

HIGATE-*Plus* (ADSL-VAN)  
가 ( )

1.00

2004/9/09

( )

1.

2.

3.

3.1

3.2

3.3

3.4 VAN

3.5

3.5.1 IP

3.5.1.1 DSLAM [ PPPoE/PPPoA ]

3.5.1.2 IP-DSLAM (DHCP )

3.5.2 IP

3.5.2.1 My-IP

3.5.2.2 Multi-IP

3.6

1 : InBound

2 : VAN

3 : ADSL-VAN PC

4 : (ADSL-VAN)

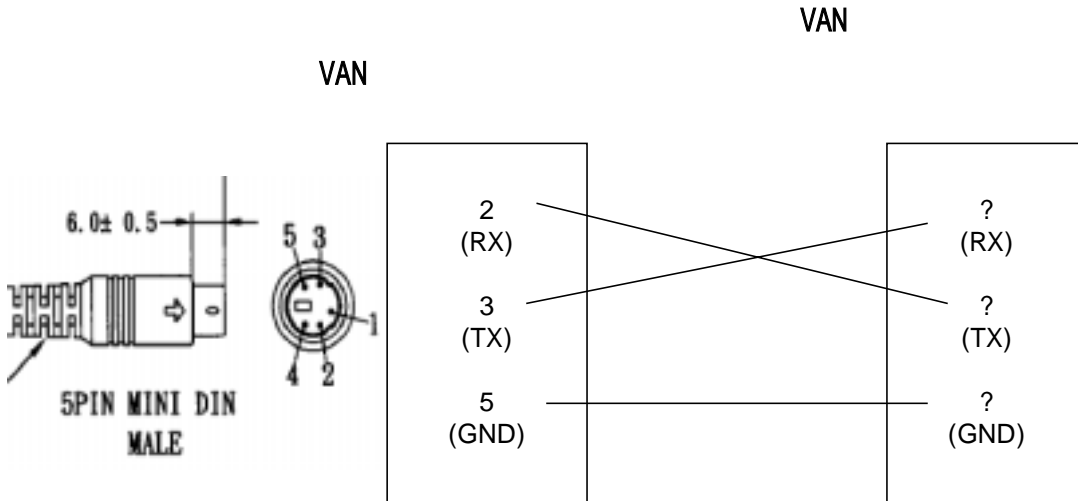
1.

가. HiGate-Plus 가 “KICC( )”  
[3.4 VAN ]

. VAN (Upgrade)

. [www.ktcheckline.co.kr](http://www.ktcheckline.co.kr)  
VAN ,

. “HiGate-Plus ”



HiGate-II

(VAN )

HiGate-Plus

Baud Rate	9600 Bps	
Data Bits	8 Bits	
Stop Bits	1	
Parity	NO	
Flow Control	NO	

[HiGate-Plus ]

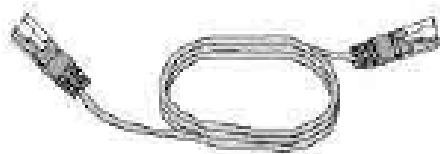
VAN

2.

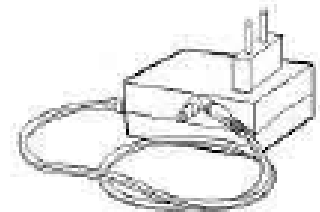
- 
- Ethernet
- 
- 
- 



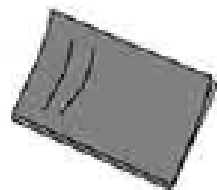
**모뎀카드**



**Ethernet 케이블**



**전원 허브터**



**사용설명서**



**전화 케이블**

3.

1.

2.

3.

4. VAN

5.

5.1 IP

5.1.1 DSLAM [ PPPoE/PPPoA ]

5.1.2 IP-DSLAM (DHCP )

5.2 IP

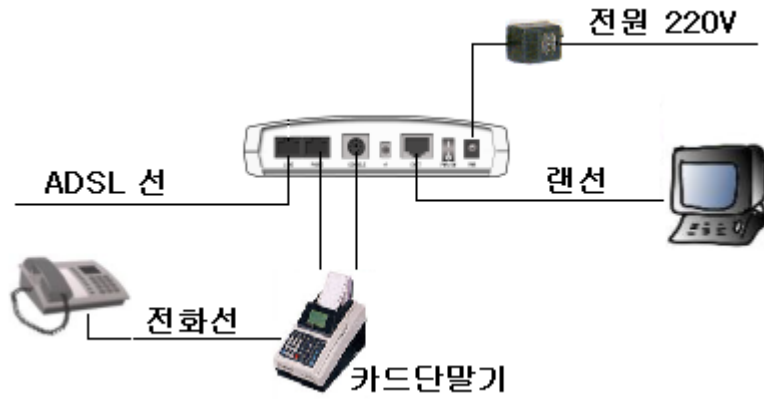
5.2.1 My-IP

5.2.2 Multi-IP

6

# HIGATE Plus

1.



2.



2.1

	LED		
(PWR)	LED	ADSL LED가	LED
(LAN)	LAN LED	Ethernet (PC ADSL )	.
(DATA)	IP /	KT (LINK) 가 .	.
		IP .	, IP
KT (LNK)	ADSL LED	ADSL (ADSL )	.

2.2

LINE	ADSL	.
PHONE		.
CONSOLE		.
ENET	Ethernet	LAN PC LAN .
PWR/SW		.
DC5V 2A		ADSL (AC 220/18V ) .
RESET		.

### 3.

#### 3.1 (DATA)LED 가

##### IP

DSLAM ADSL-VAN

ADSL-

.

“

가

1)

- ID/

2)

- DSLAM 가 IP-DSLAM

- 가 ID가

-

- DSLAM VPI/VCI

- DSLAM NAS ( )

-

\*\* IP-DSLAM

. IP-DSLAM

!!!

#### 3.2

1 ID/

<http://www.megapass.net>

가

ID

Login( )

, KT

NAS

DB

KT

ID/

가

.(110 )

2 DSLAM

:

ADSL Check Line

IP

(PPPoE)

DSLAM

IP-DSLAM

PPPoE

가

. KT

DSLAM

!!.

가

IP-DSLAM

IP-DSLAM

3 DSLAM VPI/VCI

:

KT

0/32

0/35,0/40

가

. VPI/VCI

0/32가

0/32

가

VPI/VCI

DSLAM

VPI/VCI

4

: KT

ADSL

IP

HIGATE Plus

(ADSL (Check-Line), (Lite), (Premium)) IP  
 ( (MyIP), (MultiIP))가 .  
 IP “ PPP(PPPoE, PPPoA) ”  
 “ DHCP ” . DSLAM PPP  
 , IP-DSLAM DHCP . “ PPPoE  
 DSLAM !!!!!

3.3

1 ID/ , 2 DSLAM , 3 VPI/VCI , 4  
 , KT KT

ID/ 가 ,

가

ID

3.4

가

1) NAS 가 OFF/ON  
 가 .  
 OFF (5 10 )  
 ON !!, KT (110 )

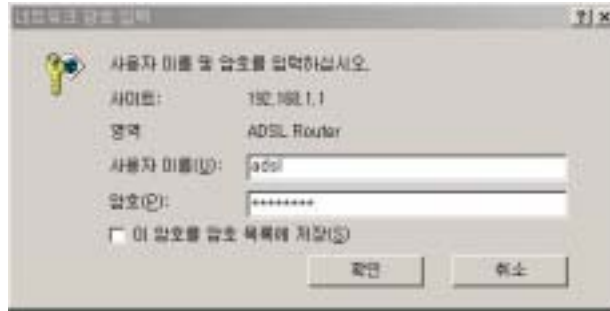
2) 가 가



## 4. VAN

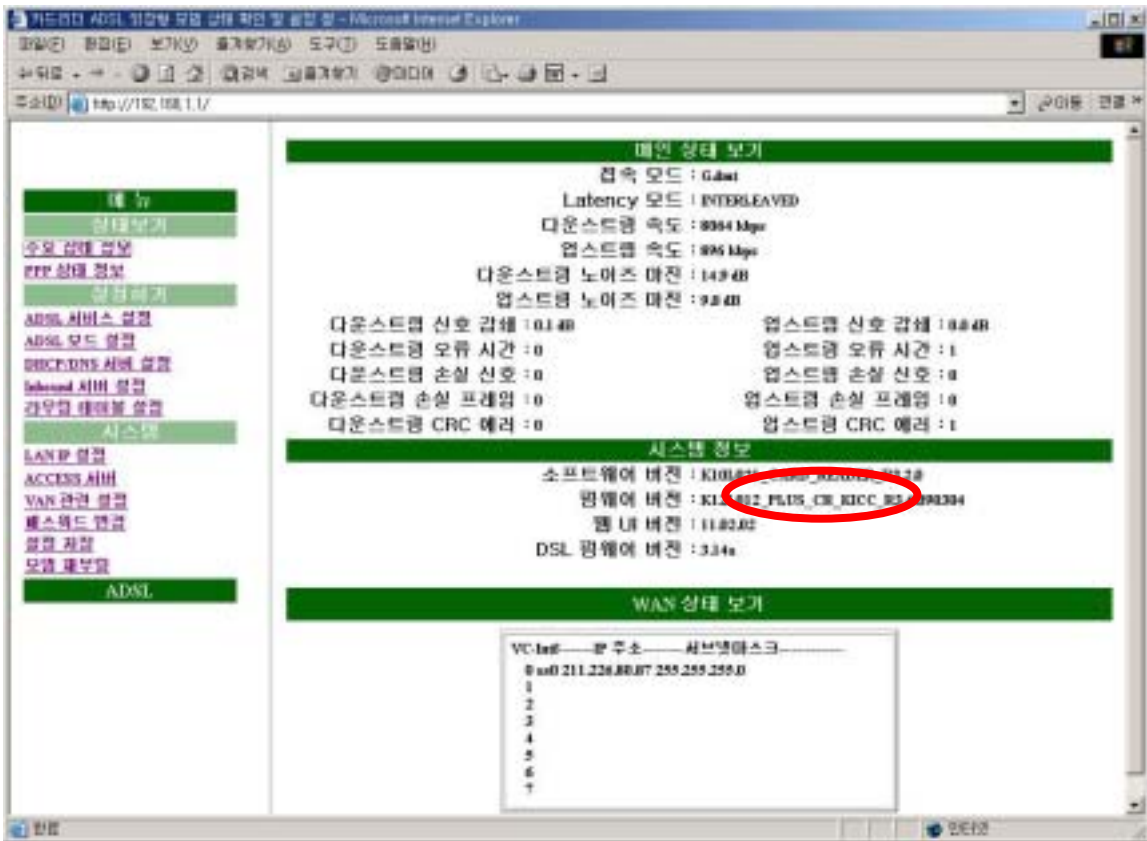
### STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : adsl
- 4) : megapass
- 5)



### STEP 2.

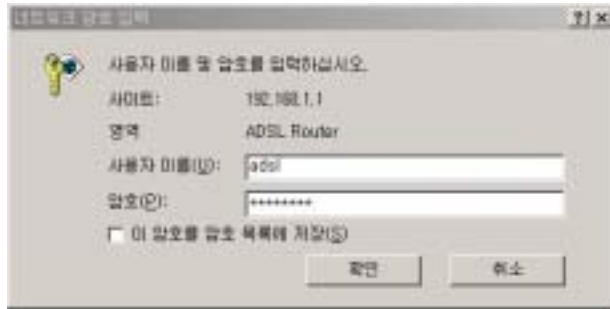
- 1) [K012Loo PLUS\_CR\_VWV\_R.X.X.xxxxx]  
 ooo : H/W Revision  
 VWV : VAN [ : KICC -  
 NICE - ]  
 R.X.X : [ ]



5. ADSL VAN  
5.1 IP  
5.1.1 DSLAM [PPPoE/PPPoA]

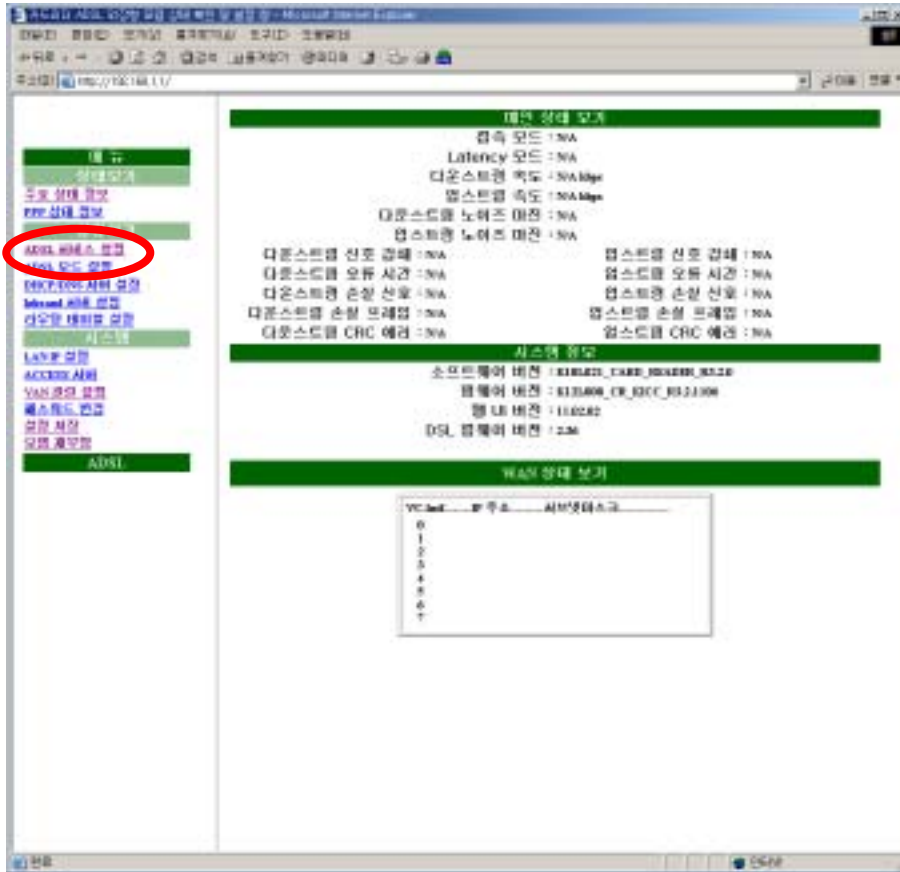
STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : adsl
- 4) : megapass
- 5)
- !



STEP 2.

- 1)
- 2) ADSL



STEP 3. ADSL

1) PVC

[ HiGate-Plus PPPoE ]

2) PPPoE

3) ADSL

!!

	Auto	
Disconnect Time	0	
PPP Reconnect on WAN Access	Enable	
PPPoE	Disable	

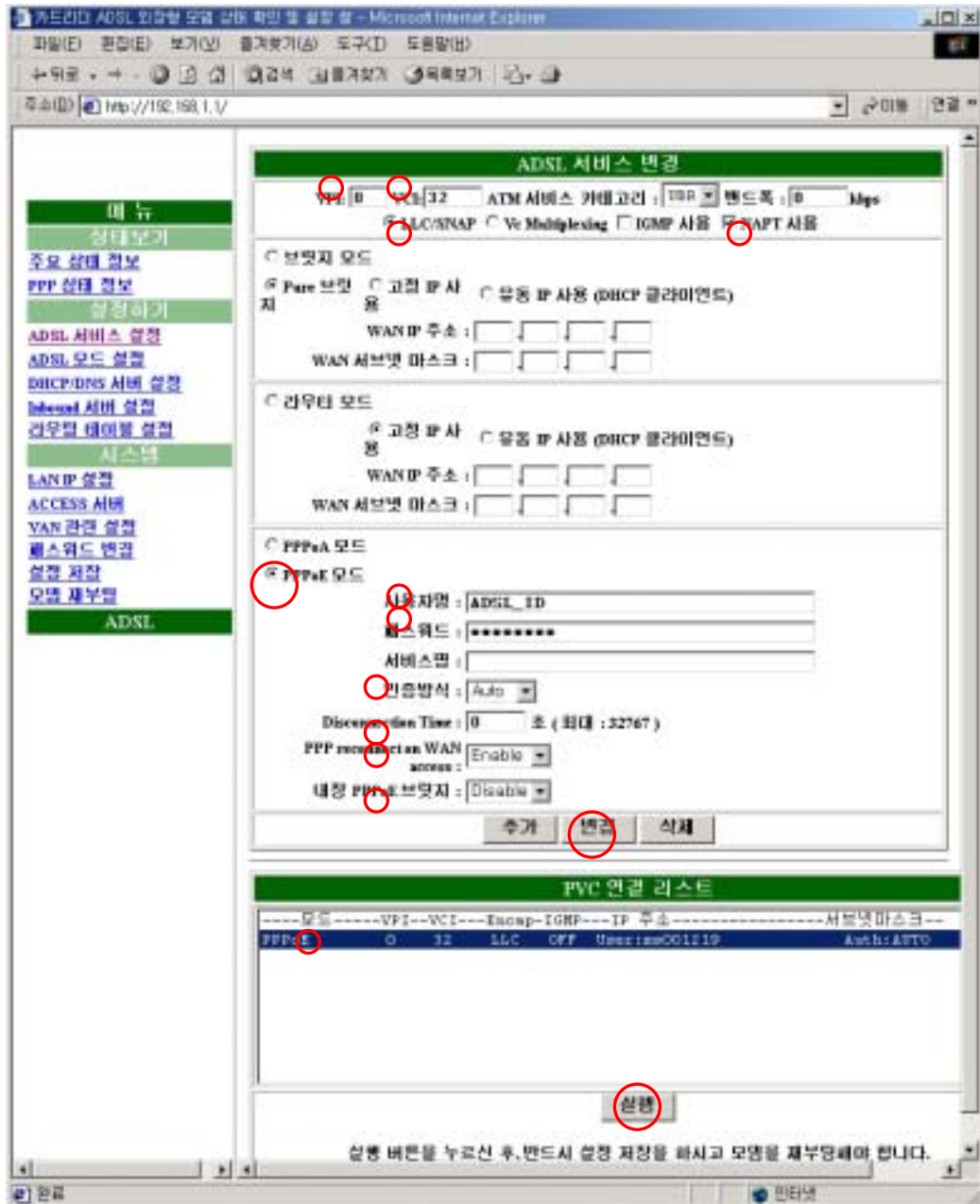
4)

( 가 가 )

5)

