Using the original Panda distribution.
No changes to the Monitor or Exec (yet).

```
$ nmcli connection show
NAME                UUID                                  TYPE      DEVICE
bridge0             5cca71a2-f875-4d47-b795-74a471b056e5  bridge    bridge0
Wired connection 1  2a0d0381-64e0-448d-9c07-9d29436b8110  ethernet  enp0s3
tap0-kanga          838777c5-305a-401a-887c-8cd090838afa  tun       tap0
tap1-roo            60ff6f9c-6fca-4773-8e09-9813a5504c0b  tun       tap1
tap2-tigger         47500cec-a2f6-41fe-929d-268279bf0709  tun       tap2
tap3                16a87363-8f0d-47f4-975f-0b9dff1ad2ed  tun       tap3
lo                  45fbd087-2816-4d3a-9beb-c94ff5e6acf0  loopback  lo
$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel master bridge0 state UP group
default qlen 1000
    link/ether 08:00:27:14:5c:13 brd ff:ff:ff:ff:ff:ff
3: bridge0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen
1000
    link/ether 42:82:83:ef:cf:41 brd ff:ff:ff:ff:ff:ff
    inet 192.168.4.52/16 brd 192.168.255.255 scope global noprefixroute bridge0
       valid_lft forever preferred_lft forever
4: tap3: <NO-CARRIER,BROADCAST,MULTICAST,PROMISC,UP> mtu 1500 qdisc fq_codel state DOWN group
default qlen 1000
    link/ether 06:a5:29:62:2f:99 brd ff:ff:ff:ff:ff:ff
5: tap2: <BROADCAST,MULTICAST,PROMISC,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default
qlen 1000
    link/ether 4e:65:ca:e2:d6:25 brd ff:ff:ff:ff:ff:ff
6: tap1: <BROADCAST,MULTICAST,PROMISC,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default
qlen 1000
    link/ether b6:d7:80:a1:9f:34 brd ff:ff:ff:ff:ff:ff
7: tap0: <NO-CARRIER,BROADCAST,MULTICAST,PROMISC,UP> mtu 1500 qdisc fq_codel state DOWN group
default qlen 1000
    link/ether b2:c9:03:ef:11:46 brd ff:ff:ff:ff:ff:ff

--------------------------------------------------------------------------------

S sudo -E ./pdp10-kl $TIGGER/tigger-simh.ini


  Starting up Tigger on SIMH running the Panda distribution

       tap+bridge has been permanently configured via nmcli
       running PDP10-KL with root privs (sudo) "


KL-10 simulator Open SIMH V4.1-0 Current        git commit id: 86bfb945+uncommitted-changes

------------------------

CPU     idle disabled, Serial: 1025 (default)
        4MW, KL10B, DF10C

RPA0    110MW, attached to Tigger/tigger-panda.RP07.DBD9, write enabled
        RP07, DBD9 format

TUA0    0MW, not attached, write locked
        SIMH format, unlimited capacity, density not set
TUA1    0MW, not attached, write locked
```

```
        SIMH format, unlimited capacity, density not set

TTY     lines=64
        attached to 4256, 7b, 0 current connections

LP20
        attached to Tigger/print.lst, Lower case, linesperpage=66

NI      MAC=AA:00:04:00:9C:10
        attached to tap:tap2

Loading boot file:    bts/boot.sav
Start addr=040000

------------------------
sim> show version
KL-10 simulator Open SIMH V4.1-0 Current
    Simulator Framework Capabilities:
        64b data
        32b addresses
        Threaded Ethernet Packet transports:PCAP:TAP:VDE:NAT:UDP
        Idle/Throttling support is available
        Virtual Hard Disk (VHD) support
        RAW disk and CD/DVD ROM support
        Asynchronous I/O support (Lock free asynchronous event queue)
        Asynchronous Clock support
        FrontPanel API Version 12
    Host Platform:
        Compiler: GCC 13.3.0
        Simulator Compiled as C arch: x64 (Release Build) on Aug 14 2025 at 15:44:56
        Build Tool: CMake (Unix Makefiles)
        Memory Access: Little Endian
        Memory Pointer Size: 64 bits
        Large File (>2GB) support
        SDL Video support: No Video Support
        PCRE RegEx (Version 8.39 2016-06-14) support for EXPECT commands
        OS clock resolution: 1ms
        Time taken by msleep(1): 1ms
        Ethernet packet info: libpcap version 1.10.4 (with TPACKET_V3)
