

G601 교육자료



2016. 07.
IP 통신 사업부
(주) 한양 디지텍

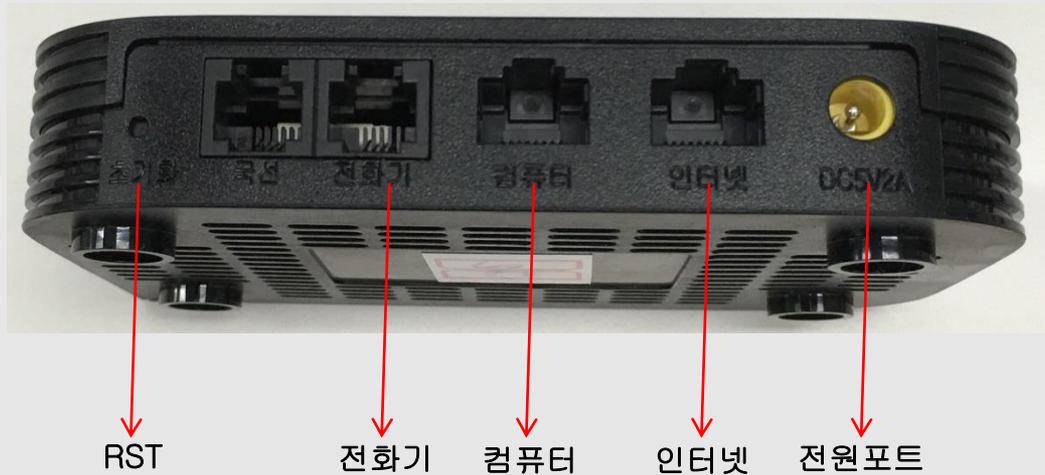
- ❖ 포장내용물
- ❖ 설치순서
- ❖ 소프트웨어 주요 기능
- ❖ 하드웨어 규격
- ❖ LED 상태표
- ❖ 웹 설정 & 메뉴 설명
- ❖ IVR 설정 방법

포장 내용물

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접속부	Type	내용
인터넷	RJ-45	WAN측 네트워크 장비 쪽으로 10/100 Base-T Ethernet 연결 (예, FTTH, Cable Modem, xDSL)
컴퓨터	RJ-45	PC나 Hub으로 10/100 Base-T Ethernet 연결
리셋	Button	MTA의 Reset을 위한 버튼
전원(5V)	Jack	DC+5V/2A 연결부
전화	RJ-11	전화 접속부
국선	RJ-11	용도가 없으니 연결하지 마세요.

설치 순서 1/2



설치 순서 2/2

순서 1	컴퓨터의 전원을 끈다. 모뎀으로 연결되어 있을 경우 모뎀의 전원도 끈다.
순서 2	컴퓨터에 연결되어 있는 이더넷 케이블을 분리해서 MTA의 “인터넷” 접속부에 연결 한다.
순서 3	MTA와 같이 포함되어 있는 이더넷 케이블의 한쪽 끝을 MTA의 “컴퓨터” 접속부에 연결하고 다른 끝은 컴퓨터의 이더넷 접속부에 연결 한다.
순서 4	MTA의 “전화” 접속부와 전화를 전화 케이블로 연결한다.
순서 5	MTA와 같이 포함되어 온 전원 어댑터를 MTA의 “전원” 접속부에 연결하고 전원 콘센트에 연결하여 전원을 인가한다.
순서 6	컴퓨터의 전원을 켜다. 모뎀으로 연결되어 있을 경우 모뎀의 전원도 켜다.
순서 7	컴퓨터가 자동적으로 IP주소를 받을 수 있도록 설정 되어 있도록 되어 있는지 확인 한다.

- ❖ SIP V2.0 (RFC 3261/RFC3262) 지원
- ❖ G.711 (A-Law, μ -Law), G.729A 코덱 지원
- ❖ 두 개의 RJ-45 포트 (10/100 자동 감지 및 자동 MDI/MDIX 지원 Ethernet ports)
- ❖ 일반 아날로그 전화 연결을 위한 한 개의 RJ-11 포트(FXS port)
- ❖ DHCP를 이용한 IP 주소 할당, 고정 IP 방식 지원
- ❖ NAT와 Bridge 기능 지원
- ❖ NAT Router/DHCP Server 지원
- ❖ NAT traversal (Static NAT Route or by STUN) 지원
- ❖ Voice Activity Detection(VAD) , Comfort Noise Generation(CNG) 그리고 echo cancellation 지원
- ❖ Adaptive jitter buffer 지원
- ❖ Call hold, Call waiting, Call forwarding, Call Transfer, and DTMF Relay(In-band, RFC2833 and SIP INFO) 등 부가서비스 지원
- ❖ MAC address cloning 지원
- ❖ IEEE 802.1P, IP TOS 지원
- ❖ 제품 설정을 위한 Web interface와 IVR-driven interface 또는 auto provisioning 제공

❖ 전원 어댑터

정격입력전압: 100~240V, 50~60Hz

정격출력전압: DC 5V, 2A

❖ CPU

MT7620N @580MHz

❖ Port

WAN

10/100Base_T RJ-45

LAN

10/100Base_T RJ-45 (PC 연결포트)

Phone

RJ-11 for FXS port

❖ 동작 온도

5 ~ 45°C (41 ~ 113°F)

❖ 보관 온도

-25 ~ 85°C (-13 ~ 185°F)

❖ 상대 습도

10 ~ 90% (Non-condensing)

❖ 크기 (L×W×H)

