

**V1.00**

New Exciting Product

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S71 VPN Server



**S71: User Manual.**

S7 VPN Server  
**User manual**

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## Content

<b>1</b>	<b>PROLOGUE</b> .....	<b>5</b>
1.1	VERSION .....	5
1.2	REFERENCED DOCUMENTS .....	5
1.3	NOTICE .....	5
<b>2</b>	<b>INTRODUCTION</b> .....	<b>6</b>
2.1	BRIEF .....	6
2.2	FEATURES .....	6
2.3	SPECIFICATION .....	7
2.4	TYPE APPLICATION .....	8
<b>3</b>	<b>SET-UP</b> .....	<b>9</b>
3.1	PANEL INTRODUCTION .....	9
3.2	ASSUMPTIONS .....	10
3.3	SET-UP .....	10
<b>4</b>	<b>CONFIGURE DIRECTORY</b> .....	<b>12</b>
4.1	BRIEF .....	12
4.2	SETTING LOCAL PC IP ADDRESS.....	12
4.3	LOGON THE WEB CONFIGURATION .....	14
4.4	WEB CONFIGURATION .....	14
4.4.1	System .....	14
4.4.2	Interface .....	15
4.4.3	Firewall.....	22
4.4.4	VPN.....	27
4.4.5	Services.....	31
4.4.6	Backup&restore.....	34
4.4.7	Traffic.....	34
4.4.8	Log .....	36
4.4.9	Password.....	36
4.4.10	Reboot.....	37
<b>5</b>	<b>SPECIAL CONFIGURE</b> .....	<b>38</b>
5.1	PRODUCTION UPGRADE.....	38
5.1.1	WEB mode .....	38
5.2	FACTORY DEFAULT .....	38
5.2.1	WEB mode .....	39
5.2.2	Reset jack mode .....	39
5.3	PORT MAP.....	39
5.4	CHANGE LOGIN ADDRESS AND PASSWORD.....	41
5.4.1	Change login address .....	41
5.4.2	Change login password .....	41
<b>6</b>	<b>PRODUCTION LIST</b> .....	<b>43</b>
<b>7</b>	<b>TERMINOLOGY</b> .....	<b>44</b>



# Chapter 1

## 1 Prologue

This document is suit for the S7140 VPN Server, it helps you to use this product quickly, It details the procedure for connecting a S7140 to a personal computer via the Ethernet port, Configure the S7140 setting with a VPN communication

The following S7140 instead of S7140 VPN Server

### 1.1 Version

Version	Date	Description	Author
1.00	2008-07-07	First Draft	Yangjun

### 1.2 Referenced Documents

R621Z120\_GPRS\_VPN\_Router\_Datasheet\_V100\_Chn.doc

R63\_CDMA\_VPN\_Router\_Datasheet\_V100\_Chn.doc

R64\_EDGE\_VPN\_Router\_Datasheet\_V100\_Chn.doc

VPN\_Router\_QuickStare\_V100\_Chn.doc

### 1.3 Notice

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# Chapter 2

## 2 Introduction

### 2.1 Brief

Ethernet is migrating from traditional IT equipment and being adopted as a standard interface for many types of machines, however challenges arise at customers sites where the LAN infrastructure is outside your control.

The S7140 VPN server is easy to install, reducing the reliance on the end customer and enables direct access to your remote LAN devices for control and monitoring purposes. It enables companies to remotely access equipment at mobile, remote networks and isolated sites.

It offers lineate network routing optimized for machines, small networks and specialized Fixed IP services now available from wireless operators. It offers low cost router operation through Dial-out, Dial-in and Always Connected modes of operation.

It also supports VPN function for the high security transmission.

### 2.2 Features

- Reliable Architecture

Embedded Linux OS .X86, NP architecture

- High Quality VPN System

Comprehensive security certification method fully ensures system security

Recovers automatically from a broken connection

Sets up VPN tunnel individually to inspect status and distribute bandwidth; highly secured and flexible.

Encrypts all communication processes through DNS, ensuring security and reliability of the system operation

- Secure and Reliable Firewall System

Effectively prevents most common network attacks

Controls and records internal users' access to Internet regulate employees' chat and web access behavior

Limits single user's connections to fend off attacks from within  
Bonds MAC/IP address to prevent user's ID from theft  
Strategically protects the application server from exposure in the public network using DMZ  
Shields the internal network through transparent Proxy and NAT  
Real-time monitors and reports upon detecting network attacks and emergencies  
Controls and defines each user's access right and scope, protecting business' confidential information.

- Easy To Use and Flexible Intelligent Router

Provide the professional function among domestic firewall products  
Separates and expands connections to speed up data transfer  
Easily sets up a fixed routing table, also applied to a large-scale network

- Multi-Priority Flow Management Ensure Network's Reliability

Flow control based on IP or service grade to manage internal users  
Guarantees QoS for different service grade  
Prevents packet loss using advance technology, ensuring error-free data transfer

- Complete Management and Logging Function

Integrates SNMP service, managing network effectively at ease  
Records and analyzes Log, managing complete network status

## 2.3 Specification

### Function specification

Supply voltage :	18V suggestion
Firewall Speed:	100 M bps
Network:	Internet access Gateway, route access
Protocol:	IPv4
Function:	Load balance、binding of bandwidth、WEB DDNS

### Network

Internet access mode	gateway Mode, Transparent Bridge, Routing Mode
Protocol	IPv4

### VPN

VPN Egypt ion Speed :	5M~200M bps
Channel number:	8192~327680
New session per seconds:	2250~45000
VPN channel quantity:	100~5000channel

### Authorization :

HASH arithmetic:	SHA-1 MD5
------------------	-----------

Authorization mode: Preshare code  
 VPN Mode: TUNNEL  
 VPN type: Intranet VPN    Extra VPN    Remote Access VPN

**Interface**

Power Plug in power supply  
 Ethernet port: 4 Entries 10/100Base-TX port

**Dimension**

size: 480×186×40 (mm)  
 weight: 2.2 kg  
 shell: Good electromagnetic shield and, heat radiate performance

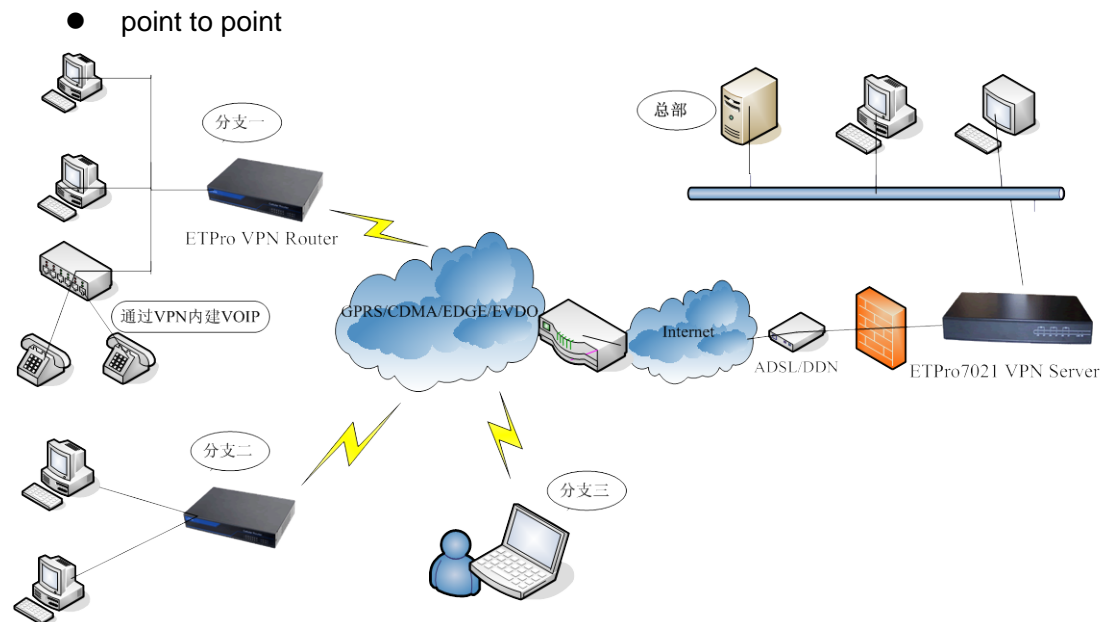
**Environment**

Ambient temperature: -20oC to +60oC  
 Storage temperature: -50℃~85℃.  
 humidity: ≤90%

