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Make network communication more reliable

NP Series

Serial Device Server

CLI User Manual

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3onedata
Make network communication more reliable

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Preface

The CLI user manual describes the serial device server:

- CLI command configuration

Note

The description of this manual is from the NP318T-8DI (3IN1). Other types of products in addition to the support of the serial port type (RS-232, RS-422, RS-485), the number of serial ports and the number of network ports are different, the command line operation are the same.

Audience

This manual applies to the following engineers:

- Network administrators
- Technical support engineers
- Hardware engineers

Conventions

Format	Description
“ ”	Words with the symbol “” mean that those are interface words. Fox example “Port number”.
>	Multiple paths are separated by the symbol ‘>’.
Light blue Font	Click light blue font to hyperlink The font color is as follows: ‘Light Blue’.
About This Chapter	The section ‘about this chapter’ provide links to various sections of this chapter, as well as links to the Principles Operations Section of this chapter.

Symbols

Format	Description

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Format	Description
Notice	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
Warning	Ndicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
Note	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.
Key	The tips of configuration and operation.

Revision History

Version No.	Date	Revision note
01	2017-05-25	Layout Adjustment
02	2017-10-12	Added password verification function

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1 Access to Serial Device Server

1.1 Configuration through Telnet

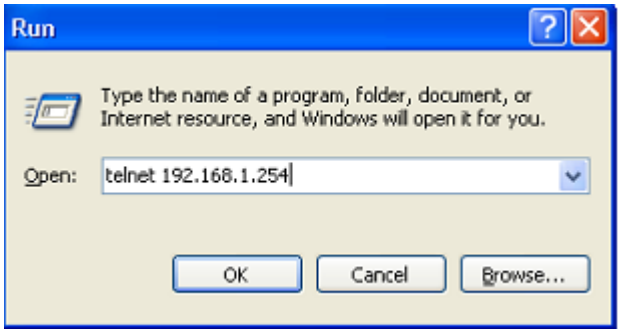
Terminal device use telnet connect to Serial device server through PC, the requirements are as follows:

- The IP address of Serial device server can get it by search or modify (Use IP command under the system management view).
- If PC and Serial device server device in the same local area network, the IP address must in a same network segment, otherwise, PC and Serial device server device must cross-router.

If satisfied these two requirements, can use telnet access to Serial device server device, and configure the Serial device server device.

Step 1 After establish configuration environment, just connect PC's Ethernet port connect to Serial device server device's Ethernet port through Local area network.

Step 2 Before access Serial device server through Telnet, need to input "**Telnet**+ Space+ Serial device server's **IP address**" for checking, Figure 1.1.1 as follows:



(Figure 1.1.1)

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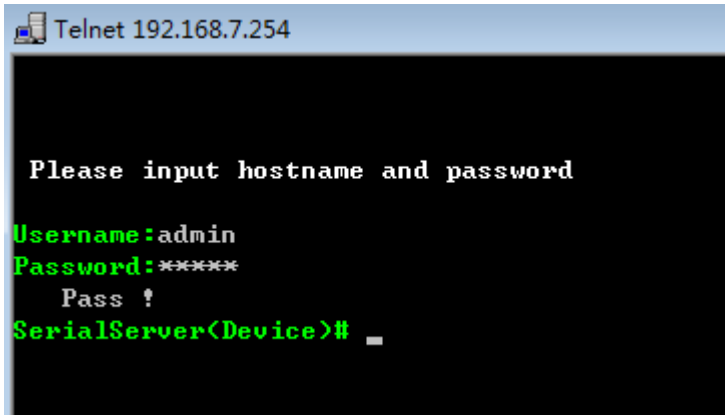
Step 3 Hit “Enter”, checkout successful and till PC show“Please input hostname and password”, ask user to input user name and password, default is admin, figure 1.1.2 as follows:



(Figure 1.1.2)

Step 4 Use command to configure Serial device server and check the running statues, if need help, please input“?” at any time. Specific configuration command please reference “Serial device server CLI user manual”.

1.2 Command line port

Serial device server provides command lines port and its configuration for user’s easy configuration and management. Command lines port includes the following features:

- Local configuration through LAN port;
- Supports history command saving which means it can save 10 pieces. History commands can be selected by up and down key.
- User can type in “help” or”?” to get some help;
- Supports intelligent complement with Tab when commands input;
- Command interpreter take the method of partial matching. User can type in conflict-free key words, such as config command, only need to type in conf.

1.2.1 View of Command Lines

Serial device server’ view of command lines aim at configuration of different functions. First of all, Serial device server establish connection, then confirmation of user name

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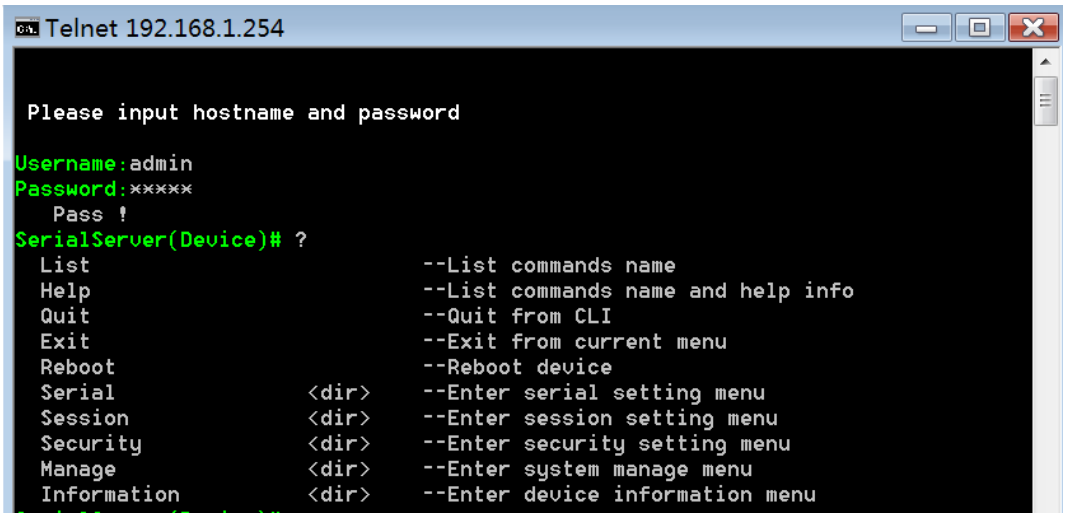
and password finished, after enter the correct user name and password, enter “help or ?” in “Device#”, enter into system view, Under the view of system, corresponding view appears after typing indifferent command, figure 1.3.1 as follows:



(Figure 1.2.1)

Table 1.2.1 system view command list

View	Function	DOS Prompt	Enter	Quit
System View		SerialServer<Device>#	Help or ?	Quit and return to user login
Information	Show or modify device type, name, device description, serial number, contact way, etc	SerialServer<System>#	Information	Exit and return to the view of system
Serial Server	Show or modify serial information, like as baud rate, data bit, flow control	SerialServer<Serial>#	Serial	

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Serial Mode	Show or modify serial port work mode	SerialServer<Session>#	Session	
Security	Show or modify access control	SerialServer<Security>#	Security	
Manage	Show or modify configuration information, like IP address, subnet mask, default gateway and password, etc.	SerialServer<Manage>#	Manage	

1.2.2 Command lines online help

Command lines port provides the following online help:

- Total help
- Partial help

Total help

Type in <?> To get all commands and their description.

```
SerialServer(Device)# ?
  List                          --List commands name
  Help                         --List commands name and help info
  Quit                         --Quit from CLI
  Exit                        --Exit from current menu
  Reboot                      --Reboot device
  Serial              <dir>    --Enter serial setting menu
  Session            <dir>    --Enter session setting menu
  Security            <dir>    --Enter security setting menu
  Manage            <dir>    --Enter system manage menu
  Information         <dir>    --Enter device information menu
```

Type in a command and “?”, between there is a space, if key word is in this location, then type in all keywords and descriptions.

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```
SerialServer<System># show ?
  Show mac              --show device MAC Address
  show version           --show device version
  show others            --show device name、 type、etc
```

Partial help

Type in a character string with <?>. It can show all commands beginning with this character string.

Example:

```
SerialServer<System>#  s ?
Serial           <dir>     --Enter Serial setting menu
Session          <dir>     --Enter Session setting menu
Security         <dir>     --Enter Security setting menu
```

Type in former letters of some key word of the command, press<Tab> key. If the letters are unique, it can show the completed key word.

```
Example:
SerialServer<System># inf + <Tab>
SerialServer<System># information
```

1.2.3 Frequent Incorrect Information of Command Lines

All commands typed by users, if it is certificated by grammar, it can run correctly, or users will be sent incorrect information. Frequent incorrect information is in table 1.2.3 as below:

Table 1.2.3 frequent incorrect information

English incorrect information	Reason
Invalid Command	Command cannot be found.
	Key word cannot be found.
	The type of parameter is wrong.
	The parameter is beyond the border.
Incomplete Command	Command is not completed.
Too many parameters	Parameter is too much.
Must One To One option!	Based mode is necessary

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1.2.4 History command

Command lines port can provides the function similar to Dos key. It automatic save command lines that users types in, and users can use these history commands. Detailed operating please check table 1.2.4 as follows:

Table 1.2.4 access history command

Operating	Key	Result
Visit previous history command	Up <↑>	If exists earlier command, it is taken out.
Visit next history command	Down <↓>	If exists later command, it is taken out.

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2 Device system based information configuration

2.1 Enter into the view of device information

Please check the view as figure 2.1.1

Table 2.1.1

Operating	Command	Description
Enter into the view of device information	Information	Run in the view of system

2.2 Show device information

Please check the device information command as table 2.2.1

Table 2.2.1

Operating	Command	Description
Show system version	**show version**	Carry out under the view of device information
Show MAC address of device	**show mac**	Carry out under the view of device information
Show Device Type, Name, etc.	**show others**	Carry out under the view of device information

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Example1: Enter into device information view, enter the bold type command as follows and enter return key

```
SerialServer<Device># information
SerialServer<System># ?
  List                      --List commands name
  Help                     --Help commands name and help info
  Quit                      --Quit from CLI
  Exit                      --Exit from current menu
  Reboot                   --Reboot device
  Show mac                --Show device MAC Address
  Show version             --Show device version
  Show others              --Show device name, type, etc
  DeviceType               --Config device type
  Devicename              --Config device name
  DeviceDescrip            --Config device description
  SerialNumber             --Config device number
  ContactWay              -- Config contact way
```

Example 2: Check device name and model number etc

```
SerialServer(System)# show others
  Device type      8COM
  Device name     SerialServer
  Description       LAN
  Serial number     201609060001
  Contact way
```

Example 3: Check the MAC address

```
SerialServer<System># show mac
   Device MAC address : 00.22.6F.03.25.45
```

2.3 Configuration information

Please reference user configuration device information as table 2.3.1:

Table 2.3.1

Operating	Command	Description
Configure Device Type	**devicetype**	Type: configurable type, the length is between 1～18 bytes
Configure Device Name	**devicename**	Name: configurable name, the length is between1～18 bytes

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Operating	Command	Description
Configure Serial Number	**devicedescrip**	Number: configurable number, the length is between 1～18 bytes
Configure Device Description	**serialmumber**	Description: configurable description, the length is between 1～20 bytes
Configure Contact information	**contactway**	Contact: Configure Contact way 1-20 bytes

Example1: Configure device name as AB123, enter the bold type command as follows and enter return key:

```
SerialServer<System># devicename ABC123
  [OK]
```

Example2: Configure device serial number as 201304111, enter the bold type command as follows and enter return key:

```
SerialServer<System># serialmumber 201304111
  [OK]
```


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3 Information configuration

The serial device server each serial port support 1-4 (optional) sessions, the working mode are:

- RealCom Mode
- TCP Client Mode
- TCP Server Mode
- UDP server Mode
- UDP client Mode
- Pair Slave Mode
- Pair Master Mode
- Udp Rang Mode
- Udp Muticast Mode
- Disabled Mode.

3.1 Enter into serial configuration view

Please refer to table 3.1.1 to set up the view serial command.

Table 3.1.1

Operating	Command	Description
Enter into serial configuration view	**Serial**	Carry out under the view of device information

Example1: Enter into serial information view, enter the bold type command as follows and enter return key.