125 x 90 x 25 mm

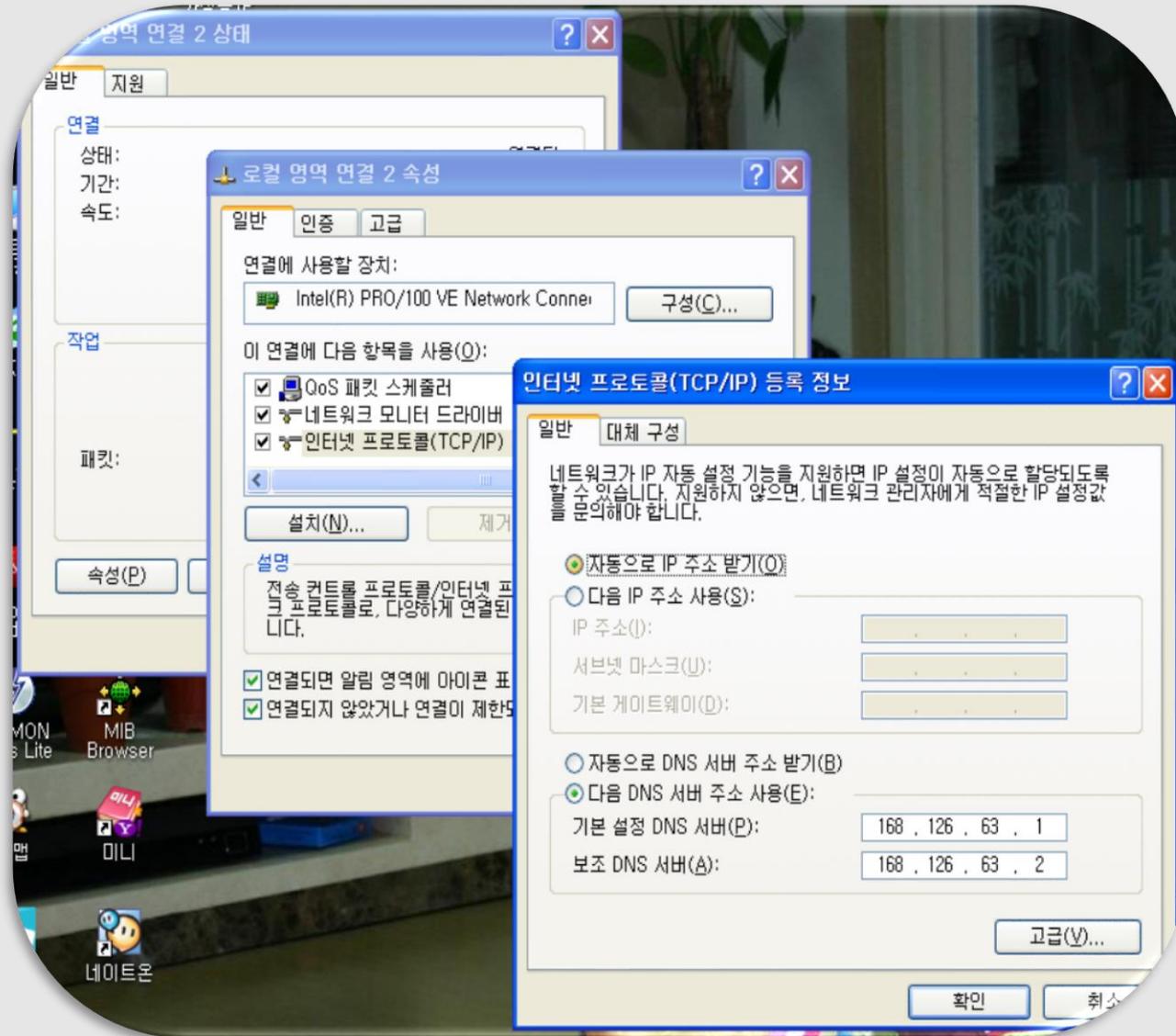
❖ 무게

100g

LED 상태 설명

전원(PWR)	전원이 인가되면 On 상태 유지.
상태(SYS)	0.5초 간격으로 점멸 : IP 할당 이전. 0.1초 간격으로 점멸 : 신규 펌웨어 업그레이드 중. On 상태 유지 : IP 할당 완료.
인터넷(WAN)	WAN 포트의 연결 상태 표시. 트래픽 발생 시 점멸.
컴퓨터(LAN)	LAN 포트의 연결 상태 표시. 트래픽 발생 시 점멸.
전화(PHONE)	0.5초 간격으로 점멸 : 전화 사용시. 전화 걸려올 때. 0.25초 간격으로 점멸: 소프트스위치에 등록 시도 중. On 상태 유지 : 등록 후 전화 사용 가능 상태.

◆ 초기 웹 접속 방법



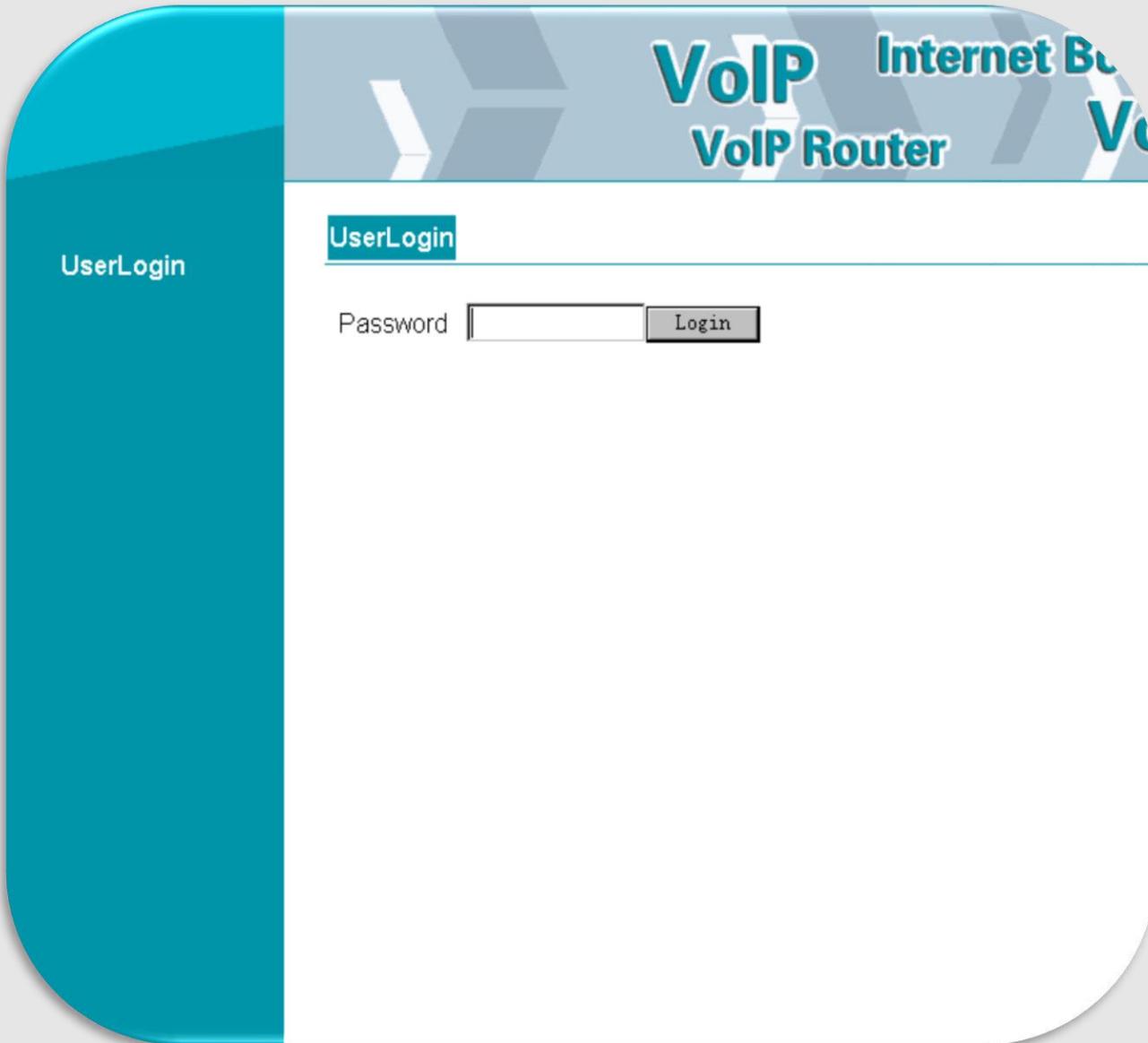
PC IP 설정

- 1) 시작 - 제어판 - 네트워크 연결
- 네트워크 연결 클릭
- 2) 네트워크 연결 속성
- 인터넷 프로토콜 (TCP/IP) 클릭 후
자동으로 IP 주소 받기 선택

웹 접속 방법

- 1) PC와 G/W의 LAN Port에 연결
- 2) Internet Explorer 주소창에
http://192.168.194.254:62207 입력

◆ Login



The screenshot shows the web interface of a VoIP Router. The header area contains the text "VoIP Internet B" and "VoIP Router". The main content area is titled "UserLogin" and features a "Password" label, an input field, and a "Login" button.