**Electromagnetic Compatible**

Electrostatic Discharge (ESD): 3 class  
 Radiated, radio-frequency, electromagnetic field immunity test: 3 class

**2.4 Type application**

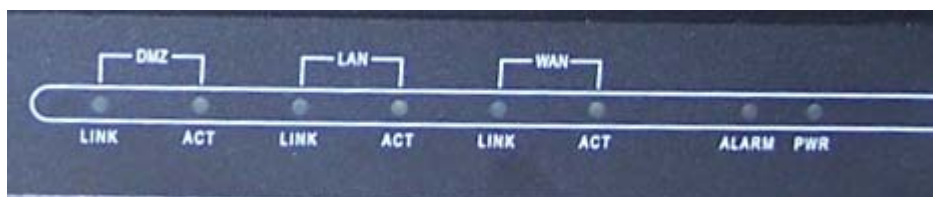


Picture 1 base on gateway and gateway

# Chapter 3

## 3 Set-up

### 3.1 Panel introduction



Front panel

The LED State

LED	State	description
PWR	Lights up	Product Working normally
ALARM	Lights up	Working in trouble
WAN	ACT	Lights up
	LINK	Lights up
LAN	ACT	flashing
	LINK	Lights up flashing
DMZ	ACT	flashing
	LINK	Lights up



Back board panel

All port of VPN Router is on the back board panel, please according to front picture, the description as following

- **Power jack:** Supply DC 9~18V
- **R jack:** restoration Factory default, used pen and press the jack about five secs, it will restoration the system parameter of factory default. example .when you have forgot the password of web management of VPN Router, you can do like this
- **LAN port:** local area network, 4 Entries 10/100Base-TX port, automatically identify Crossover or parallel line port, a computer、 switch join the LAN network via LAN port
- **WAN port:** be used for DSL/Cable MODEM connection, 10/100Base-TX
- **Console port:** Connect with cable to carrying out command

## 3.2 Assumptions

To carry out this procedure the following hardware and knowledge assumed:

### Hardware Required:

Personal computer or notebook computer with an Ethernet port. In most cases this computer is running the Windows operating system (95, 98, 2000 or XP)

A S7140 VPN Router with appropriate power supply for your equipment

An Ethernet cross-over cable connects the computer to the S7140VPN Router.

An "Internet enabled" SIM from the local GPRS /CDMA/EDGE/ECDO service provider.

This SIM should be in an unlocked state.

### Knowledge Required:

How to change IP address on the Ethernet interface of the computer.

How to change the default gateway and DNS server address with the computer.

The Access Point Name (APN), for the SIM from the local GPRS/CDMA/EDGE/EVDO service provider.

The username and password for the GPRS/CDMA/EDGE/EVDO service. In some cases no username and password are required.

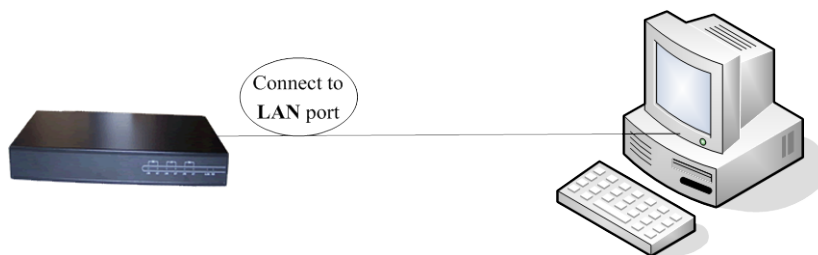
It is assumed that the default IP address of the S7140 VPN Router is 192.168.0.254 that the computer will be given an address within the 192.168.0.??? Range. And the gateway is the same with 192.168.0.254

## 3.3 Set-up

The following is a more detailed explanation of the steps; it required to connect a computer with the Internet using a Router

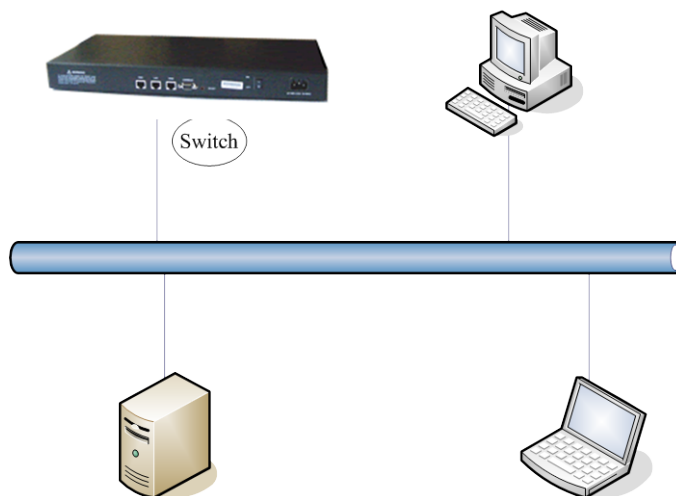
According to your fact condition, connect to your pc as the following two connection mode

- (1) Directness connection:



- (2) LAN Connection:

Put a Router connect to HUB or Switch. Then you can used any PC of LAN network to configure the Router



This is an outline of the steps required to connect to the Internet using a Router

1. According to the top picture connect all equipment
2. Attach the antenna; insert the SIM with no power
3. Connect the computer's Ethernet port to the Router Ethernet port using a cross-over cable.
3. Ensure that the computer is on the same network address range as the Router and make the computer's default gateway
4. Access the Router using the web interface.
5. Connect to an Internet host via the Router

# Chapter 4

## 4 Configure directory

### 4.1 Brief

The Router has a WEB configuration interface. It makes Setting Router much easier.

This passage will explain all the function of the configuration, suggests IE4.0, SSL connection, 10000(port)

You can access: <https://192.168.0.254.10000>(Router default configure address :)  
easy,

### 4.2 Setting local PC IP address

Ensure that the local PC is on the same subnet range with the Router and make the default IP address of the Router is the PC default gateway

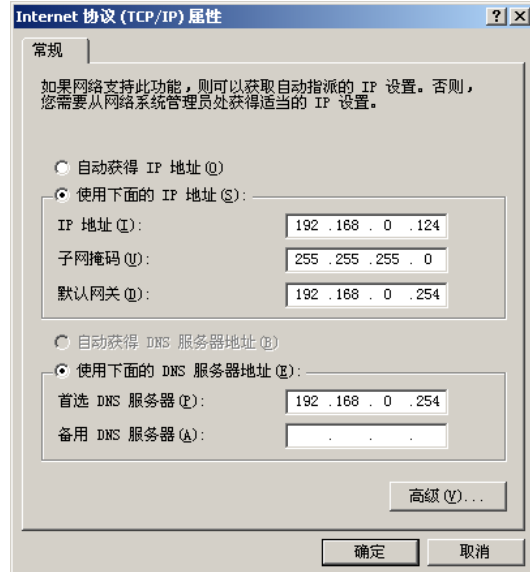
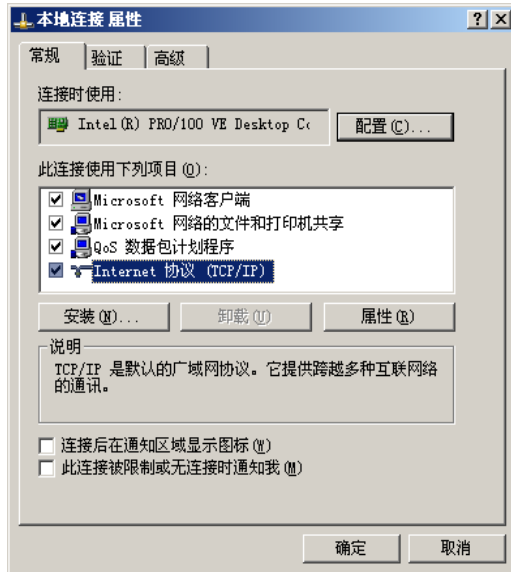
Example, below the IP address of the pc has been set to 192.168.0.124 and the default gateway is the default address of the Router (192.168.0.254).

#### **For Windows XP the sequence is:**

START >>Control Panel >> Network Connections >>Right-Click on Local Area Connection >> Properties >> Internet Protocol

Change the computer's IP address, default gateway and DNS server and then click OK.