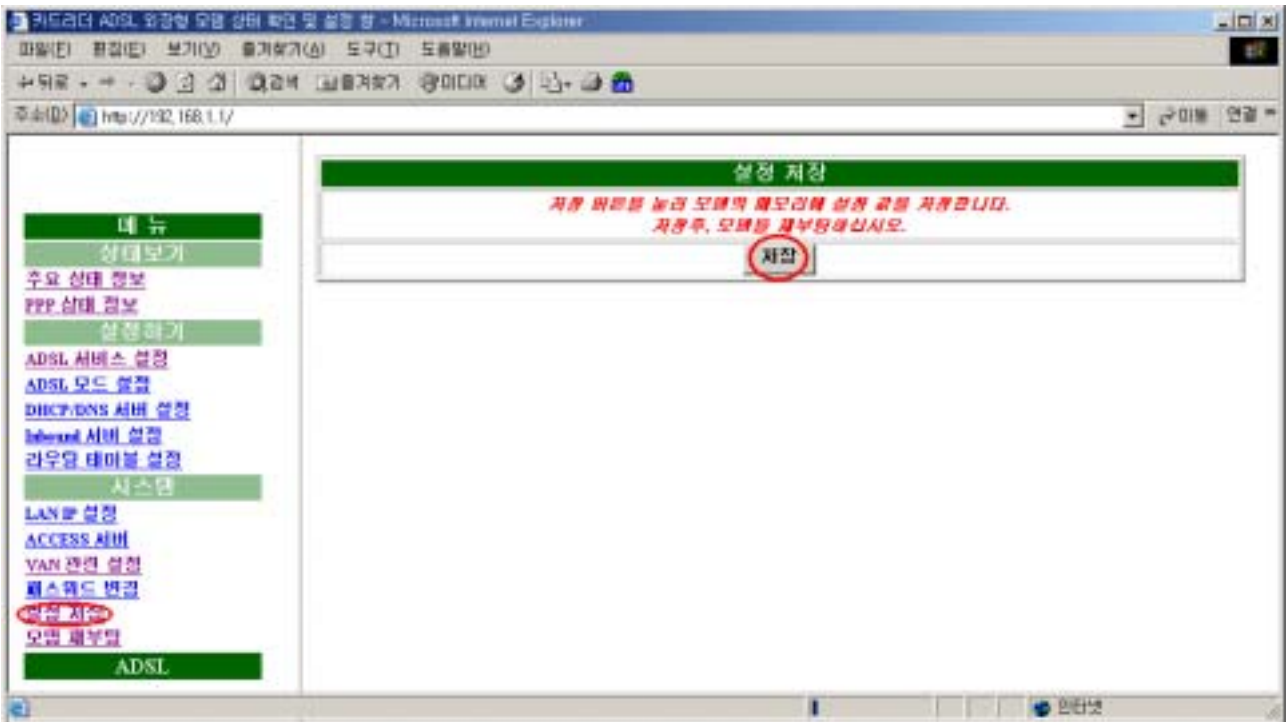
! VPI/VC1 !

DSLAM  
NAPT



STEP 4.

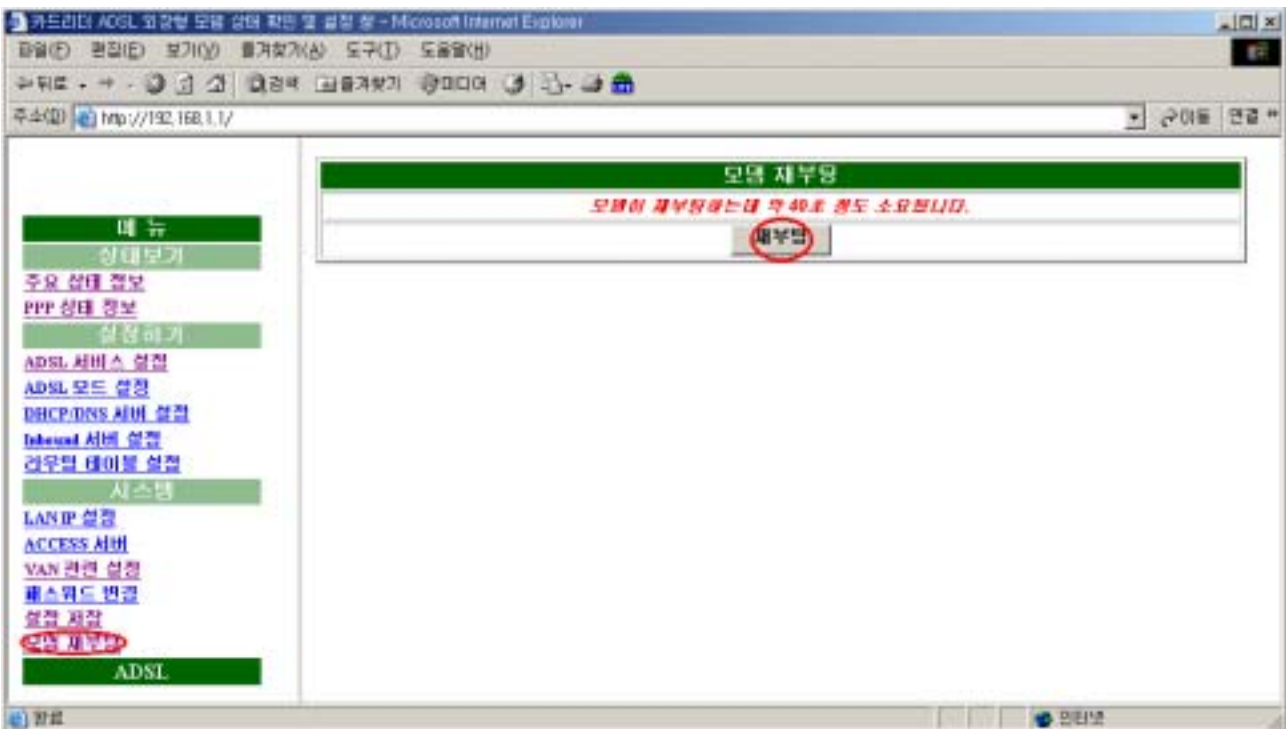
- 1)
- 2)
- !



STEP 5.

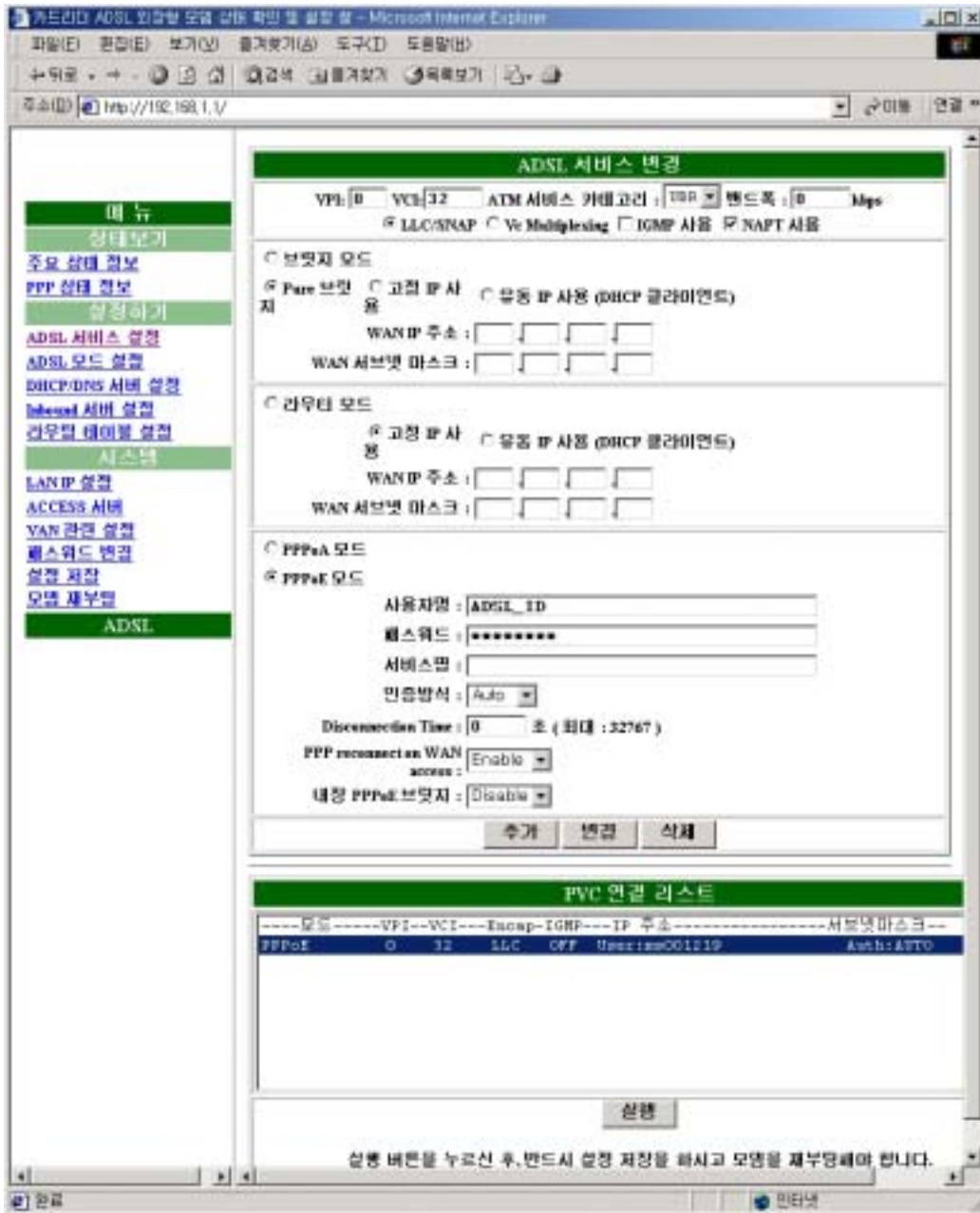
- 1)
- 2)
- 3)

ADSL



STEP 6

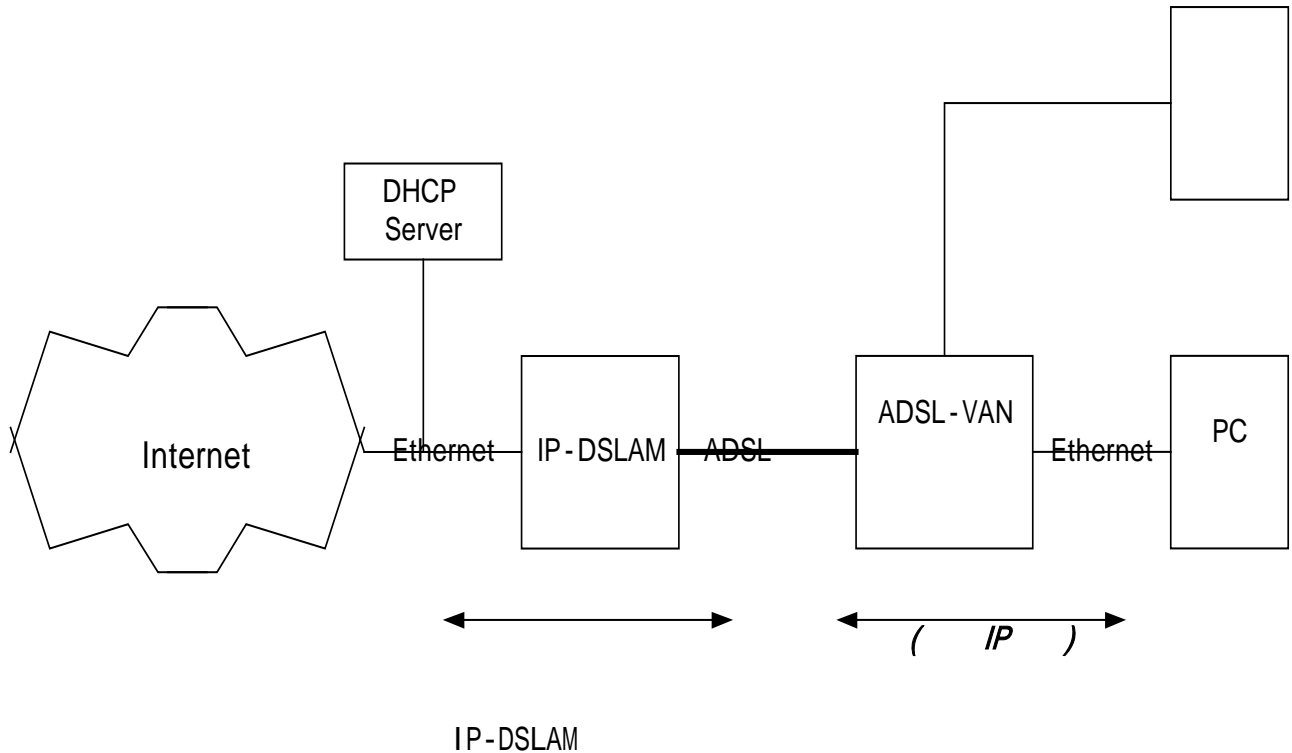
- 1)
- 2) ADSL



5.1.2 IP-DSLAM [DHCP]

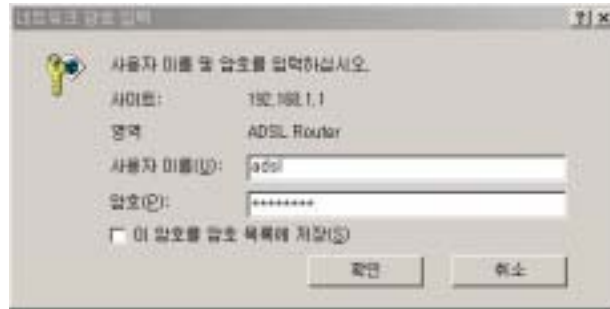
KT DSLAM IP-DSLAM  
 KT IP-DSLAM IP (ADSL-Lite, Premium, CheckLine), ADSL-VAN (HiGate-Plus CheckLine)

IP-DSLAM IP, IP DSLAM  
 DSLAM PPP(PPPoE, PPPoA) IP-DSLAM  
 DHCP (Dynamic Host Configuration Protocol)  
 DHCP ID,  
 MAC  
 KT IP-DSLAM 가 1 MAC



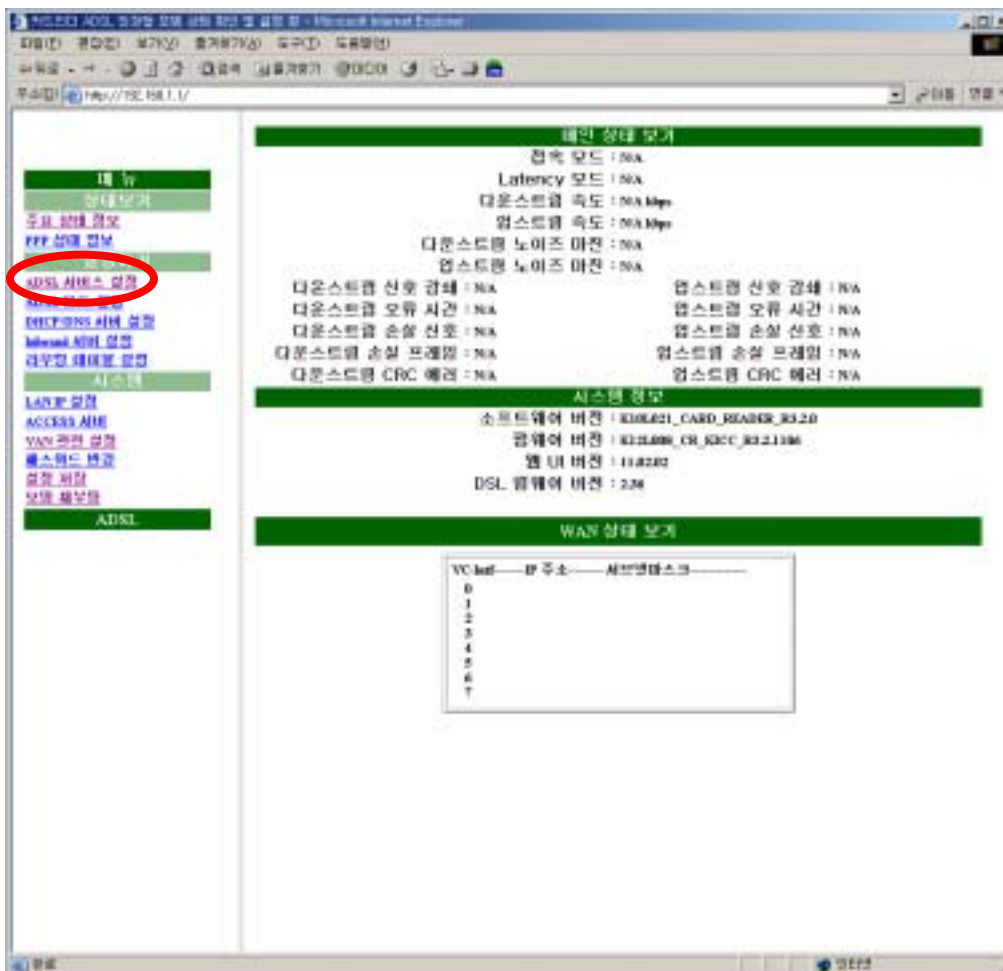
## STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : adsl
- 4) : megapass
- 5)
- !