Login

- 패스워드 입력 후 Login 버튼 클릭
- 사용자 password는 user
- 관리자 password는 g601_abcd
(abcd는 MAC주소 뒤 4자리)

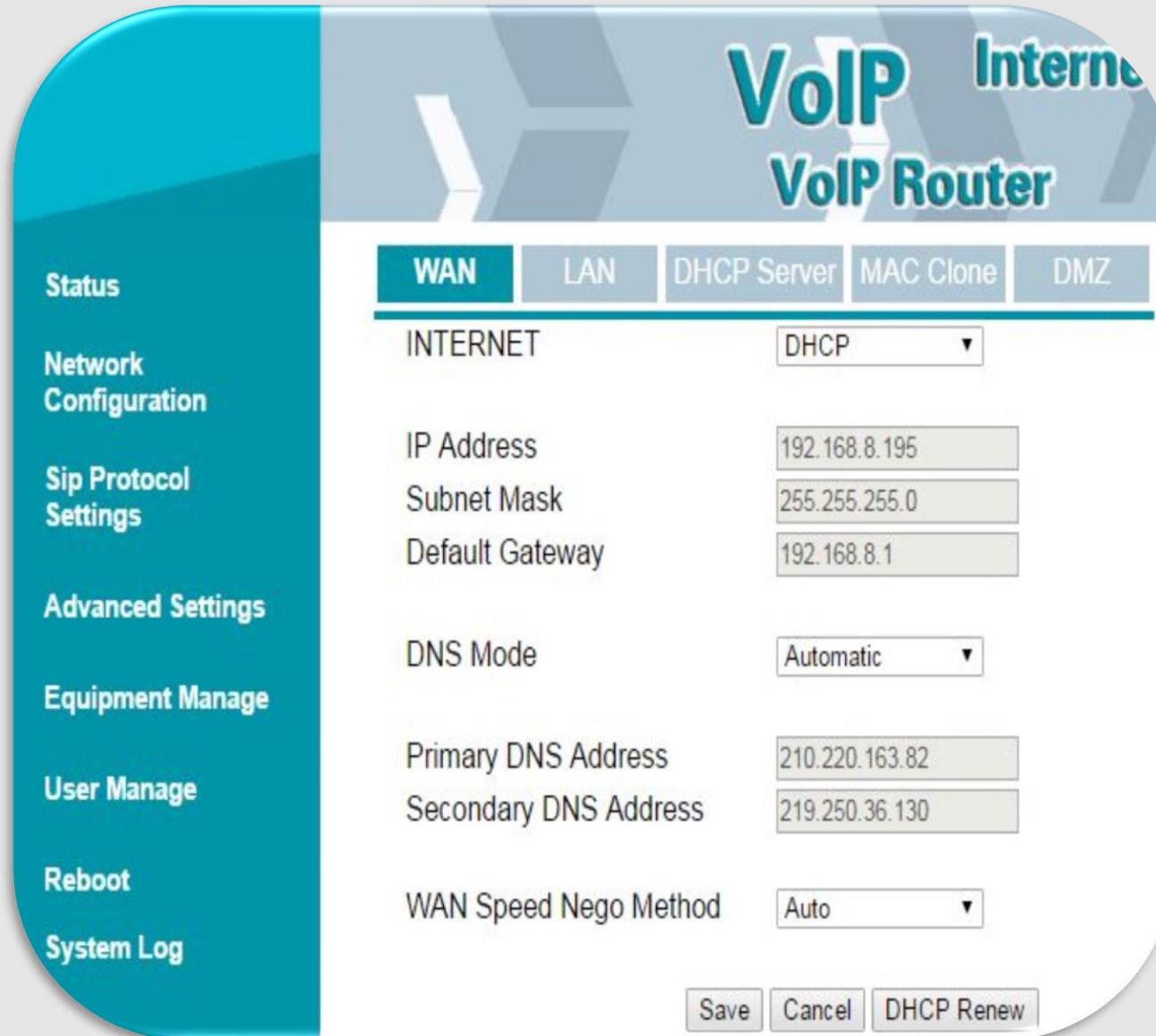
VoIP Internet B
VoIP Router Vo

Status		
Status	Model Name	G601
Network Configuration	Software Version	G601-V42100(201607011618)
Sip Protocol Settings	Hardware Version	V1.1
Advanced Settings	DSP Version	D2.73
Equipment Manage	Register Status	Registered 07047549010
User Manage	FXS Status	Hook On
Reboot	WAN Link Status	100MFull
System Log	WAN Interface MAC Address	18:53:E0:1E:02:A7
Relogin	WAN Interface IP Address	192.168.8.195
	Subnet Mask	255.255.255.0
	Gateway IP Address	192.168.8.1
	DNS Address	192.168.8.1
	GMT Time	2016-07-04 16:49:15
	System Running Time	0 Day 01:00:51

State

- 모델명, 버전 정보, IP 정보 등, 현재 상태를 표시
- user 모드일 경우 단말 설정에 제한적임.

◆ Network Configuration



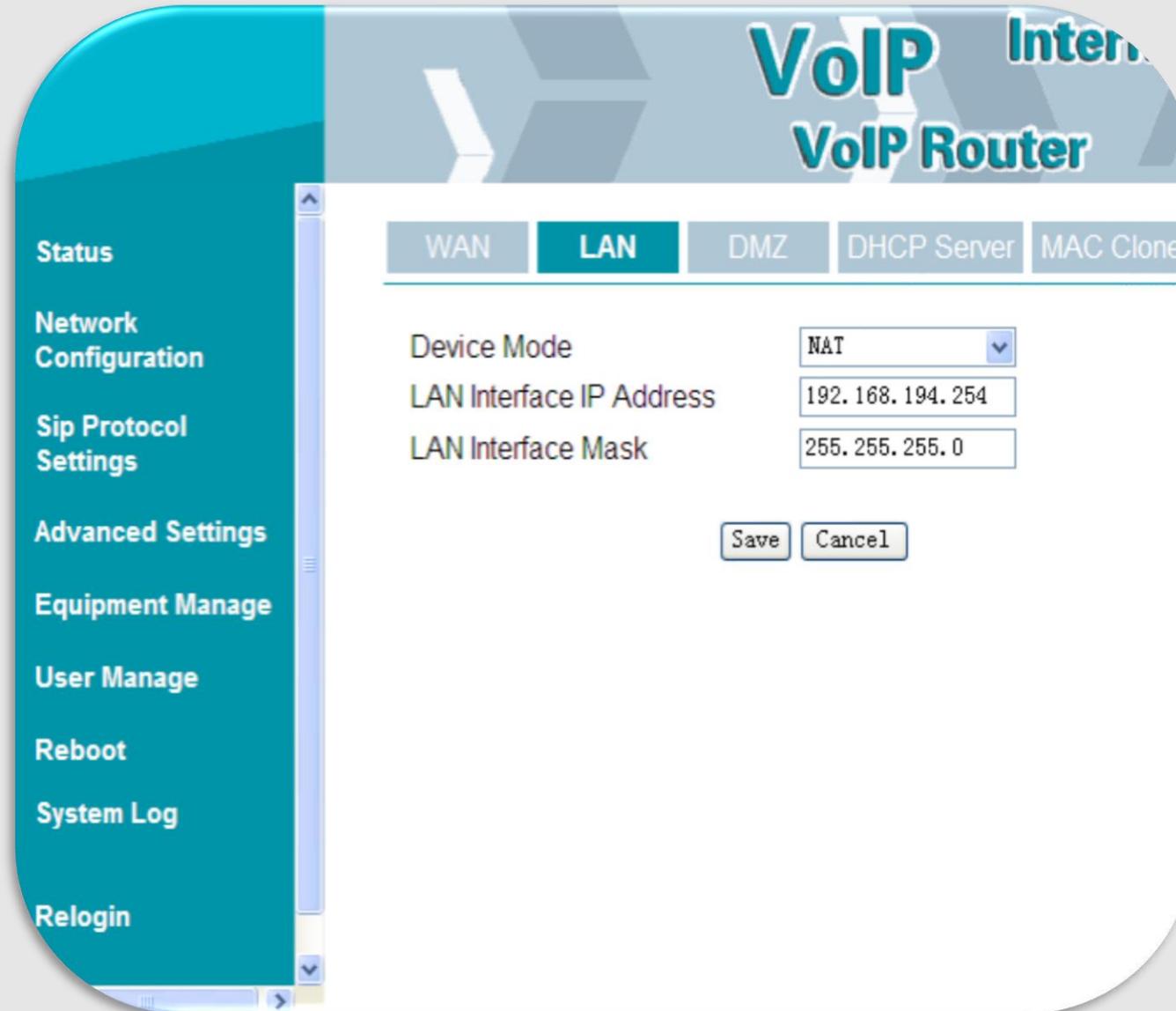
The screenshot shows the 'VoIP Router' web interface. The 'Network Configuration' tab is selected, and the 'WAN' sub-tab is active. The configuration is for the 'INTERNET' interface, set to 'DHCP' mode. The IP address is 192.168.8.195, subnet mask is 255.255.255.0, and the default gateway is 192.168.8.1. The DNS mode is set to 'Automatic', with a primary DNS address of 210.220.163.82 and a secondary DNS address of 219.250.36.130. The WAN Speed Nego Method is set to 'Auto'. At the bottom, there are buttons for 'Save', 'Cancel', and 'DHCP Renew'.