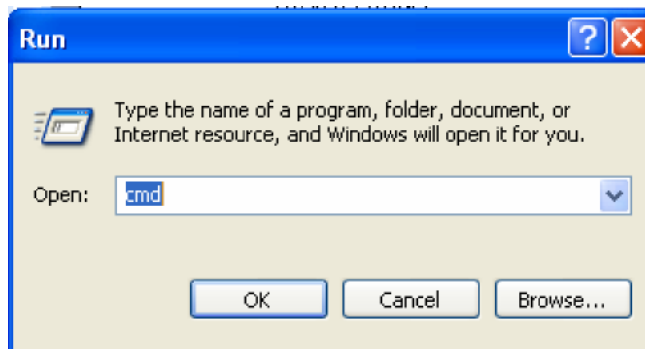
It may take a minute or two for the computer to be allocated the new IP address. In some cases, a reboot may be required.



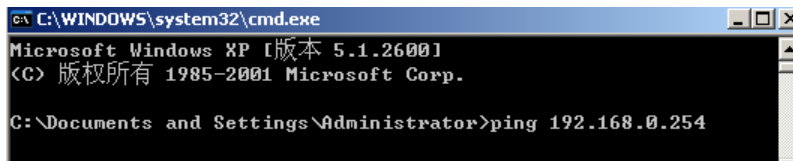
Ensure the PC is on the same subnet with the Router

To test that there is connectivity between the computer and the Router, you can ping the Router using the ping command at the command prompt. Get to the command prompt in Windows XP, use:

START>>RUN>>cmd



The ping command is entered as follows:



If successful, you should see some ping statistics like the following example

```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ping 192.168.0.254

Pinging 192.168.0.254 with 32 bytes of data:

Reply from 192.168.0.254: bytes=32 time=1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64
Reply from 192.168.0.254: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
    
```

### 4.3 Logon the web Configuration

The Router is configured using a web browser as the interface. To logon to the web server enter the IP address of The Router in the browser address window. The default address is 192.168.0.254. A log on interface should display.

The username is "admin". The default password is "888888".

### 4.4 WEB configuration

If Login successful, the browser should display the following web page, Router setting can be configured.

#### 4.4.1 System

VS2000
主页 退出

+ ETPro-7021

- 系统信息
- 接口配置
- 防火墙
- VPN配置
- 服务管理
- 流量管理
- 系统日志
- 修改帐号
- 重新启动

系统状态及配置

系统信息

系统信息 无DMZ , 2 WAN口负载均衡  
 软件版本 6.0 (SN: 2007040419 )  
 主机名 etek.3322.org  
 系统当前时间 Tue Jun 12 18:18:12 UTC 2007

接口信息

内网IP地址	192.168.10.1	流入字节:	16467362	流出字节:	44098882
WAN1	(IP地址是61.141.150.18 )	流入字节:	42267043	流出字节:	14426693

资源状态

系统状态 CPU 使用率 3 % , 空闲内存 33.544 M字节, 启动时间39 min  
 并发连接数 83  
 ipsec隧道数 1

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14

### 4.4.1.1 System info

系统信息	
系统信息	无DMZ , 2 WAN口负载均衡
软件版本	6.0 (SN: 2007040419 )
主机名	etek.3322.org
系统当前时间	Tue Jun 12 18:18:12 UTC 2007

This page contain system info、firmware version、Hostname、 and system info

### 4.4.1.2 Interface info

接口信息					
内网IP地址	192.168.10.1	流入字节:	16467362	流出字节:	44098882
WAN1	(IP地址是61.141.150.18 )	流入字节:	42267043	流出字节:	14426693

If the WAN Interface is configured correctly there will be an IP address displayed and Transmitted and Received Bytes. Example "202.192.57.143" is configured WAN successfully and get address (please according 4.4.22 burl),

### 4.4.1.3 Source State

资源状态	
系统状态	CPU 使用率 3 % , 空闲内存 33.544 M字节, 起动时间39 min
并发连接数	83
ipsec隧道数	1

After you had successful configure VPN, IPSEC Tunnels will show tunnels number, example S7140 01 is 1 IPsec Tunnels and S7140 02 is 2

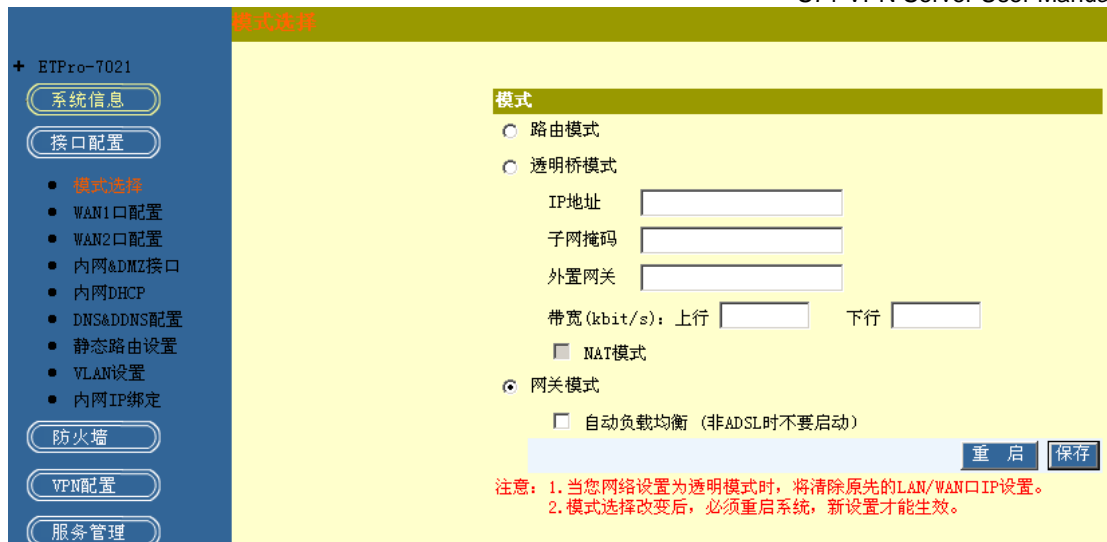
## 4.4.2 Interface

To display the interface configuration page,

### 4.4.2.1 Working mode

It Include Routing Mode、 Transparent Bridge、 Gateways Mode. We advice to used Gateway mode, default is Gateway mode.

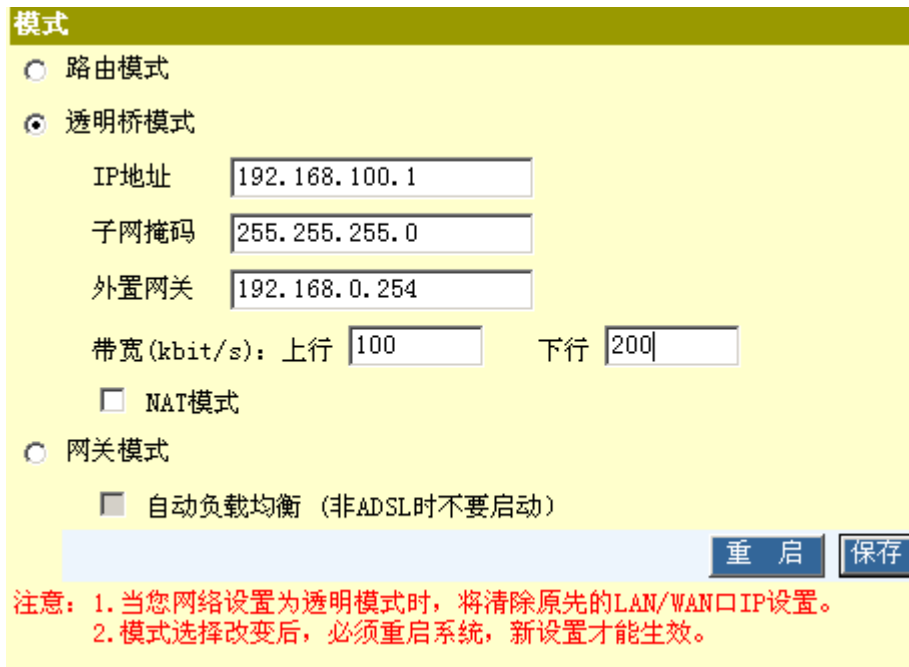
- (1) Gateway Mode: If your Router network is connect to Internet



(2) Router Mode: If the Router operate with other Router in the same network, including a gateway, if you choose Router Mode, you need to setting another Router as a gateway so the computer can be connected internet

On the Router Mode, WAN and LAN port implement transparent connection via ARP-Proxy

(3) transparent bridge: Choose this Mode, connect two kind of network, the administration should fill info; include IP, subnet mask, gateway.