```
SerialServer(Device)# serial
```


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```
SerialServer(Serial)# ?
  List                                --List commands name
  Help                               --List commands name and help
info
  Quit                               --Quit from CLI
  Exit                               --Exit from current menu
  Reboot                            --Reboot device
  Show config                        --Show com config information
  Show com_state                     --Show com state info
  Show com_para                     --Show com parameter info
  Com alias                          --Set com alias
  Com buadrate                      --Set com baudrate
  Com linctrl                         --Set com line ctrl
  Com mode                         --Set com work mode
  Com flow_ctrl                       --Set com flow ctrl
  Com rts                           --Set com rts
  Com dtr                           --Set com dtr
  Com fifo_en                        --Set com fifo
  Com packs_bytes                   --Set com packs bytes
  Com packs_time                    --Set com packs time
  Com delimiter_num                   --Set com delimiter num
  Com delimiter_char1                   --Set com delimiter char1
  Com delimiter_char2                   --Set com delimiter char2
  Com delimiter_mode                  --Set com delimiter mode
```

3.2 Display serial information

Please check the serial information command as table 3.2.1

Table 3.2.1

Operating	Command	Description
Display serial configuration information	**Show config** <*port_list*>	<*port_list*>: Choice the port number of serial 1~8 or all optional
Display information of serial connection states	**Show com_state**<*port_list*>	<*port_list*>: Choice the port number of serial 1~8 or all optional

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Operating	Command	Description
Display serial port parameter information	**Show com_para**<*port_list*>	<*port_list*>: Choice the port number of serial 1~8 or all optional

Example1: Enter into device information view, enter the bold type command as follows and enter return key

```
SerialServer<Serial># show confing 1
COM<1>
 Alias
Com work mode:        RS232
 Buadrate:            115200<bps>
 Data bit:            8<bits>
 Parity bit:          NONE
 Stop bit:            1<bit>
 Flow ctrl:           NONE
 FIFO ctrl:           Enable
 Rts ctrl:            AUTO
 Dtr ctrl:            AUTO
 Packs length:        500<bytes>
 Force time:          20<ms>
 Delimiter num:       0
 Delimiter num:       0
 Delimiter num:       0
 Delimiter mode:      Save
```

Example2: Statistics COM1 state information, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# show com_state 1
COM<1>
  TX:         0
  RX:         0
  TX total:     0
  RX total:     0
  CTS:        Off
  DSR:        Off
  RI:          Off
```


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```
DCD:        Off
DTR:        Off
RTS:        Off
```

Example3: Statistics COM1 parameter information, enter the bold type command as follows and enter return key:

```
  SerialServer(Serial)# show com_para 1
COM<1>
  Buadrate:          115200(bps)
  Data bit:           8(bits)
  Parity bit:          NONE(bits)
  Stop bit:           1(bits)
  Flow ctrl:          None
```

3.3 Serial parameter configuration

Serial parameter configuration

table 3.3.1

Table 3.3.1

Operating	Command	Description
Configuration serial parameter	**Com alias** <port> <alias>	<port>: Choice the port number of serial 1~8 or all optional <alias>: Serial notes, allow Chinese character. English character, digit and "-""_" but do not allow space.
	Com buadrate <port> <baudrate>	<port>: serial port number, optional 1-8 <*Baudrate*>: {300,600,1200,2400,4800,9600, 19200, 38400, 57600, 115200}

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Operating	Command	Description
	Com linctrl <port> <*parity*> <*Databits*> <*stopbits*>	<*port*>:Choice the port number of serial 1~8 or all optional <*parity*>: 0 --None 1 --Odd 2 --Even 3 --Mark 4 --Space <*Databits*>: 0 --5bits 1 --6bits 2 --7bits 3 --8bits <*stopbits*>: 0 --1bit 1 --2bits
Serial work mode seting	**Com_mode** <*port*> <*mode*>	<port>:Choice the port number of serial 1~8 or all optional < *Com_mode* >: 0 RS-232 1 RS-485 2 RS-422
Serial flow control	**Com flow_ctrl** < *port*> < flow_ctrl >	<*port*>:Choice the port number of serial 1~8 or all optional < flow_ctrl>: 0 NO 1 RTS/CTS 2 XON/XOFF 3 DTR/DSR
RTS control	**Com rts <**port> <rts>	<port>:Choice the port number of serial 1~8 or all optional <*rts* :rts 0 automatic 1 ON *2* OFF

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Operating	Command	Description
DTR control	**Com dtr** <port> <dtr>	<port>:Choice the port number of serial 1~8 or all optional <*dtr*>:dtr 0 automatic 1 ON 2 OFF
FIFO	**Com fifo_en** < *port*> <*fifo_ctrl*>	<port>:Choice the port number of serial 1~8 or all optional <*fifo_ctrl*>*:fifo* 0 disable 1 enable
Pack length	**Com packs_bytes** <*port*> <*Packs_bytes*>	<port>:Choice the port number of serial 1~8 or all optional <*Packs_bytes*>: 1-1460(byte)
Pack time	**Com packs_time** <*port*> <*Packs_time*>	<port>:Choice the port number of serial 1~8 or all optional <*Packs_time*>:1~500*ms*
Delimiter	**Com delimiter_num** <*port* > <*num*>	<port>:Choice the port number of serial 1~8 or all optional <*num*> : 0 disable 1 enable delimiter 1 2 enable delimiter 1 and 2
Delimiter 1	**Com delimiter_char1** <port> <char1>	<port>:Choice the port number of serial 1~8 or all optional <char1> :HEX 00-FF
Delimiter 2	**Com delimiter_char2** <port> <char2>	<port>:Choice the port number of serial 1~8 or all optional <char2> :HEX 00-FF

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Operating	Command	Description
Character Handing	**Com delimiter_mode** <port> <mode>	<port>:Choice the port number of serial 1~8 or all optional <mode> :0 retain 1 delete

Example1: Configuration COM1 parameter, baud rate: 300bps, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com buadrate 1 300
  [OK]
```

Example2: Configuration COM1 parameter, parity: ODD, data bits: 6 bits, stop bits: 2bits, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com linctrl 1 1 1 1
  [OK]
```

Example3: Configuration COM1 working mode is RS422, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com mode 1 2
  [OK]
```

Example4: Configuration COM1 flow control is DTR/DSR, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com flow_ctrl 1 3
  [OK]
```

Example5: Configuration COM1 RTS control is ON, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com rts 1 1
  [OK]
```

Example6: Configuration COM1 DTR control is OFF, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com dtr 1 2
  [OK]
```