Category	Item	Value
Mode	INTERNET	DHCP
IP Address	IP Address	192.168.8.195
Subnet Mask	Subnet Mask	255.255.255.0
Default Gateway	Default Gateway	192.168.8.1
DNS Mode	DNS Mode	Automatic
Primary DNS Address	Primary DNS Address	210.220.163.82
Secondary DNS Address	Secondary DNS Address	219.250.36.130
WAN Speed Nego Method	WAN Speed Nego Method	Auto

WAN 설정

- IP mode: static, DHCP 중에서 선택.
- IP address, subnet mask, gateway
IP address는 static를 사용할시 사용.
- DNS mode는 static mode일때만 사용한다.
- WAN Speed Nego Method에서는
포트의 Link 속도를 설정할 수 있다.
(Auto, 100/10, Half/Full Duplex)

◆ Network Configuration



The screenshot displays the web interface of a VoIP Router. The main title is "VoIP Router" with "VoIP" in large blue letters and "Router" in smaller blue letters. Below the title, there are navigation tabs: "WAN", "LAN" (selected), "DMZ", "DHCP Server", and "MAC Clone". The "LAN" tab is active, showing the following configuration fields:

- Device Mode: NAT (dropdown menu)
- LAN Interface IP Address: 192.168.194.254
- LAN Interface Mask: 255.255.255.0

At the bottom of the configuration area, there are "Save" and "Cancel" buttons. On the left side, there is a vertical menu with the following items: Status, Network Configuration (highlighted), Sip Protocol Settings, Advanced Settings, Equipment Manage, User Manage, Reboot, System Log, and Relogin.

LAN 설정

Default: Bridge/NAT

LAN Interface IP Address

Default: 192.168.194.254

Manager IP Address(HTTP Login IP)

Local mode로 접속할 때 IP
Default IP: 192.168.194.254

◆ Network Configuration

VoIP Router

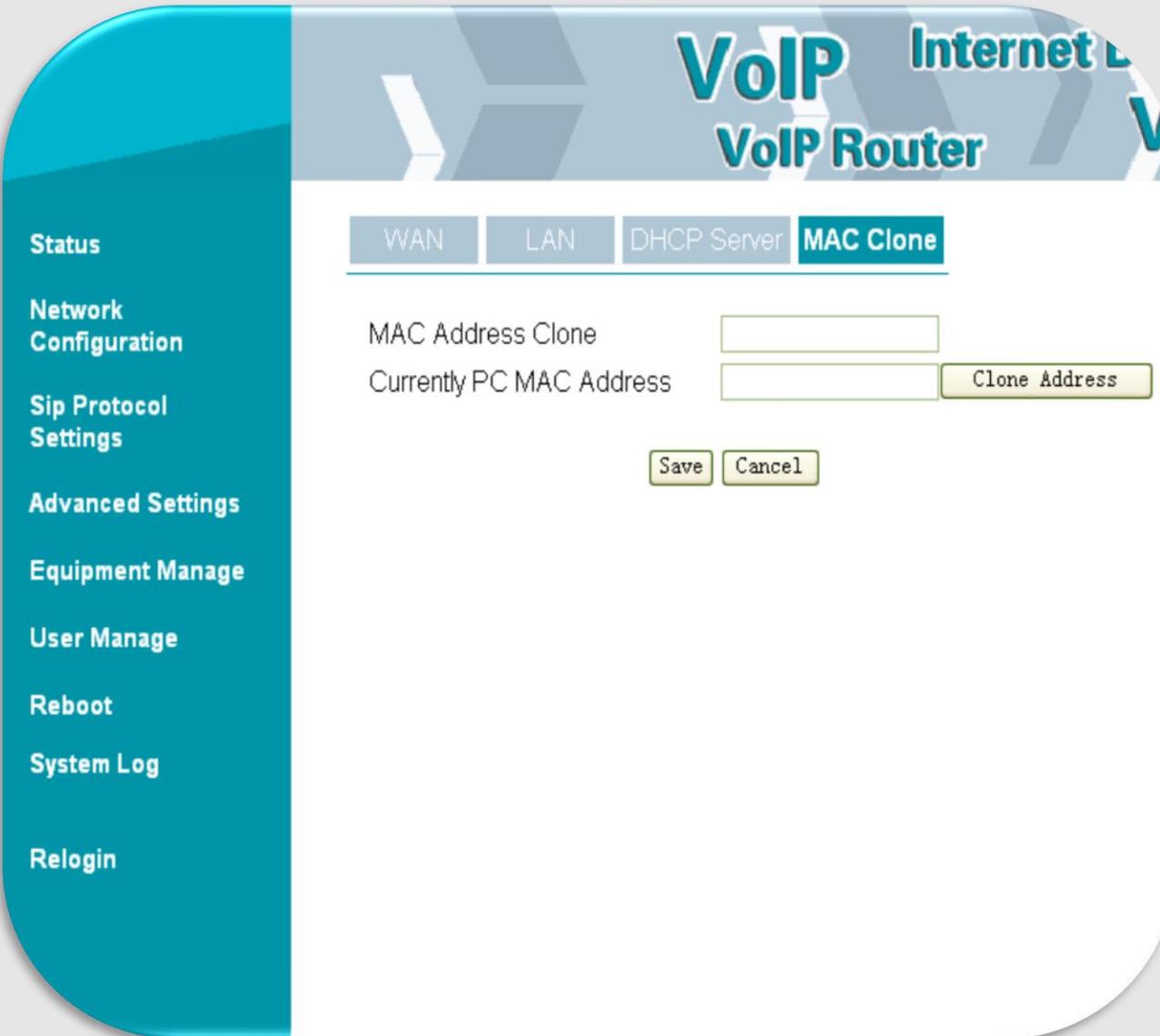
Internet

	WAN	LAN	DHCP Server	MAC Clone	DMZ
DHCP Server			Disable ▼		
DHCP Starting Address			192.168.194.2		
DHCP Ending Address			192.168.194.252		
Primary DNS(optional)			210.220.163.82		
Secondary DNS(optional)			219.250.36.130		
Lease Time (Sec)			86400		