IP Address: Type the static address according to ISP offered, all LAN port and WAN port will share this IP address. Attention to the default gateway of LAN computer must set this IP address. Then it dial-up.

Subnet Mask: all WAN and LAN port exist in this subnet.

Attention:

- 1, Clear LAN/WAN ip configuration before you set Network to be Transparent Bridge Mode
- 2, you must reboot system to make the new setting work after you change the mode

#### 4.4.2.2 WAN

**WAN1口的配置方式:**

固定IP  
 ADSL拨号连接  
 电话拨号连接  
 DHCP连接  
 关闭连接

---

**固定IP配置选项:**

IP地址	<input type="text"/>	DNS服务器1	<input type="text"/>
网络掩码	<input type="text"/>	DNS服务器2	<input type="text"/>
默认网关	<input type="text"/>	DNS服务器3	<input type="text"/>

(如果不设置DNS服务器,系统将不进行断线检测)

---

**拨号连接配置选项**

登陆用户名	<input type="text" value="szteilin@163.gd"/>	使用密码登陆	<input type="password"/>
从ISP得到DNS配置?	<input checked="" type="radio"/> 是 <input type="radio"/> 否	尝试连接的时间	<input type="text" value="60"/> 秒(40-90)
是否限制包尺寸?	<input type="text" value="1412"/> 字节	是否进行LCP检测?	<input checked="" type="radio"/> 是 <input type="radio"/> 否

---

**WAN1 静态路由:**

分行填写, 格式如20.10.10.0/24

---

上行带宽:  kbit/s    下行带宽:  kbit/s

静态ip或dhcp中使用断线检测:     MAC地址克隆:

---

ADSL已启动, IP = 61.141.150.18

(重新启动后生效)

According to different ISP, WAN configuration include Static IP, ADSL, PPP, DHCP Mode, we usually choice "PPP mode" for this production

- (1) static mode

According to Static IP from ISP offer. Type Corresponding IP, Subnet Mask, Gateway, and DNS as following

**固定IP配置选项:**

IP地址	<input type="text" value="10.1.58.2"/>	DNS服务器1	<input type="text" value="202.96.134.133"/>
网络掩码	<input type="text" value="255.255.255.0"/>	DNS服务器2	<input type="text"/>
默认网关	<input type="text" value="10.1.58.1"/>	DNS服务器3	<input type="text"/>

(如果不设置DNS服务器,系统将不进行断线检测)

- (2) ADSL

If you connect with network used Via ADSL. Please choose this option

拨号连接配置选项			
登陆用户名	<input type="text" value="szteilin@163.gd"/>	使用密码登陆	<input type="password" value="●●●●●●"/>
从ISP得到DNS配置?	<input checked="" type="radio"/> 是 <input type="radio"/> 否	尝试连接的时间	<input type="text" value="60"/> 秒 (40-90)
是否限制包尺寸?	<input type="text" value="1412"/> 字节	是否进行LCP检测?	<input checked="" type="radio"/> 是 <input type="radio"/> 否

- (4) DHCP

Choose DHCP function, get Ip address from network configure automatically

- Static Routing

WAN1 静态路由:	
<input type="text" value="202.96.0.0/11"/> <input type="text" value="202.83.0.0/12"/>	分行填写, 格式如20.10.10.0/24

### WAN1: Static Routing

The procedure for statically routing has three steps:

- 1, for each data link within the internet work, identify all addresses (subnet or network)
- 2, for each router, identify all data links not directly connected to that router
- 3, for each router, write a route statement for each data link not directly connected to it

By summarizing a group of subnets or even major networks, the number of static route entries may be reduced drastically. However, caution must be used when summarizing addresses; when done incorrectly, unexpected routing behavior may occur.

The administrative distances of all dynamic routing protocols are substantially higher than 1. Therefore, by default a static route to a network will always be preferred over a dynamically discovered route to the same network.

## 4.4.2.3 LAN&DMZ

内网配置列表								
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p>+ ETPro-7021</p> <p>系统信息</p> <p>接口配置</p> <ul style="list-style-type: none"> <li>● 模式选择</li> <li>● WAN1口配置</li> <li>● WAN2口配置</li> <li>● 内网&amp;DMZ接口</li> <li>● 内网DHCP</li> <li>● DNS&amp;DDNS配置</li> <li>● 静态路由设置</li> <li>● WLAN设置</li> <li>● 内网IP绑定</li> </ul> </div> <div style="width: 80%;"> <table border="1"> <thead> <tr> <th>接口名称</th> <th>IP地址</th> <th>子网掩码</th> </tr> </thead> <tbody> <tr> <td>内网 (编辑)</td> <td>192.168.10.1</td> <td>255.255.255.0</td> </tr> </tbody> </table> <p><input checked="" type="checkbox"/> 广播arp信息 (防止arp欺骗)</p> <p><input type="button" value="确定"/> (重新启动后网口配置生效)</p> </div> </div>			接口名称	IP地址	子网掩码	内网 (编辑)	192.168.10.1	255.255.255.0
接口名称	IP地址	子网掩码						
内网 (编辑)	192.168.10.1	255.255.255.0						

LAN (edit): Local Area Network parameter

LAN □ IP address the default parameter is 192.168.0.254:10000

Subnet Mask: the default parameter is 255.255.255.0.

Click" edit" in LAN (edit) tab, Change local IP address .

**Network Config**

---

<b>IP Address</b>	192.168.100.1
<b>Subnet Mask</b>	255.255.255.0

**Save**

If you change successful, the login Address is 192.168.100.1:10000, the other PC must be change local IP address, and it is the same with LAN of Router

#### 4.4.2.4DHCP

The configuration as below

**DHCP配置列表**

---

+ ETPro-7021

系统信息

接口配置

- 模式选择
- WAN1口配置
- WAN2口配置
- 内网&DMZ接口
- **内网DHCP**
- DNS&DDNS配置
- 静态路由设置
- VLAN设置
- 内网IP绑定

防火墙

打开DHCP服务

自动应用于绑定MAC地址的IP用户

网关IP

DNS服务器

内网IP地址起点

内网IP地址终点

内网IP网络掩码

**确定**

#### 4.4.2.5 DNS&DDNS

If you can connect with Internet hosts using their IP address, but not using their domain name, you may have to switch on DNS Relay within the Router. The process for this is to log into the Router as described above, then configure the Ethernet uplink settings.

Before you setting DDNS, YOU must access [www.3322.org](http://www.3322.org), [www.dtdns.com](http://www.dtdns.com) and other DDNS service providers to register a domain name (DDNS server is [dtdns.com](http://dtdns.com) supply)

DDNS Server: the default DDNS function is close. If you need open this function, choose A Dynamic DNS service providers from menu, and type your Username 、 password and host name in DDNS Setting

Select “enable” Tab to start-up DDNS, It auto change this domain name ip with every dial-up connection



### 4.4.2.8 IP/MAC Bind

内网IP绑定

启用

绑定的IP

设置内网绑定MAC地址的IP，格式如：  
192.168.2.2 00:0C:29:A9:F9:AC  
表示192.168.2.2绑定到  
00:0C:29:A9:F9:AC，IP和MAC之间以  
空格隔开，每行一条。点击下面的  
“ARP命令列表”按钮可列出当前的  
IP-MAC，以便参考。

arp列表

保存

Choose “enable” tab, it will bind an Ip with Mac address in LAN. the format as below  
192.168.0.124 00:10:C6: OE: 07: EB