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Example7: Configuration COM1 FOFI function is enabling, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com fifo_en 1 1
  [OK]
```

Example8: Configuration COM1 pack length is 300byte, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com packs_bytes 1 300
  [OK]
```

Example9: Configuration COM1 pack time is 200ms, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com packs_time 1 200
  [OK]
```

Example10: Configuration COM1 delimiter 1 is enable, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com delimiter_num 1 1
  [OK]]
```

Example11: Configuration COM1 the value of delimiter 1 is 16 (hexadecimal), enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com delimiter_char1 1 22
  [OK]]
```

Example12: Configuration COM1 the value of delimiter 2 is 18 (hexadecimal), enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com delimiter_char2  1 24
  [OK]]
```

Example13: Configuration COM1 the character handing mode is delete, which contains no delimiter character in the transmission of packets, enter the bold type command as follows and enter return key:

```
SerialServer(Serial)# com delimiter_mode  1 1
  [OK]]
```


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3.4 Working mode parameter configuration

3.4.1 Serial settings command

Table 3.4.1

Operating	Command	Description
Enter into the view of device session	**Session**	Carry out under the view of device information

Example1: Enter into serial working mode configuration view, enter the bold type command as follows and enter return key:

```
SerialServer(Device)# session
SerialServer(Session)# ?
  List                        --List commands name
  Help                        --List commands name and help info
  Quit                        --Quit from CLI
  Exit                        --Exit from current menu
  Reboot                      --Reboot device
  Show ch_state               --Show channel state info
  Show link                   --Show COM link state information
  Show Session              --Show COM Session State information
  Session_mode                --Set com Session mode
  Realcom session_num         --Set realcom session number
  Realcom alive_time          --Set realcom alive time
  Realcom skip_busy           --Set realcom skip busy
  Realcom cmd_type            --Set realcom cmd type
  Realcom queue_access        --Set realcom queue access
  Realcom resp_timeout        --Set realcom response timeout
  Realcom frame_break         --Set realcom frame break
  TcpServer session_num       --Set tcp server session number
  TcpServer alive_time        --Set tcp server alive time
  TcpServer TCP_timeout       --Set tcp server tcp timeout
  TcpServer skip_busy         --Set tcp server skip busy
  TcpServer local_port        --Set tcp server local port
  TcpServer queue_access      --Set tcp server queue access
```


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```
TcpServer resp_timeout      --Set tcp server response timeout
TcpServer frame_break       --Set tcp server frame break
TcpClient session_num       --Set tcp client session number
TcpClient dns_en            --Set tcp client dns en
TcpClient dest_ip           --Set tcp client dest ip
TcpClient domain            --Set tcp client dest domain
TcpClient dest_port         --Set tcp client dest port
TcpClient local_port        --Set tcp client local port
TcpClient conn_control      --Set tcp client connect control
TcpClient disconn_control --Set tcp client disconnect control
TcpClient alive_time        --Set tcp client alive time
TcpClient tcp_timeout       --Set tcp client tcp timeout
TcpClient skip_busy         --Set tcp client skip busy
TcpClient queue_access      --Set tcp client queue access
TcpClient resp_timeout    --Set tcp client response timeout
TcpClient frame_break       --Set tcp client frame break
UdpServer session_num       --Set udp server session number
UdpServer listen_port       --Set udp server listen port
UdpServer UDP_timeout       --Set udp server udp timeout
UdpServer queue_access      --Set udp server queue access
UdpServer resp_timeout      --Set udp server response timeout
UdpServer frame_break       --Set udp server frame break
UdpClient session_num       --Set udp client session number
UdpClient dns_en            --Set udp client dns en
UdpClient dest_ip           --Set udp client dest ip
UdpClient domain            --Set udp client dest domain
UdpClient dest_port         --Set udp client dest port
UdpClient listen_port       --Set udp client listen port
UdpClient queue_access      --Set udp client queue access
UdpClient resp_timeout      --Set udp client response timeout
UdpClient frame_break       --Set udp client frame break
UdpRang session_num         --Set udp rang session number
UdpRang start_ip            --Set udp rang start ip
UdpRang end_ip              --Set udp rang end ip
UdpRang dest_port           --Set udp rang dest port
UdpRang listen_port         --Set udp rang listen port
UdpMulticast session_num   --Set udp multicast session number
UdpMulticast dest_ip        --Set udp multicast dest ip
UdpMulticast group_num      --Set udp multicast group number
```


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```
UdpMulticast group_ip        --Set udp multicast group ip
UdpMulticast dest_port       --Set udp multicast dest port
UdpMulticast listen_port     --Set udp multicast listen port
PairSlave alive_time         --Set pair slave tcp alive time
PairSlave listen_port        --Set pair slave listen port
PairMaster alive_time        --Set pair master tcp alive time
PairMaster dest_ip           --Set pair master dest ip
PairMaster dest_port         --Set pair master dest port
PortReboot                   --reboot port
```

3.4.2 Serial working mode display settings command

Table 3.4.2

Operating	Command	Description
Display serial working mode and connection	**Show ch_state** *<port_list>*	*<port_list>*:Choice the port number of serial 1~8 or all optional
Display connection and session state for serial connection address, port	**Show link***<port_list>*	*<port_list>*:Choice the port number of serial 1~8 or all optional
Show the parameters of the working mode of the serial port	**Show session***<port_list>*	*<port_list>*:Choice the port number of serial 1~8 or all optional

Example1: Display COM1 working mode and connection, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# show ch_state 1
COM<1>
   word mode:          Realcom
   IP1:               Connected
   IP2:
   IP3:
   IP4:
```


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Example2: Display connection and session state for COM1 connection address and port, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# show link 1
COM<1>
   work mode:         Realcom
   Session<1>
      Connected
      30000
      192.168.7.11
      49654
   Session<2>

   Session<3>

   Session<4>
```

Example3: Show the parameters of the working mode of the serial port, enter the bold type command as follows and enter return key:

```
   SerialServer(Session)# show session 1
COM<1>
   Session mode:       Realcom
   Session number:      1
   AliveTime:           60(S)
   SkipBusy:           Enable
   CmdType:           disable
   QueueAccess:        Enable
   RespTimeout:        100(S)
   FrameBreak:         100(S)
```

