

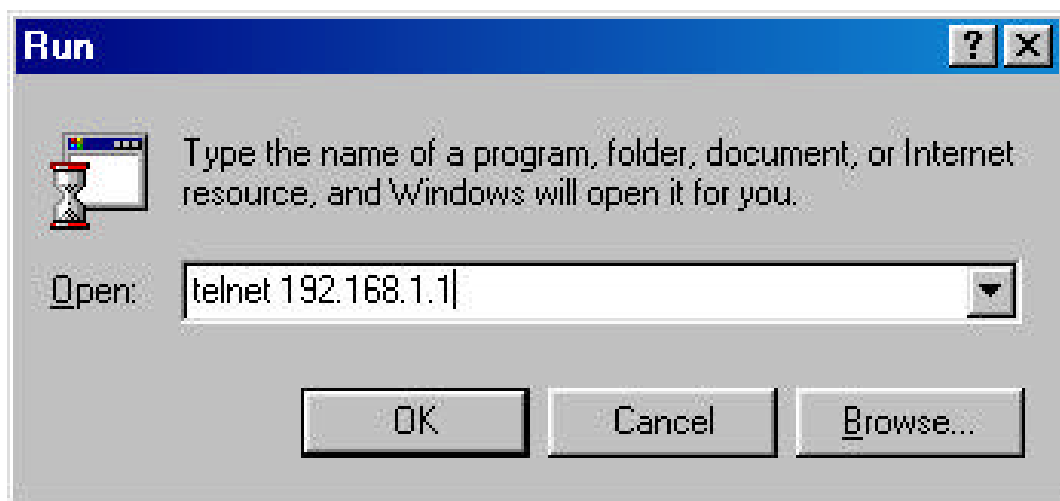
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# Telnet / Logs Commands

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## Telnet Commands

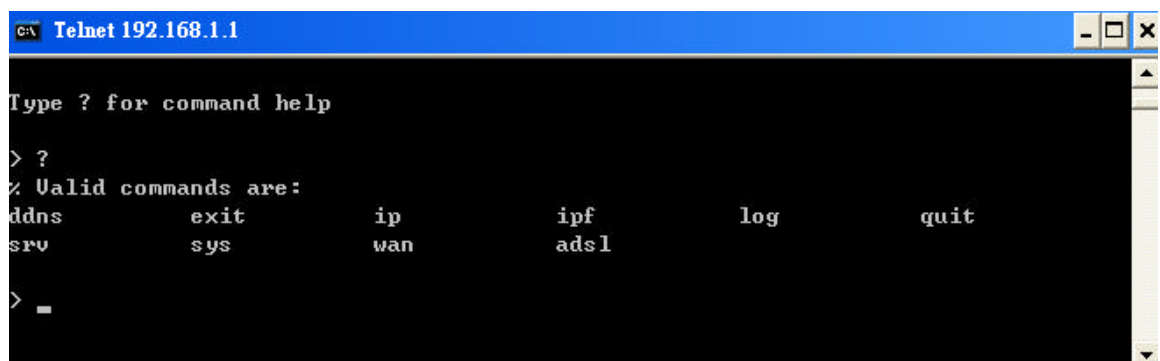
Click Start > Run and type **Telnet 192.168.1.1** in the Open box as below. Note that the IP address in the example is the default address of the router. If you have changed the default, enter the current IP address of the router.



Click OK. The Telnet terminal will open. If an administrator password has not already been assigned, follow the on-screen instructions to assign one.

```
*** WARNING ****  
* System has no password. *  
* Please set password, using "sys pass" commands. *  
*****
```

After assigning a password, type ?. You will see a list of valid commands.



1. ddns  
ddns log : show ddns log, max. 24 records
2. exit  
close telnet task

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3. ip

ip addr : show or set NAT local ip address

ip arp

- i. add <IP addr.> <MAC addr> <LAN or WAN> : add arp cache table
- ii. del <IP addr.> <LAN or WAN> : delete arp cache table
- iii. status : show arp cache table

ip dhcpd

- i. option : 1: dhcp client do not fill client IP field  
others or default: dhcp client fills client IP field
- ii. release : release WAN IP address
- iii. renew : renew WAN IP address from DHCP server
- iv. status : show WAN DHCP client IP parameters got from DHCP server

ip ping <IP addr.> : ping IP address

ip route

- i. add <dst> <netmask> <gateway> <iface> <rtype> : add a routing table.  
notes: 1. rtype : default: default route  
PPPoE\_default: PPPoE default route  
PPTP\_default: PPTP default route  
local: local route  
else: static route  
2. iface: 0 : NAT LAN or routing LAN  
1 : ISDN IN  
2 : ISDN OUT  
3 : WAN  
>= 4 : virtual private network
- ii. del <dst> <netmask> <rtype> : delete a routing table.
- iii. status : show routing table  
notes: 1. ~ : private  
2. C : connected  
3. S : static  
4. R : RIP  
5. \* : default route

ip wanaddr <IP addr> <IP netmask> [gateway IP] : set the wan IP address, mask, gateway IP address.