## STEP 2.

- 1)
- 2) ADSL



STEP 3. ADSL

1) PVC

[ HiGate-Plus PPPoE ]

2)

3) VPI/VCI , IP

4) LLC/SNAP

5) NAPT

( PC )

6) ( 가 가 )

7)

! VPI/VCI DSLAM

! NAPT

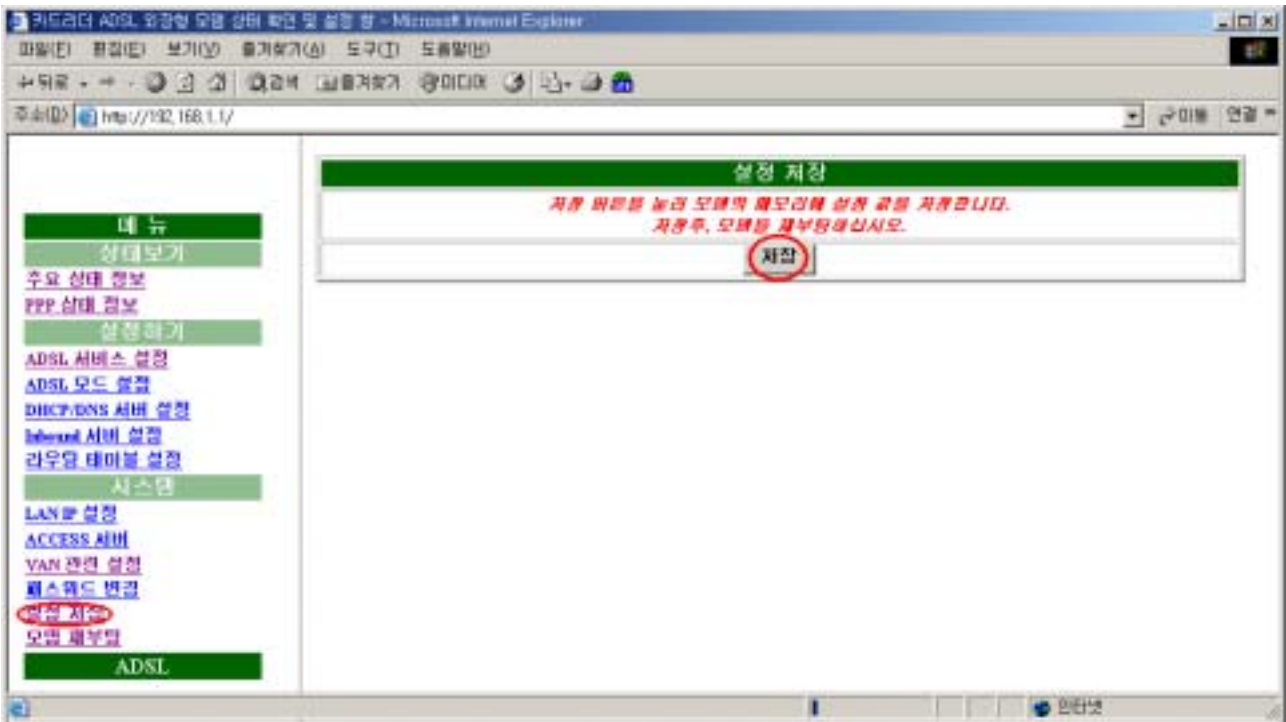




STEP 4.

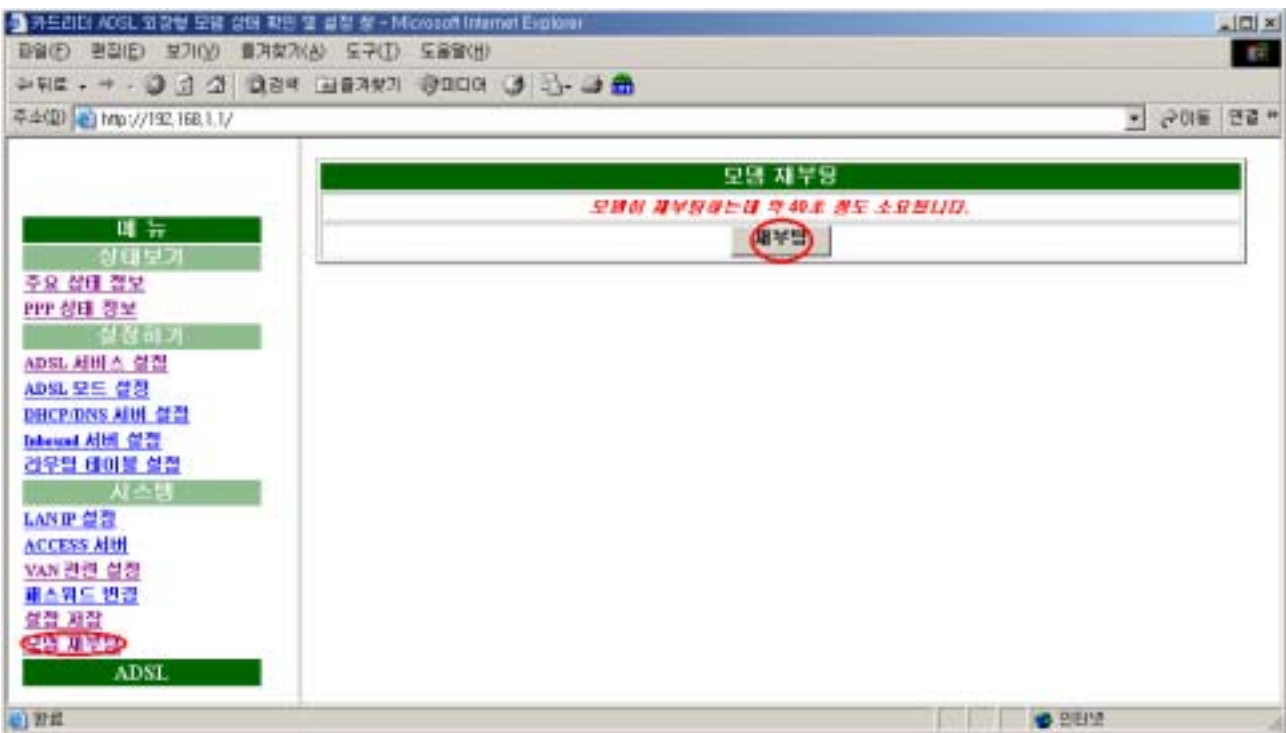
- 1)
- 2)

!



STEP 5.

- 1)
- 2)

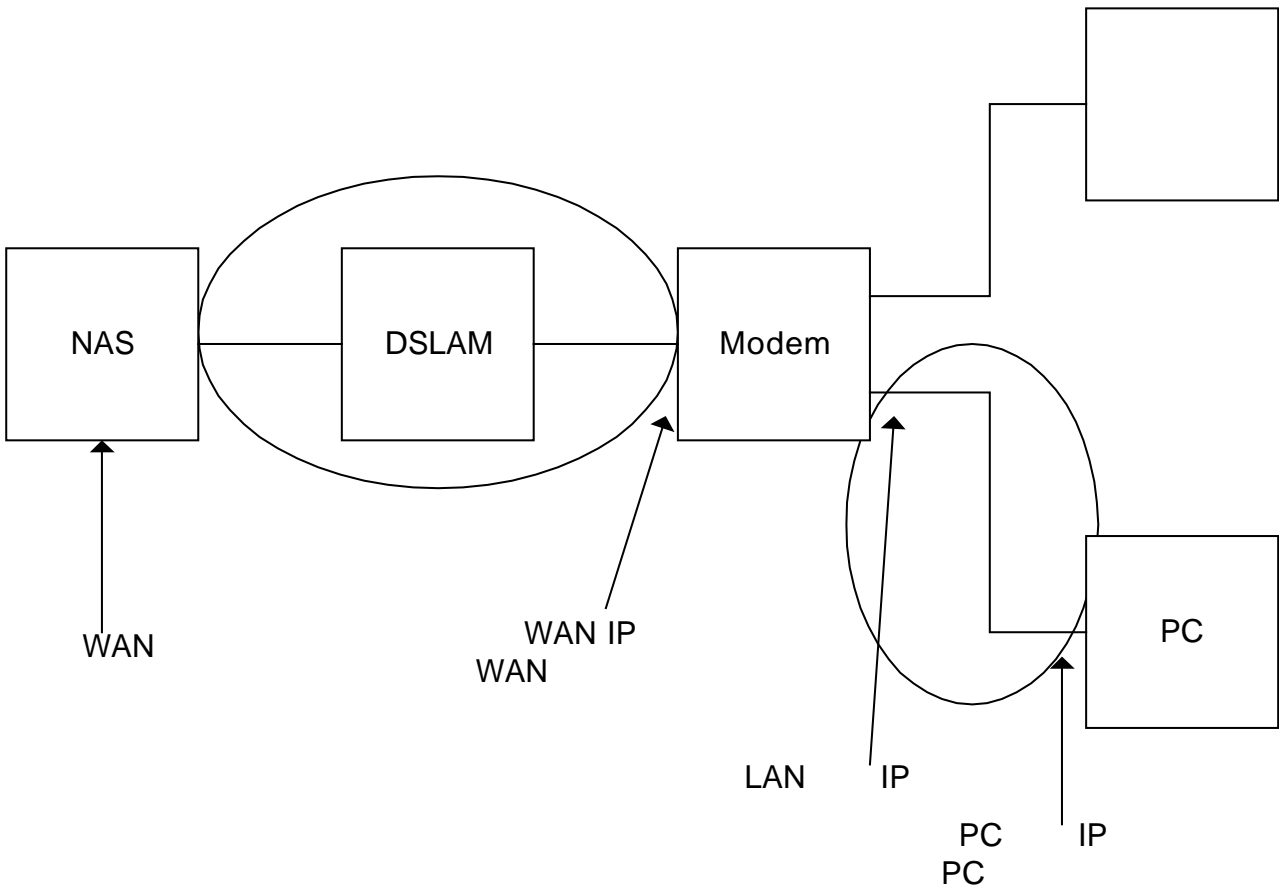


5.2 IP

5.2.1 MyIP [ IP 1 ]

MyIP IP 1 3  
 ADSL-VAN IP 1  
 , IP 2 Multi-IP

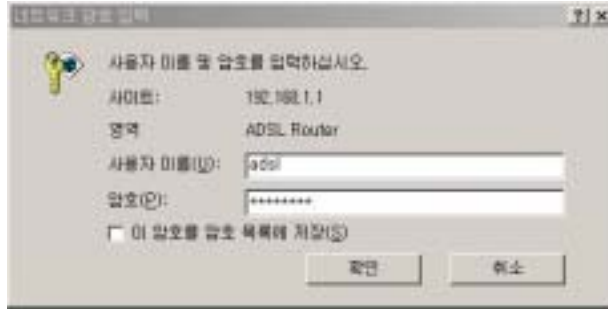
ADSL-VAN KT IP  
 PC IP , NAPT  
 PC .  
 ( WAN IP : 168.126.236.34 WAN :  
 255.255.255.248, WAN :168.126.236.33 가  
 .)



[ WAN IP , WAN KT ] .

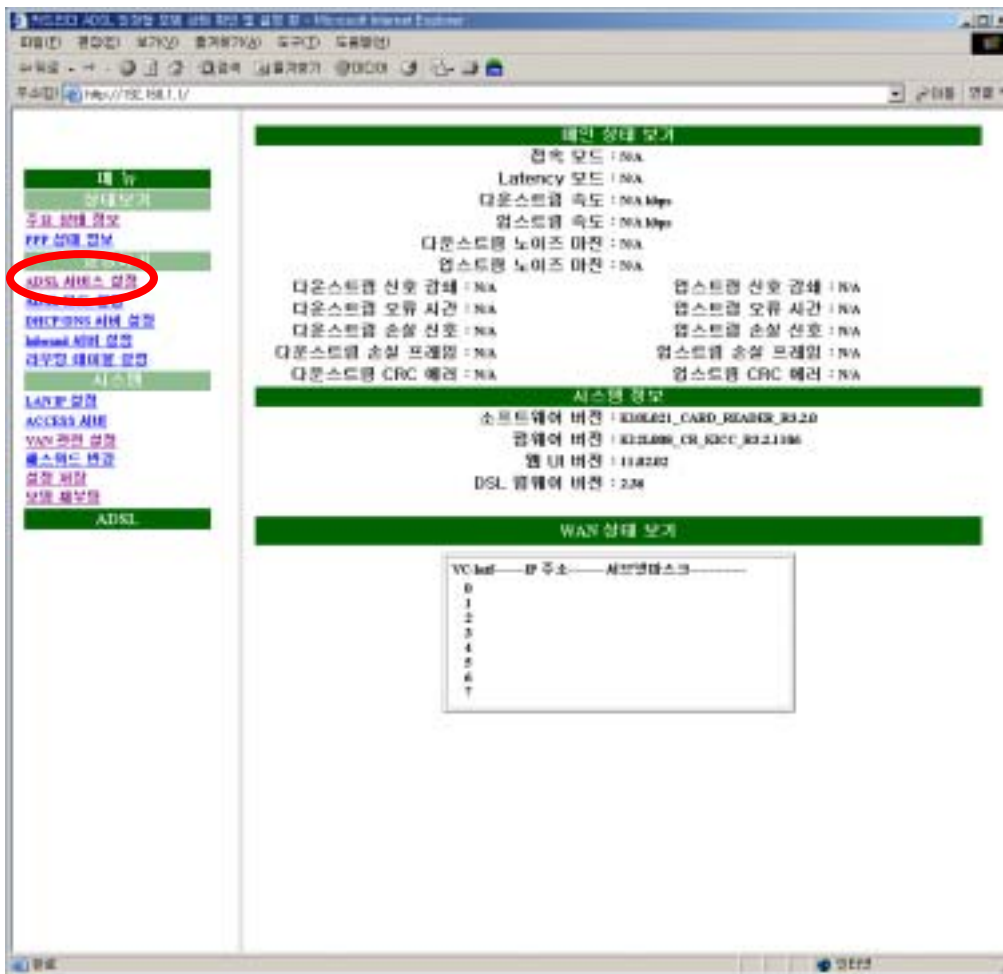
STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : adsl
- 4) : megapass
- 5)
- !



STEP 2.

- 1)
- 2) ADSL



STEP 3. ADSL (KT IP (MyIP) )

3. 1 IP

- 1) PVC (PPPoE) ←
- 2) , IP
- 3) WAN IP KT IP
- 4) WAN KT
- 5) VPI/VCI
- 6) LLC/SNAP
- 7) NAPT (PC )
- 8) ( 가 가 )
- 9)
- 10)
- ! VPI/VCI DSLAM
- ! NAPT

ADSL 서비스 변경

VPI:  VCI:  ATM 서비스 카테고리:  핸드폭:  kbps  
 LLC/SNAP  Vc Multiplexing  IGMP 사용  NAPT 사용

브릿지 모드  
 Pure 브릿지  고정 IP 사용  유동 IP 사용 (DHCP 클라이언트)  
 WAN IP 주소:      
 WAN 서브넷 마스크:

라우터 모드  
 고정 IP 사용  유동 IP 사용 (DHCP 클라이언트)  
 WAN IP 주소:      
 WAN 서브넷 마스크:

PPPoA 모드  
 PPPoE 모드  
 사용자명:   
 패스워드:   
 서비스명:   
 인증방식:   
 Disconnection Time:  초 (최대 : 32767)  
 PPP reconnect on WAN access:   
 내장 PPPoE 브릿지:

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PVC 연결 리스트

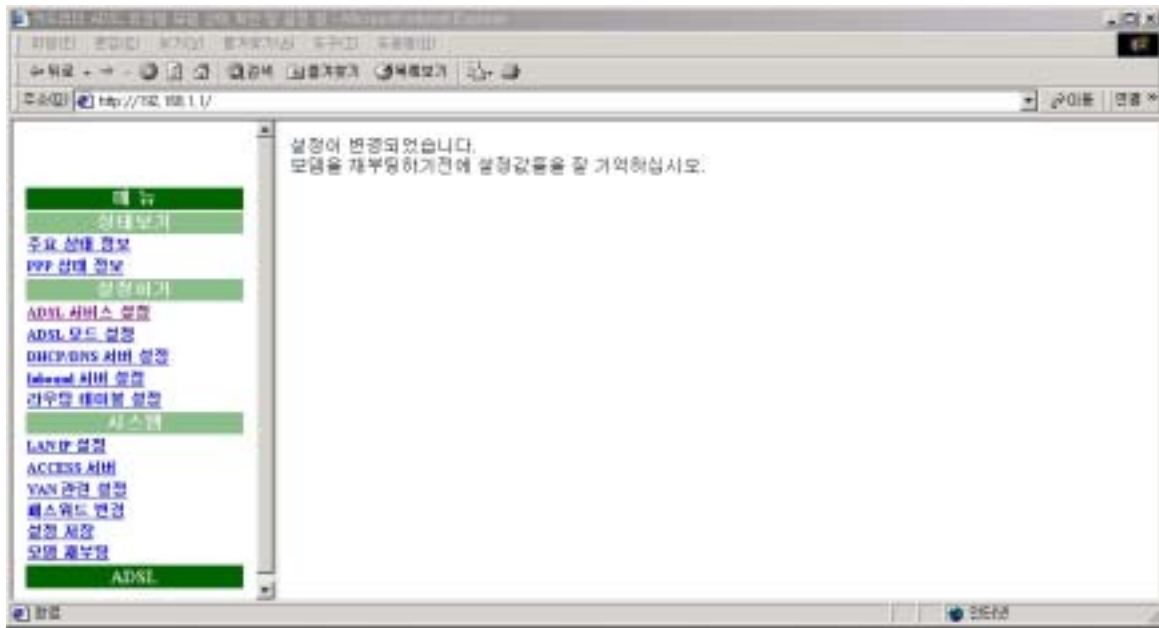
-----모드-----	VPI	VCI	Encap	IGMP	IP 주소	서브넷마스크
2684R Bridge 0	32	LLC	OFF		168.126.236.34	255.255.255.248

실행 버튼을 누르신 후, 반드시 설정 저장을 하시고 모뎀을 재부팅해야 합니다.

3.2

1) ADSL

!!



