmask 255.255.0
	Gatway 192.168.10.1
	DNS1 192.168.10.1
	DNS2

5. Configuring the serial port as COM port:

5.1 Go to "Configuration", and choose the device and the "port". Select "Serial Settings" to configure the serial settings.

Broadcast Device Permise	Map COM Umap COM Wizard Wizard Com Wizard Com
Honitor ⊕ ≪ Setup Wizard ↓ IP Collection ↓ System Log	Baudrate 38400 Stop Bits 1 Performance Throughput Parity No Flow Control No Flow Image: Control Resistor Data Bits 8 Interface RS232 Terminal Resistor
	Delimiter Settings Serial to Ethernet Ethernet to Serial Delimiter 1 Delimiter 2 0 (HEX) Enabled Enabled Flush Serial to Ethernet Data Buffer After 0 (0-65535) ms The received data will be queueing in the buffer until all the delimiters are matched. When the buffer is a data buffer "itush S2E data buffer"
	timeout, the data will also be sent. Force TX Interval: 0 (0-65535)ms data 1 interval time data 2 interval time data 3 The received data will be queueing in TX buffer until TX interval time is timeout or TX buffer is full, the data will also be sent. 0 is disable. Length: 1024 (0-1024)bytes Make sure collect enough lenght from serial.
Notice: If you choose R	S 485(2-wire) interface, for better connection, please Check "Terminal Resisto

5.2 Select "Service mode", "Real/Virtual COM Mode" and press "Map COM" to map the port to the COM port.

Configuration Ontions Halo				
Image: Second Decision Image: Second Decision Firmware Wizard Image: Second Decision Wizard Image: Second Decision Firmware Wizard	e (
Serial Settings Service Mode Notification	_			
port1 Service Mode Real/Virtual COM Mode 💌				
Real/Virtual COM Mode	Select a Real/Virtual COM Name			
Real/Virtual COM Settings Data Port# 4000 Control Port# 4001	COM1 COM2 COM3 COM4 COM4			
Multilink	COM6 COM7			
Max Connections	COM8 COM9 COM10 COM11			
Destination Host COM Name	COM12 COM13			
Waiting for connection	COM14 COM15 COM15			
2				
3	Cancel OK			

Congratulations! You have finished JetPort configurations with Real/Virtual COM mode. You can also use web or telnet console by the JetPort IP address.



In addition to Windows utility, JetPort 5601 can also be managed by Web-HTTPS and the SSH Console.

The HTTPS is a security protocol that provides communication privacy over the internet. The HTTPs packets transmitted between the JetPort and PC would be encrypted.

The SSH allows users to securely login to remote host computers, to execute commands safely in a remote computer, to securely copy remote files and to provide secure encrypted and authenticated communications between two non-trusted hosts.

This chapter describes:

- HTTPS Console
 - Server Configuration
 - Port Configuration
 - Management
 - Save / Restart
- SSH Console
 - SSH Client
 - Configuration

Web Console

When the JetPort has been configured with proper IP address and the web management is enabled, you can use web browser to make further configurations.

Type JetPort's IP address in the Address input box, for example <u>https://192.168.10.2</u> (Note: you can just type http://, this is not allowed in HTTPS. You should type https://.)

街 https://192.168.10.2	×
Attps://192.168.10.2	~

If the JetPort is password protected, use the pre-assigned password to login first.

kore	enix	JET/PORT
		Password Protected
	Password	Submit
		<u>Go to Korenix</u> • <u>Help</u>
kore	nix	JET/2ORT/
	Welcome to	JetPort Web Commander
Server Configuration	Welcome to Overview	JetPort Web Commander
Server Configuration Port	Welcome to Overview	JetPort Web Commander
Server Configuration Port Configuration	Welcome to Overview Model IP Address	JetPort Web Commander
Server Configuration Port Configuration Management	Welcome to Overview Model IP Address MAC Address	JetPort Web Commander JetPort5601v3 192.168.10.2 00:12:77:FF:12:21

The overview page lists the basic information of this JetPort device.

Server Configuration

SNTP Configuration Page configures Server name, Time Server, and Telnet console enable/disable.