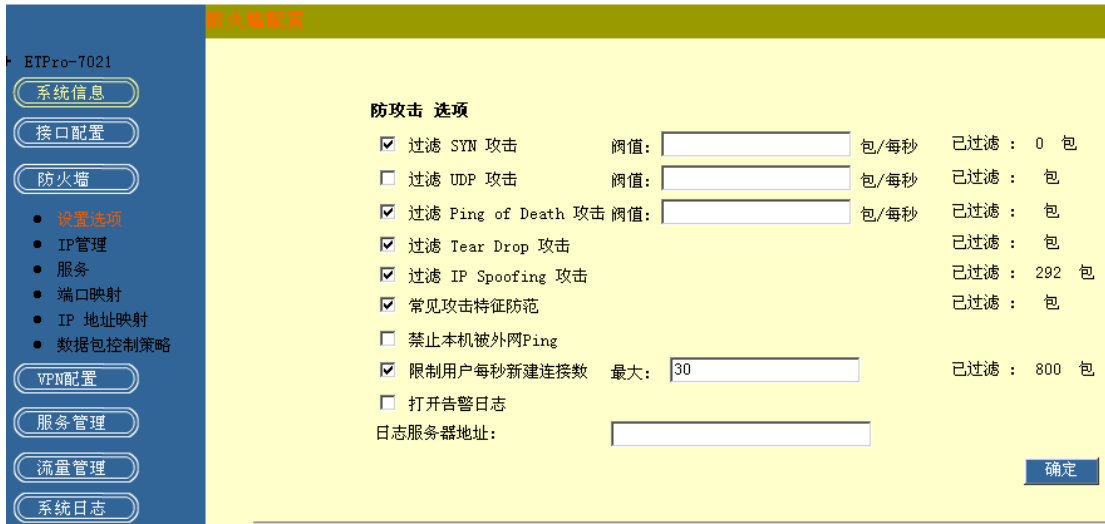
## 4.4.3 Firewall

Frequently used by corporations and educational institutions for increased security, firewalls work by blocking certain Internet traffic from entering or leaving a network.

Internet traffic moves through a firewall based on service identification numbers that are known as ports. Certain ports must be open for Router to work. Network administrators typically open a minimal amount of network ports, allowing the traffic for approved applications to enter and leave the network while blocking other network traffic.

### 4.4.3.1 Security

The default Firewall function is enable, if this function is close, filter SYN Attack 、filter tear Drop function and so on also would be closed

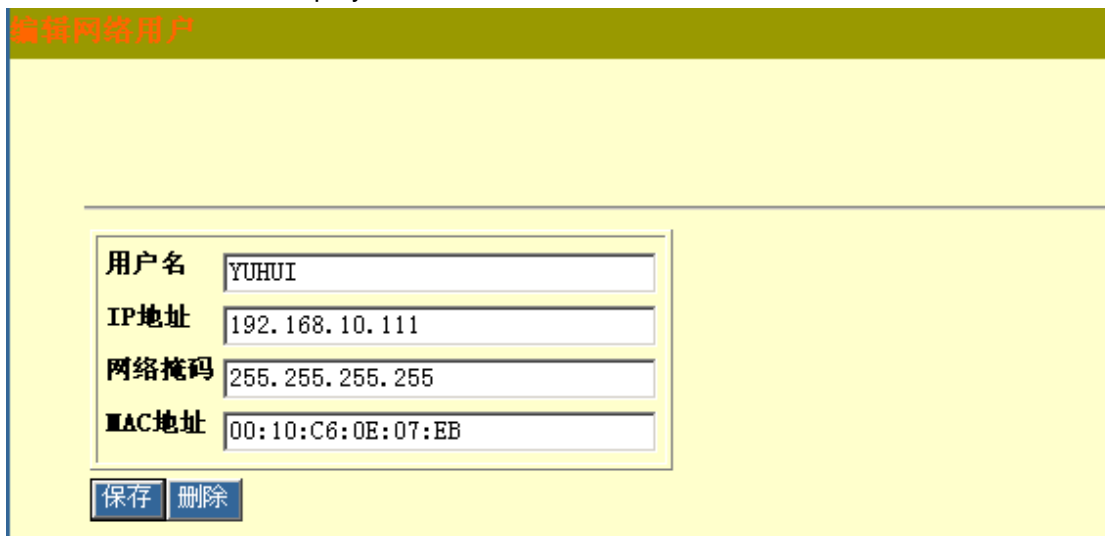


### 4.4.3.2 Ip management

In order to manage easier, setting the local area network user's Ip and Mac address, avoid user change IP



Click "creates" tab the display as below



If you have succeed create a IP manage, the next as below

网络用户管理

用户名	IP地址	子网掩码	MAC地址
YUHUI (编辑)	192.168.10.111	255.255.255.255	00:10:C6:0E:07:EB

创建

### 4.4.3.3 Services

System pre-establish some servers, this services are used in firewall. Access rule and server manager and so on in LAN or WAN port to choose

As below display .you can see Port Name, Port Range, port value. Click “edit” to change it

端口管理

端口名	端口范围	端口值
AOL (编辑)	5190-5194	
BGP (编辑)		179
DHCP-Relay (编辑)	67	
DNS (编辑)		53
FINGER (编辑)		79
FTP (编辑)		21
GOPHER (编辑)		70
H323 (编辑)		1720, 1503, 1719
HTTP (编辑)		80
HTTPS (编辑)		443
IKE (编辑)		500
IMAP (编辑)		143
Internet-Locator-Service (编辑)	389	
IRC (编辑)	6660-6669	
L2TP (编辑)		1701

### 4.4.3.4 Port map

If the Manager set up on a DMZ or internal network with private addresses, some configuration of the Manager is required, as well as setting up the port mapping and access rules in the firewall.

The port mapping must be set up for the web and data ports defined in the Manager. You must use the same ports in the firewall as on the Manager configuration, both for HTTP/HTTPS web and for UDP data.

In some firewalls, you have to set up access rules separately from the port mapping, and in others the access rules are implied by adding the port mapping.

端口映射设置					
外部端口号	外部IP地址	映射到端口	映射到IP地址	协议	
6600-6699 (编辑)	任意	6600-6699	192.168.10.227	任意	
9999 (编辑)	任意	9999	192.168.10.246	任意	
60000 (编辑)	任意	60000	192.168.10.189	任意	
9998 (编辑)	任意	9998	192.168.10.101	任意	
7788 (编辑)	任意	7788	192.168.10.108	任意	
1122 (编辑)	任意	1066	192.168.10.113	任意	
7777 (编辑)	任意	7777	192.168.10.76	任意	
60000 (编辑)	任意	60000	192.168.10.181	任意	
2200 (编辑)	218.18.211.55	8000	192.168.10.200	任意	
9000 (编辑)	任意	9000	192.168.10.224	任意	
50000-50005 (编辑)	任意	50000-50005	192.168.10.88	任意	
6868 (编辑)	任意	6868	192.168.10.54	任意	
6666 (编辑)	任意	6666	192.168.10.78	任意	
5000 (编辑)	任意	5000	192.168.10.233	任意	
11111 (编辑)	任意	11111	192.168.10.13	任意	
8000 (编辑)	任意	8000	192.168.10.234	任意	
8888 (编辑)	任意	8888	192.168.10.148	任意	
2222 (编辑)	任意	2222	192.168.10.168	任意	
600 (编辑)	任意	600	192.168.10.145	任意	
10000 (编辑)	任意	10000	192.168.10.249	任意	

创建

Click "create" tab to create a new port map the display as below

端口映射

外部端口号

外部IP地址

映射到端口

映射到IP地址1

协议  tcp  udp  all

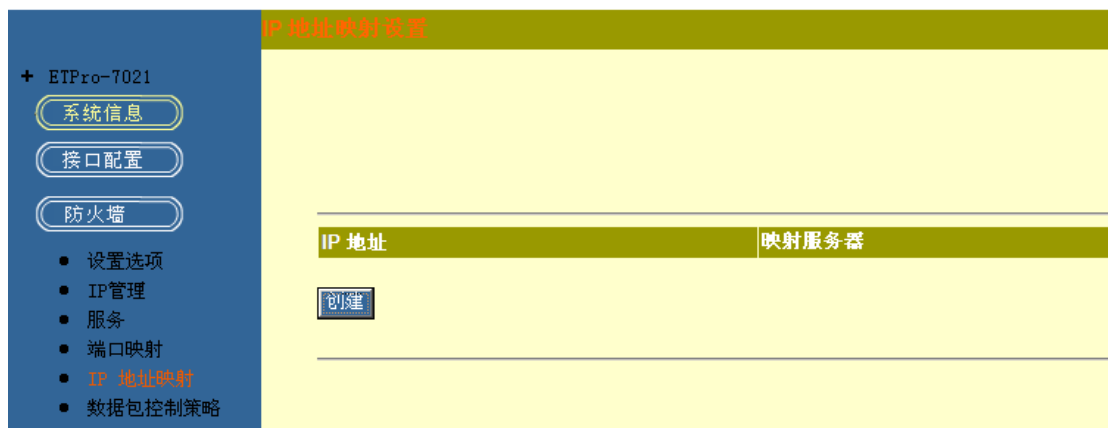
#### 4.4.3.5 IP MAP

With NAT enabled, the IP addresses of nodes on your LAN are private since they are hidden from the Internet. IP Maps let you forward all requests directed to a public IP address provided to you by your ISP through the Entopic router's NAT interfaces. Once configured, all network ports and protocols will be forwarded to a specific host or server behind the Entopic router.