2) Destination network ID, Subnet Mask : 0.0.0.0

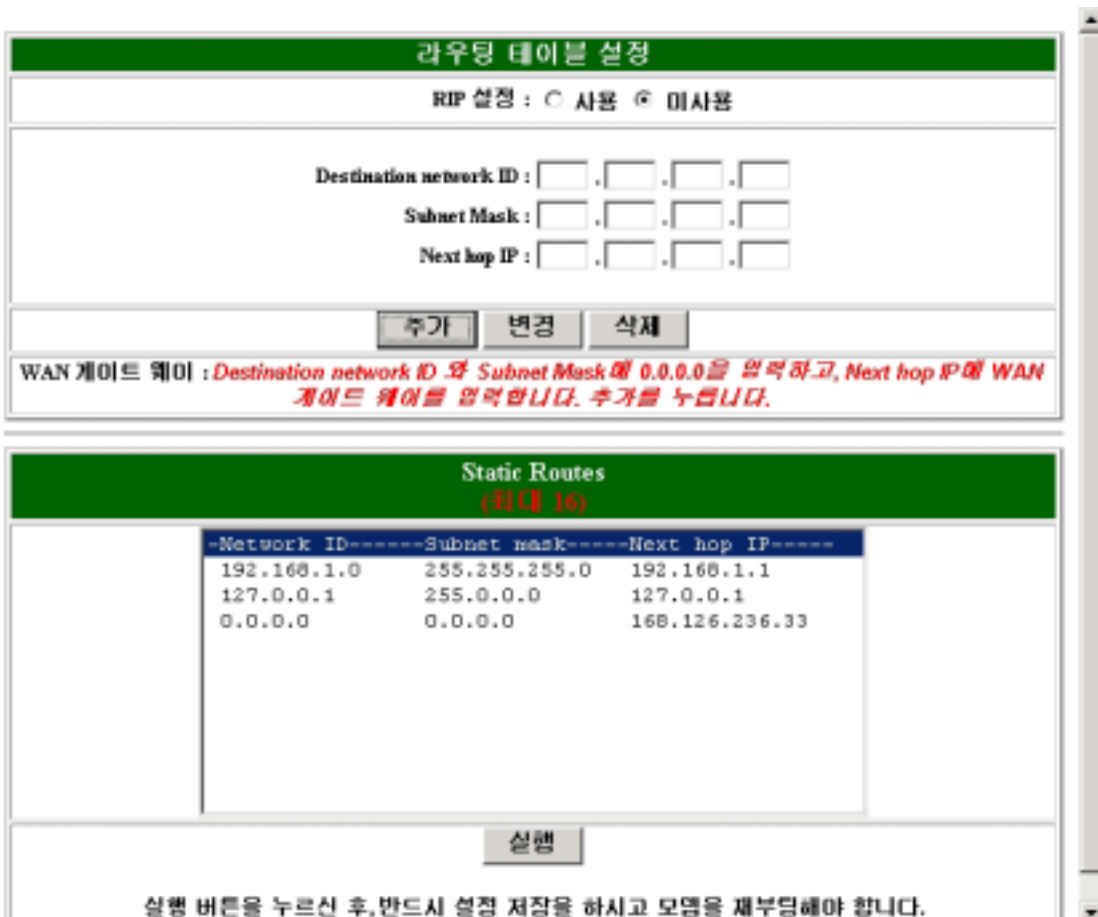
Next Hop IP

KT

IP

3) 가

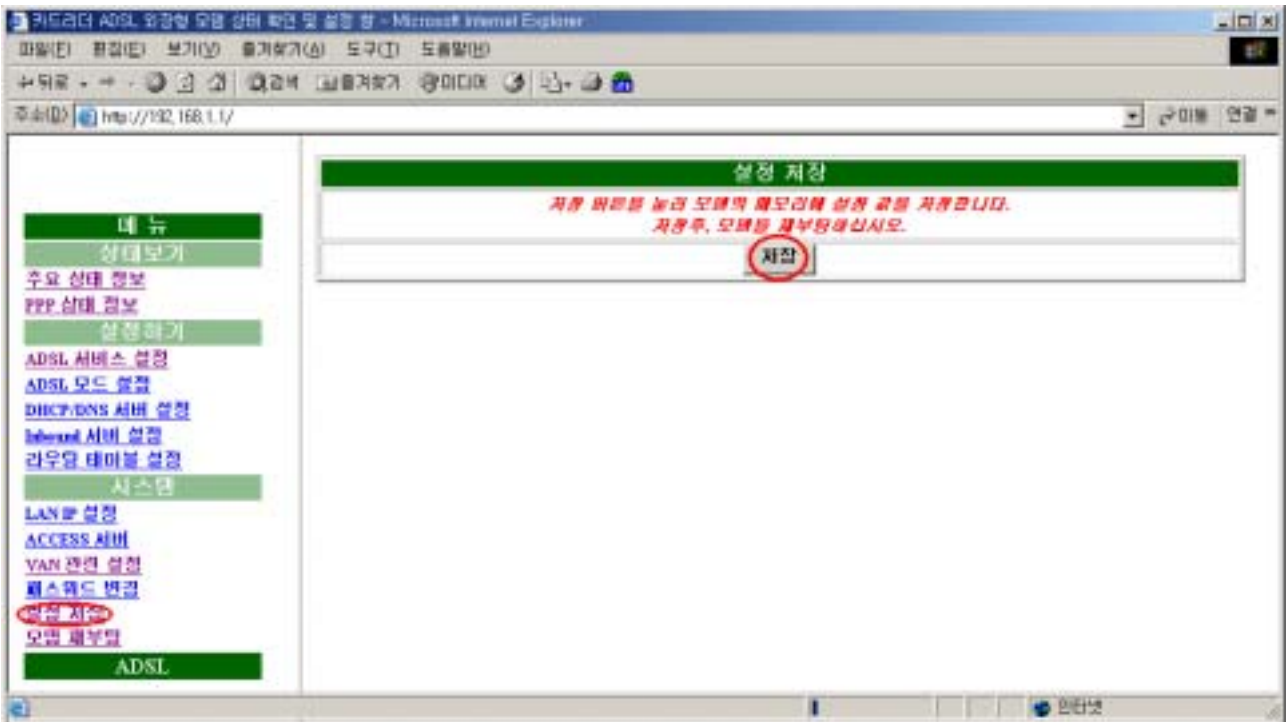
4)



STEP 4.

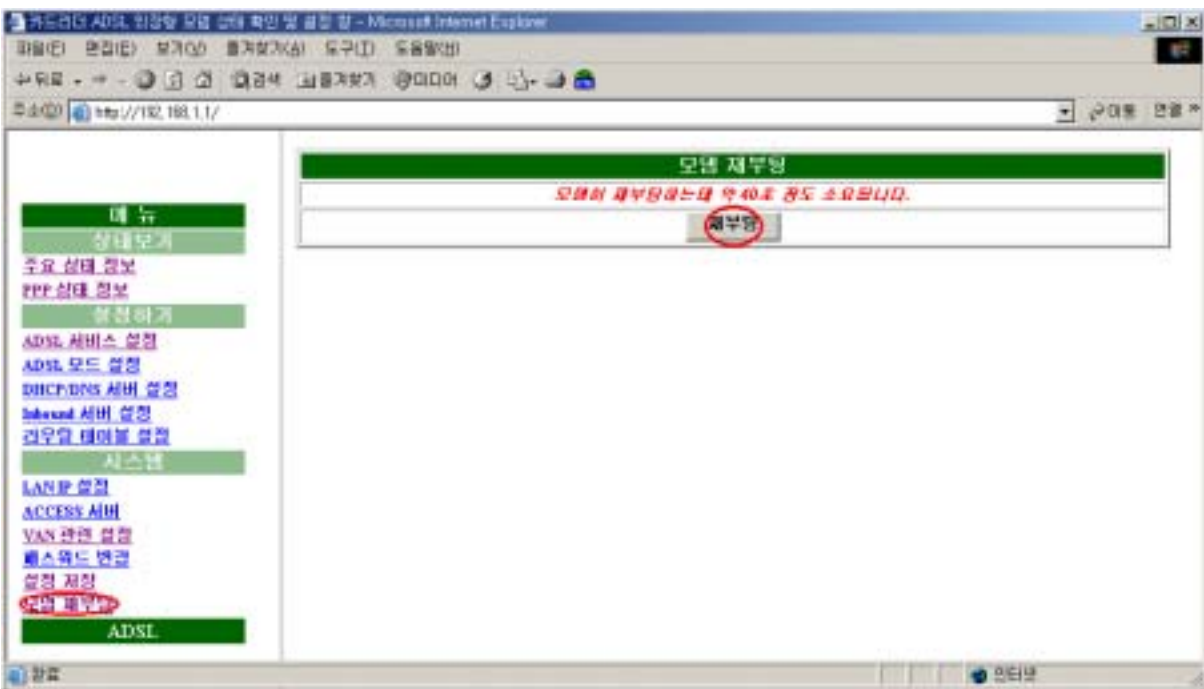
- 1)
- 2)

!



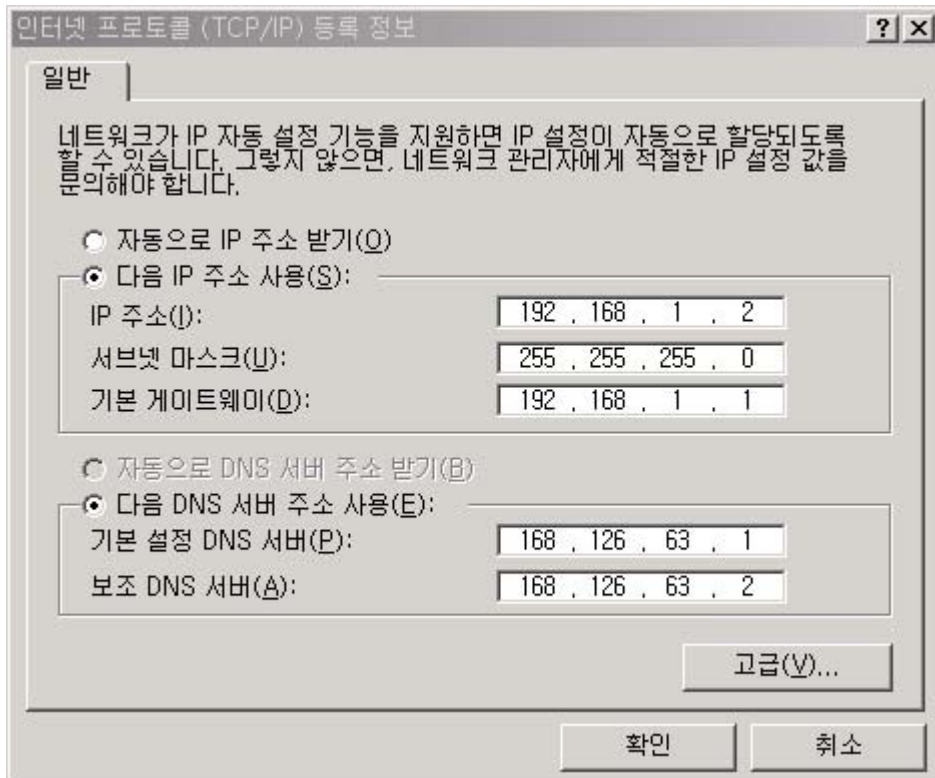
STEP 5.

- 1)
- 2)



STEP 6 (PC)

- | PC     |                 | PC | IP |
|--------|-----------------|----|----|
| 1) IP  | : 192.168.1.2   | .  | .  |
| 2)     | : 255.255.255.0 | .  | .  |
| 3)     | : 192.168.1.1   | .  | .  |
| 4) DNS | : KT            | .  | .  |
- “ 168.126.63.1 2 ”



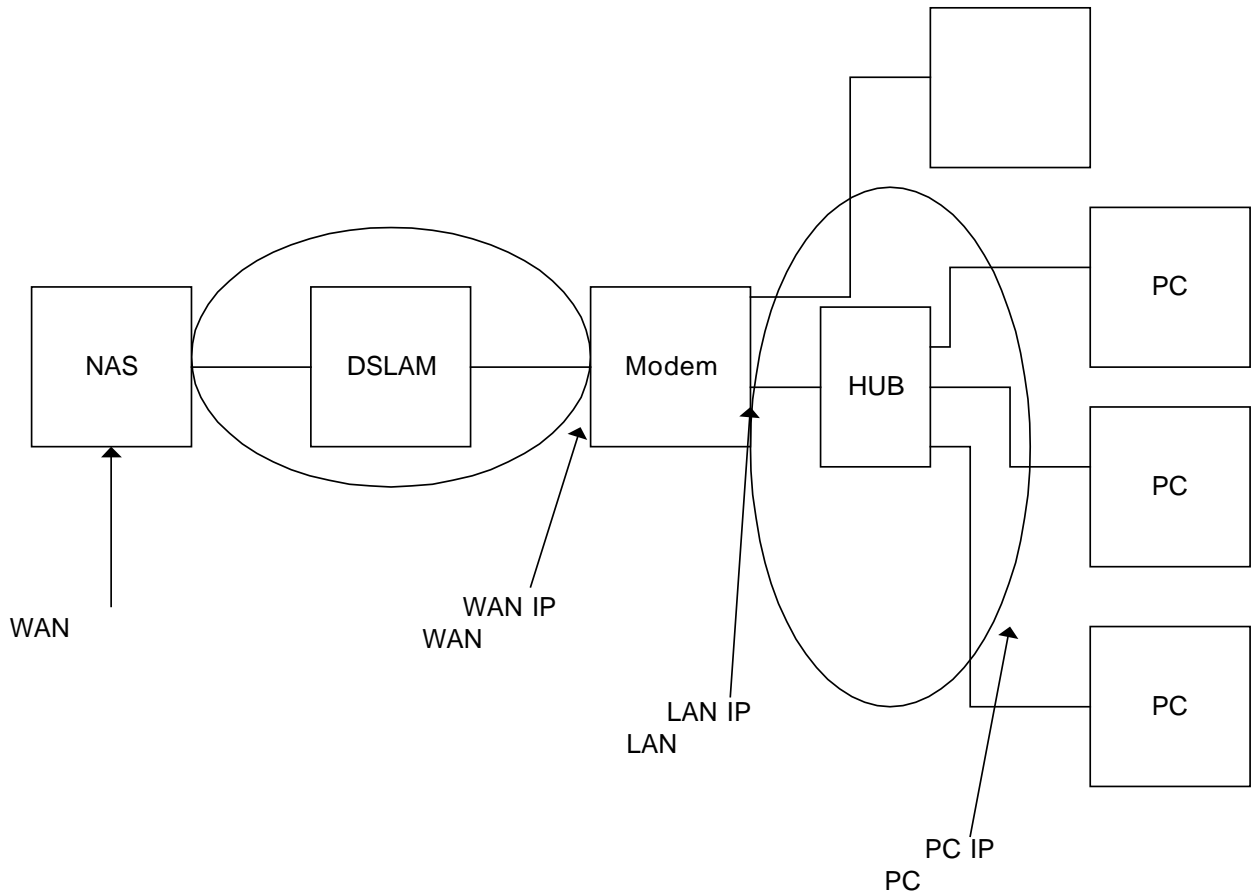
### 5.2.2 Multi-IP

*Multi-IP* *IP*

---

( WAN IP : 168.126.236.34  
WAN : 255.255.255.248,  
WAN : 168.126.236.33,  
LAN IP 168.126.236.41,  
LAN : 255.255.255.248

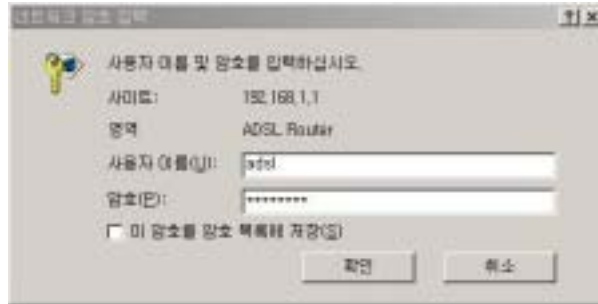
가 .)





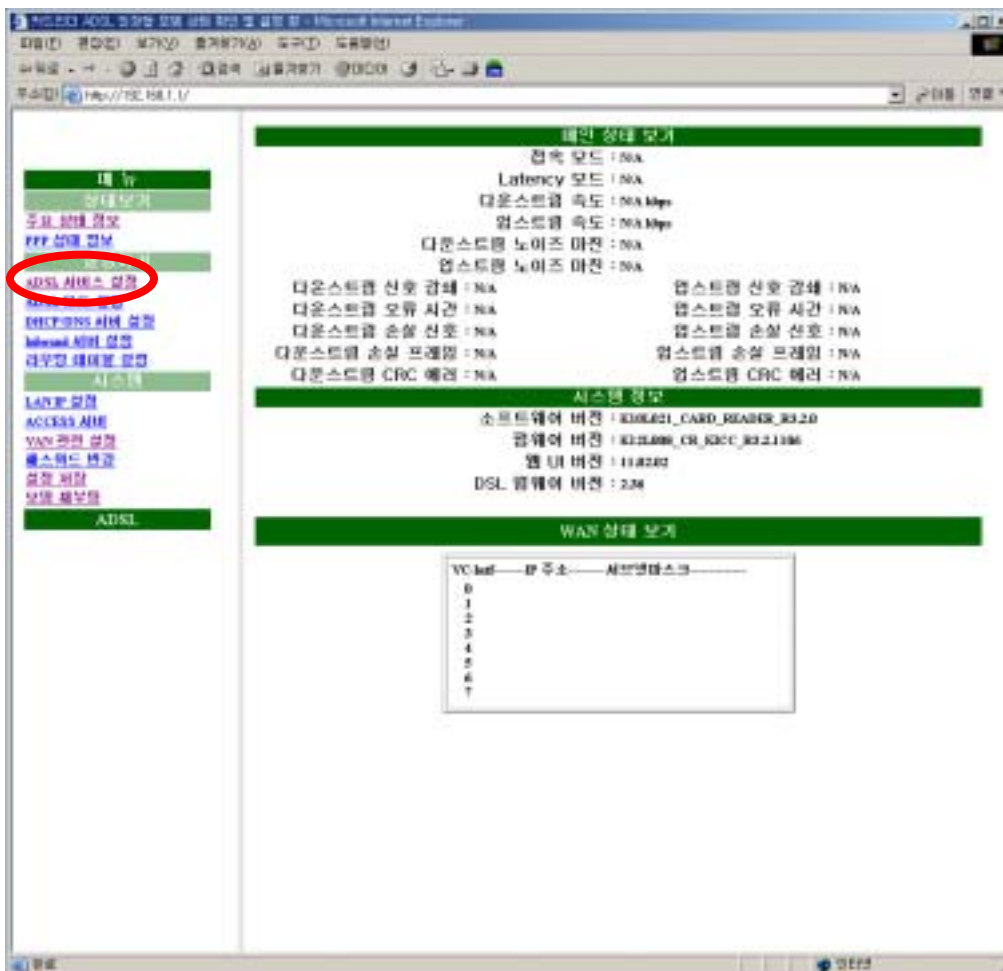
## STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : adsl
- 4) : megapass
- 5)
- !



## STEP 2.

- 1)
- 2) ADSL



STEP 3. ADSL ( IP (Multi-IP) )

3. 1 IP

- 1) PVC (PPPoE) ←-
- 2) , IP
- 3) WAN IP KT IP
- 4) WAN KT
- 5) VPI/VCI
- 6) LLC/SNAP
- 7) ( 가 가 )
- 8)
- 9)
- ! VPI/VCI DSLAM .
- \*\* NAPT !!!