Welcome to JetPort Web Commander Server Configuration Basic Setting System Information Name JetPort5801v3-DEFAULT System Information Name JetPort5801v3-DEFAULT IP Configuration Ime System Information IP Configuration SNTP Enable Vireless Configuration SNTP Enable SNTP Enable Time SNTP Imable Imable Configuration (GMT+08:00)Taipei Imable Time Zone (GMT+08:00)Taipei Imable Local Time Mon Aug 27 2001 05:59:24 GMT+0 Imable Time Server pool.ntp.org Port 123	kore	nix	JET/PORT		
Server Configuration Basic Setting System Information Name JetPort5801v3-DEFAULT SNTP Configuration IP Configuration Ime IP Configuration SNTP Enable Wireless Configuration SNTP Enable Time SNTP Imagement Management Imagement Mon Aug 27 2001 05:59:24 GMT+0 Time Server pool.ntp.org Port Time Server pool.ntp.org Port		Welcome to J	etPort Web Commander		
System Information Name JetPort5801v3-DEFAULT IP Configuration IP Configuration Time Wireless Configuration SNTP Enable Disable Time Zone (GMT+08:00)Taipei Local Time Time Server pool.ntp.org Port 123 	Server Configuration	Basic Setting			
IP Configuration Time Wireless Configuration SNTP Enable © Disable Port Onfiguration Time Zone (GMT+08:00)Taipei Management Mon Aug 27 2001 05:59:24 GMT+0 Time Server pool.ntp.org Port 123	System Information SNTP Configuration		JetPort5801v3-DEFAULT		
Witeless Configuration User Authentication SNTP Enable Port Configuration Management Time Zone (GMT+08:00)Taipei Mon Aug 27 2001 05:59:24 GMT+0 Time Server pool.ntp.org Port	IP Configuration	Time			
Port Configuration Time Zone (GMT+08:00)Taipei Management Mon Aug 27 2001 05:59:24 GMT+0 Time Server pool.ntp.org Port 123	User Authentication	SNTP	Enable Isable		
Local Time Mon Aug 27 2001 05:59:24 GMT+0 Management Time Server pool.ntp.org Port 123	Port	Time Zone	(GMT+08:00)Taipei ▼		
Management Time Server pool.ntp.org Port 123	Management	Local Time	Mon Aug 27 2001 05:59:24 GMT+0		
		Time Server	pool.ntp.org Port 123		
Console		Console			
Maintenance Telnet Console 	Maintenance	Telnet Console	• Enable Oisable		

Submit

IP Configuration Page configures the IP address, netmask, gateway, and DNS server for the JetPort. Auto IP report is for dynamic IP address reporting in defined intervals.

korer	nix	JET/PORT
	Welcome to Je	etPort Web Commander
Server Configuration	Network Setting	
System Information SNTP Configuration	Network Interface	LAN T
IP Configuration Wireless Configuration	IP Configuration	Static •
User Authentication	IP Address	192.168.10.2
Configuration	Netmask	255.255.255.0
Management	Gateway	192.168.10.1
g	DNS Server 1	192.168.10.1
Maintenance DNS Server 2		
	Auto IP Report	
	Auto Report to IP	
	Auto Report to TCP Port	0
	Auto Report Interval	0 seconds
	Ethernet Mode	
	Ethernet Mode	Redundant Switch

Submit

In User Authentication, you can define administration password to protect the JetPort from unauthorized modification. Avoid using space in password.

kore	nix		JET/PORT
	Welcome to Je	etPort Web Com	mander
Server Configuration	Change Password		
System Information SNTP Configuration	Old Password		
Wireless Configuration User Authentication	New Password		
Port Configuration	Confirm New Password		
Management		Submit	
Maintenance			

Port Configuration

Serial Configuration covers Serial Parameter settings, such as baud rate, data bits, stop bits, parity, and flow control.

kore	nix	JET/20RT/		
Server Configuration	Welcome to Serial Setting	JetPort Web Commander		
Port		Port1		
Configuration	Port Alias	Port0		
Serial Configuration	Interface	RS232 V		
Service Mode	Baud Rate	RS232		
Management	Data Bits	RS485(2-wires)		
J	Stop Bits	RS485(4-wires)		
Maintenance	Parity	None T		
	Flow Control	None T		
	Force TX Interval Time	0 ms		
	Force TX Length	1024 bytes		
	Performance	Throughput Latency		
	Terminal Resistor	• OFF ON		

Notice: If you choose RS 485(2-wire) interface, for better connection, please turn ON "Terminal Resistor".