        OS: Linux VonBraun 6.14.0-27-generic #27~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Tue Jul 22
17:38:49 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
        Processor Name: AMD Ryzen 7 3800X 8-Core Processor
        tar tool: tar (GNU tar) 1.35
        curl tool: curl 8.15.0 (x86_64-pc-linux-gnu) libcurl/8.15.0 OpenSSL/3.5.1 zlib/1.3
brotli/1.1.0 zstd/1.5.5 libidn2/2.3.7 libpsl/0.21.2 libssh2/1.11.0 nghttp2/1.59.0 nghttp3/1.11.0
librtmp/2.3 OpenLDAP/2.6.7
        git commit id: 86bfb945+uncommitted-changes
        git commit time: 2024-10-19 19:47:46-04:00
sim>
sim> show ethernet
ETH devices:
 eth0  enp0s3                                (No description available)
 eth1  bridge0                               (No description available)
 eth2  tap2                                  (No description available)
 eth3  tap1                                  (No description available)
 eth4  tap3                                  (No description available)
 eth5  tap0                                  (No description available)
 eth6  tap:tapN                              (Integrated Tun/Tap support)
 eth7  vde:device{:switch-port-number}       (Integrated VDE support)
 eth8  nat:{optional-nat-parameters}         (Integrated NAT (SLiRP) support)
 eth9  udp:sourceport:remotehost:remoteport (Integrated UDP bridge support)
Open ETH Devices:
 NI     tap:tap2 (No description available)
Ethernet Device:
```

```
  Name:                   tap2
  Reflections:            0
  Self Loopbacks Sent:    2
  Self Loopbacks Rcvd:    0
  Packets Sent:           2
  Asynch Interrupts:      Enabled
  Interrupt Latency:      0 uSec
  Read Queue: Count:      0
  Read Queue: High:       0
  Read Queue: Loss:       0
  Peak Write Queue Size:  0
  MAC Filter[ 0]: AA:00:04:00:9C:10
  MAC Filter[ 1]: FF:FF:FF:FF:FF:FF
sim>


              -- or --


S sudo -E ./pdp10-kl $ROO/roo-simh.ini


  Starting up ROO on SIMH running the Panda distribution

       tap+bridge has been permanently configured via nmcli
       running PDP10-KL with root privs (sudo)


KL-10 simulator Open SIMH V4.1-0 Current        git commit id: c20b391e+uncommitted-changes

------------------------

CPU     idle disabled, Serial: 1025 (default)
        4MW, KL10B, DF10C

RPA0    110MW, attached to Roo/roo-panda.rp, write enabled
        RP07, SIMH format

TUA0    0MW, not attached, write locked
        SIMH format, unlimited capacity, density not set
TUA1    0MW, not attached, write locked
        SIMH format, unlimited capacity, density not set

TTY     lines=64
        attached to 4255, 7b, 0 current connections

LP20
        attached to Roo/print.lst, Lower case, linesperpage=66

NI      MAC=AA:00:04:00:9B:10
        attached to tap:tap1

Loading boot file:    bts/boot.sav
Start addr=040000
To start              type: c
After: BOOT>          type <enter>
After: Why reload?    type {new|op|cm|ha|hu|pm|sch|sa|other}
After: SJ 0:          type ^C to get the systems attention

------------------------
sim> sim>
sim> show version
```

```
KL-10 simulator Open SIMH V4.1-0 Current
    Simulator Framework Capabilities:
        64b data
        32b addresses
        Threaded Ethernet Packet transports:PCAP:TAP:VDE:NAT:UDP
        Idle/Throttling support is available
        Virtual Hard Disk (VHD) support
        RAW disk and CD/DVD ROM support
        Asynchronous I/O support (Lock free asynchronous event queue)
        Asynchronous Clock support
        FrontPanel API Version 12
    Host Platform:
        Compiler: GCC 13.3.0
        Simulator Compiled as C arch: x64 (Release Build) on Aug 18 2025 at 18:44:48
        Build Tool: CMake (Unix Makefiles)
        Memory Access: Little Endian
        Memory Pointer Size: 64 bits
        Large File (>2GB) support
        SDL Video support: No Video Support
        PCRE RegEx (Version 8.39 2016-06-14) support for EXPECT commands