ADSL 서비스 변경

VPI:  VCI:  ATM 서비스 카테고리:  핸드폭:  kbps  
 LLC/SNAP  Vc Multiplexing  IGMP 사용  NAPT 사용

브릿지 모드  
 Pure 브릿지  고정 IP 사용  유동 IP 사용 (DHCP 클라이언트)  
 WAN IP 주소:      
 WAN 서브넷 마스크:

라우터 모드  
 고정 IP 사용  유동 IP 사용 (DHCP 클라이언트)  
 WAN IP 주소:      
 WAN 서브넷 마스크:

PPPoA 모드  
 PPPoE 모드  
 사용자명:   
 비밀번호:   
 서비스명:   
 인증방식:   
 Disconnection Time:  초 (최대: 32767)  
 PPP reconnect on WAN access:   
 내장 PPPoE 브릿지:

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PVC 연결 리스트

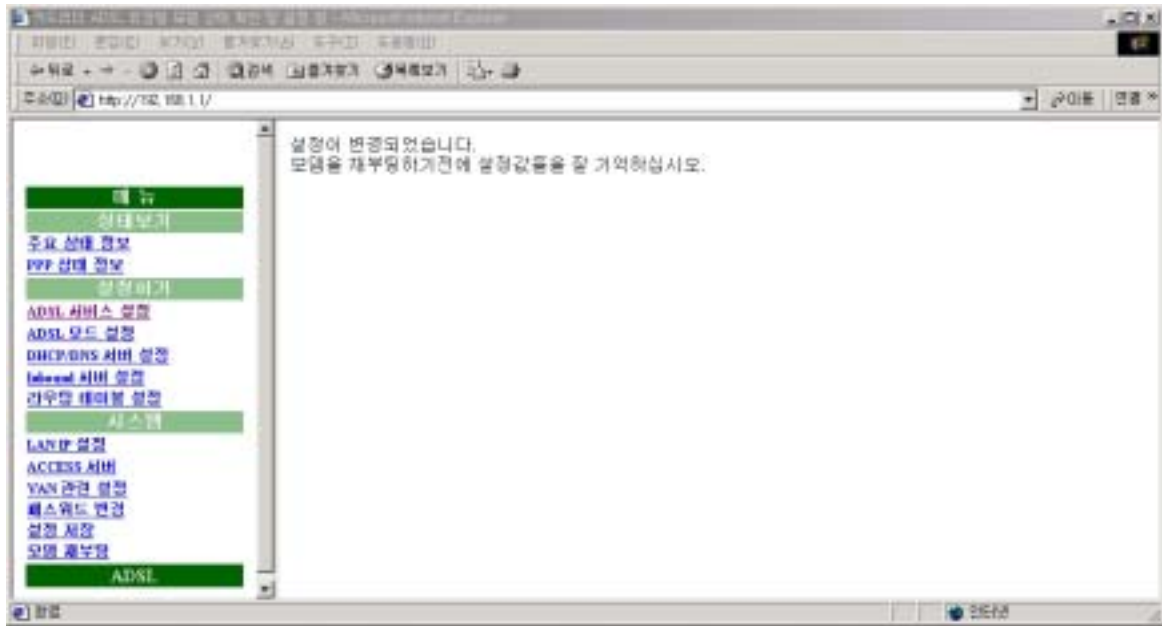
모드	VPI	VCI	Encap	IGMP	IP 주소	서브넷마스크
3684R Router 0	32	LLC	OFF	168.126.236.34	255.255.255.248	

실행 버튼을 누르신 후, 반드시 설정 저장을 하시고 모뎀을 재부팅해야 합니다.

3.2

1) ADSL

!!



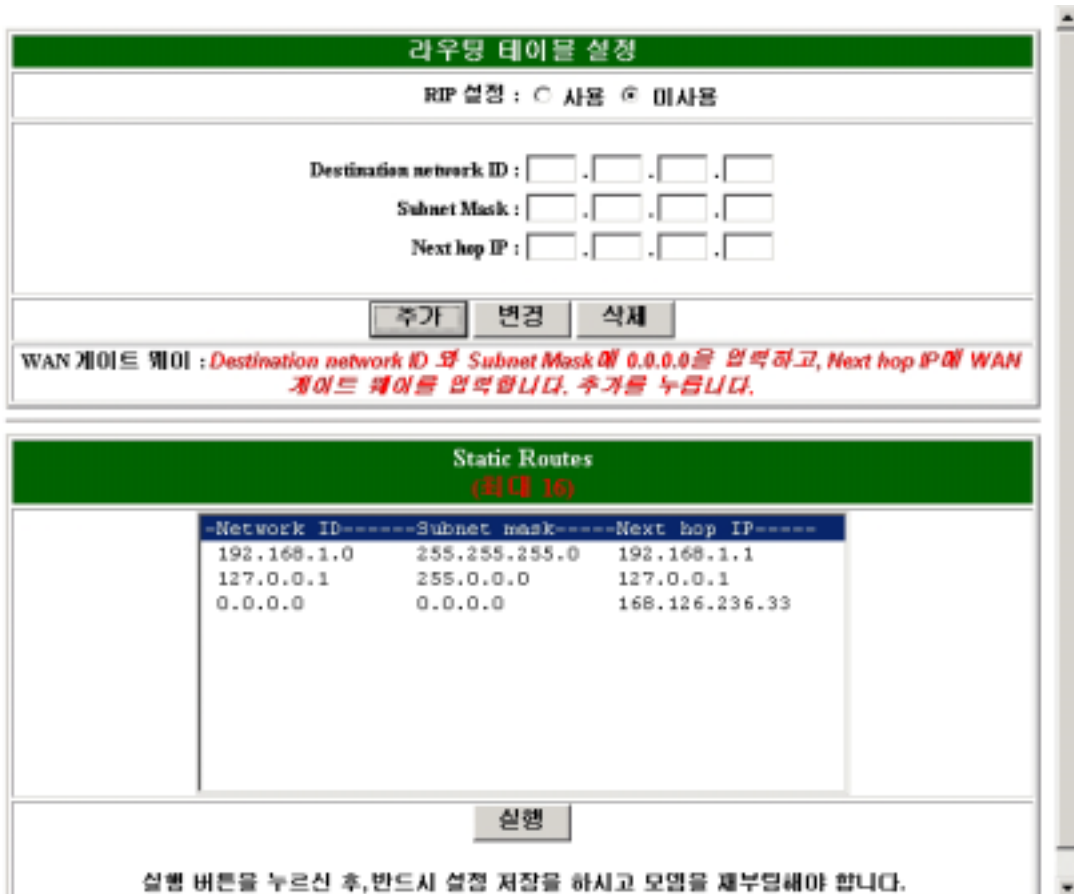
2) Destination network ID, Subnet Mask : 0.0.0.0  
KT

Next Hop IP

IP

3) 가

4)



### 3.3 LAN IP

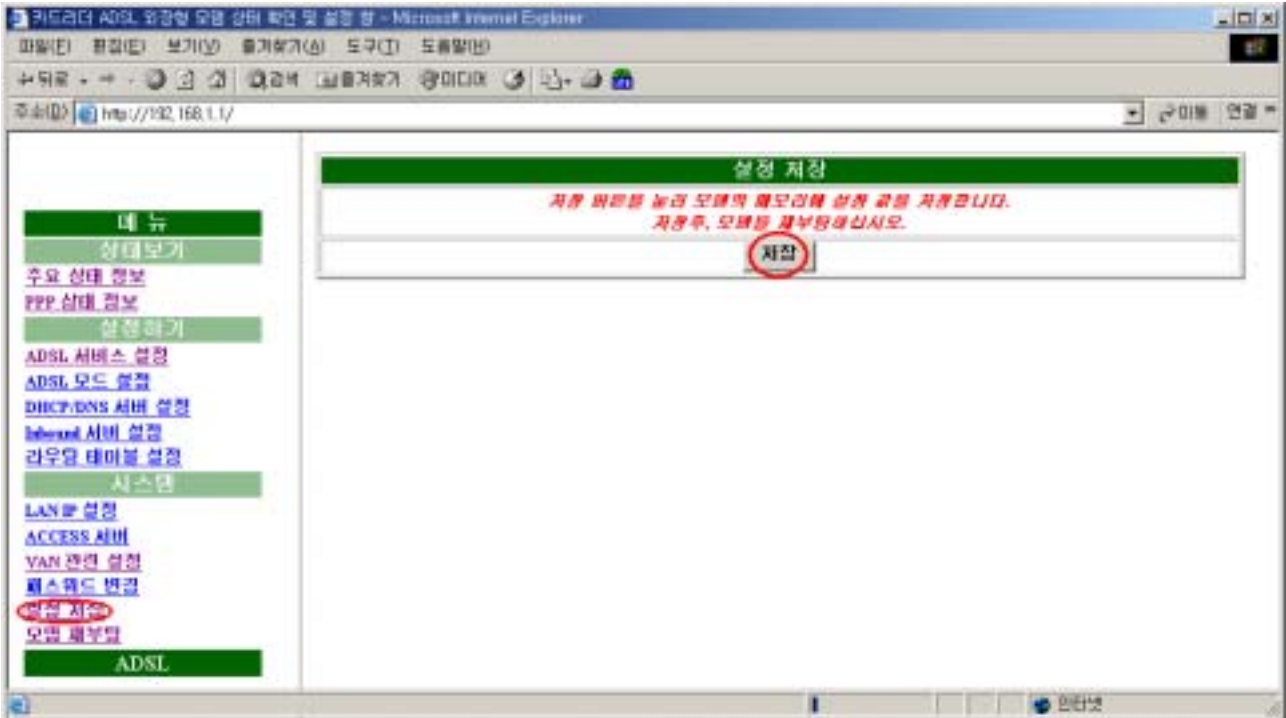
- LAN IP . Multi-IP LAN IP가
- IP .
- 1) LAN IP
  - 2) LAN
  - 3)

! http://192.168.1.1  
 LAN IP (http://168.126.236.41)  
 가 . !!,  
 (PC) LAN  
 PC 가 PC

LAN IP 설정	
LAN IP 주소 :	<input type="text" value="168.126.236.41"/>
LAN 서브넷 마스크 :	<input type="text" value="255.255.255.248"/>
<input type="button" value="실행"/>	
실행 버튼을 누르신 후, 반드시 설정 저장을 하시고 모뎀을 재부팅해야 합니다.	

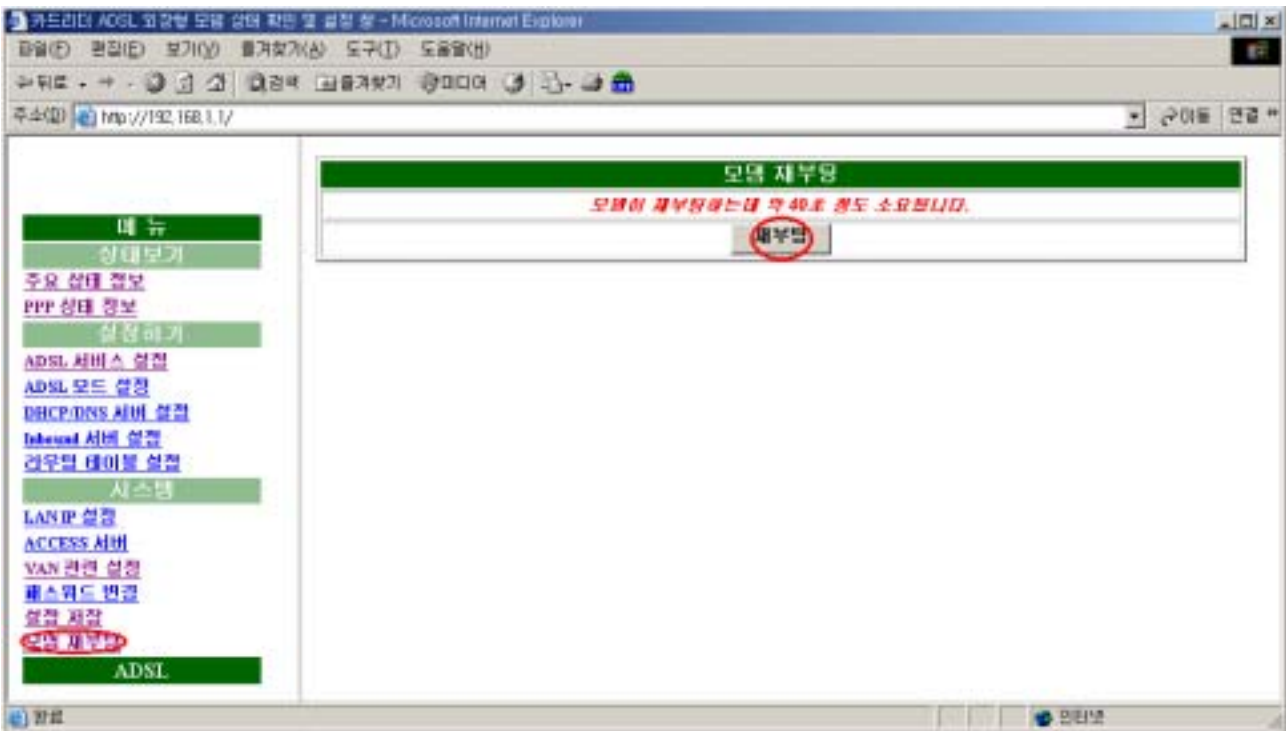
STEP 4.

- 1)
- 2)



STEP 5.

- 1)
- 2)



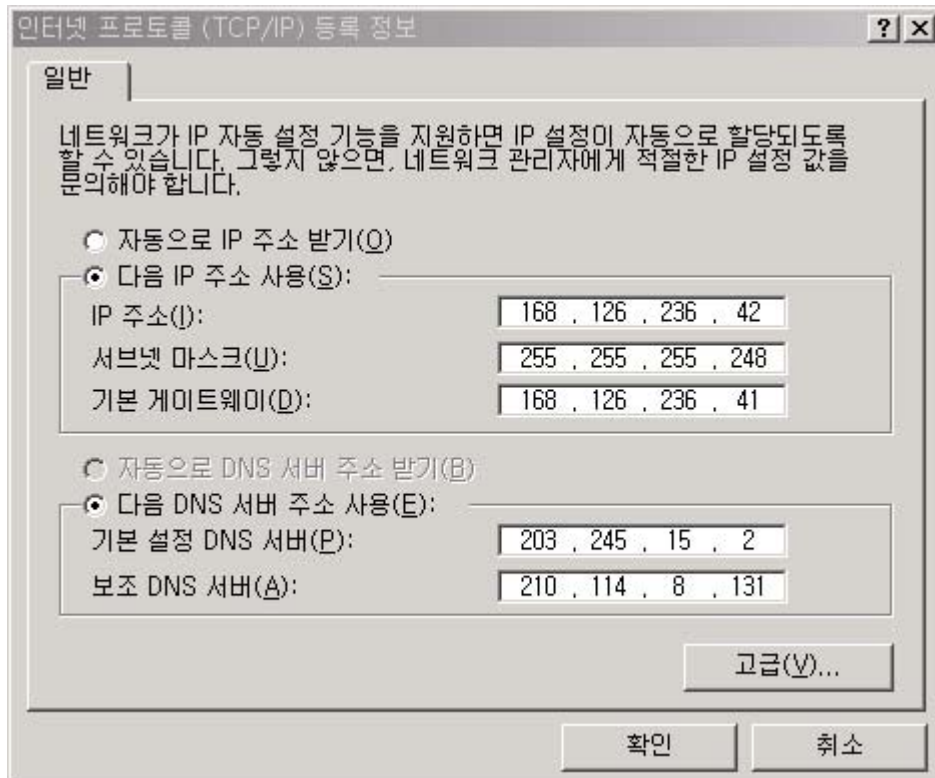
STEP 6 (PC)

PC

IP

PC

IP



6.

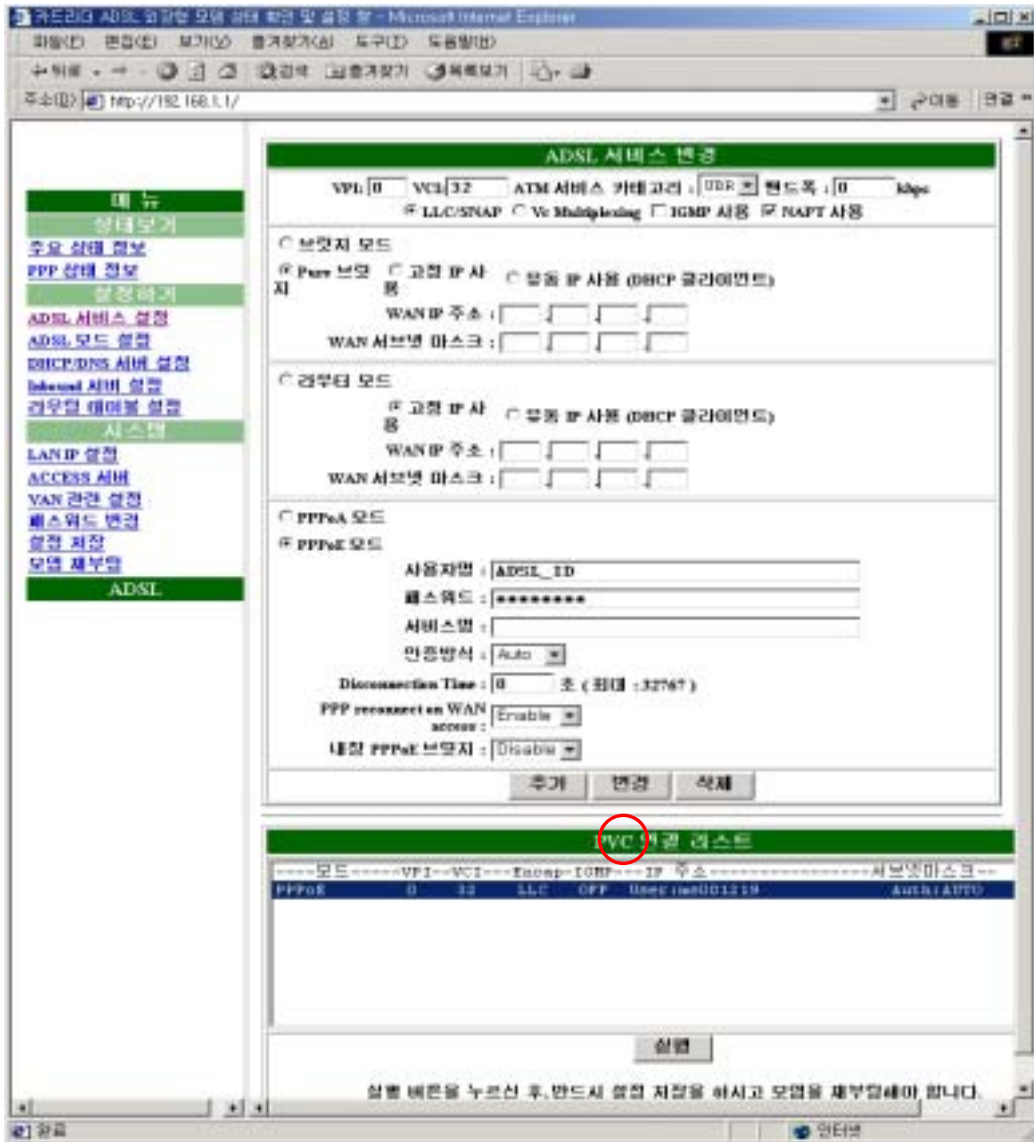
1)

