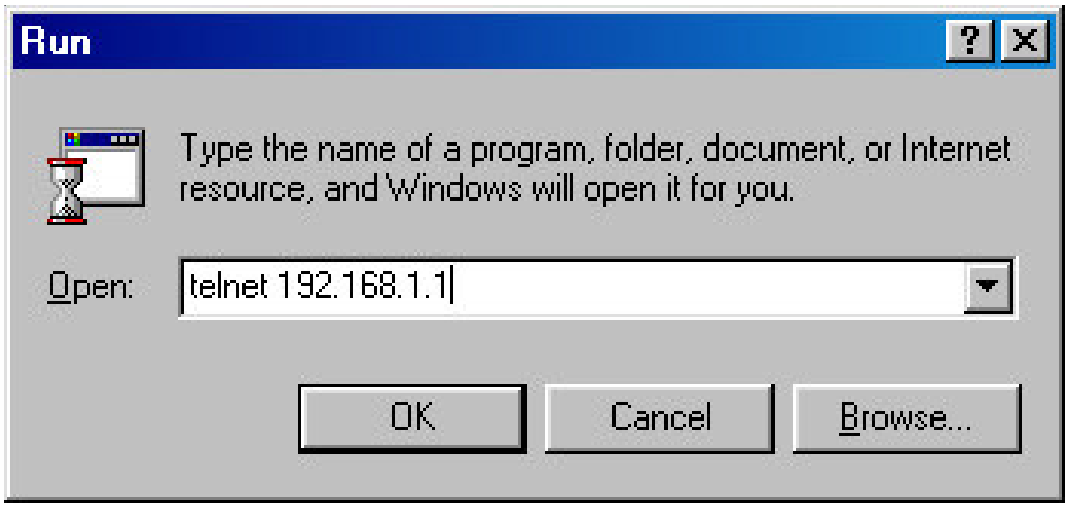
Telnet/ Logs Commands

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

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 dhcpc
      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 a filter rule's statistics
      -Z: clear IP filter's gross statistics
      -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

5. isdn (VigorX/Vigori/VigorW/VigorGi)
   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

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 (VigorX/i, VigorW/Gi)

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 hareware self test (ADI Eagle chipset)(V2600 only)
adsl idle : enter idle mode that adsl will not respose any signal from CO-Side.
adsl reboot : do adsl reset, and it will break current adsl connection.
adsl psd [n] : change Upstream Tx power. (V2600 only)
%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

// for power user
adsl ppp [channel vci vpi Encap Proto modu | 0 : fix_ip, 1 : dhcp_client] :
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
adsl cmv [Symbol Offset] : read CMV register from Eagle.(V2600 only)
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.
adsl cmvinfo : show CMV information(V2600 only)

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

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.

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/PPPoA/ 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/PPPoA/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.