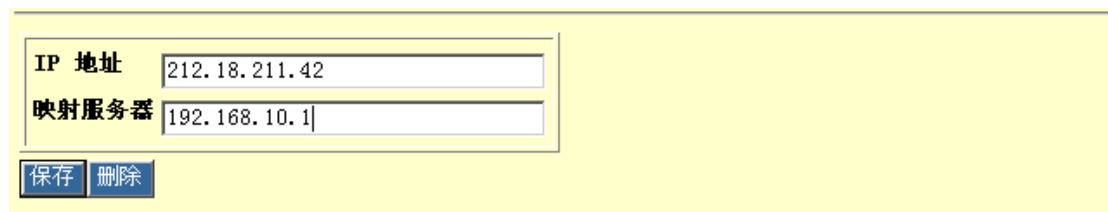
If your ISP has assigned you multiple static IP addresses you may want to have one or more of these IP's assigned directly to hosts or servers behind the Entopic with NAT enabled.

Example: you want to place a public IP (212.18.211.42) onto the local workstation IP (192.168.10.1) then this Quick Guide will take you through this process step-by-step. How

this is done will be determined by the type of routing (or bridging) handled from the ISP. The IP's can be routed to the Ethernet interface of the router, or be bridged to you on the WAN interface



Click "creates" tab to create a new IP map the display as below



IP Address:                      The WAN IP address

Mapped Server:                The LAN IP address



### 4.4.3.6 Strategy

Click "create" tab to create a new strategy and click "APPLY" to make new setting work, the display as below

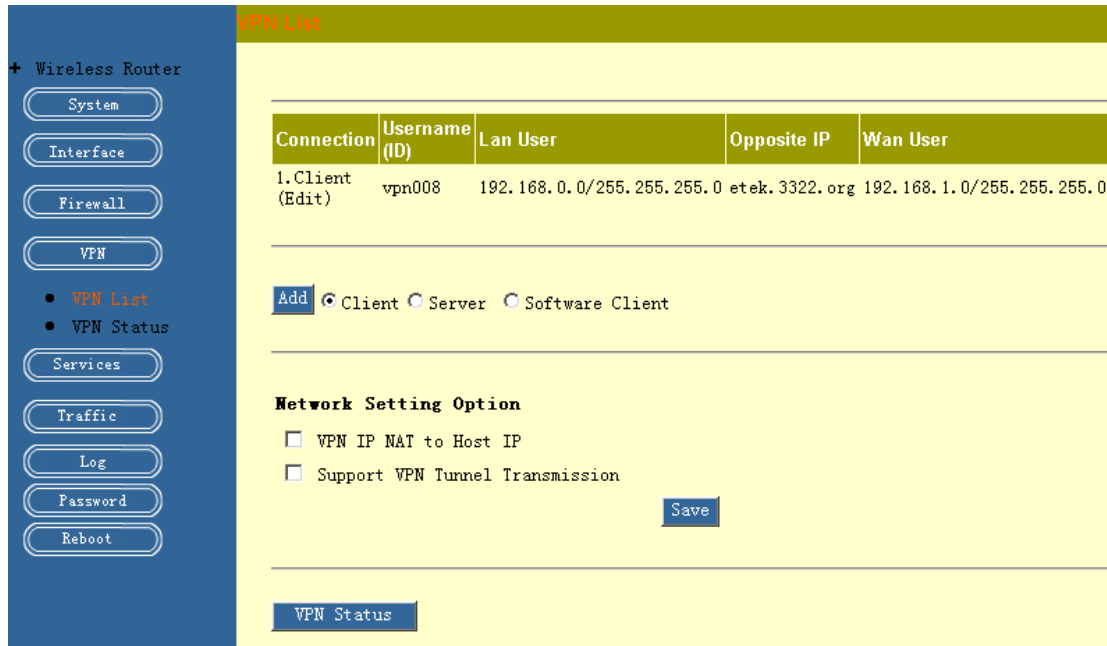
### 4.4.4 VPN

For select this function, you Can configure Router as client and server, how to detailed configure VPN? Please referenced document

How\_to\_config\_VPN\_V100R\_Eng

#### 4.4.4.1 VPN LIST

According to different require to choose suitable VPN Server type, it contain "client"、"server"、"Software client"



- (1) configure VPN Router as client , if connect Router with other equipment Select"client" option and click" add" button, display client web as below

Username (Local ID)

Local Subnet Select

IP

Subnet Mask

Opposite IP/Domain

Opposite Subnet Select

IP

Subnet Mask

Password

Aggressive Mode

Local ID is the name of this connect (Host name is default)  
Connection will be created when ID&P same with that in the Server.  
Proposed name: client1.vpn11.com

**Attention:**  
In VPN Network, some Subnet can be li  
Routing is on the Subnet Address to  
So the Client Subnet that connected  
can not conflicted. The same, it can n  
Server's Subnet.

User name (local ID): local ID is the name of this connection(host name is default, it must be the same with VPN server configuration)

password: The same with the server.

Dynamic IP: Dynamic IP means opposite maybe Dial-up connection. So no input IP Address.

- (2): configure Router as server  
Configure VPN Server parameters. As below

**编辑服务器端VPN配置**

用户名(对方ID)	<input type="text" value="vpn110"/>	对方ID是此连接的唯一标志 (既对方机器名) ID和密码与客户端中的相等,即可建立联接 建议的名字如: client1.vpn11.com
本地子网	选择 <input type="text" value="输入一个"/>	动态IP表明对方可能是拨号连接,不用输入IP地
	IP值 <input type="text" value="192.168.10.0"/> 掩码 <input type="text" value="255.255.255.0"/>	
对方IP或域名	动态IP <input type="text"/>	<b>注意:</b> 在VPN 的网络中,可以把多个子网 联系到一起,路由是靠子网的地址 来区分的,所以所有连进VPN SERVER 的客户端的子网不能冲突,也不能 与服务器的子网冲突。
对方子网	选择 <input type="text" value="输入一个"/> IP值 <input type="text" value="192.168.0.0"/> 掩码 <input type="text" value="255.255.255.0"/>	
密码	<input type="text" value="*****"/>	
野蛮模式	<input type="checkbox"/>	

When correspond Subnet choose software Client, the function is the same with the following "IPSec software client"

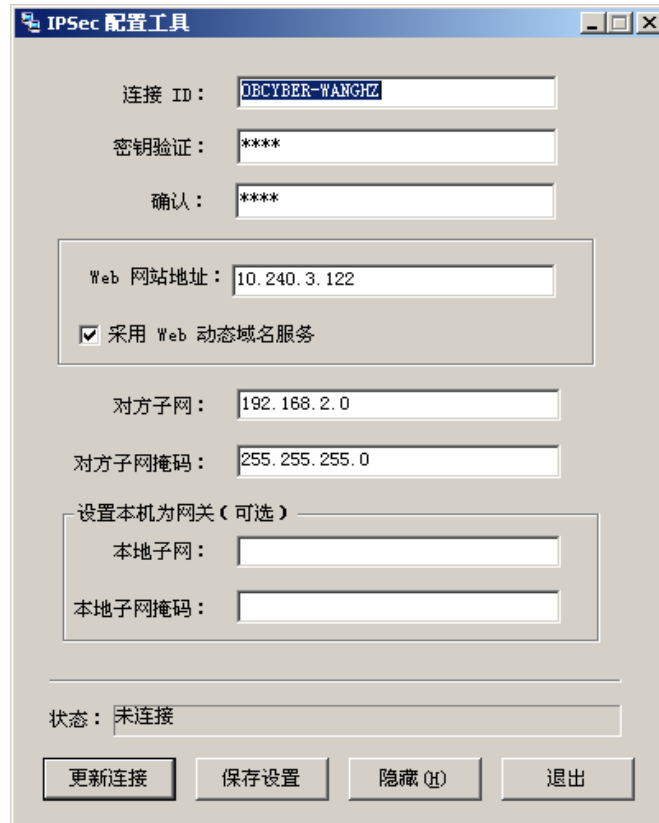
- (3): configure Router as "software client"