DHCP 서버

- DHCP 서버: Enable / Disable 선택
Default : Disable
- DHCP 시작 주소:
Default: 192.168.194.2
- DHCP 마지막 주소:
Default: 192.168.194.252
- 기본 DNS 주소(옵션)
Default: 210.220.163.82
- 보조 DNS 주소(옵션)
Default: 219.250.36.130
- Leave Time : DHCP IP Leave Time
Default: 86400

◆ Network Configuration



The screenshot shows the web interface of a VoIP Router. The main header reads "VoIP Internet Router" and "VoIP Router". Below the header, there are navigation tabs for "WAN", "LAN", "DHCP Server", and "MAC Clone". The "MAC Clone" tab is selected. The main content area contains the following fields and buttons:

- MAC Address Clone:
- Currently PC MAC Address:
-

On the left side, there is a vertical menu with the following items:

- Status
- Network Configuration
- Sip Protocol Settings
- Advanced Settings
- Equipment Manage
- User Manage
- Reboot
- System Log
- Relogin

MAC 복제

- 1) 클론 MAC 주소: 복제하고자 하는 MAC 주소
 - 2) 현재 PC MAC 주소: LAN에 연결된 PC의 MAC 주소
- 클론 MAC 주소에 복제하고자 하는 MAC 주소를 입력하고 클론주소 버튼을 클릭 하면 MAC주소가 복제된다.
 - 사용의 편의를 위해 현재 PC MAC 주소를 자동으로 얻어올 수 있다.

◆ Advanced Settings



Status

Network Configuration

Sip Protocol Settings

Advanced Settings

Equipment Manage

User Manage

Reboot

System Log

Relogin

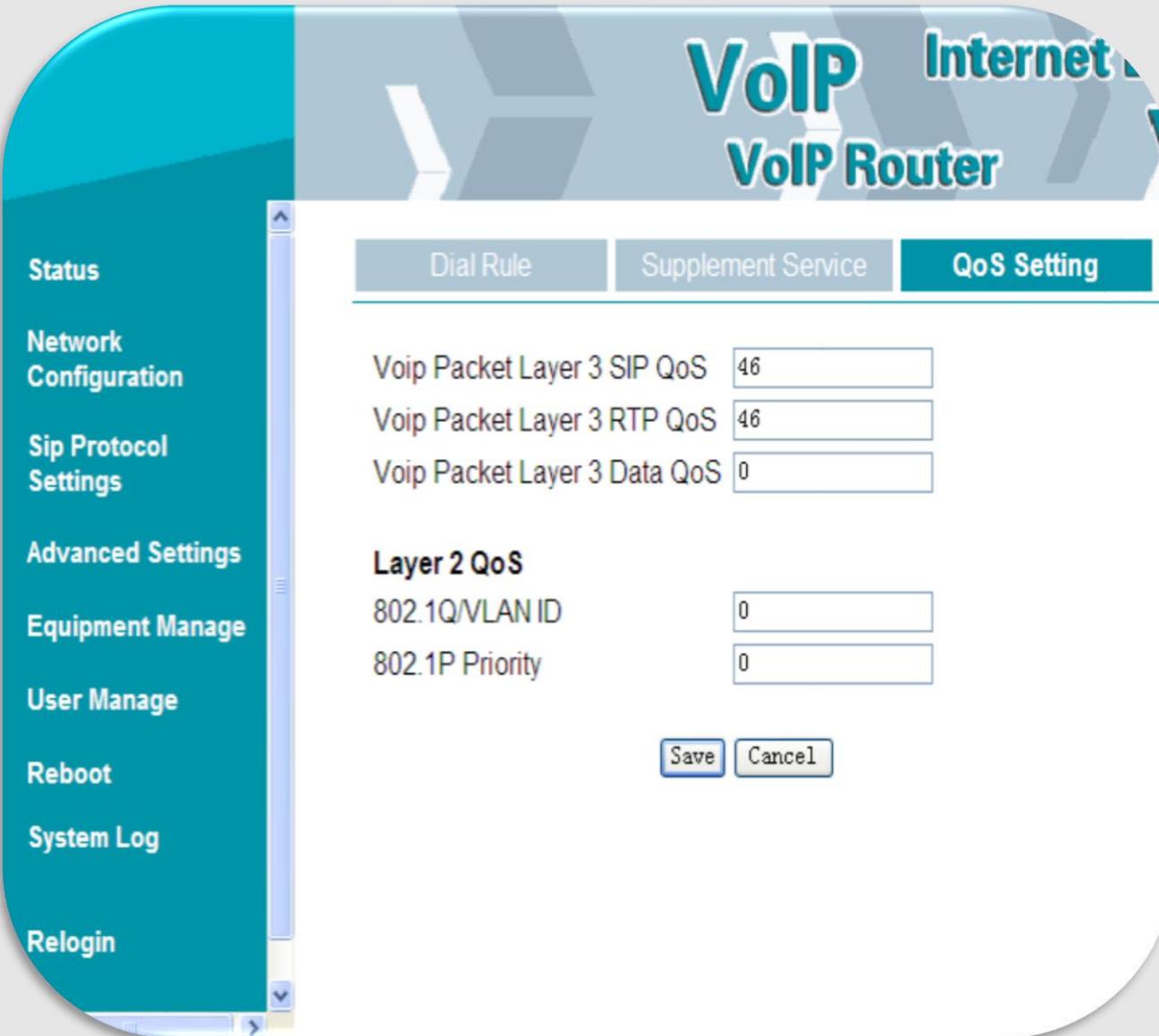
Dial Rule			Supplement Service	QoS Setting
Index	Match Number	Dial Out		
1	[26].....	Dial		
2	[4589].....	Dial		
3	0[57]0.....	Dial		
4	0[68]0.....	Dial		
5	00[1235678].	Till IDT		
6	01[0235].....	Dial		
7	01[6789]1..	Dial		
8	0100.....	Dial		
9	011[2-8].....	Dial		
10	1111	Dial		
11	01115.....	Dial		
12	0119.....	Dial		
13	016[2-8].....	Dial		
14	0169.....	Dial		
15	017[2-9].....	Dial		
16	018[2-8].....	Dial		
17	0189.....	Dial		
18	019[2-8].....	Dial		
19	0199.....	Dial		
20	02[26].....	Dial		
21	02[4589].....	Dial		

Dial Rule

전화 Dial 을 위한 Digitmap을 셋팅

Default : Null

◆ Advanced Settings



The screenshot displays the web interface of a VoIP Router. The main header reads "VoIP Internet VoIP Router". A navigation menu on the left includes: Status, Network Configuration, Sip Protocol Settings, **Advanced Settings**, Equipment Manage, User Manage, Reboot, System Log, and Relogin. The "Advanced Settings" section is active, showing three tabs: "Dial Rule", "Supplement Service", and "QoS Setting". The "QoS Setting" tab is selected, displaying the following configuration fields:

- Voip Packet Layer 3 SIP QoS:
- Voip Packet Layer 3 RTP QoS:
- Voip Packet Layer 3 Data QoS:
- Layer 2 QoS**
- 802.1Q/VLAN ID:
- 802.1P Priority:

At the bottom of the configuration area, there are "Save" and "Cancel" buttons.