3.4.3 Serial work mode parameter setting command

Table 3.4.3

Operating	Command	Description

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Operating	Command	Description
Work mode	**Session_mode** <*port*> <mode>	<*port*>:Choice the port number of serial 1~8 or all optional <mode> --com Session mode 0 --realcom 1 --tcp server 2 --tcp client 3 --udp server 4 --udp client 5 --pair slave 6 --pair master 11 --udp rang 12 --udp multicast 15 --disabled
RealCom Mode	**RealCom session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional <session_num>:session number,0-4 optional
	RealCcom alive_time <port> <alive_time>	<*port*>:Choice the port number of serial 1~8 or all optional <alive_time>:TCP alive time 0-65535(S)
	RealCom skip_busy <port> <skip_busy>	<*port*>:Choice the port number of serial 1~8 or all optional <skip_busy>: 0 disable 1 Enable
	RealCom cmd_type <port> <cmd_type>	<*port*>:Choice the port number of serial 1~8 or all optional <cmd_type>:Compatible protocol mode 0 --disable 1 --mcp 2 --ccp

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Operating	Command	Description
	RealCom local_port <port> <local_port>	<*port*>:Choice the port number of serial 1~8 or all optional <local_port>: 1-65535
	RealCom cmd_port <port> <cmd_port>	<*port*>:Choice the port number of serial 1~8 or all optional <cmd_port>:destination port 1-65535
	RealCom queue_access <port> <queue_access>	<*port*>:Choice the port number of serial 1~8 or all optional <queue_access>: 0 disable 1 Enable
	RealCom resp_timeout <port> <resp_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <resp_timeout>: 10-65535(ms)
	RealCom frame_break <port> <frame_break>	<*port*>:Choice the port number of serial 1~8 or all optional <frame_break>: 10-65535(ms)
TCP Server Mode	**TcpServer session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional < session_num >: 0-4
	TcpServer alive_time <port> <alive_time>	<*port*>:Choice the port number of serial 1~8 or all optional <alive_time>:TCP alive time 0-65535(S)

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Operating	Command	Description
	TcpServer TCP_timeout <port> <TCP_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <TCP_timeout>: 0-65535(S)
	TcpServer skip_busy <port> <skip_busy>	<*port*>:Choice the port number of serial 1~8 or all optional <skip_busy>: 0 disable 1 Enable
	TcpServer local_port <port> <local_port>	<*port*>:Choice the port number of serial 1~8 or all optional <local_port>: 1-65535
	TcpServer pwd_check <port> <pwd_check>	<*port*>：Choice the port number of serial 1~8 or all optional <pwd_check> ： verify the password 0 --disable 1 --Enable
	TcpServer send_msg <port> <send_msg**>**	<*port*>：Choice the port number of serial 1~8 or all optional <*send_msg*>： send verification message *0* *--IpAddr* *1* *--DeviceName* *2* *--disable*
	TcpServer queue_access <port> <queue_access>	<*port*>:Choice the port number of serial 1~8 or all optional <queue_access>: 0 disable 1 Enable
	TcpServer resp_timeout <port> <resp_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <resp_timeout>: 10-65535(ms)

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Operating	Command	Description
	TcpServer frame_break <port> <frame_break>	<*port*>:Choice the port number of serial 1~8 or all optional <frame_break>: 10-65535(ms)
TCP Client mode	**TcpClient session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional < session_num >: 0-4
	TcpClient dns_en <port> <id> <dns_en>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dns_en>:Domain name format address 0 disable 1 Enable
	TcpClient dest_ip <port> <id> <dest_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dest_ip>:The destination IP address, such as 192.168.1.254
	TcpClient domain <port> <id> <domain>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <domain>:Domain name format address, such as www.baidu.com
	TcpClient dest_port <port> <id> <dest_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dest_port>: 1-65535

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Operating	Command	Description
	TcpClient local_port <port> <id> <local_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <local_port> 1-65535
	TcpServer pwd_check <port> <pwd_check>	<*port*>：Choice the port number of serial 1~8 or all optional <pwd_check> ： verify the password 0 --disable 1 --Enable
	TcpServer send_msg <port**>** **<**send_msg**>**	<*port*>：Choice the port number of serial 1~8 or all optional <*send_msg*>： send verification message *0* *--IpAddr* *1* *--DeviceName* *2* *--disable*
	TcpClient conn_control <port> <conn_control>	<*port*>:Choice the port number of serial 1~8 or all optional < conn_control >:Connection control 0 --Always 1 --Char 2 --DSR On 3 --DCD On
	TcpClient disconn_control <port> <disconn_ control>	<*port*>:Choice the port number of serial 1~8 or all optional < disconn_control >:Disconnect control 0 --None 1 --DSR Off 2 --DCD Off 3 --Idle

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Operating	Command	Description
	TcpClient alive_time <port> <alive_time>	<*port*>:Choice the port number of serial 1~8 or all optional <alive_time>: 0-65535(S)
	TcpClient TCP_timeout <port> <TCP_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <TCP_timeout>: 0-65535(S)
	TcpClient skip_busy <port> <skip_busy>	<*port*>:Choice the port number of serial 1~8 or all optional <skip_busy>: 0 disable 1 Enable
	TcpClient queue_access <port> <queue_access>	<*port*>:Choice the port number of serial 1~8 or all optional <queue_access>: 0 disable 1 Enable
	TcpClient resp_timeout <port> <resp_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <resp_timeout>: 10-65535(ms)
	TcpClient frame_break <port> <frame_break>	<*port*>:Choice the port number of serial 1~8 or all optional <frame_break>: 10-65535(ms)
UDP server	**UdpServer session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional < session_num >: 0-4

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Operating	Command	Description
	UdpServer listen_port <port> <listen_port >	<*port*>:Choice the port number of serial 1~8 or all optional < listen_port >: 1-65535
	UdpServer udp_timeout <port> <ud_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <ud_timeout>: 10-65535(ms)
	UdpServer queue_access <port> <queue_access >	<*port*>:Choice the port number of serial 1~8 or all optional <queue_access>: 0 disable 1 Enable
	UdpServer resp_timeout <port> <resp_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <resp_timeout>: 10-65535(ms)
	UdpServer frame_break <port> <frame_break>	<*port*>:Choice the port number of serial 1~8 or all optional <frame_break>: 10-65535(ms)
UDP Client	**UdpClient session_num** <port> <session_num>	<port>: Choice the port number of serial 1~8 or all optional <session_num> --session number:0,1,2,3,4
	UdpClient dns_en <port> <id> <dns_en>	< *port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dns_en>: Domain name format address 0 disable 1 Enable