        OS clock resolution: 1ms
        Time taken by msleep(1): 1ms
        Ethernet packet info: libpcap version 1.10.4 (with TPACKET_V3)
        OS: Linux VonBraun 6.14.0-27-generic #27~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Tue Jul 22
17:38:49 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
        Processor Name: AMD Ryzen 7 3800X 8-Core Processor
        tar tool: tar (GNU tar) 1.35
        curl tool: curl 8.15.0 (x86_64-pc-linux-gnu) libcurl/8.15.0 OpenSSL/3.5.1 zlib/1.3
brotli/1.1.0 zstd/1.5.5 libidn2/2.3.7 libpsl/0.21.2 libssh2/1.11.0 nghttp2/1.59.0 nghttp3/1.11.0
librtmp/2.3 OpenLDAP/2.6.7
        git commit id: c20b391e+uncommitted-changes
        git commit time: 2025-03-03 16:26:28-08:00
sim>
sim> show ethernet
ETH devices:
 eth0  enp0s3                               (No description available)
 eth1  bridge0                              (No description available)
 eth2  tap2                                 (No description available)
 eth3  tap1                                 (No description available)
 eth4  tap3                                 (No description available)
 eth5  tap0                                 (No description available)
 eth6  tap:tapN                             (Integrated Tun/Tap support)
 eth7  vde:device{:switch-port-number}      (Integrated VDE support)
 eth8  nat:{optional-nat-parameters}        (Integrated NAT (SLiRP) support)
 eth9  udp:sourceport:remotehost:remoteport (Integrated UDP bridge support)
Open ETH Devices:
 NI     tap:tap1 (No description available)
Ethernet Device:
  Name:                    tap1
  Reflections:             0
  Self Loopbacks Sent:     2
  Self Loopbacks Rcvd:     0
  Packets Sent:            2
  Asynch Interrupts:       Enabled
  Interrupt Latency:       0 uSec
  Read Queue: Count:       0
  Read Queue: High:        0
  Read Queue: Loss:        0
  Peak Write Queue Size:   0
  MAC Filter[ 0]: AA:00:04:00:9B:10
  MAC Filter[ 1]: FF:FF:FF:FF:FF:FF
sim>

------------------------
```

```
sim> go

ena
BOOT V11.0(315)

BOOT>

[BOOT: Loading] [OK]


[PS mounted]
TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4 Internet: Loading host names [OK]

System res
Date and time is: Tuesday, 26-August-2025 5:30PM
Why reload? SA
Run CHECKD? N
 DDMP: Started
[KNILDR: Loading microcode version 1(172) into Ethernet channel 0]
26-Aug-2025 17:30:54 Internet: Network 192.168.4.0 on, Output on


SYSJOB 7A(88)-4 started at 26-Aug-2025 1730
SJ  0: @LOGIN OPERATOR
SJ  0: @ENABLE
SJ  0: $SYSTEM:STSJ1
26-Aug-2025 17:30:55 SYSJB1: SYSJB1 started.
SJ  0: $^ESET LOGIN ANY
SJ  0: $OPR

 [NCP]:              Waiting for ORION to start
26-Aug-2025 17:30:58 SYSJB1: Job 0:
26-Aug-2025 17:30:58 SYSJB1: Job 0:  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:58 SYSJB1: Job 1:
26-Aug-2025 17:30:58 SYSJB1: Job 1:  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:58 SYSJB1: Job 2:
26-Aug-2025 17:30:58 SYSJB1: Job 2:  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:58 SYSJB1: Job 3:
26-Aug-2025 17:30:58 SYSJB1: Job 3:  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:59 SYSJB1: Job 4:
26-Aug-2025 17:30:59 SYSJB1: Job 4:  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:59 SYSJB1: Job 5:
26-Aug-2025 17:30:59 SYSJB1: Job 5:
SJ  0: OPR>TAKE SYSTEM:SYSTEM.CMD
SJ  0:
SJ  0: 17:30:59       --ORION log file SPOOL:OPERATOR-SYSTEM.LOG already open .. command ignored--
  TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4
26-Aug-2025 17:30:59 SYSJB1: Job 1: @LOGIN
SJ  0:
SJ  0: 17:30:59       --Output display for OPR modified--
 OPERATOR
26-Aug-2025 17:31:00 SYSJB1: Job 1: @ENABLE
26-Aug-2025 17:31:00 SYSJB1: Job 3: @LOGIN OPERATOR
26-Aug-2025 17:31:00 SYSJB1: Job 5: @LOGIN OPERATOR
26-Aug-2025 17:31:00 SYS
SJ  0:
SJ  0: 17:31:00       --Output display for OPR modified--
SJ  0:
SJ  0: 17:31:00       --Output display for OPR modified--