QoS Setting

-음성 품질을 보장하기 위한 설정

기본 : SIP, RTP Value: 46

◆ Equipment Manage

VoIP Internet B...

VoIP Router

Device Manage	Web Upgrade	Network Manager Setting
NTP Server 1	<input type="text" value="kr.pool.ntp.org"/>	
NTP Server 2	<input type="text" value="203.248.240.103"/>	
Time Zone	<input type="text" value="[GMT+09:00]"/>	
H/F Detect Time(100ms)	<input type="text" value="6"/>	
Dial Mode	<input type="text" value="Enable"/>	
IDT(sec)	<input type="text" value="4"/>	
PDT(sec)	<input type="text" value="2"/>	
PSTN/VOIP Switch	<input type="text" value="VOIP"/>	
IVR Protect	<input type="text" value="Disable"/>	
Loop Current(20-41)	<input type="text" value="23"/>	
Ring Waveform	<input type="text" value="Sinusoid"/>	
Ring Voltage(40-63 Vrms)	<input type="text" value="63"/>	
IP Conflict Detecting Time	<input type="text" value="60"/>	
WAN Interface Login	<input type="text" value="Disable"/>	
Web Login Port	<input type="text" value="62207"/>	
Web Access Time	<input type="text" value="30"/>	
Syslog	<input type="text" value="Enable"/>	

Device Manage

- 각종 서버 및 부가 기능 사용 여부 설정
- NTP Server 1/2
Time Server 1/2 주소
- Time Zone
타임존 설정
- H/F Detect Time(100ms)
Hook-Flash 인식 시간
- Dial Mode
Dial Rule 사용여부
- IDT(sec)
전화번호 입력 후 전송 버튼(#)을 누르지 않고 전화가 걸리는 시간 설정
- IVR Protect
IVR를 이용한 단말 초기화 가능 여부 설정
- Ring Waveform
Ring 파형 선택
- Ring Voltage(40-63)
Ring 전압 조절

- Status
- Network Configuration
- Sip Protocol Settings
- Advanced Settings
- Equipment Manage**
- User Manage
- Reboot
- System Log
- Relogin

◆ Equipment Manage

VoIP Internet B...

VoIP Router

Device Manage
Web Upgrade
Network Manager Setting

NTP Server 1	<input type="text" value="kr.pool.ntp.org"/>
NTP Server 2	<input type="text" value="203.248.240.103"/>
Time Zone	<input type="text" value="[GMT+09:00]"/> ▼
H/F Detect Time(100ms)	<input type="text" value="6"/>
Dial Mode	<input type="text" value="Enable"/> ▼
IDT(sec)	<input type="text" value="4"/>
PDT(sec)	<input type="text" value="2"/>
PSTN/VOIP Switch	<input type="text" value="VOIP"/> ▼
IVR Protect	<input type="text" value="Disable"/> ▼
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Ring Voltage(40-63 Vrms)	<input type="text" value="63"/>
IP Conflict Detecting Time	<input type="text" value="60"/>
WAN Interface Login	<input type="text" value="Disable"/> ▼
Web Login Port	<input type="text" value="62207"/>
Web Access Time	<input type="text" value="30"/>
Syslog	<input type="text" value="Enable"/> ▼

Device Manage(계속)

- 각종 서버 및 부가 기능 사용 여부 설정
- PDT(sec)
 - *88 등과 같은 feature code 등을 입력하여 부가서비스를 이용할경우 의 자동발신 대기
- WAN Interface Login
 - Wan을 통한 Web 접근 가능 여부 설정
- Web Login Port
 - Web 접근 Port 설정
- IP Conflict Detecting Time
 - IP 충돌을 탐지하기 위한 DHCP 탐색 cycle time
- Web Login Port
 - WEB 로그인 시 포트
- Web Access Time
 - Web 로그인후 자동로그아웃 까지 접속이 유지되는 시간
- Syslog
 - syslog 표현

◆ Equipment Manage



The screenshot shows the web interface for a VoIP Router. The main title is "VoIP Internet Box VoIP Router". The navigation menu includes "Status", "Network Configuration", and "Sip Protocol Settings". The "Web Upgrade" section is active, showing "Update Firmware" with a dropdown menu set to "Image File". Below this is an "Upgrade" button with the text "파일 선택" (File Select) and "선택된 파일 없음" (No file selected). A warning message states: "(!!During upgrading please **avoid** power off!!)".

Web Upgrade

- 사용자가 직접 수동으로 F/W 및 Dialrule 업그레이드

◆ Equipment Manage

VoIP Internet VoIP Router

Device Manage
Web Upgrade
Network Manager Setting

Network Manager Function	<input type="text" value="Enable"/>
Upgrade Interval(minute)	<input type="text" value="0"/>
Distributing Manager Server Address	<input type="text" value="taps.skbbroadband.com"/>
Distributing Manager Account	<input type="text" value="user"/>
Distributing Manager Password	<input type="text" value="user"/>
TAPS SSL	<input type="text" value="Enable"/>
TAPS Port	<input type="text" value="19700"/>
Download Server Http Port	<input type="text" value="80"/>
Download Server Type	<input type="text" value="HTTP"/>
SNMP Service	<input type="text" value="Enable"/>
Periodic Trap Server Address	<input type="text" value="trap1.itss.skbbroadband.c"/>
Event Trap Server Address	<input type="text" value="trap2.itss.skbbroadband.c"/>
Read Community Name	<input type="text" value="....."/>
Write Community Name	<input type="text" value="....."/>
Trap Community Name	<input type="text" value="....."/>