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Operating	Command	Description
	UdpClient dest_ip <port> <id> <dest_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dest_ip>:The destination IP address, such as 192.168.1.254
	UdpClient domain <port> <id> <domain>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <domain>:Domain name format address, such as www.baidu.com
	UdpClient dest_port <port> <id> <dest_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>:Session number 1-4 <dest_port>: 1-65535
	UdpClient listen_port <port> <listen_port>	<*port*>:Choice the port number of serial 1~8 or all optional <*listen_port*> --*listen port:{1-65535}*
	UdpClient queue_access <port> <queue_access>	<*port*>:Choice the port number of serial 1~8 or all optional <*queue_access*> --*queue_access* *0* --*disable* *1* --*Enable*
	UdpClient resp_timeout <port> <resp_timeout>	<*port*>:Choice the port number of serial 1~8 or all optional <*resp_timeout*> --*response timeout:{10-65535(ms)}*
	UdpClient frame_break <port> <frame_break>	<*port*>:Choice the port number of serial 1~8 or all optional <*frame_break*> --*frame break:{10-65535(ms)}*

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Operating	Command	Description
UDP Rang mode	**UdpRang session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional < session_num >: 0-4
	UdpRang start_ip <port> <id> <start_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <start_ip>:The starting address, legal IP address configuration
	UdpRang end_ip <port> <id> <end_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <end_ip>:The end address, legal IP address configuration
	UdpRang dest_port <port><id> <dest_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <dest_port>: 1-65535
	UdpRang listen_port <port><id> < listen_port >	<*port*>:Choice the port number of serial 1~8 or all optional <id> 1-4 < listen_port > 1-65535
UdpMulticast mode	**UdpMulticas session_num** <port> <session_num>	<*port*>:Choice the port number of serial 1~8 or all optional < session_num >: 0-4
	UdpMulticas dest_ip <port> <id> <dest_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <dest_ip>:Destination IP address

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Operating	Command	Description
	UdpMulticas group_num <port> <group_num >	<*port*>:Choice the port number of serial 1~8 or all optional <group_num >:Multicast group number 0-4
	UdpMulticas group_ip <port> <id> <group_id> <group_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 0-4 <group_id>:Multicast group ID 1-4 <group_ip>:IP multicast address, multicast address legitimate
	UdpMulticas dest_port <port><id> <dest_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <dest_port>: 1-65535
	UdpMulticas listen_port <port><id> < listen_port >	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 < listen_port >: 1-65535
Pair Slave mode	**PairSlave alive_time** <port> <alive_time>	<*port*>:Choice the port number of serial 1~8 or all optional <alive_time>: 0-65535(S)
	PairSlave listen_port <port><id> < listen_port >	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 < listen_port >: 1-65535
Pair Master Mode	**PairMaster alive_time** <port> <alive_time>	<*port*>:Choice the port number of serial 1~8 or all optional <alive_time>: 0-65535(S)

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Operating	Command	Description
	PairMaster dest_ip <port> <id> <dest_ip>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <dest_ip>:Destination IP address
	PairMaster dest_port <port><id> <dest_port>	<*port*>:Choice the port number of serial 1~8 or all optional <id>: 1-4 <dest_port>: 1-65535
PortReboot	**PortReboot** <port>	<port> 1-8 or all

Example1: Set the COM1 work mode is TCP Client mode, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# session_mode 1 2
  [OK]
```

Example2: In TCP Client mode, set the COM1 session number is 3, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient session_num 1 3
  [OK]
```

Example3: In TCP Client mode, set the COM1 TCP Alive time is 5, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient alive_time 1 5
  [OK]
```

Example4: In TCP Client mode, set the COM1 Ignore blocking enabled, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient skip_busy 1 1
  [OK]
```

Example5: In TCP Client mode, set the COM1 local port is 40000, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient local_port 1 1 40000
  [OK]
```


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Example6: In RealCom mode, set the COM1 compatible protocol is MCP, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# realcom cmd_type 1 1
  [OK]
```

Example7: In RealCom mode, set the COM1 queue access is enable, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# realcom queue_access 1 1
  [OK]
```

Example8: In RealCom mode, set the COM1 response timeout is 260, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# realcom resp_timeout 1 260
  [OK]
```

Example9: In RealCom mode, set the COM1 frame interrupt parameter is 100, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# realcom frame_break 1 100
  [OK]
```

Example10: In TCP server mode, set the COM1 TCP timeout is 5, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpserver tcp_timeout 1 5
  [OK]
```

Example11: In TCP Client mode, set the COM1 address format for domain name, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient dns_en 1 1 1
  [OK]
```

Example12: In TCP Client mode, set the COM1 destination address is 192.168.7.11, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient dest_ip 1 1 192.168.7.11
  [OK]
```

Example13: In TCP Client mode, set the COM1 destination address domain name www.xxxxxx.com, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient domain 1 1 www.xxxxxx.com
```


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```
  [OK]
```

Example14: In TCP Client mode, set the COM1 destination port is 40001, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient dest_port 1 1 40001
  [OK]
```

Example15: In TCP Client mode, set the COM1 connection control for char, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient conn_control 1 1
  [OK]
```

Example16: In TCP Client mode, set the COM1 disconnection control for Idle, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# tcpclient disconn_control 1 3
  [OK]
```

Example17: In UDP server mode, set the COM1 listen port is 41000, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# UdpServer listen_port 1 41000
  [OK]
```

Example18: In UDP Rang mode, set the COM1 start IP address is 192.168.7.1, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# udprang start_ip 1 1 192.168.7.1
  [OK]
```

Example19: In UDP Rang mode, set the COM1 end IP address is 192.168.7.254, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# udprang end_ip 1 1 192.168.7.254
  [OK]
```

Example20: In UDP Multicast mode, set the COM1 multicast number is 2, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# UdpMulticast group_num 1 2
  [OK]
```


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Example21: In UDP Multicast mode, set the COM1 multicast address is 224.0.0.0, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# udpmulticast group_ip 1 1 1 224.0.0.0
  [OK]
```