How to install software client. Please referenced document:

"How\_to\_config\_VPN\_V100R\_Eng"

Username (Opposite ID)	<input type="text" value="DBCYBER"/>	Opposite ID is the only signs of this link (Opposite Hose name) Connection will be created when ID&Password is the same with that in the Server. Porposed name: client1.vpn11.com
Local Subnet	Select <input type="text" value="Input"/> IP <input type="text" value="192.168.2.0"/> Mask <input type="text" value="255.255.255.0"/>	
Opposite IP/Domain	Static IP <input type="text" value="10.240.3.122"/>	Dynamic IP means Opposite maybe Dial-up connection. So no input IP Address.
Opposite Subnet	Select <input type="text" value="Private network client"/> IP <input type="text"/> Mask <input type="text"/>	
Password	<input type="text" value="1111"/>	<b>Attention:</b> In VPN Network,some Subnet can be linded together. Routing is on the Subnet Address to differentiate. So the Client Subnet that connected into VPN Server can not conflicted.The same,it can not conflict with Server's Subnet.
Aggressive Mode	<input type="checkbox"/>	

When you configure Router as software client,"private network client" is not must configure



(IPSec client)

#### 4.4.4.2 VPN state

The list display currently VPN connect mode and connect state

VPN Status				
Opposite IP	Local Subnet	Opposite Subnet	State	Communications Pack Quantity
218.18.211.170	192.168.0.0/255.255.255.0	192.168.10.0/255.255.255.0	connected	0

If you have succeed configure VPN, you can see IPSEC Tunnels will show tunnels number

Source State	
System State	started 29 min, cpu load: 1.34, 1.20, 0.97
Simultaneous Connect	10
IPSec Tunnels	1

## 4.4.5 Services

This page you can configure and check procedure of Router

### 4.4.5.1 PPTP

Click "VPN 配置" in S7040 WEB configure page, choose "PPTP 设置" to configure PPTP, the display page as below, select "启用 PPTP" to Enable PPTP function, please type start ip and End IP

click“确定 “to confirm your configuration, then it will create a new PPTP user as following “启用 PPTP”:

“启用 PPTP”： enable PPTP configuration  
 “起始 IP” Start IP  
 “终止 IP” End IP

Type your username and password (it must be the same with you client PPTP configuration) .save your configuration. Then you have succeed configured PPTP server PPTP user

“序号” serial number

“用户名” User name  
 “密码” password  
 “新增” new create



Configure PPTP AS Front picture, type the user name and password from ISP offered, if you have succeed configure .then your can communication immediately

### 4.4.5.2Time

You can change” hardware time” and” time server”



Hardware Time: you can configure date、month、year、hour  
 Time Server: Select”enable” option, and type host/address:”time.windows.com”  
 Time zone: In china, time zone usually is select”GMT+8”

### 4.4.5.3 Command shell

输入网络工具命令

执行命令:  清理之前的命令

You can enter some Linux command to execute example “ping” ,”route  
,”free” ,”fconfig” and so on.

Example execute” ping” command, ping www.163.com and click ”execute” button, the follow info as below

正在执行...

**命令输出**

```
> ping www.163.com
PING www.cache.split.netease.com (220.181.28.53): 56 data bytes

--- www.cache.split.netease.com ping statistics ---
4 packets transmitted, 0 packets received, 100% packet loss
```

输入网络工具命令

执行命令:  清理之前的命令

执行先前的命令  清理命令

### 4.4.5.4 System Upgrade

File name:  浏览...

Start

Click “browsing” and select the program file, “update success” appears in the “update promotion status” after 3-5minute, otherwise it will show fail.

End as system upgrade, the Router will reboot, after then, you had better reset factory default

Attention: upgrade course don’t interrupt operation. Otherwise the Router can’t work normally

## 4.4.6 Backup & restore



When you need to backup your current configuration file, select "download" and it will download current configuration file. This function could help you to backup your current configuration.

When you want to reset the previous configuration... You can click browse button. Select the previous configuration file. Click "restore" and start to reset configuration. It will backup your configuration.

Attention: for backup and restore, password can't be backup and restore. After you restore configuration successfully, you also must use previous password.

### 4.4.6.1 Factory default

When you choose "reset factory default", the system will display as below picture, click "confirm", the Router setting will be lost and reset to factory default.

Default username: Admin  
 Default password: 888888  
 Default IP address: 192.168.0.254  
 Default Subnet Mask: 255.255.255.0.



## 4.4.7 Traffic

This appendix describes how to configure your firewall to allow e-meeting traffic to pass through it.

### 4.4.7.1 IP traffic control

**IP流量控制**

序号	起始IP	终止IP	上行带宽(kbit/s)	下行带宽(kbit/s)	启用
1	192.168.10.1	192.168.10.100	50	200	<input checked="" type="checkbox"/>
2			0	0	<input type="checkbox"/>
3			0	0	<input type="checkbox"/>

流量控制方式:  (在非ADSL模式下, 只有限制最大带宽生效)

列出正在使用的IP速度

This page, you can input a subnet to control Upstream and Downstream traffic. Select "enable" option and click "save" button, It just start ip traffic control.

Click "IP list" as below, you can choose sorting By ip、Upstream speed or Downstream speed

**IP速度列表**

按IP排序  
  按上行速度排序  
  按下行速度排序

序号	IP	上行速度(kbit/s)	下行速度(kbit/s)
1	192.168.10.76	16.16	5.768
2	192.168.10.10	0.64	0

## 4.4.8 Log

System Log

---

Lines  Include

```
Jan 1 07:04:56 adsl-stop: Killing adsl-connect
Jan 1 07:04:56 adsl-stop: Killing pppd
Jan 1 07:04:56 chat[20686]: SIGTERM
Jan 1 07:04:56 pppd[20684]: Connect script failed
Jan 1 07:04:56 pppd[20684]: Exit.
Jan 1 07:04:56 kernel: rs_close ttys0, count = 1
Jan 1 07:05:06 pppd[20795]: pppd 2.4.3 started by root, uid 0
Jan 1 07:05:06 kernel: rs_open ttyS0, count = 1
Jan 1 07:05:07 kernel: rs_open ttyS0, count = 2
Jan 1 07:05:07 kernel: rs_close ttys0, count = 2
Jan 1 07:05:07 chat[20798]: abort on (BUSY)
Jan 1 07:05:07 chat[20798]: abort on (NO DIALTONE)
Jan 1 07:05:07 chat[20798]: send (at&d2^M)
Jan 1 07:05:08 chat[20798]: expect (OK)
Jan 1 07:05:08 chat[20798]: at&d2^M^M
Jan 1 07:05:08 chat[20798]: OK
Jan 1 07:05:08 chat[20798]: -- got it
Jan 1 07:05:08 chat[20798]: send (ATDT#777^M)
Jan 1 07:05:08 chat[20798]: expect (CONNECT)
Jan 1 07:05:08 chat[20798]: ^M
```

Choice “log” option, It will display the system auto recordation log it will help you quickly to check question

Attention: when your used Router in trouble, please save the system log and send out our engineer, we will try our best to get ride of malfunction

## 4.4.9 Password

This function can change login password, the Router default password is “888888” in order to make sure network safe, we suggest modify password

修改登录密码

修改登录密码

确认登录密码

### 4.4.10 Reboot

Choose this function and click "confirm" button, it will reboot system



# Chapter 5

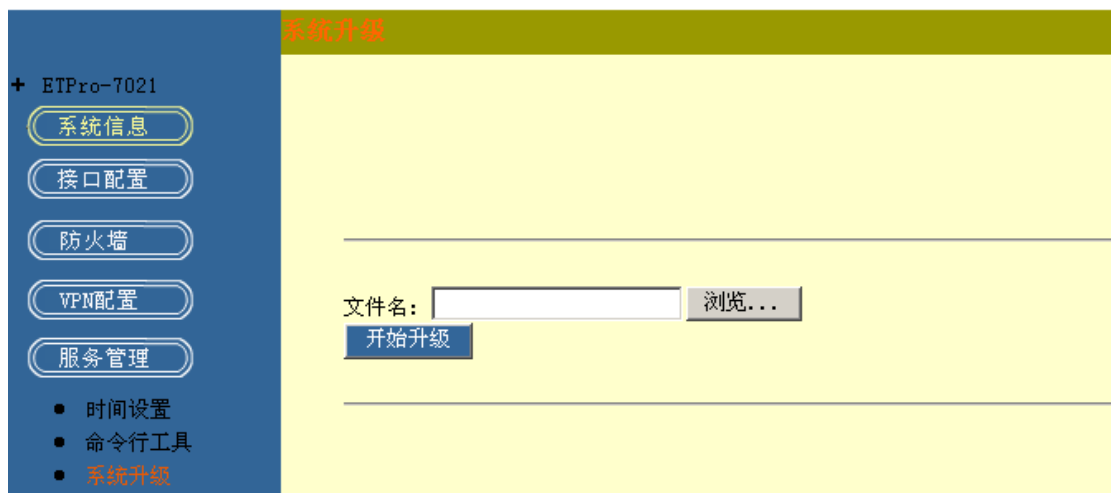
## 5 Special configure

### 5.1 Production upgrade

Router supply production upgraded function about user setting.It have two different upgrade mode, it is very easy to used

#### 5.1.1 WEB mode

click “services” in left menu, select “System Upgrade”.