2)

2-1)PVC

2-2)

IP	DSLAM (PPPoE/PPPoA)	PPPoE/PPPoA VPI/VCI IP : User: ID가 : Auto Disconnect Time : 0 PPP Reconnect on WAN Access : Enable PPPoE : Disable
	IP-DSLAM (DHCP)	2684R Bridge VPI/VCI IP : DHCP Client
IP	My-IP	2684B Bridge VPI/VCI IP / Routing LAN IP ( IP )
	Multi-IP	2684B Router VPI/VCI IP / Routing LAN IP ( IP )
		PC NAPT 가 (ADSL )





1 : InBound

2 : VAN

3 :ADSL-VAN

PC

4 : (ADSL-VAN)

1: InBound (PC )

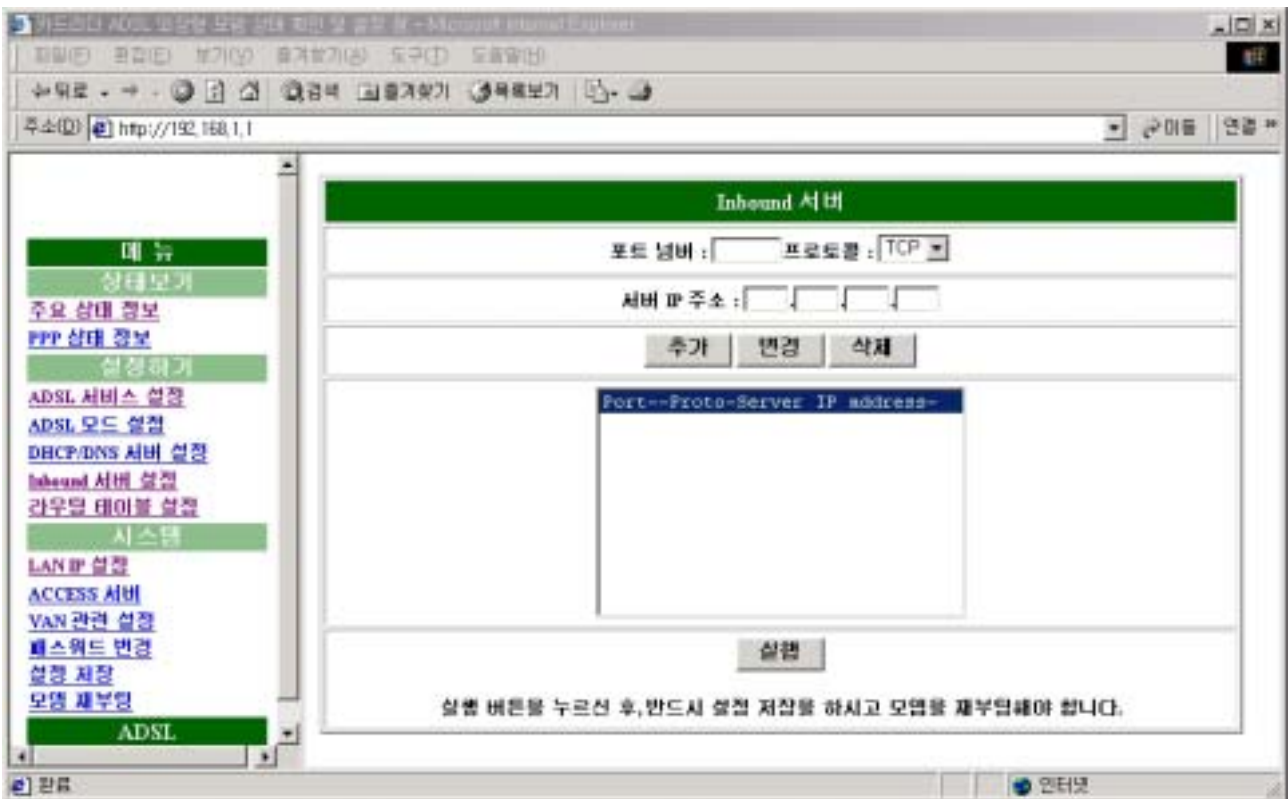
MyIP InBound PC , PC  
 PC

IP

TCP/UDP

PC IP

- 1) (WebServer 80 )
- 2) (WebServer TCP)
- 3) (PC) IP
- 4) 가
- 5)
- 6)



## 2 : VAN

### 1. VAN

VAN

가 ,

- VAN

### 2. UDP

- ALM LED가 3 5

- IP ( VAN )

### 3. UART

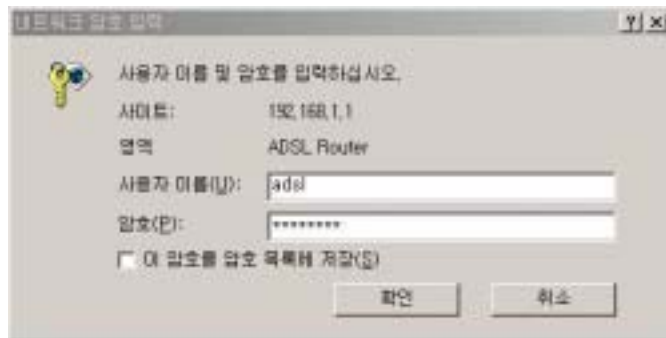
(9600 Bps ) [Baud Rate

]

## 1. ADSL VAN

### STEP 1.

- 1)
- 2) URL <http://192.168.1.1>
- 3) : **adsl**
- 4) : **megapass**
- 5)
- !

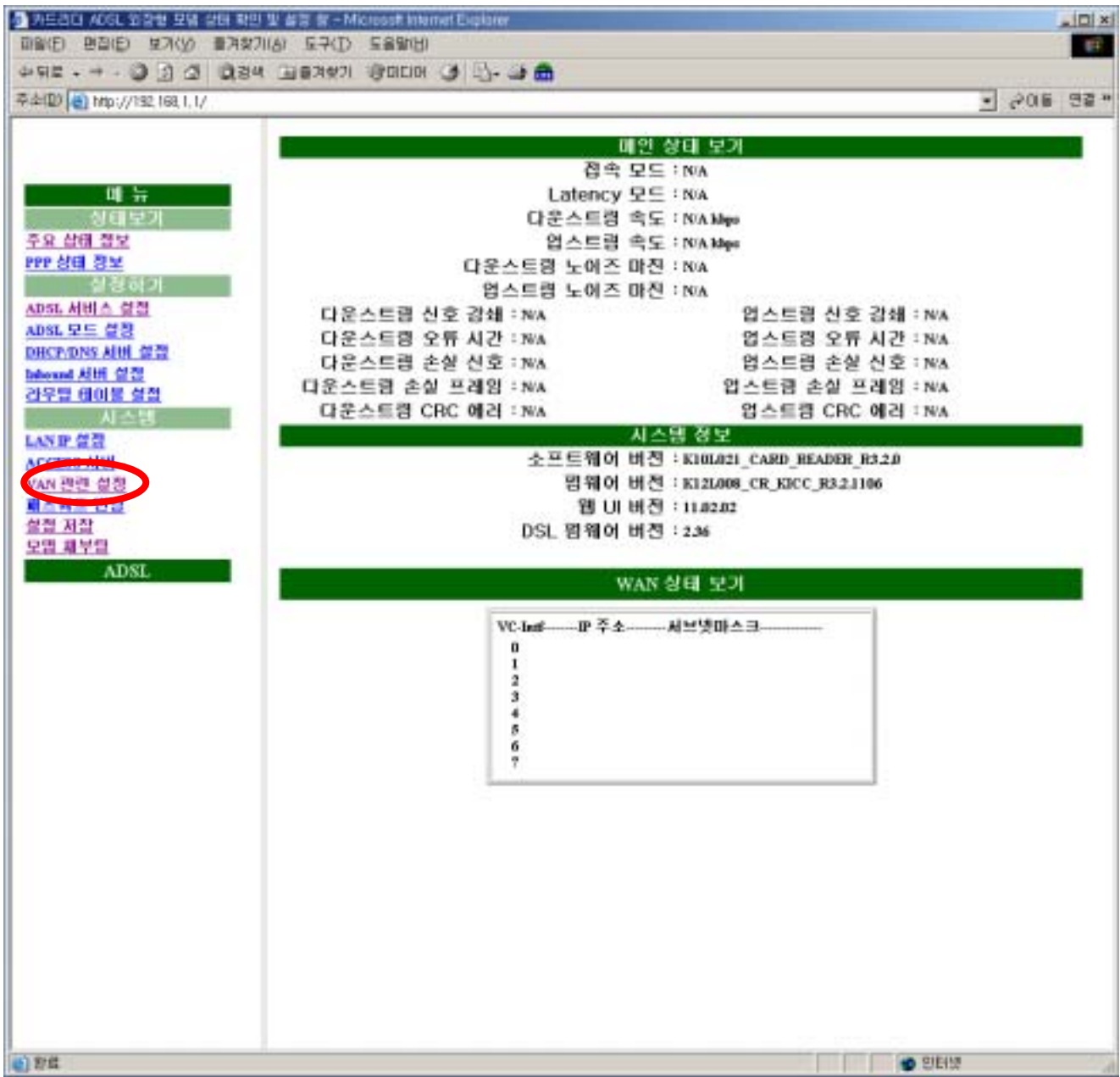


STEP 2.

1)

2)

ADSL



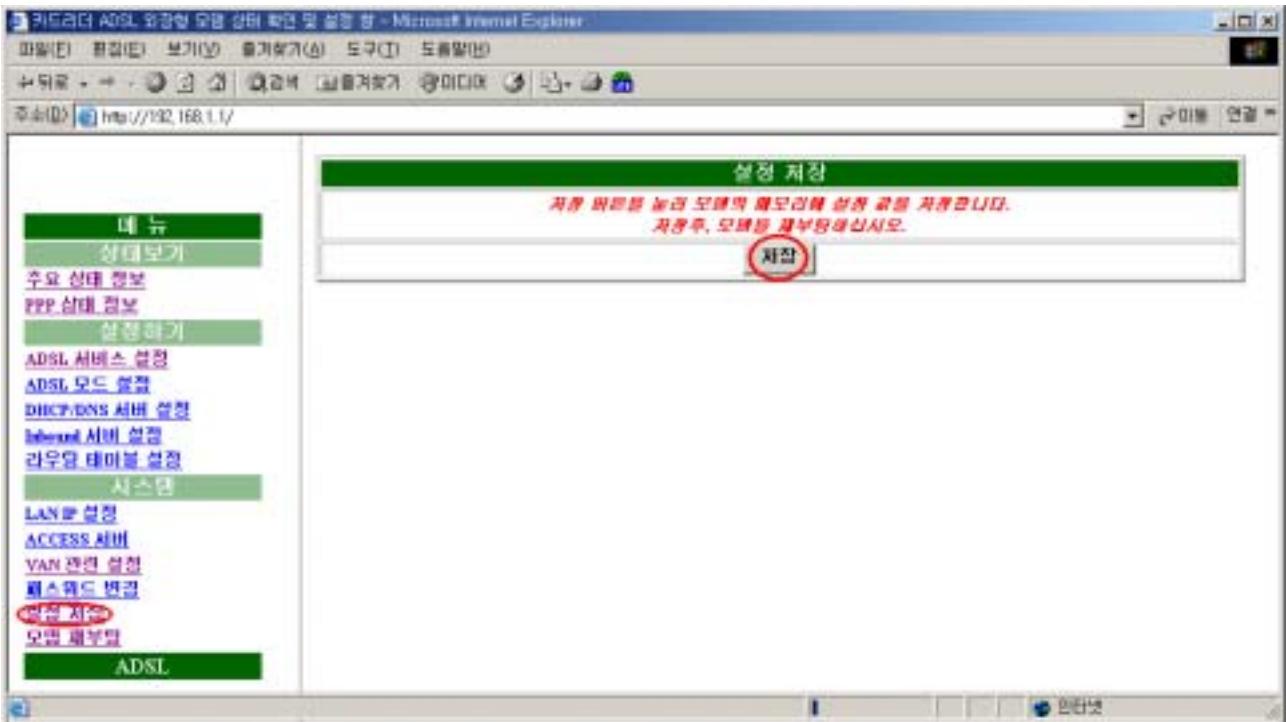
STEP 3. ADSL

- 1) VAN
- 2) VAN
- 3) UDP !! ( )
- 4) Baud Rate ( )
- 5)

VAN 관련 설정	
VAN 서버 관련 정보 설정	
VAN 서버 IP 주소 :	203 . 233 . 72 . 21
VAN 서버 Port 시작주소 :	5600
VAN 서버 Port 끝주소 :	5609
UDP 데이터 송신 서버 설정	
UDP 서버 IP 주소 :	211 . 216 . 50 . 2
UDP 송신 시간 간격[분] :	5
UDP 송신 :	<input checked="" type="radio"/> 사용 <input type="radio"/> 미사용
Baud Rate Settings (Data bit =8, Parity = no, Stop bit = 1, No flow control)	
Rate :	9600
<div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 5px 0;">실행</div>	
<p>실행 버튼을 누르신 후, 반드시 설정 저장을 하시고 모뎀을 재부팅해야 합니다.</p>	

STEP 4.

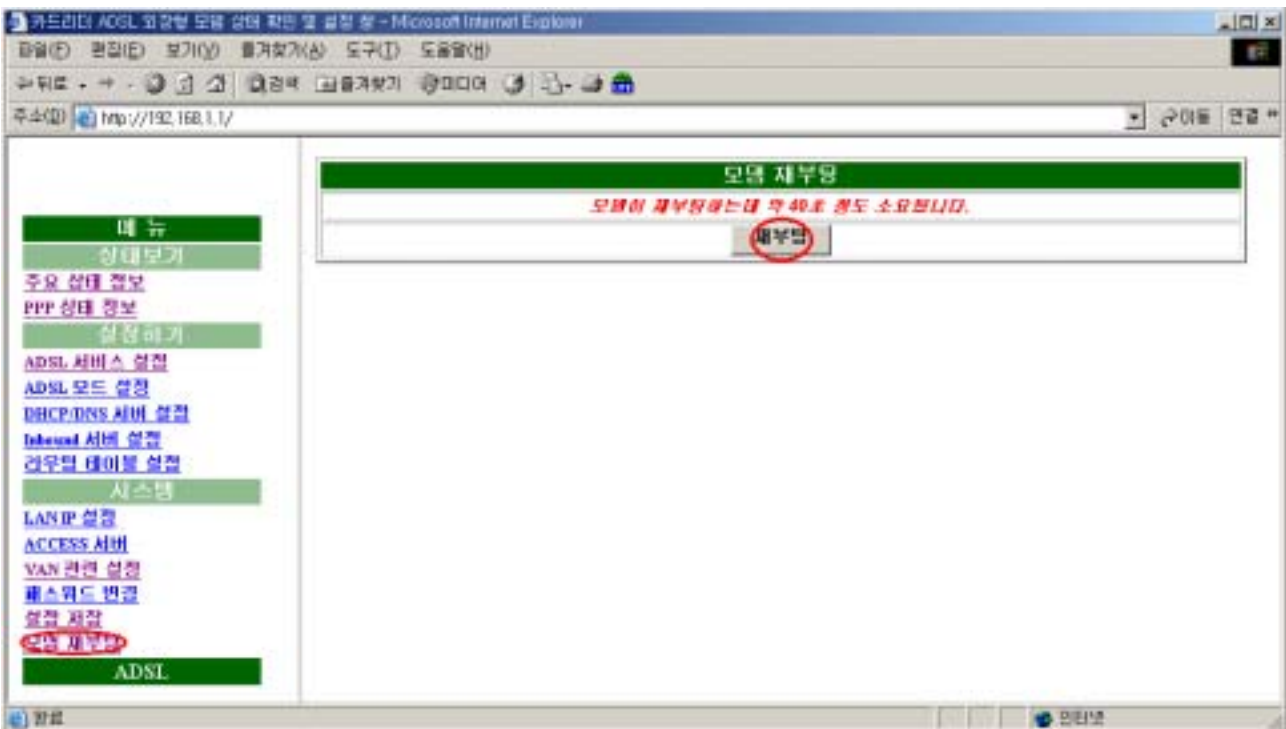
- 1)
- 2)
- !



STEP 5.

- 1)
- 2)
- 3)

ADSL



STEP 6

- 9)
- 10) VAN

VAN 관련 설정	
VAN 서버 관련 정보 설정	
VAN 서버 IP 주소 :	<input type="text" value="203.233.72.21"/>
VAN 서버 Port 시작주소 :	<input type="text" value="5600"/>
VAN 서버 Port 끝주소 :	<input type="text" value="5609"/>
UDP 데이터 송신 서버 설정	
UDP 서버 IP 주소 :	<input type="text" value="211.216.50.2"/>
UDP 송신 시간 간격[분] :	<input type="text" value="5"/>
UDP 송신:	<input checked="" type="radio"/> 사용 <input type="radio"/> 미사용
Baud Rate Settings (Data bit=8, Parity = no, Stop bit = 1, No flow control)	
Rate :	<input type="text" value="9600"/>
<input type="button" value="실행"/>	
실행 버튼을 누르신 후, 반드시 설정 저장을 하시고 모뎀을 재부팅해야 합니다.	

!!! VAN                  IP /Port                  Baud Rate Setting

!!!

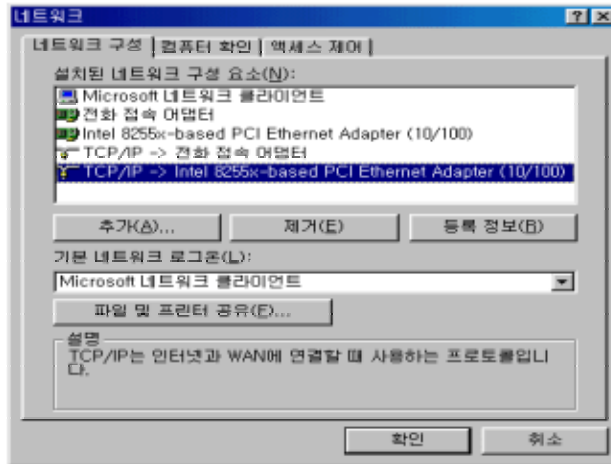
### 3: ADSL-VAN

### PC

1.