Example22: Restart all ports, enter the bold type command as follows and enter return key:

```
SerialServer(Session)# PortReboot 1
```


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4 Access Control

4.1 Enter into the view of access control

Please check the device information command as table 4.1.1

Access control configuration included:

- Device security setting
- IP address filter, Mac address filtering
- Filter rule settings
- User management

Table 4.1.1

Operating	Command	Description
Enter into the view of device access control	**Security**	Run in the view of system

Example1: Enter into device access control view, enter the bold type command as follows and enter return key.

```
SerialServer(Device)# security
SerialServer(Security)# ?
  List                        --List commands name
  Help                       --List commands name and help info
  Quit                        --Quit from CLI
  Exit                         --Exit from current menu
  Reboot                     --Reboot device
  UserManage show             --Show user infomation
```


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```
  Auth                          --Set authentication
  UserManage add                --Add a user
  UserManage modify             --Modify a user
  UserManage delete             --Delete a user
  IpFilter show                   --Show ip filter
  IpFilter set                    --Set ip filter control
  IpFilter def                   --Set ip filter default
perimission
  IpFilter modify                 --Modify ip filter list
  MacFilter show                --Show mac filter
  MacFilter set                  --Set mac filter control
  MacFilter def                  --Set mac filter default
perimission
  MacFilter modify               --Modify mac filter list
  Device show                   --Show device security
  Device modify                 --Modify device security
```

4.2 Display Device Information

Please check the security information command as table 4.2.1

Table 4.2.1

Operating	Command	Description
Display user management information	**UserManage show**	Carry out in the view of security
Display IP filtering information	**IpFilter show**	Carry out in the view of security
Display MAC filtering information	**MacFilter show**	Carry out in the view of security
Display device security settings information	**Device show**	Carry out in the view of security

Example1: Display device information

```
SerialServer(Security)# usermanage show
Authentication:Enable
user_index:1          user_name:admin
user_level:administrator
```


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```
user_index:2          user_name:           user_level:guest
user_index:3          user_name:           user_level:guest

SerialServer(Security)# ipfilter show 1
list_id:1
   state:             enable
   acess permission:    allow
   ip address:         192.168.1.1
   subnet mask:        255.255.255.0

SerialServer(Security)# macfilter show 1
list_id:1
   state:             enable
   acess permission:    forbidden
   mac address:        00.00.00.00.11.00

  SerialServer(Security)# device show
web:     Enable
telnet:    Enable
search:   Enable
upgrade  : Enable
```

4.3 Access Control Settings

Table 4.3.1

Operating	Command	Description
Authentication	**Auth** <*Auth_en*>	<*Auth*>: 0 disable 1 enable

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Operating	Command	Description
Add user	**UserManage Add** <username> <password> <affirm> <user_level>	<username>:User name, can only contain the size of the write in English, numbers and underscores, the length should not be greater than 20; <password>:Password, the length should not be greater than 20 <affirm>:Confirm Password <user_level>:Authority management 0 guest 1 administrator
Modify user information	**UserManage modify** <user_index> <username> <password> <affirm> <user_lever>	<user_index>:Identity authentication number, 1, 2, 3 <username>:User name, can only contain the size of the write in English, numbers and underscores, the length should not be greater than 20; <password>:Password, the length should not be greater than 20 <affirm>:Confirm Password <user_level>:Authority management 0 guest 1 administrator
IP filter enable	**IpFilter set** <en>	<en>: 0 disable 1 enable
IP filter rules setting	**IpFilter def** <permission>	<permission>: 0 forbidden 1 allow

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Operating	Command	Description
Modify IP filter	**IpFilter modify** <list> <state> <permission> <ip> <netmask>	<list>: 1-16 <state>: 0 disable 1 enable <permission> : 0 forbidden 1 allow <ip> :Filter IP address, including A, B, C class address, and does not allow to set to the ring back address <netmask>:Subnet mask, and IP address the legitimate configuration of the address
MAC filter enable	**MacFilter set** <en>	<en>: 0 disable 1 enable
MAC filter rules setting	**MacFilter def** <permission>	<permission>: 0 forbidden 1 allow
Modify MAC filter	**MacFilter modify** <list> <state> <permission> <mac>	<list>: 1-16 <state> 0 diaable 1 enable <permission> : 0 foebidden 1 allow <mac> : mac address
Device security settings	**Device modify** <web_console> <telnet_console> <serach> <upgrade>	<web_console>: 0 disable 1 enable <telnet_console>: 0 disable 1 enable <serach>: 0 disable 1 enable <upgrade>: 0 disable 1 enable

Example1: Enable authentication, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# auth 1
```


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```
[OK]
```

Example2: Increase the identity authentication user, the user name is master, the password is pass, the password confirmation is pass, the authority management is administrator, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# usermanage add master pass pass 1
  [OK]
```

Example3: Modified number 3 of the identity of the user, the user name changed to KK, password for the KKK, the user to confirm the KKK, the authority management is administrator, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# usermanage modify 3 kk kkk kkk 1
  [OK]
```

Example4: Enable IP address filtering, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# ipfilter set 1
  [OK]
```

Example5 Set IP address filtering function rule to allow access, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# ipfilter def 1
  [OK]
```

Example6: Modify the number of IP address filtering project 3, changed to enable No. 3 project, allowing the IP address 192.168.9.55, and subnet mask of 255.255.255.0 access equipment, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# ipfilter modify 3 1 1 192.168.9.55
255.255.255.0
  [OK]
```

Example7: Enable MAC address filtering, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# macfilter set 1
  [OK]
```


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Example8: Set MAC address filtering function rule to allow access, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# macfilter def 1
  [OK]
```

Example9: Modify the number of MAC address filtering project 4, changed to enable No. 4 project, allowing the MAC address 00-22-00-01-00-00 access equipment, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# macfilter modify 4 1 1 00.22.00.01.00.00
  [OK]
```

Example10: Enable Web console, Telnet console, search device, firmware upgrade function, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# device modify 1 1 1 1
  [OK]
```

4.4 Delete Identity Authentication User

Table 4.4.1

Operating	Command	Description
Delete identity authentication user	**UserManage delete** <name_index>	<name_index>:1、2、3

Example1: Delete the device ID number 3 for the identity authentication user, enter the bold type command as follows and enter return key.