For advanced data packing options, you can specify delimiters for Serial to Ethernet and / or Ethernet to Serial communications in Port Profile Page.

You can define max. 4 delimiters (00~FF, HEX) for each way. The data will be hold until the delimiters are received or the optional "Flush Ethernet to Serial data buffer" times out. Zero means disable (factory default).

Force TX interval time is to specify the timeout when no data has been transmitted. When the timeout is reached or TX buffer is full (4K Bytes), the queued data will be sent. Zero means disable(factory default).

korer	nix		JET/20RT
	Welcome to J	etPo	rt Web Commander
Server Configuration	Port Profile		
Port		Port1	
Configuration	Local TCP Port	4000	
Serial Configuration Port Profile	Command Port	4001	
Service Mode	Mode	Serial t	o Ethernet
Management	Flush Data Buffer After	0	ms
	Delimiter(Hex 0~ff)	1:00	2:00 3:00 4:00
Maintenance Mode		Ethern	et to Serial
	Flush Data Buffer After	0	ms
	Dolimitor/Hox 0, ff)	1.00	2:00 3:00 4:00

Service Mode- Real/Virtual COM

In Service Mode Page, Real/Virtual COM mode, you need to define the available port number, Idle timeout, Alive check, and Max. connections allowed from 1 to 5.

kore	nix		JET/20RT
	Welcome to	JetPo	ort Web Commander
Server Configuration	Service Mode		
Port		Port1	
onfiguration	Service Mode	Virtua	al/Real COM Mode 🔻
Port Profile	Idle Timeout	0	(0~65535)seconds
Service Mode	Alive Check	0	(0~65535)seconds
Management	Max Connection	1 🔻	max. connection (1~5)
Maintenance			Submit

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Service Mode- TCP Server

In TCP Server mode, you need to define the available port number, Idle timeout, Alive check, and Max. connections allowed from 1 to 5.

Service Mode

	Port1		
Service Mode	TCP Server Mode		
TCP Server Port	4000		
Idle Timeout	0 (0~65535)sec onds		
Alive Check	0 (0~65535)seconds		
Max Connection	1 ▼ max. connection(1~5)		
	Submit		

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Service Mode- TCP Client

In TCP Client mode, you need to define the destination host IP and port number, Idle timeout, Alive check. To deploy multilink, specify up to 4 more hosts IP and Port number.

Service Mode

	Port1			
Service Mode	TCP Client Mode			
Destination Host	0.0.0.0 : 4000			
Idle Timeout	0 (0~65535)seconds			
Alive Check	0 (0~65535)seconds			
Connect on	Startup O Any Character			
Destination Host	Port			
1. 0.0.0.0	65535			
2. 0.0.0.0	65535			
3. 0.0.0.0	65535			
4. 0.0.0.0	65535			

Submit

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Connect on Startup: The TCP Client will build TCP connection once the connected serial device is startup.

Connect on Any Character: The TCP Client will build TCP connection once the connected serial device starts to send data.

Service Mode- UDP

In UDP mode, you need to define the destination host IP and Local listen port number.

To create more destination hosts, specify the IP range of destination IP and send port number.

Service Mode

		Port1				
Service Mode		UDP Mode	UDP Mode			
L	isten Port	4000				
Host start IP		Host end IP		Send Port		
1.	0.0.0.0	0.0.0.0		65535		
2.	0.0.0.0	0.0.0.0		65535		
3.	0.0.0.0	0.0.0.0		65535		
4.	0.0.0.0	0.0.0.0		65535		

Submit

Management

Access IP Control List

The Access IP Table specifies the IP address and subnet that can access to the device. The access is based on IP and netmask combination.

If the access is open to all hosts, do NOT enable this function.

Server Configuration	Access	s IP Setting			
Port Configuration	Enable IP Filtering (When unchecked this option allows any IP to gain access to the device)				
	No.	Activate the IP	IP Address	Netmask	
Management	1				
Access IP Control List	2				
System Event Conf.	3				
Maintenance	4				
	5				
	6				

SMTP/SNMP Conf.

SMTP/SNMP configuration includes the mail server's IP address or domain. If the authentication is required, specify the username and password. There are 4 email addresses you can specify to receive the notification.