Click “browsing” and select the program file, “update success” appears in the “update promotion status” after 3-5minute, otherwise it will show fail.

End as system upgrade, the Router will reboot, after then, you had better reset factory default

Attention: upgrade course don't interrupt operation. Otherwise the Router can't work normally

### 5.2 Factory default

Router supply factory default function about user setting.It have two different mode, web reset mode and reset jack mode

## 5.2.1 WEB mode

click “services” in left menu, select “Factory default”.

When you choose “reset factory default”, the system will display as below picture, click “confirm”, the Router setting will be lost and reset to factory default.

Default username: Admin  
 Default password: 888888  
 Default IP address 192.168.0.254  
 Default Subnet Mask: 255.255.255.0.



## 5.2.2 Reset jack mode

you can according to 3.1 chapter about Back board pane, select a” R jack “ be side in power and LAN port, used pen and press the jack about five sects, it will restoration the system parameter to factory default. example .when you have forgot the password of web manage of Router, you can do like this.

## 5.3 Port map

If the Manager set up on a DMZ or internal network with private addresses, some configuration of the Manager is required, as well as setting up the port mapping and access rules in the firewall.

The port mapping must be set up for the web and data ports defined in the Manager. You must use the same ports in the firewall as on the Manager configuration, both for HTTP/HTTPS web and for UDP data.

In some firewalls, you have to set up access rules separately from the port mapping, and in others the access rules are implied by adding the port mapping.

端口映射设置

外部端口号	外部IP地址	映射到端口	映射到IP地址	协议
6600-6699 (编辑)	任意	6600-6699	192.168.10.227	任意
9999 (编辑)	任意	9999	192.168.10.246	任意
60000 (编辑)	任意	60000	192.168.10.189	任意
9998 (编辑)	任意	9998	192.168.10.101	任意
7788 (编辑)	任意	7788	192.168.10.108	任意
1122 (编辑)	任意	1066	192.168.10.113	任意
7777 (编辑)	任意	7777	192.168.10.76	任意
60000 (编辑)	任意	60000	192.168.10.181	任意
2200 (编辑)	218.18.211.55	8000	192.168.10.200	任意
9000 (编辑)	任意	9000	192.168.10.224	任意
50000-50005 (编辑)	任意	50000-50005	192.168.10.88	任意
6868 (编辑)	任意	6868	192.168.10.54	任意
6666 (编辑)	任意	6666	192.168.10.78	任意
5000 (编辑)	任意	5000	192.168.10.233	任意
11111 (编辑)	任意	11111	192.168.10.13	任意
8000 (编辑)	任意	8000	192.168.10.234	任意
8888 (编辑)	任意	8888	192.168.10.148	任意
2222 (编辑)	任意	2222	192.168.10.168	任意
600 (编辑)	任意	600	192.168.10.145	任意
10000 (编辑)	任意	10000	192.168.10.249	任意

创建

Click "create" tab to create a new port map the display as below

端口映射

外部端口号	<input type="text" value="80"/>
外部IP地址	<input type="text" value="220.192.63.27"/>
映射到端口	<input type="text" value="80"/>
映射到IP地址1	<input type="text" value="192.168.10.111"/>
协议	<input type="radio"/> tcp <input type="radio"/> udp <input checked="" type="radio"/> all

保存 删除

## 5.4 Change login address and password

### 5.4.1 Change login address

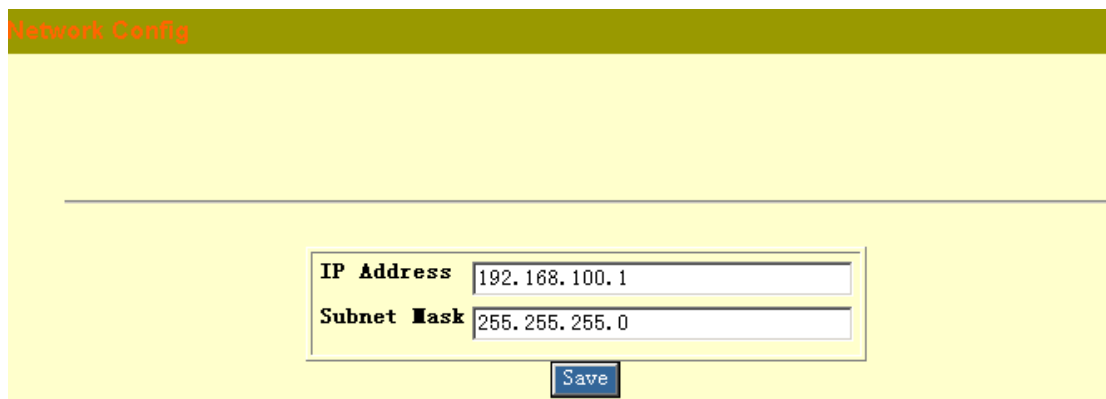


LAN (edit): Local Area Network parameter

LAN IP address the default parameter is 192.168.0.254:10000

Subnet Mask: the default parameter is 255.255.255.0.

Click "edit" in LAN (edit) tab, Change local IP address .



If you change successful, the login Address is 192.168.100.1:10000, the other PC must be change local IP address, and its gateway must the same with Router IP

### 5.4.2 Change login password

Click "Password" in left menu, and type a new password to change login password

修改登录密码




修改登录密码

确认登录密码

修改

# Chapter 6

## 6 Production list

name	unit	number	description	Sketch-map
Host	Entries	1	Standard supply	
Quality card	piece	1	Standard supply	
power	Entries	1	Supply 12V	
Production-CD	piece	1	Standard supply	

# Chapter 7

## 7 Terminology

<b>APN:</b>	Access Point Name or APN is the name of an access point for GPRS. Examples: include internet, vf.internet.au and Telstra. Internet
<b>Default gateway:</b>	When setting up the PC to operate with a Router the gateway setting. (in the Network settings) must be set to the IP address of the Router., Using the IP address of the Router as the gateway, lets your computer, know that you will use the Router to access remote networks.
<b>DNS</b>	Directory Name Server – a server that converts IP addresses to names. e.g. 64.233.167.99 translates to google.com
<b>GPRS</b>	Short for General Packet Radio Service, a standard for Cellular communications which runs at speeds up to 115 kilobits per
<b>Internet</b>	A network of computer networks which operates world-wide using a common set of communications protocols.
<b>NMS</b>	Network Management Server – an online system used to remotely monitor devices on a network.
<b>SIM</b>	Subscriber Identity Module – a small rectangular piece of plastic with a layer of copper. Provided as part of a mobile telephone service.
<b>Unlocked State:</b>	A SIM that does not require a password to activate
<b>VPN:</b>	Virtual Private Network
<b>WAN:</b>	Wide Area Network, common is Internet
<b>LAN:</b>	Local Area Network
<b>DDNS:</b>	Dynamic Domain Name Server

<b>DHCP:</b>	Dynamic Host Configuration Protocol, DHCPfunctionm is auto get Ipaddress from network configuration
<b>DMZ:</b>	Demilitarized Zone.
<b>GMT:</b>	Greenwich Mean Time
<b>ISP:</b>	Internet Service Provider
<b>L2TP:</b>	Layer 2 Tunneling Protocol
<b>PPPoE:</b>	Point-to-Point Protocol over Ethernet, used dial-up.
<b>PPTP:</b>	Point-to-Point Tunneling Protocol, used dial-up.