4. ipf : show or set IP filter

ipf view [option] or ipf [-VzZ] [-l block | pass | nomatch | none]

-V: show version of this IP filter

-z: clear the statistics of a filter rule

-Z: clear the gross statistics of the IP filters

-l: set the log flag

option:

- c : show the running call filter rules
- d : show the running data filter rules
- f : for fragment state
- h : show hit-number of the filter rule
- r : show the running (call & data) filter rule
- s : for IP state status
- t : display to the end
- z : clear the statistics after this command

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5. isdn ( V2600X/V2600We)

isdn dial <dest name> : dial ISDN ISP name

isdn drop <B1 or B2> : drop ISDN B1 or B2 channel

6. log : show routers logs

log [-cfhipstwx?][F a|c|f|s|w]

-c : for call log

-f : for IP filter log

-F : flush log buffer

a : flush all logs

c : flush the call log

f : flush the IP filter log

s : flush the IP state log

w : flush the wan <ISDN and PPP> log

-h : for the usage help

-i : for ISDN D-channel log

-p : for PPP/MP log

-s : for IP state log

-t : display to the end

-w : for WAN <ISDN and PPP> log

-x : for packet body hex dump

7. quit : quit telnet command

8. srv

srv dhcp

i. fixip

a. add <IP addr> <MAC addr XX-XX-XX-XX-XX-XX> <host ID> : add a DHCP fix IP address

b. del <IP addr> : delete a DHCP fix IP address

ii. gateway <Gateway IP> : set the DHCP server gateway IP address

iii. ipcnt <IP count> : set the DHCP server free IP count

iv. off : disable the DHCP server

v. on : enable the DHCP server

vi. leasetime <Lease Time (sec.)> : set DHCP server lease time, default is 3 days

**note: leasetime 0 : set to default**

vii. relay

a. servip <server IP>: set the DHCP relay agent server IP address

b. subnet <1 or 2> : client is for NAT(1) or enabling routing(2)

viii. badip

a. del <IP addr.> : reset bad IP address to free IP

b. status : show bad IP address

ix. public

a. start <IP address> : public IP start address

b. cnt <IP count> : public free IP count

c. status : show MAC address assigned for public IP

d. add <MAC addr. XX-XX-XX-XX-XX-XX> : add MAC address for public IP

e. del <MAC addr. XX-XX-XX-XX-XX-XX> : delete MAC address for public IP

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## srv nat

### i. portmap

- a. add <idx> <servname> <proto> <pub port> <pri IP> <pri port> : add a NAT portmap

**note:** 1. proto = 0 : disabled  
2. proto = 6 : TCP  
3. proto = 17 : UDP

- b. del <idx> : delete a NAT portmap
- c. disable
- d. enable
- e. flush : clear the NAT table
- f. table : show NAT portmap table

### ii. status : show NAT table

## srv vta ( V2600X, V2600We )

- i. off : disable remote CAPI
- ii. on : enable remote CAPI
- iii. status : show remote CAPI status

## 9. sys

sys admin <ASCII string>

sys cfg

- i. default : set to default factory parameters
- ii. status : show status

sys cmdlog : show the latest command

sys domainname : set domain name

sys iface : show every interface status

sys name <ASCII string (max. 20 characters)> : set machine name

sys passwd <ASCII string (max. 23 characters)> : set password

sys reboot : reboot router

sys tftpd : enable TFTP server

sys version : show router version information

## 10. wan

wan mtu <MTU size:1000-1500>

## 11. adsl

adsl status : show adsl link status, mode, speed, and so on.

adsl hwtest : do adsl DMT chipset hardware self test (ADI Eagle chipset)

adsl idle : enter idle mode that adsl will not response any signal from CO-Side.

adsl reboot : do adsl reset, and it will break current adsl connection.

adsl psd [n] : change Upstream Tx power.