E-mail and SNMP Trap

E-mail Settings	
SMTP Server	Port
My server requires a	uthentication
User Name	
Password	
E-mail Sender	
E-mail Address 1	
E-mail Address 2	
E-mail Address 3	
E-mail Address 4	

SNMP Trap configuration includes up to 4 Trap Servers. You need to at least fill in one Trap Server's IP or domain. The Community is also required information. Do not use the ";" in this column. Location and Contact is optional information.

Port Notification	-		
DCD Changed	Mail	🔲 Тгар	Syslog
DSR Changed	🔲 Mail	🔲 Тгар	Syslog
RI Changed	Mail	🔲 Тгар	Syslog
CTS Changed	🔲 Mail	🔲 Тгар	Syslog
Port Connected	🔲 Mail	🔲 Тгар	Syslog
Port Disconnected	🔲 Mail	🔲 Trap	Syslog

System Event Conf.

Specify the events that should be notified to the administrator. The events can be alarmed by means of email, SNMP trap, or system log.

Server Configuration	Event Notification				
Port	Port Device Notification				
Configuration	Hardware Reset (Cold Start)	🗆 Mail	Trap	Syslog	
Management	Software Reset (Warm Start)	🗆 Mail	Trap	Syslog	
Management	Login Failed	🗆 Mail	Trap	Syslog	
Access IP Control List SMTP/SNMP Conf	IP Address Changed	🗆 Mail	Trap	Syslog	
System Event Conf.	Password changed	🗆 Mail	Trap	Syslog	
Maintenance	Access IP Blocked	🗆 Mail	Trap	Syslog	
maintenance	Redundant Power Changed	🔲 Mail	Trap	Syslog	
	Redundant Ethernet Changed	🗆 Mail	Trap	Syslog	
	Port Notification				
	DCD Changed	🗆 Mail	Trap	Syslog	
	DSR Changed	🗆 Mail	Trap	Syslog	
	RI Changed	🗆 Mail	Trap	Syslog	
	CTS Changed	🗆 Mail	Trap	Syslog	
	Port Connected	🗆 Mail	Trap	Syslog	
	Port Disconnected	🗆 Mail	Trap	Syslog	

Device Notification:

- > Hardware Reset (Cold Start): Rebooting the JetPort will trigger the event
- Software Reset (Warm Start): Restarting the computer will trigger the event
- Login Failed: Using wrong password in console will trigger the event
- > IP Address Changed: Changing network setting will trigger the event
- > Password Changed: Changing the password will trigger the event
- Access IP Blocked: Report blocked IP addresses
- Redundant Power Change: Power change will trigger the event
- > Redundant Ethernet Change: Ethernet master port change will trigger the event

Port Notification:

- DCD changed: When DCD (Data Carrier Detect) signal changes, indicating the modem connection status has changed, the event will be triggered.
- DSR changed: When DSR (Data Set Ready) signal changes, indicating that the data communication equipment is powered off, the event will be triggered.
- RI changed: When RI (Ring Indicator) signal changes, indicating the incoming of a call, the event will be triggered.
- CTS changed: When CTS (Clear To Send) signal changes, indicating that the transmission between computer and DCE can proceed.
- Port connected: In TCP Server Mode, when the device accepts an incoming TCP connection, this event will be trigger. In TCP Client Mode, when the device has connected to the remote host, this event will be trigger. In Real/Virtual COM Mode, when Real/Virtual COM is ready to use, this event will be trigger.
- Port disconnected: In TCP Server/Client Mode, when the device lost the TCP link, this event will be trigger. In Real/Virtual COM Mode, When Real/Virtual COM is not available, this event will be trigger.

Select the events and the type of Email, SNMP Trap or Syslog, click Submit to enable it.

Maintenance

Load Factory Default: Load default configuration except Network Settings. Import Configuration: Retrieve saved configuration file to apply in the device. Click Browse to choose the configuration file then click the Import command.

Export Configuration: Save the current configuration into a file and save the file in current host. Upgrade Firmware: Upgrade to new firmware. Click Browse to select the firmware then click Upgrade command.



SSH Console

For using SSH, you should open the SSH Client, assign the IP of the JetPort you'd like to access and enter the correct Username/Password, then you can enter the SSH console menu.