Network Management Setting

- 프로비저닝 서버인 TAPS 사용여부 설정
Default : Enable

* 자동 프로비저닝 사용여부 설정

VoIP Inter VoIP Router

Status

Network
Configuration

Advanced Settings

Equipment Manage

User Manage

Reboot

System Log

Relogin

User Manage

Enter the original Password

Enter the new Password

Confirm the new Password

Save

Cancel

User Manage

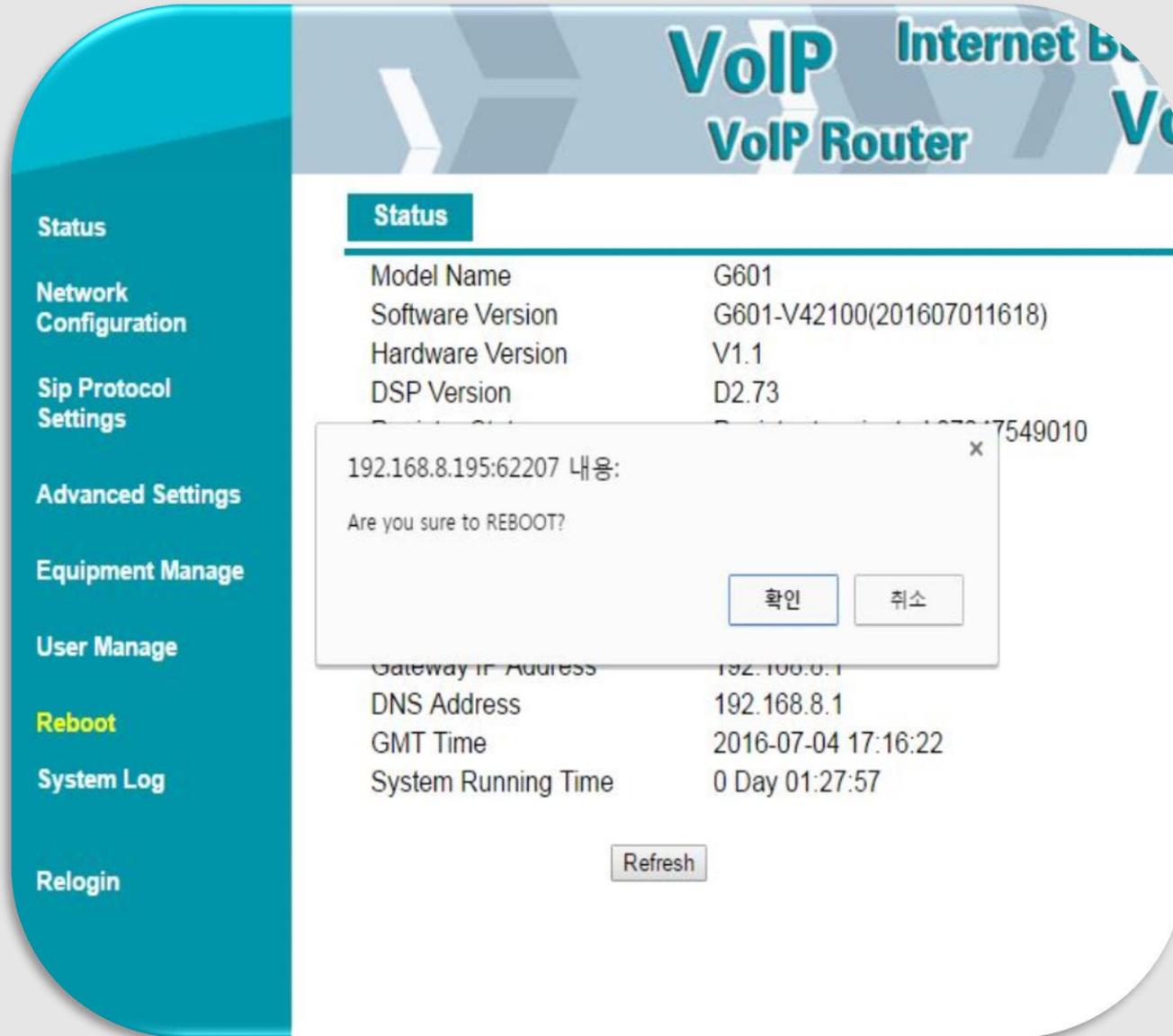
사용자 계정의 Password를 변경

기존의 Password 입력

새로운 Password 입력

새로운 Password 다시입력

◆ Reboot



The screenshot shows the web interface of a VoIP Router. The left sidebar contains navigation menus: Status, Network Configuration, Sip Protocol Settings, Advanced Settings, Equipment Manage, User Manage, Reboot (highlighted in yellow), System Log, and Relogin. The main content area is titled 'Status' and displays the following information:

Status	
Model Name	G601
Software Version	G601-V42100(201607011618)
Hardware Version	V1.1
DSP Version	D2.73
Gateway IP Address	192.168.8.1
DNS Address	192.168.8.1
GMT Time	2016-07-04 17:16:22
System Running Time	0 Day 01:27:57

A dialog box is overlaid on the status page, titled '192.168.8.195:62207 내용:'. The dialog contains the text 'Are you sure to REBOOT?' and two buttons: '확인' (Confirm) and '취소' (Cancel). A 'Refresh' button is located at the bottom of the status page.

Reboot

System 설정 변경 혹은 Upgrade후에 반드시 Reboot를 하여야 함.

◆ System Log

VoIP
Internet Box

VoIP Router
VoIP Phone

- Status
- Network Configuration
- Sip Protocol Settings
- Advanced Settings
- Equipment Manage
- User Manage
- Reboot
- System Log
- Relogin

```

<Fri Jul 1 08:18:11 2016> LinkStatus: WAN Link Up
<Fri Jul 1 08:18:11 2016> LinkStatus: LAN1 Link Up
<Fri Jul 1 08:18:15 2016> udhpcp[2215]: udhpcp (v1.12.1) started
<Fri Jul 1 08:18:16 2016> udhpcp[2314]: udhpcp (v1.12.1) started
<Fri Jul 1 08:18:17 2016> udhpcp[2215]: Sending select for 192.168.8.195...
<Fri Jul 1 08:18:17 2016> udhpcp[2215]: Lease of 192.168.8.195 obtained, lease time 3600
<Fri Jul 1 08:18:21 2016> udhpcp[2314]: Received a SIGTERM
<Fri Jul 1 08:18:21 2016> udhpcp[3824]: udhpcp (v1.12.1) started
<Tue Jul 5 11:12:20 2016> snmpd[934]: start
<Tue Jul 5 11:12:20 2016> provision[1006]: start
<Tue Jul 5 11:12:23 2016> provision[1006]: Init Taps]
<Tue Jul 5 11:12:23 2016> provision[1006]: STARTUP_REQ]
<Tue Jul 5 11:12:23 2016> provision[1006]: STARTUP_RES]
<Tue Jul 5 11:12:23 2016> provision[1006]: start download dialmap]
<Tue Jul 5 11:12:23 2016> provision[1006]: to download dialmap
<Tue Jul 5 11:12:24 2016> provision[1006]: get dialmap ok]
<Tue Jul 5 11:12:24 2016> provision[1006]: update dialmap ok
<Tue Jul 5 11:12:24 2016> provision[1006]: SIPCONF_REQ]
<Tue Jul 5 11:12:24 2016> provision[1006]: SIPCONF_CNF]
<Tue Jul 5 11:12:24 2016> provision[1006]: COMPLETE_IND]
<Tue Jul 5 11:12:24 2016> provision[1006]: COMPLETE_CNF]
<Tue Jul 5 11:12:25 2016> provision[1006]: update sip config ok
<Tue Jul 5 11:12:30 2016> looptask[538]: start
<Tue Jul 5 11:12:34 2016> goahead[643]: webs start...
<Tue Jul 5 11:12:35 2016> ipphone[1024]: ***system booting***
<Tue Jul 5 11:12:35 2016> ipphone[1024]: SW:142(120106174008)
<Tue Jul 5 11:12:36 2016> goahead[643]: webs: Listening for HTTP requests at address 192.168.194.25...
<Tue Jul 5 11:12:38 2016> ipphone[595]: Wan If eth2.1 ip Change :0.0.0.0 -> 192.168.8.195
<Tue Jul 5 11:12:39 2016> ipphone[1024]: Local SIP Addr:192.168.8.195
<Tue Jul 5 11:12:40 2016> ipphone[1024]: Compress 1 Messages
<Tue Jul 5 11:12:40 2016> ipphone[1024]: Start Init Sip Stack...
<Tue Jul 5 11:12:42 2016> ipphone[595]: TZ change to GMT-9
<Tue Jul 5 11:12:44 2016> ipphone[1376]: UISignalControl[15][9000][15][30][16]
<Tue Jul 5 11:12:47 2016> ipphone[1024]: SIP all register client init
<Tue Jul 5 11:12:47 2016> ipphone[1024]: SIP0(Enable) Contact:192.168.8.195:5060
<Tue Jul 5 11:12:48 2016> ipphone[1024]: Init Sip Stack Success
<Tue Jul 5 11:12:48 2016> ipphone[993]: Start Register Client ...
<Tue Jul 5 11:12:53 2016> ipphone[993]: 0 Registering To:sip:07047549010@skbroadband.com
<Tue Jul 5 11:12:54 2016> ipphone[993]: SIP SEND:REGISTER sip:skbroadband.com SIP/2.0
<Tue Jul 5 11:12:54 2016> ipphone[2060]: SIP RECEIVE:SIP/2.0 401 Unauthorized
<Tue Jul 5 11:12:54 2016> ipphone[2060]: SIP SEND:REGISTER sip:skbroadband.com SIP/2.0
<Tue Jul 5 11:12:54 2016> ipphone[2060]: SIP RECEIVE:SIP/2.0 200 OK
<Tue Jul 5 11:12:54 2016> ipphone[2060]: 0 Register OK expires= 50
<Tue Jul 5 11:12:55 2016> provision[1006]: REGISTER_IND]
<Tue Jul 5 11:12:55 2016> provision[1006]: REGISTER_CNF]
<Tue Jul 5 11:13:45 2016> ipphone[993]: SIP SEND:REGISTER sip:skbroadband.com SIP/2.0

```

System Log

- 시스템 부팅시 절차 정보
- SIP 메시지 송/수신 정보
- 기타 단말의 주요 이벤트 발생시에 한 라인씩 로그가 추가 된다.