%n : -5 -> +5

adsl oamlb [n] : do F5 OAM Loopback test.

% n : LB Cell Account.

adsl savecfg : save current configuration to flash.

adsl hwtype : show annex A/B information

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```

// for power user
adsl country :set country on cfg.
adsl tally : show Sar & Mac in/out counts on Tx/RX.
adsl sartally : show detail information about SAR.
adsl sarclk : show/adjust Sar operation freq. ( range : 1,2,4,8 )
adsl showbins : show bins (tones) allocated bits, SNR and Gain
adsl utpclk : show/adjust Utopia operation freq. ( range : 1,2,4,8 )
adsl ppp [?] channel vci vpi Encap Proto modu [acqIP] [Username Password]] : create
  PPPoA/PPPoE/1483_xxx and set VPI/VCI, modulation.
    Encap: 0 : VC_MUX, 1 : LLC, 2 : LLC_Bridge, 3 : LLC_Route,
           4 : VCMUX_Bridge, 5 :VCMUX_Route
    Proto: 0 : PPPoA, 1 : PPPoE, 2 : MPoA
    Modu: 0 : T1.413, 1 : G.Lite, 2 : G.dmt, 4 : Multi
    acqIP: 0: fix_ip, 1: dhcp_client. (acquire IP method)
    Username: Username of PPPoE/PPPoA connection.
    Password: Password of PPPoE/PPPoA connection.
Note: You have to reboot the system when you set it on Route mode.
adsl cmv [Symbol Offset] : read CMV register from Eagle chipset (for debug).
Symbol : CMVs symbol name.
    ADPT, CNTL, CODE, DIAG, DOPT, FLAG, INFO, INTL,
    MASK, OPTN, PFCL, PFRX, PFTX, PSDM, RATE, RXDA,
    STAT, TEST, TONE, TXDA, UOPT.

// for debug mode firmware
adsl tonetest tone_num wideband_pow tone_pow : do tone test on giving tone.
adsl lbt : ADSL loopback test
adsl cmvrwt : Test CMV control channel. -10 : Supress Tx Exception

```

#### Additional function

If you log in with **drayteker**, you can get the following commands more.

admin: drayteker

1. ip pcb : show pcb status
2. ip sock : show sock status
3. model
4. srv dialin adduser : do nothing
5. srv dialin cfg status : show remote dial-in access common configuration
6. srv dialin deluser <list index> : delete dial in user index
7. srv dialin off : do nothing
8. srv dialin on : do nothing
9. srv dialin status : do nothing
10. srv dialin userlist : show dial in user list
11. srv dialin useroff <list index>: disable the dial in index user
12. srv dialin useron <list index> : enable the dial in index user
13. srv dialout : do nothing
14. sys debug : implement wrong, show insufficient arguments

- 
- 15. sys key : show system key
  - 16. sys mem <HEX addr.> : dump memory
  - 17. sys task : show system task
  - 18. sys tst <mode> <pattern 01010101>
    - 0 : Reset PHY using PHY services
    - 1 : PHY sleep using PHY services
    - 2 : PHY sleep using PHY services
    - 3 : PHY wake-up using PHY services
    - 8 : Change channel / frequency
    - 9 : Supress Post back-off delay
    - 10 : Supress Tx Exception
    - 11 : Start monitor mode
    - 14 : Start continuous transmission; data (16-bits,binary)
    - 15 : Stop Testing
    - 16 : Continuous Receive
    - 17 : SetSignal
    - 19 : Cal Enable

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## Call Logs

The Call log provides a simple method for troubleshooting call setup or WAN connection problems. By default, the router records WAN connection messages. This information can be helpful in diagnosing WAN connection problems. If you do not understand the content, you can easily save the log and send it to a support technician.

The steps are:

1. Login to the Telnet terminal.
2. Type `log -F c` to clear all call logs.
3. Ping to any outside host to trigger the router to dial from your PC.
4. Type `log -c` to display the latest call log.

ISDN example:

```
vigor2600> log -c
14:48:59.480 >>> Dial-up triggered by user : 192.168.1.18
                  proto=icmp, to 168.95.1.1
14:48:59.480 Dialing ISP (Hinet) : 04125678
14:49:00.000 PPP Start (B1)
14:49:03.230 PAP Login OK (B1)
14:49:03.280 IPCP Opening (B1)
                  Own IP Address : 163.31.241.167 Peer IP Address : 168.95.67.195
                  Primary DNS : 168.95.192.1 Secondary DNS : 168.95.1.1
vigor2600> █
```

PPPoE example:

```
vigor2600> log -c
15:04:10.320 >>> Dial-up triggered by user : 192.168.1.18
                  proto=icmp, to 168.95.1.1
15:04:10.760 PPP Start (PPPoE)
15:04:13.310 PAP Login OK (PPPoE)
15:04:13.450 IPCP Opening (PPPoE)
                  Own IP Address : 168.95.186.16 Peer IP Address : 168.95.186.254
                  Primary DNS : 168.95.192.1 Secondary DNS : 168.95.1.1
vigor2600> █
```

## ISDN Logs

To capture messages exchanged on the ISDN interface, use the `log -i` command to dump all exchanged messages on the ISDN interface.

The steps are:

1. Login to the Telnet terminal.
2. Type `log -F w` to clear all ISDN logs.
3. Ping to any outside host to trigger the router to dial from your PC.
4. Type `log -i` to display the latest ISDN log. To display all ISDN logs saved in the log buffer, type `log -i -t`.

Detailed ISDN log example:

```
15:15:59.550 ---->D Len=27 LAPD TE C SAPI=0 TEI=75 INFO P=0 NR=4 NS=4
      23 bytes ETSI 102
      Orig CR=0x3E PD=Q.931 SETUP
1 00000100 INFORMATION ELEMENT : Bear Capability
2 00000010 IE length : 2 octets
3 1----- Extension bit : not continued
  -00----- Coding standard : CCITT standard coding as described below
--- MORE --- ['q': Quit, 'Enter': New Lines, 'Space Bar': Next Page] ---
  ---01000 Info. transfer capability : unrestricted digital information
4 1----- Extension bit : not continued
  -00----- Transfer mode : circuit mode
  ---10000 Information transfer rate : 64 kbit/s
1 00011000 INFORMATION ELEMENT : Channel Identification
2 00000001 IE length : 1 octets
3 1----- Extension bit : not continued
  -0----- Interface ident. : implicit identified
  --0----- Interface type : basic interface
  ---0----- Spare
  ----0--- Preferred/exclusive : indicate channel is preferred
  -----0-- D-channel indicator : the channel identified is not the D-channel
  -----11 Information channel selection : any channel
1 01110000 INFORMATION ELEMENT : Called Party Number
2 00001001 IE length : 9 octets
3 1----- Extension bit : not continued
  -000----- Type of number : unknown
  ----0000 Numbering plan : unknown
4 ***** Number digits : [04125678]
19 10100001 INFORMATION ELEMENT : 0xA1
```

The above example shows detailed D-channel **SETUP** messages only. Note that all ISDN D-channel messages will be displayed when you type the **log -i -t** command. This command allows you to see whether the ISDN connection could be established or not. Note that if you cannot understand the details, save these messages in a file and send it to a support technician.

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## PPP Logs

To view PPP logs, type `log -p`.

The steps are:

1. Login to the Telnet terminal.
2. Type `log -F w` to clear all PPP logs.
3. Ping to any outside host to trigger the router to dial from your PC.
4. Type `log -p` to display the latest PPP log. To display all PPP logs, use the `log -p -t` command.

```
vigor2600> log -p
16:07:00.000 >>>>B1 Len=27
  Protocol:LCP(c021)
    ConfReq Identifier:0x00
      Protocol Field Compression
      Address/Control Field Compression
      MRRU: 1500
      Short Sequence Number Header Format
      Endpoint Discriminator
        Locally Assigned Address: 00 0f 77 24 00 0f ##

16:07:00.970 >>>>B1 Len=27
  Protocol:LCP(c021)
    ConfReq Identifier:0x01
      Protocol Field Compression
      Address/Control Field Compression
      MRRU: 1500
      Short Sequence Number Header Format
      Endpoint Discriminator
        Locally Assigned Address: 00 0f 77 24 00 0f ##
```

The PPP log is useful in solving communication problems for normal ISDN dialup, or PPPoE and PPTP dialup via a DSL modem.

## WLAN Logs

To view all WAN logs, including ISDN D-channel and PPP/PPPoE/ PPTP messages, the simplest way is to type `log -w -t`.

The steps are:

1. Login to the Telnet terminal.
2. Type `log -F w` to clear all PPP/PPPoE/PPTP and ISDN logs.
3. Ping to any outside host to trigger the router to dial from your PC.
4. Type `log -w` to display the latest WAN log. If you want to display all WAN logs, use the `log -w -t` command.