SSH Client

There are many free, shareware, trial or charged SSH clients you can find in the internet. Fox example, PuTTY is a free and popular Telnet/SSH client, we'll use this tool to tell you how to login the JetPort by SSH. Note: *PuTTY is copyright 1997-2006 Simon Tatham*.

Download PuTTY: http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html

JetPort Settings: Enable the "Telnet Management Enable" to enable the SSH feature of JetPort 5601/5601f. Click "Goto Telnet Management" will ask you to open the SSH client.

General Security Networking Noti	ication	Management	Update Firmware	Save/Load
🔽 Web Management Enable	Got	o Web Manage	ement	
✓ Telnet Management Enable	Goto) Telnet Manag	ement	
SNMP Management Enable				

After modifying configuration, be sure to validate the changes by using "Apply Only" or "Apply and Save".

The copyright of PuTTY

About PuTTY 🔀
PuTTY Release 0.54
© 1997-2004 Simon Tatham. All rights reserved.
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Open the PuTTY

In the Session sub-tree, enter the Host Name (IP Address of your JetPort) and Port number (default = 22). Choose the "SSH" protocol.

In the SSH sub-tree, select the "Enable legacy use of single-DES in SSH2". Then click "Open" to start the SSH session console.

🛣 PuTTY Configura	tion	
Category:		
Session	Basic options for your PuTTY	session
Logging	Specify your connection by host name	or IP address
Keyboard	Host Name (or IP address)	Port
Bell	192.168.10.3	22
Features	Protocol: <u>R</u> aw <u>I</u> elnet ORlogin	⊙ SSH
Appearance Behaviour Translation Selection Colours Connection Proxy Telnet Rlogin SSH Auth Tunnels Bugs	Load, save or delete a stored session - Saved Sessions	
	Default Settings	Load Sa <u>v</u> e Delete
	Close <u>w</u> indow on exit: Always Never Only or	n clean exit
About	Open	<u>C</u> ancel

ategory:	n
 Session Logging Terminal Keyboard 	Options controlling SSH connections Data to send to the server Remote command:
Features Features Window Appearance Behaviour Translation Selection Colours Connection Proxy Telnet Rlogin SSH Auth Tunnels Bugs	Protocol options □ Don't allocate a gseudo-terminal □ Enable compression Preferred SSH protocol version: ○ 1 only ○ 1 ● 1 only ○ 2 ● 1 only ○ 1 ● 2 ○ 2 only Encryption options Encryption cipher selection policy: AES (SSH 2 only) Blowfish 3DES - warm below here DES □own

SSH Console is opened. The default username of the SSH public key is admin, password is admin. You can see the console as below:

Login as: admin admin@192.168.10.3's password: (admin)

*** Korenix JetPort Commander ***

Input System Password: ***** (The password you setup in the Jetport commander.) Password confirmed. Starting Main Menu. You can start to configure your JetPort by SSH console.



Type the Password you setup in the JetPort Commander.

Configuration

Configure the device and port by pressing function number or the hinted initial.

Press "q" to exit the function. Always press "a" to apply and save change after making a configuration. Jetport **5601** has build-in SNMP agent that supports SNMP trap, RFC 1317 RS232 MIB and RFC1213 MIB-II. The following tables list SNMP variables implemented in Jetport 5601.

RFC1213 MIB-II supported SNMP variables

System MIB				
sysDescr	sysObjectID	sysUpTime	sysContact	sysName
sysLocation	sysORLastChange	sysORID	sysORDescr	sysORUpTime

Interface MIB				
ifNumber	ifIndex	ifDescr	ifType	ifMtu
ifSpeed	ifPhysAddress	ifAdminStatus	ifOperStatus	ifInOctets
ifInUcastPkts	ifInDiscards	ifInErrors	ifOutOctets	ifOutUcastPkts
ifOutDiscards	ifOutErrors	ifOutQLen	ifSpecific	