- Windows 95/98/98SE/ME  
 TCP/IP Microsoft 가 . [ ] [ ] [ ]  
 . [ ] [ ] . [ ]  
 가 Microsoft TCP/IP 가  
 가 .

[ 1-1] ADSL .  
 (Intel 8255x-based PCI Ethernet Adapter(10/100) :  
 .) 가



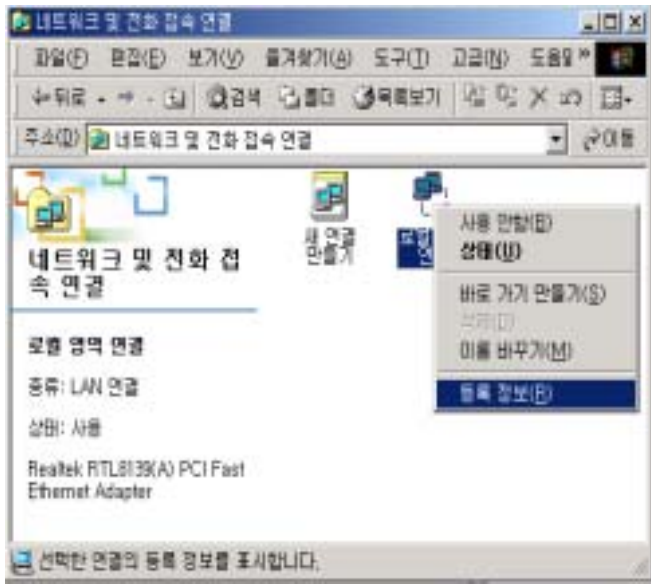
[ 1-1] Windows 9x, ME

Microsoft TCP/IP 가

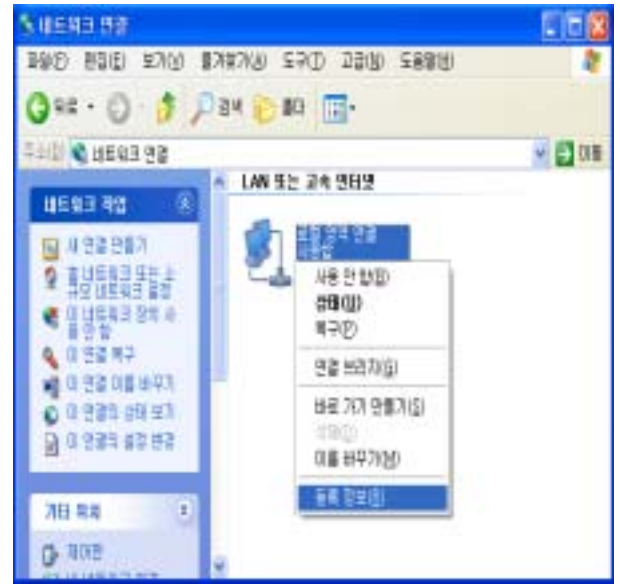


# HIGATE Plus

Windows 2000, XP  
 TCP/IP Microsoft 가  
 . [ ] [ ] [ ]  
 (Windows XP [ ]-> [ ] , [ ] )  
 .) [ ] [ ]  
 가 [ 1-2](Windows 2000 ), [ 1-3](Windows XP )

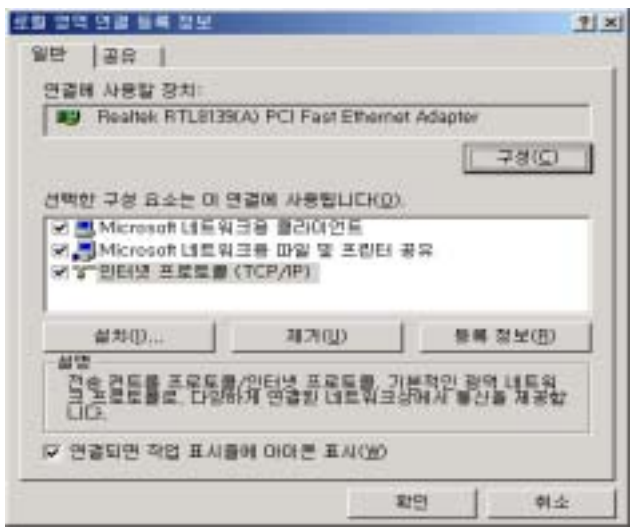


[ 1-2] Windows 2000



[ 1-3] Windows XP

[ ] 가 [ 1-4](Windows 2000 ), [ 1-5](Windows XP ) Microsoft TCP/IP 가 가



[ 1-4] Windows 2000

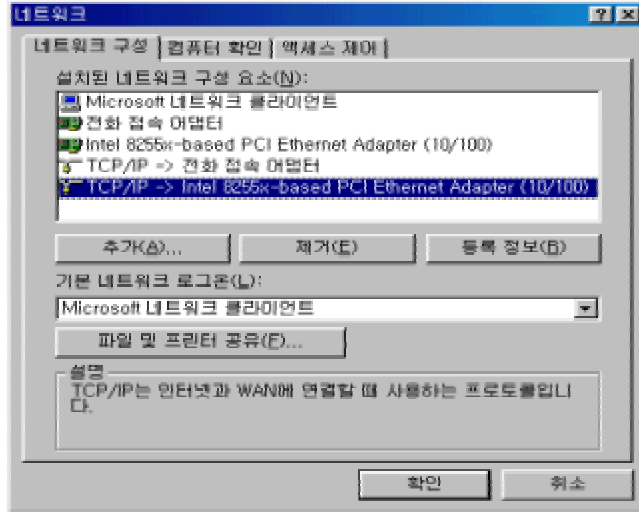


[ 1-5] Windows XP

( )

2.

- Windows 95/98/98SE/ME  
 [ ] [ ] [ ] . [ ] [ ]  
 . [ ] 가 “ TCP/IP ->  
 ”  
 ( . )



TCP/IP

IP

IP

TCP/IP



TCP/IP

- IP



TCP/IP

- DNS

DNS

DNS

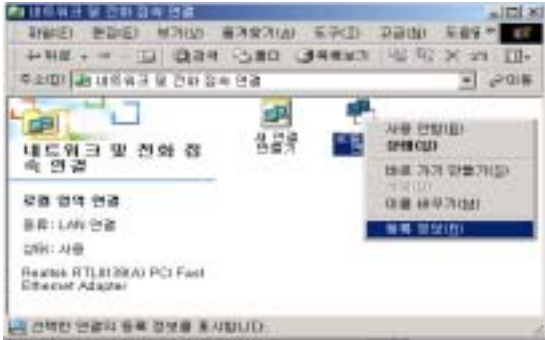
가

# HIGATE Plus

- Windows 2000,XP

[ ] [ ] [ ]  
 [ ] , [ ]  
 [ ]  
 가

. (Windows XP [ ] ->  
 .) [ ]



Windows 2000

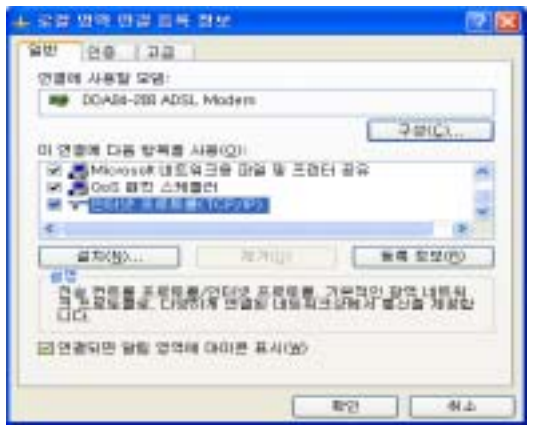


Windows XP

[ ] 가 (TCP/IP)



Windows 2000



Windows XP

IP DNS

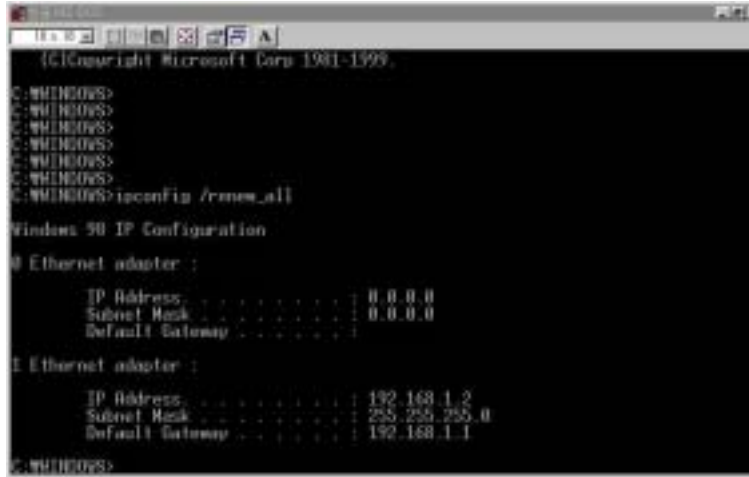
가

### 3. IP

[ ] [ ]

command(Window2000: cmd)

ipconfig IP  
 IP 192.168.1.2 254  
 ( 가 ) ipconfig /renew\_all(window2000:  
 ipconfig /renew)

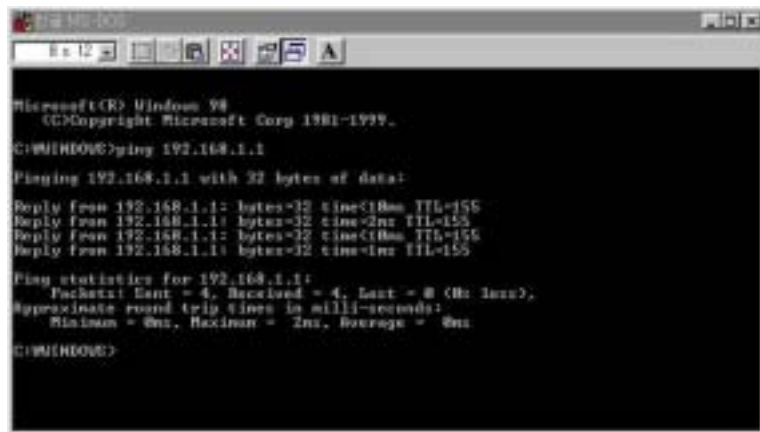


[ - IP , , ]

\*\*\* PC 가 IP 가  
 ( : IP )

### 4. Ping 가

ping , 가



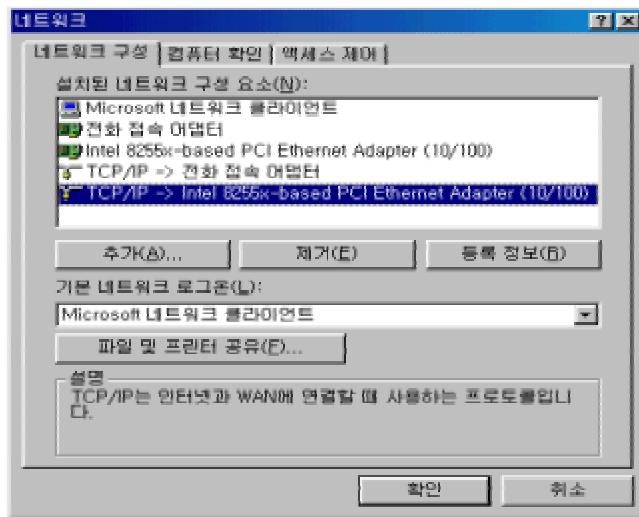
[ - ping 가 ]

2. Ping 가.

LED 가 , LAN LED

:: IP

- Windows 95/98/98SE/ME  
[ ] [ ] [ ] . [ ] [ ]  
[ ] 가 “ TCP/IP -> ”  
( .)



TCP/IP

TCP/IP

IP

IP

192.168.1.2

“ 255.255.255.0 ”

“ 192.168.1.1 ”

가

# HIGATE Plus



TCP/IP

- IP



TCP/IP

-

, 가

.

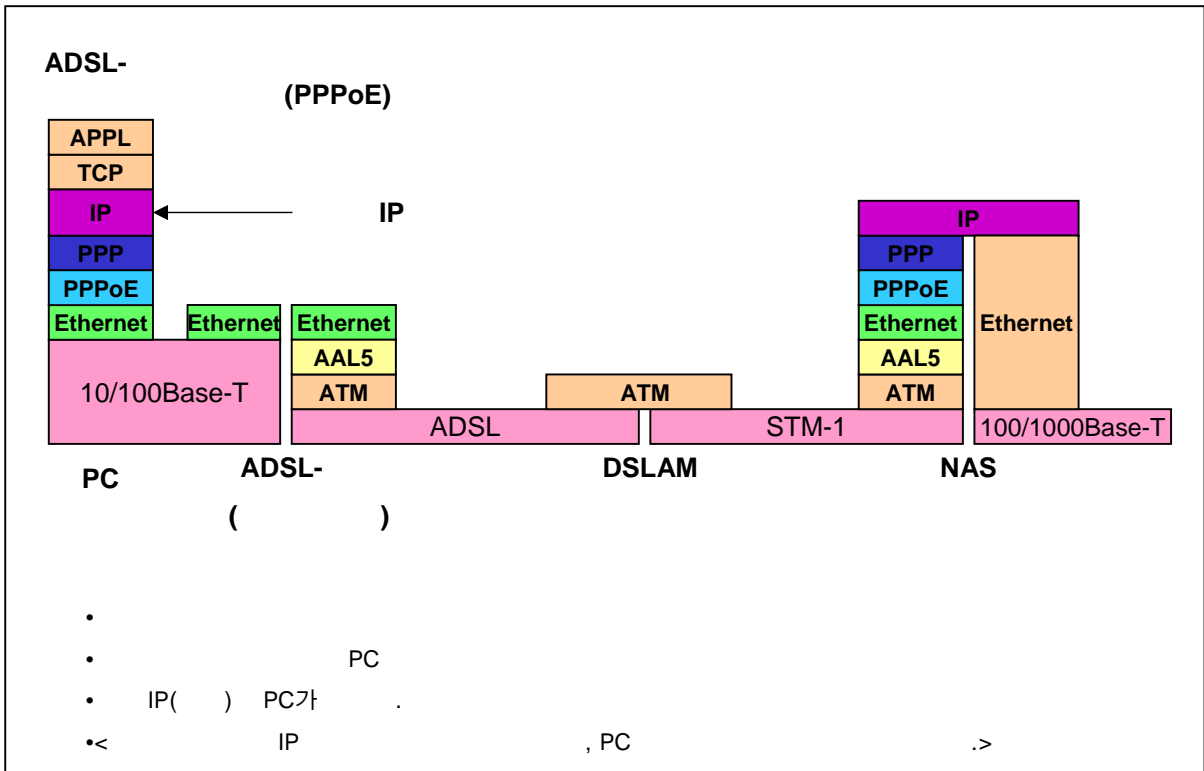
## 4 (ADSL-VAN)

1. ADSL (ADSL-VAN)
2. DSLAM/ IP-DSLAM

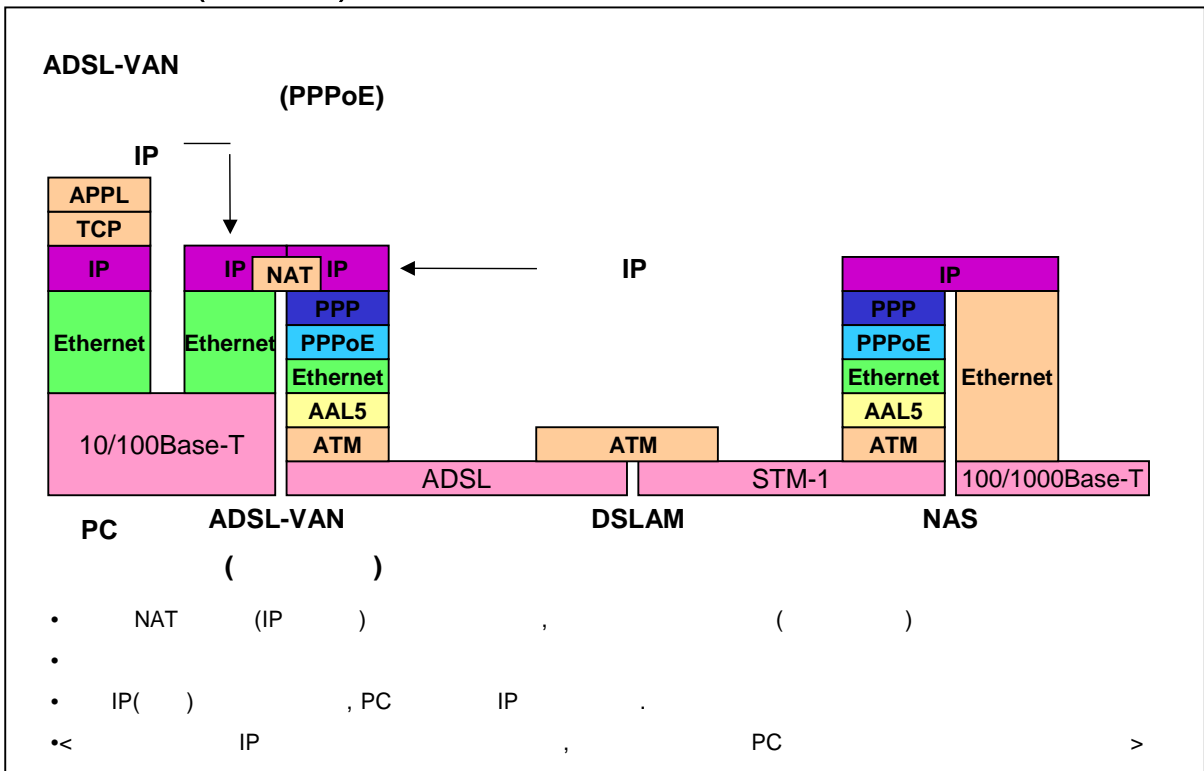
1 ADSL (ADSL-VAN)

1.1

가. ADSL-

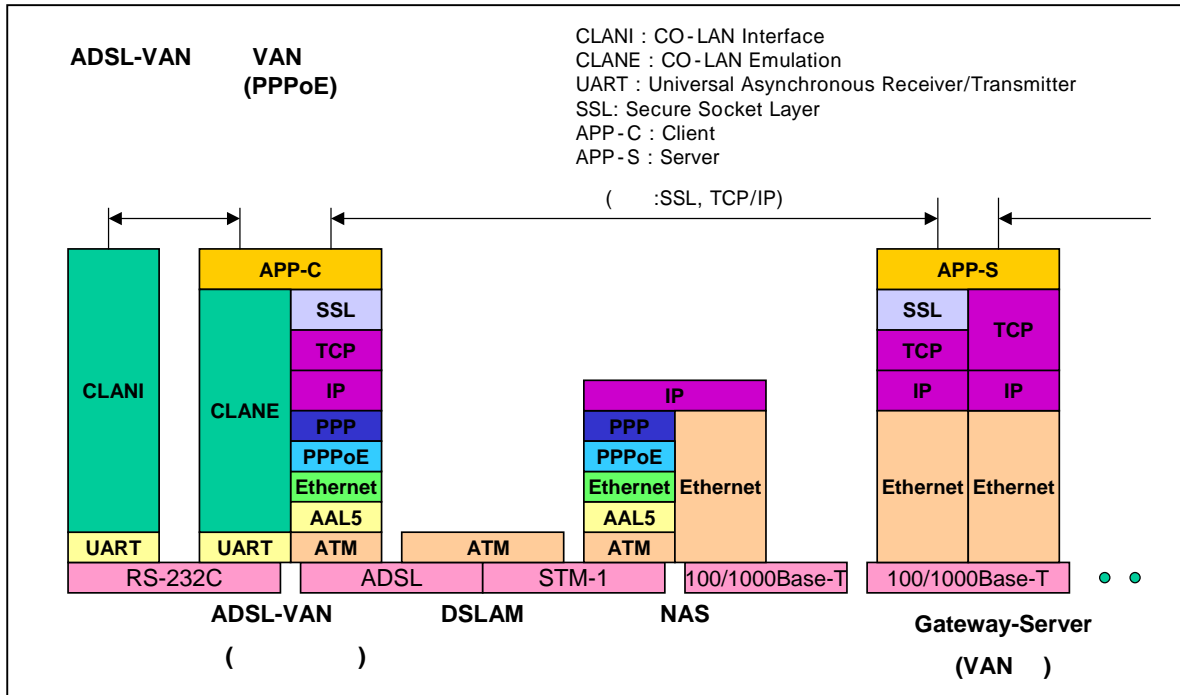


. (ADSL-VAN)





2.2. ADSL-VAN



\*\* ADSL-VAN

\*\*

...