JB1: Job 0: @LOGIN OPERATOR
26-Aug-2025 17:31:00 SYSJB1: Job 0: @ENABLE
26-Aug-2025 17:31:00 SYSJB1: Job 1: $NETSRV
26-Aug-2025 17:
```

```
SJ  0:
SJ  0: 17:31:00       --Output display for OPR modified--
31:00 SYSJB1: Job 2: @LOGIN OPERATOR
26-Aug-2025 17:31:00 SYSJB1: Job 2: @ENABLE
26-Aug-2025 17:31:00 SYSJB1: Job 3: @ENABLE
26-Aug-2025 17:31:00 SYSJB1: Job 4: @LOGIN OPERATOR
26-Au
SJ  0:
SJ  0: 17:30:59       Batch-Stream 0  -- Set Accepted --
g-2025 17:31:00 SYSJB1: Job 5: @ENABLE
26-Aug-2025 17:31:01 SYSJB1: Job 5: $FTS
26-Aug-2025 17:31:01 SYSJB1: Job 0: $RESOLV
26-Aug-2025 17:31:01 SYSJB1: Job 2: $SMTJFN
26-Aug-2025 17
% [Logger 26-Aug-2025 17:31:01 ]: Started at 26-Aug-2025 17:30:57

SJ  0:
SJ  0: 17:30:59       Batch-Stream 1  -- Set Accepted --
:31:01 SYSJB1: Job 3: $MMAILR
26-Aug-2025 17:31:01 SYSJB1: Job 4: @ENABLE
26-Aug-2025 17:31:01 SYSJB1: Job 5: FTS>TAKE FTS.CMD
SJ  0:
SJ  0: 17:30:59       Batch-Strea
26-Aug-2m 2  -- Set Accepted --
SJ  0:
SJ  0: 17:30:59       Batch-Stream 3  -- Set Accepted --
025 17:31:01 SYSJB1: Job 4: $IMAPSV
SJ  0:
SJ  0: 17:31:01       Batch-Stream 0  -- Set Accepted --
26-Aug-2025 17:31:02 SYSJB1: Job 5: [FTS20: FTS event
SJ  0:
SJ  0: 17:31:01       Batch-Stream 1  -- Set Accepted --
38: spooler started]
SJ  0:
SJ  0: 17:31:01       Batch-Stream 2  -- Set Accepted --
SJ  0:
SJ  0: 17:31:01       Batch-Stream 3  -- Set Accepted --
SJ  0:
SJ  0: 17:3
17:31:03 From operator terminal 13 on n1:01       Batch-Stream 0  -- Startup Scheduled --
SJ  0:
SJ  0: 17:31:01       Batch-Stream 1  -- Startup Scheduled --
SJ  0:
SJ  0: 17:31:01       Batch-Stream 2  -- Startup Scheduled --
SJ  0:
SJ  0: 17:31:01       Batch-Stream 3  -- Startup Scheduled --
SJ  0: OPR>TAKE SYSTEM:NCP.CMD
SJ  0:
SJ  0: 17:31:03       --SEND command completed--
SJ  0:
SJ  0: 17:31:04         -- Structure Status Change Detected --
SJ  0:         Previously mounted structure PS: detected
SJ  0:
SJ  0: 17:31:04         -- Structure Status Change Detected --
SJ  0:         Structure state for structure PS is incorrect
SJ  0:           EXCLUSIVE/SHARED attribute set incorrectly
SJ  0:         Status of structure PS: is set:
SJ  0:         Domestic, Unregulated, Shared, Available, Dumpable
SJ  0:
SJ  0:
SJ  0: 17:31:08       NCP
SJ  0:
SJ  0: Request # 1; Set Node Completed
SJ  0:
```

```
SJ  0: 17:31:08       NCP
SJ  0:
SJ  0: Request # 2; Set Node Completed
SJ  0:
SJ  0: 17:31:11       NCP
SJ  0:
SJ  0: Request # 3; Set Logging Completed
SJ  0:   Logging = File
SJ  0:
SJ  0:
SJ  0:
SJ  0: 17:31:14       NCP
SJ  0:
SJ  0: Request # 4; Set Circuit Completed
SJ  0:
SJ  0: 17:31:14       NCP
SJ  0:
SJ  0: Request # 5; Set Circuit Completed
SJ  0:
SJ  0: 17:31:17       NCP
SJ  0:
SJ  0: Request # 6; Set Node Completed
SJ  0:
SJ  0: 17:31:17       NCP
SJ  0:
SJ  0: Request # 7; Set Node Completed
SJ  0:
SJ  0: 17:31:17       NCP
SJ  0:
SJ  0: Request # 8; Show Known Nodes Summary Completed
SJ  0:
SJ  0:       Node       State       Active  Delay  Circuit       Next node
SJ  0:                                 links
SJ  0:   4.154 (KANGA)                            NI-0-0
SJ  0:   4.155 (ROO)    On             0
SJ  0:   Identification = DECnet-20 Version 4.0
SJ  0:   4.156 (TIGGER)                           NI-0-0
SJ  0:
SJ  0:
SJ  0: 17:31:18       NCP
SJ  0:
SJ  0: Request # 9; Show Known Circuits Summary Completed
SJ  0:
SJ  0: Circuit     State                  Loopback    Adjacent
SJ  0:                                      Name        Node
SJ  0: NI-0-0      On
SJ  0:
SJ  0:
SJ  0: 17:31:18       NCP
SJ  0:
SJ  0: Request # 10; Show Known Lines Summary Completed
SJ  0:
SJ  0: Line     State
SJ  0: NI-0-0   On
SJ  0:


 TOPS-20 System ROO, PANDA TOPS-20 Monitor 7.1(21733)-4

This system is for the use of authorized users only.  Usage of
this system may be monitored and recorded by system personnel.