```
SerialServer(Security)# usermanage delete 3
  [OK]
```


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5 System Management

5.1 Enter into the view of System Management

Please check the device information command as table5.1.1

Table5.1.1

Operating	Command	Description
Enter into device information view	**Manage**	Carry out in the view of system management

Example1: Enter into device information view, enter the bold type command as follows and enter return key

```
SerialServer(Device)# manage
SerialServer(Manage)# ?
  List                    --List commands name
  Help                    --List commands name and help info
  Quit                    --Quit from CLI
  Exit                    --Exit from current menu
  Reboot                   --Reboot device
  Dhcpmode                --Set dhcpmode
  Gateway                 --Set gateway
  Ip                      --Set ip address and subnet mask
  Def_eth                 --Set the default eth port
  Dnsmode                  --Set dnsmode
  Dnsaddr                  --Set dns address
  Report_dest_addr         --Set report dest addr
  Report_dest_port          --Set Report dest port
  Report_period             --Set report period
  Show ip_map               --Show ip map table
  Del ip_map                --Delete ip map item
```


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```
Add ip_map              --Add ip map item
Show net_config         --Show net config
Set console_timeout     --Set console timeout
Restore                 --Reset to default config
Upgrade                 --upgrade device fireware
Upload                  --Upload device configuration files
Download                --Download device configuration files
```

5.2 Display Device Address Information

Please check the device information command as table 5.2.1

Table 5.2.1

Operating	Command	Description
Display system address information	**show net_config**	Carry out under the view of system management

Example1: display device address information

```
SerialServer(Manage)# show net_config
  Device IP address   :   192.168.7.254
  Device mask address :   255.255.255.0
  Device gateway      :   192.168.7.1
```

5.3 System Timeout Settings

System timeout is used to define, after entering the CLI settings mode, do not do any operation of the timeout period, the system will automatically jump to the user mode, re user name and password authentication.

Please check the system timeout setting command as table 5.3.1

Table 5.3.1

Operating	Command	Description

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Operating	Command	Description
system timeout time setting	**Set console_timeout** <time_out>	<*time_out*>:System time out, the value of [0-60], the unit minute, the default timeout period of 5 minutes; take 0 for the closure of this set function.

Example1: Set the timeout period for the system for 10 minutes, enter the bold type command as follows and enter return key

```
SerialServer(Manage)# Set console_timeout 10
  [OK]
```

5.4 IP Address and Default Gateway Settings

Please check the IP address and default gateway command as table 5.4.1

Table 5.4.1

Operating	Command	Description
IP address setting	**Ip** <*ip_address*> <*mask*> <*eth_port*>	<*ip_address*>:IP address <*mask*>:Subnet mask <eth_port>: Ethernet port 0 Eth1 1 Eth2
Default gateway setting	**Gateway**<*gateway*> <*eth_port*>	<*gateway*>:Default gateway address <eth_port>: Ethernet port 0 Eth1 1 Eth2

Example1: Set the device Ethernet port 2 IP address is 192.168.1.254, the subnet mask is 255.255.255.0, the default gateway is 192.168.1.1, enter the bold type command as follows and enter return key

```
SerialServer(Manage)# ip 192.168.1.254 255.255.255.0 1
  [OK]
```


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```
SerialServer(Manage)# gateway 192.168.1.1  1
  [OK]
```

5.5 IP Mapping

Please check the IP mapping command as table below.

Operating	Command	Description
Show ip_map	**Show ip_map**	Display IP mapping table entries
Del ip_map	**Del ip_map**<*item_id* >	Delete map entry <item_id >: the number of entries
Add ip_map	**Add ip_map**<*dest_ip*><*netmask*> <*eth_port* >	Add a mapping table entry <*dest_ip*> Destination address <*netmask* > subnet mask <*eth_port* > default port
Def_eth	**Def_eth** <*eth_port* >	Set default port <*eth_port* > 0 eth1 1 eth2

5.6 Restore factory settings

Please check the Restore factory settings command as table below.

Operating	Command	Description
Restore factory settings	Restore	Carry out under the view of system management

Example1: Restore factory settings, enter the bold type command as follows and enter return key

```
SerialServer(Manage)# restore
Restore Settings or not ? (yes/no) yes
Wait.........
```


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5.7 Upload and Download Configurable files

Please check the table below.

Operating	Command	Description
Upload Configurable files	**Upload**	Suffix of file is (.cfg)
Download Configurable files	**Download**	Suffix of file is (.cfg)

Example1: Steps of downloading configurable files are as follows, enter the bold type command as follows and enter return key:

Step 1 Enter the the bold type command.

```
SerialServer(Manage)# download
   Please select file path and ready to receive file .
   Or press [Esc] to quit .
```

Step 2 Configure Hyper Terminal and select folder of files wanted.

[Transfer] →[Receive File] →[Browse] →[Choose Folder] →[folder which user choose to save the download files to] →[OK] → [Use protocol] →[Xmodem] → [Receive] →[file name] →[file name user choose to save, the suffix is .cfg] →[OK]

Step 3 END.

Example2: Steps of uploading configurable files are as follows, enter the bold type command as follows and enter return key:

Step 1 Input command

```
System_manage# upload
   Please send configuration file, or press [Esc] to quit.
CCCCCCCCCCC
```

Note

From input upload command and the first C appearing, if no operating within 2 minutes, system will quit by itself.

Step 2 Configure Hyper Terminal and select configurable files wanted with suffix of**.cfg .**

Transfer] →[Send File] →[Browse] →[choose folder] →[configurable file user choose to upload] →[Open] → [Use Protocol] →[Xmodem]→[Send]

Step 3 END.

Note

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Telnet did not support this command.

5.8 System Upgrade

Through hyper terminal, user can upgrade system file(Please make sure the file correct) ,lease check the table below.

Operating	Command	Description
System upgrade	**Upgrade**	Suffix of file is (.bin)

Example1:teps are as follows, enter the bold type command as follows and enter return key:

Step 1 Input command:

```
SerialServer(Manage)# upgrade
   Please send upgrade file, or press [Esc] to quit .
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
```

Step 2 2. Configure Hyper Terminal and select Upgrading files wanted with suffix of **.bin.** [Transfer] →[Send File] →[Browse] →[choose folder] →[configurable file user choose to upload] →[Open] → [Use Protocol] →[Xmodem]→[Send]

Step 3 END.

Note

Telnet did not support this command.

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Make network communication more reliable

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