System Log Example

System Log – Booting 이후 SoftSwitch 등록까지

```

<Fri Jul 1 08:18:12 2016> LinkStatus: WAN Link Up
<Fri Jul 1 08:18:12 2016> LinkStatus: LAN1 Link Down
<Fri Jul 1 17:18:17 2016> snmpd[2290]: start
<Fri Jul 1 17:18:18 2016> provision[2322]: start
<Mon Jul 4 15:48:49 2016> provision[2322]: Init Taps|
<Mon Jul 4 15:48:49 2016> provision[2322]: STARTUP_REQ|
<Mon Jul 4 15:48:49 2016> provision[2322]: STARTUP_RES|
<Mon Jul 4 15:48:49 2016> provision[2322]: start download dialmap|
<Mon Jul 4 15:48:49 2016> provision[2322]: to download dialmap
<Mon Jul 4 15:48:49 2016> provision[2322]: get dialmap ok|
<Mon Jul 4 15:48:49 2016> provision[2322]: update dialmap ok
<Mon Jul 4 15:48:49 2016> provision[2322]: SIPCONF_REQ|
<Mon Jul 4 15:48:49 2016> provision[2322]: SIPCONF_CNF|
<Mon Jul 4 15:48:49 2016> provision[2322]: COMPLETE_IND|
<Mon Jul 4 15:48:49 2016> provision[2322]: COMPLETE_CNF|
<Mon Jul 4 15:48:50 2016> provision[2322]: update sip config ok
<Mon Jul 4 15:48:52 2016> looptask[2638]: start
<Mon Jul 4 15:48:54 2016> goahead[2710]: webs start...
<Mon Jul 4 15:48:55 2016> ipphone[2780]: ***system booting***
<Mon Jul 4 15:48:55 2016> goahead[2710]: webs: Listening for HTTP requests at address
192.168.194.2...
<Mon Jul 4 15:48:55 2016> ipphone[2780]: SW:142(120106174008)
<Mon Jul 4 15:48:57 2016> ipphone[2700]: Wan If eth2.1 ip Change :0.0.0.0 ->
192.168.8.195
<Mon Jul 4 15:48:57 2016> ipphone[2780]: Local SIP Addr:192.168.8.195
<Mon Jul 4 15:48:58 2016> ipphone[2700]: Compress 1 Messages
<Mon Jul 4 15:48:58 2016> ipphone[2700]: TZ change to GMT-9
<Mon Jul 4 15:48:58 2016> ipphone[2780]: Start Init Sip Stack...
<Mon Jul 4 15:48:58 2016> ipphone[2780]: SIP all register client init
<Mon Jul 4 15:48:58 2016> ipphone[2780]: SIP0(Enable) Contact:192.168.8.195:5060
<Mon Jul 4 15:48:58 2016> ipphone[2780]: Init Sip Stack Success
<Mon Jul 4 15:48:59 2016> ipphone[2778]: Start Register Client ...
<Mon Jul 4 15:49:00 2016> ipphone[2778]: 0 Registering
To:sip:07047549010@skbroadband.com
<Mon Jul 4 15:49:00 2016> ipphone[2778]: SIP SEND:REGISTER sip:skbroadband.com
SIP/2.0
<Mon Jul 4 15:49:00 2016> ipphone[2941]: SIP RECEIVE:SIP/2.0 401 Unauthorized
<Mon Jul 4 15:49:00 2016> ipphone[2941]: SIP SEND:REGISTER sip:skbroadband.com
SIP/2.0
<Mon Jul 4 15:49:00 2016> ipphone[2941]: SIP RECEIVE:SIP/2.0 200 OK
<Mon Jul 4 15:49:00 2016> ipphone[2941]: 0 Register OK expires= 50

```

System Log 계속 – 호처리

```

<Tue Jul 5 10:14:58 2016> ipphone[2855]: channel=0, OFF_HOOK
<Tue Jul 5 10:15:01 2016> ipphone[2967]: Outgoing call[0,1] to (called number :
01029966502)
<Tue Jul 5 10:15:02 2016> ipphone[2967]: SIP SEND:INVITE
sip:01029966502@skbroadband.com SIP/2.0
<Tue Jul 5 10:15:02 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 100 Trying
<Tue Jul 5 10:15:02 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 407 PROXY
AUTHENTICATION REQUIRED
<Tue Jul 5 10:15:02 2016> ipphone[3334]: SIP SEND:ACK
sip:01029966502@skbroadband.com SIP/2.0
<Tue Jul 5 10:15:02 2016> ipphone[3334]: SIP SEND:INVITE
sip:01029966502@skbroadband.com SIP/2.0
<Tue Jul 5 10:15:02 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 100 Trying
<Tue Jul 5 10:15:03 2016> goahead[2683]: User:admin Login. IP:192.168.8.219
<Tue Jul 5 10:15:04 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 183
SessionProgress
<Tue Jul 5 10:15:04 2016> ipphone[2852]: code_type=1 decode_type=1 vad=0 plc=1
agc=0
<Tue Jul 5 10:15:05 2016> ipphone[2967]: Call is established with [01029966502]
<Tue Jul 5 10:15:05 2016> ipphone[2970]: snd_data_to_dsp start
<Tue Jul 5 10:15:12 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 200 OK
<Tue Jul 5 10:15:12 2016> ipphone[3334]: SIP SEND:ACK
sip:01029966502@1.255.17.102:5060;transport=U...
<Tue Jul 5 10:15:18 2016> ipphone[3334]: SIP RECEIVE:BYE
sip:07047549010@192.168.8.195:5060 SIP/2.0...
<Tue Jul 5 10:15:18 2016> ipphone[2967]: call with [] [01029966502] end
<Tue Jul 5 10:15:18 2016> ipphone[3334]: SIP SEND:SIP/2.0 200 OK
<Tue Jul 5 10:15:18 2016> ipphone[2968]: Close RtpChan(0 1)
<Tue Jul 5 10:15:20 2016> ipphone[2791]: SIP SEND:REGISTER
sip:skbroadband.com SIP/2.0
<Tue Jul 5 10:15:20 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 401 Unauthorized
<Tue Jul 5 10:15:20 2016> ipphone[3334]: SIP SEND:REGISTER
sip:skbroadband.com SIP/2.0
<Tue Jul 5 10:15:20 2016> ipphone[3334]: SIP RECEIVE:SIP/2.0 200 OK
<Tue Jul 5 10:15:20 2016> ipphone[3334]: 0 Register OK expires= 50
<Tue Jul 5 10:15:22 2016> ipphone[2855]: channel=0, ON_HOOK

```