Address	MIB			
atlfIndex		atPhysAddress	atNetAddress	

IP MIB				
ipForwarding	ipDefaultTTL	ipInReceives	ipInHdrErrors	ipInAddrErrors
ipForwDatagrams	ipInUnknownProtos	ipInDiscards	ipInDelivers	ipOutRequests
ipOutDiscards	ipOutNoRoutes	ipReasmTimeout.	ipReasmReqds	ipReasmOKs
ipReasmFails	ipFragOKs	ipFragFails	ipFragCreates	ipAdEntAddr
ipAdEntIfIndex	ipAdEntNetMask	ipAdEntBcastAddr	ipRouteDest	ipRoutelfIndex
ipRouteMetric1	ipRouteNextHop	ipRouteType	ipRouteProto	ipRouteMask
ipRouteInfo	ipNetToMedialfIndex	ipNetToMediaPhysAddress	ipNetToMediaNetAddress	ipNetToMediaType
ipRoutingDiscards				

ICMP MIB				
icmpInMsgs	icmpInErrors	icmpInDestUnreachs	icmpInTimeExcds	icmpInParmProbs
icmpInSrcQuenchs	icmpInRedirects	icmpInEchos	icmpInEchoReps	icmpInTimestamps
icmpInTimestampReps	icmpInAddrMasks	icmpInAddrMaskReps	icmpOutMsgs	icmpOutErrors
icmpOutDestUnreachs	icmpOutTimeExcds	icmpOutParmProbs	icmpOutSrcQuenchs	icmpOutRedirects
icmpOutEchos	icmpOutEchoReps	icmpOutTimestamps	icmpOutTimestampReps	icmpOutAddrMasks
icmpOutAddrMaskReps				

TCP MIB				
tcpRtoAlgorithm	tcpRtoMin	tcpRtoMax	tcpMaxConn	tcpActiveOpens
tcpPassiveOpens	tcpAttemptFails	tcpEstabResets	tcpCurrEstab	tcpInSegs
tcpOutSegs	tcpRetransSegs	tcpConnState	tcpConnLocalAddress	tcpConnLocalPort
tcpConnRemAddress	tcpConnRemPort	tcpInErrs	tcpOutRsts	

UDP MIB				
udpInDatagrams	udpNoPorts	udpInErrors	udpOutDatagrams	udpLocalAddress
udpLocalPort				

SNMP MIB				
snmpInPkts	snmpOutPkts	snmpInBadVersions	snmpInBadCommunityNames	snmpInBadCommunityUses
snmpInASNParseErrs	snmpInTooBigs	snmpInNoSuchNames	snmpInBadValues	snmpInReadOnlys
snmpInGenErrs	snmpInTotalReqVars	snmpInTotalSetVars	snmpInGetRequests	snmpInGetNexts
snmpInSetRequests	snmpInGetResponses	snmpInTraps	snmpOutTooBigs	snmpOutNoSuchNames
snmpOutBadValues	snmpOutGenErrs	snmpOutGetRequests	snmpOutGetNexts	snmpOutSetRequests
snmpOutGetResponses	snmpOutTraps	snmpEnableAuthenTraps	snmpSilentDrops	snmpProxyDrops

RFC1317 RS232 supported SNMP variables

RS232 MIB				
rs232Number	rs232PortIndex	rs232PortType	rs232PortInSigNumber	rs232PortOutSigNumber
rs232PortInSpeed	rs232PortOutSpeed	rs232PortInFlowType	rs232PortOutFlowType	
rs232AsyncPortIndex	rs232AsyncPortBits	rs232AsyncPortStopBits	rs232AsyncPortParity	rs232AsyncPortAutobaud
rs232AsyncPortParityErrs	rs232AsyncPortFramingErrs	rs232AsyncPortOverrunErrs		
rs232InSigPortIndex	rs232InSigName	rs232InSigState	rs232InSigChanges	
rs232OutSigPortIndex	rs232OutSigName	rs232OutSigState	rs232OutSigChanges	

Pin No.	Name	Notes/Description
1	DCD	Data Carrier Detect
2	RXD	Receive Data (RxD, Rx)
3	TXD	Transmit Data (TxD, Tx)
4	DTR	Data Terminal Ready
5	GND	Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indicator

RS232 DB9 Male



Version	Description	Date
V3.1	Add Terminal Resistor notice	Nov.2015
V3.0	For JetPort 5601 V3.0	Oct. 2015
V1.5	Update Win 7 Setup.	Aug. 2014
V1.4	Add Real COM	July 2012
V1.3	Remove Linux TTY driver	July 2009
V1.2	Correct Serial Port LED color.	Oct. 2008
V1.1	Add Din-Rail Mount Installation and notice.	Mar. 2007
V1.0	The first released version.	Aug. 2006