: DSLAM PPPoE Client  
 가, IP-DSLAM DHCP Client가 PC IP  
 PC .

ADSL-VAN : 가 , DSLAM ( DSLAM/ IP-DSLAM), VPI/VCI, ( IP/ IP)

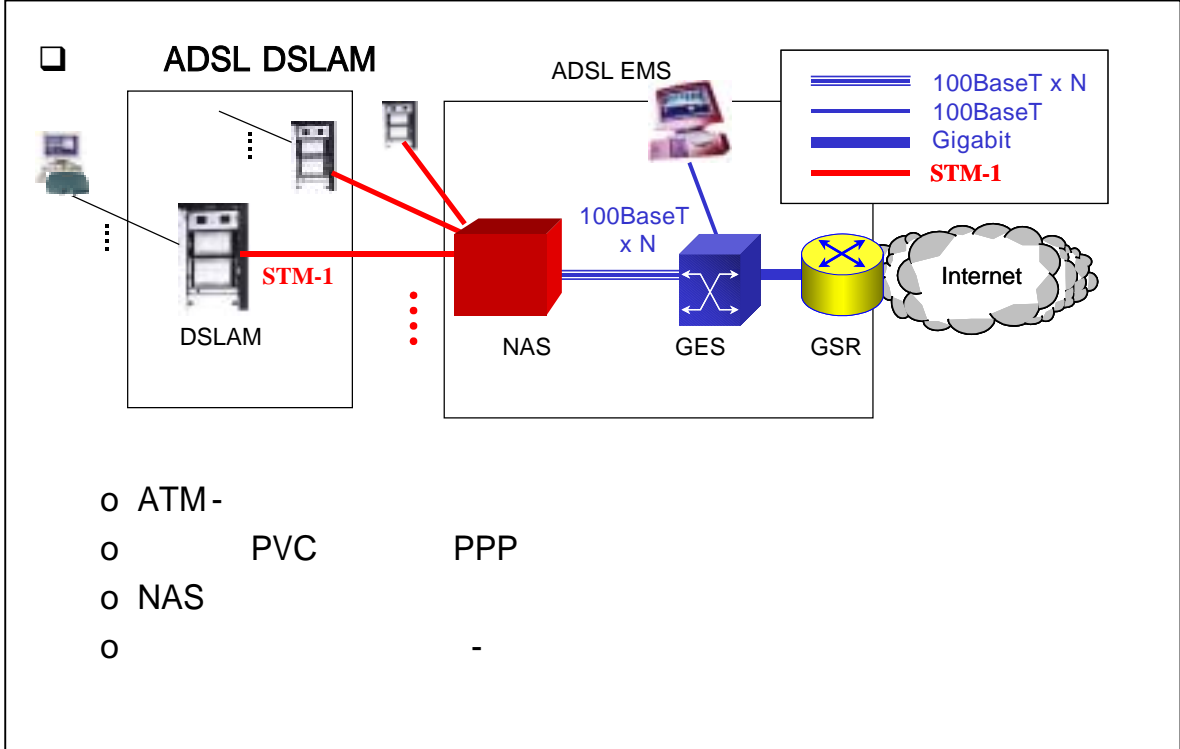
IP - DHCP(Dynamic Host Configuration Protocol)

- IP DHCP 가 가 IP 가
- ( IP )
- IP , IP 가 IP
- IP POOL IP 가
- DHCP (Lease Time: 60 , , 가 ) ARP ,
- DHCP IP

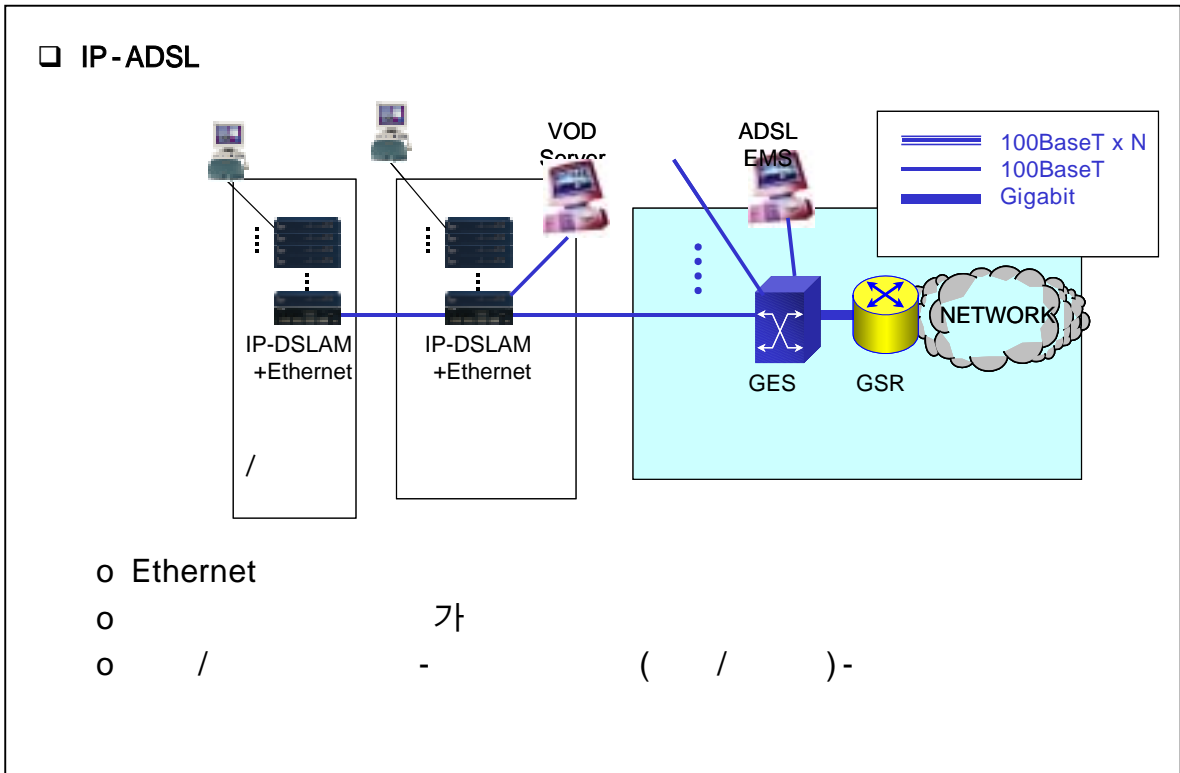
2 DSLAM/ IP-DSLAM

2.1.

ii. DSLAM

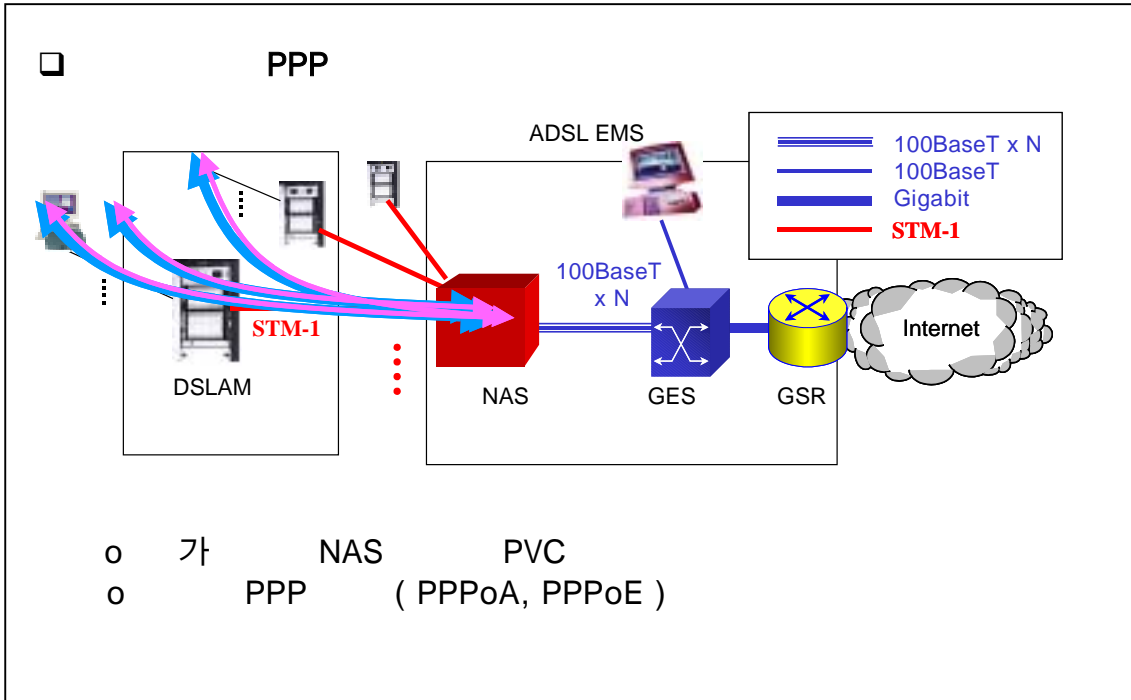


. IP-DSLAM

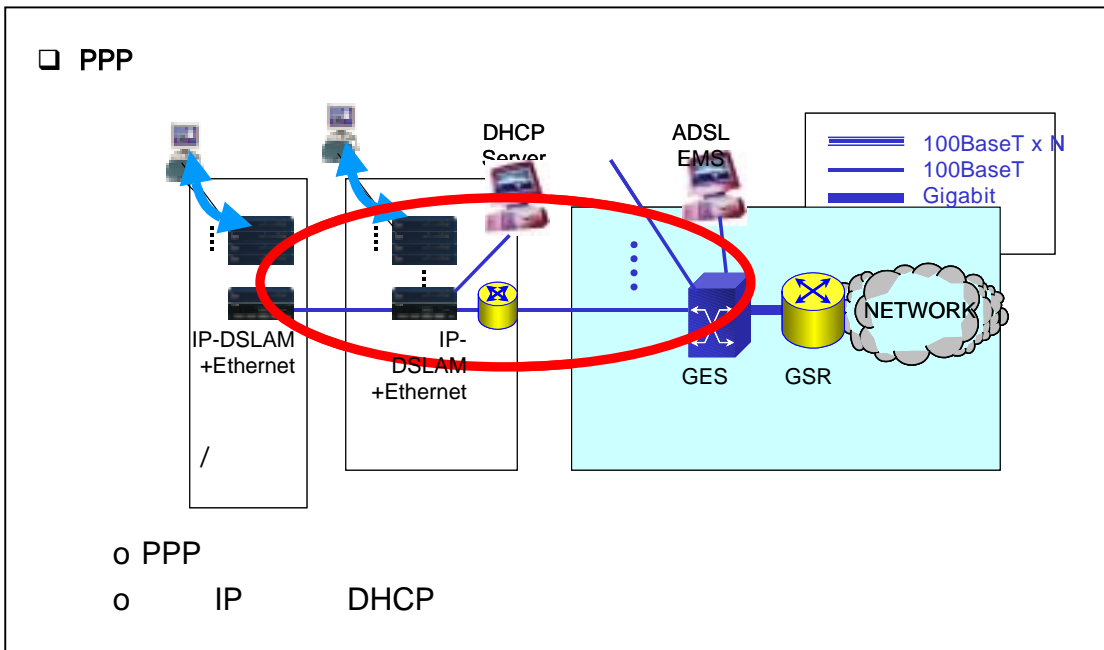


2.2.

가. DSLAM

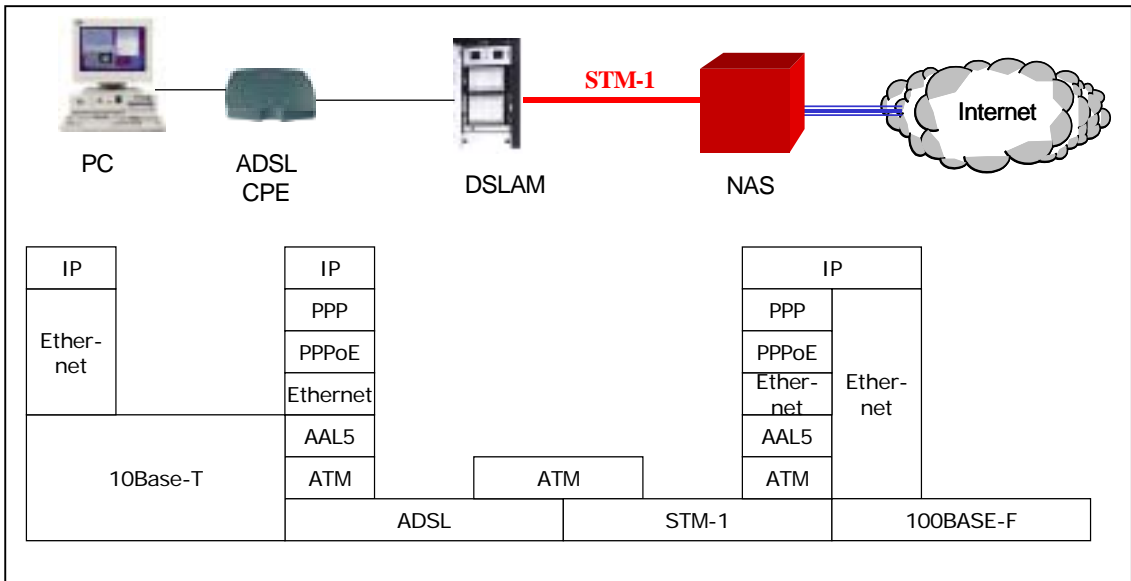


. IP-DSLAM

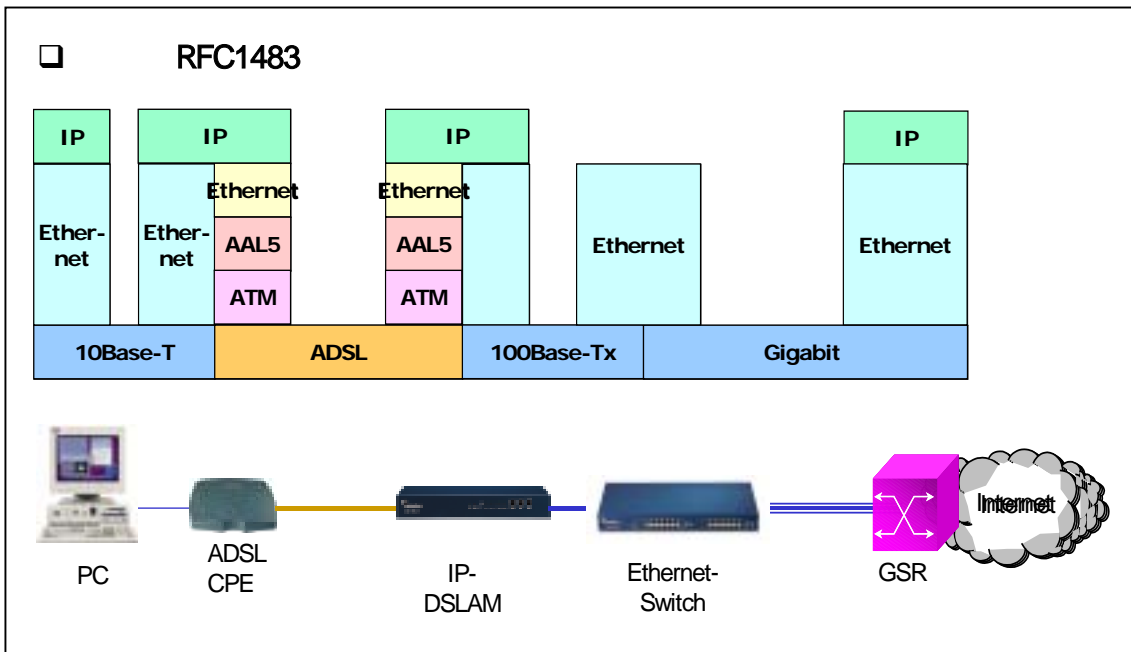


2.3.

가. DSLAM-PPPoE/PPPoA



. IP-DSLAM - RFC1483 (DHCP)



\*\*

ADSL-VAN

ASDL-CPE IP NAPT(IP )  
ADSL

\*\* ADSL-VAN

DSLAM