Anyone using this system expressly consents to such monitoring
and is advised that if such monitoring reveals possible
```

```
evidence of criminal activity, system personnel may provide the
evidence from such monitoring to law enforcement officials.

@login operator
@
@ena
$
$information decnet
 Local DECNET node: ROO.  Nodes reachable: 1.
 Accessible DECNET nodes are:       ROO
$
$information internet
 Network 192.168.4.0 host name is roo.c3cyphers.com
 Network interface type is IPNI, Internet address is 192.168.4.155
 Network interface is up, output is enabled
 Network service is enabled
 Last network interface up transition: 26-Aug-2025 17:39:39
$
$OPR
OPR>set port NI available

13:28:50           -- Problem Setting Port --
               NI Port already set available
OPR>exit
$
$connect <system>
$
$spear
       ...
$;  SPEAR shows no errors  (only startup and shutdown messages)
$
$type monnam.txt
TOPS-20 System ROO
$
$type 7-1-config.cmd
! ROO configuration parameters
!
! Systemwide logical name definitions
!
DEFINE BLI: SYS:
DEFINE C: PS:<KCC-6.INCLUDE>
DEFINE CLISP: PS:<CLISP>
DEFINE DEFAULT-EXEC: SYSTEM:EXEC.EXE
DEFINE DEFAULT-MAILER: SYS:MM.EXE
DEFINE DOC: PS:<DOCUMENTATION>
DEFINE DOMAIN: PS:<DOMAIN>
DEFINE EDITOR: SYS:EDT
DEFINE EMACS: PS:<EMACS>
DEFINE FINGER: PS:<FINGER>
DEFINE FUN: PS:<GAMES>
DEFINE HLP: PS:<HELP>
DEFINE INTERLISP: PS:<LISP>
DEFINE LISP: PS:<LISP>
DEFINE LOGIN-EXEC: SYSTEM:EXEC.EXE
DEFINE MACLISP: PS:<MACLISP>
DEFINE MAIL: PS:<MAIL>
DEFINE MAILQ: PS:<MAIL.QUEUE>
DEFINE MM: PS:<MM>
DEFINE MTA-DUMPER: MTA0:
DEFINE NEW: PS:<NEW-SUBSYS>,SYS:
DEFINE NRT: SYS:SETHOST.EXE
DEFINE OPR: CTY:
DEFINE PLOT: UNS:
DEFINE POBOX: PS:
```

```
DEFINE SAI: PS:<SAIL>
DEFINE SCRIBE: PS:<SCRIBE>
DEFINE SERR: PS:<SYSTEM-ERROR>
DEFINE SYS: PS:<SUBSYS>,DOMAIN:,UNS:,UNIX-SYS:,SAI:,FUN:,HLP:,DSK:
DEFINE SYSTEM: PS:<SYSTEM>
DEFINE UNIX-ROOT: PS:<ROOT>
DEFINE UNIX-SYS: PS:<ROOT.BIN>,PS:<ROOT.USR.BIN>
DEFINE UNS: PS:<UNSUPPORTED>
DEFINE UNV: SYS:
!
! Other definitions
!
TIMEZONE 0
BATCH-BACKGROUND
DISABLE ACCOUNT-VALIDATION
!ENABLE TAPE-DRIVE-ALLOCATION
ENABLE WORKING-SET-PRELOADING
TAPE-RECOGNITION-ERRORS REGARD-AS-UNLABELED
NODE ROO 4.155
DECNET ROUTER-ENDNODE
! ETHERNET 0 DECNET
$
$type 7-1-sysjob.run
RUN SYS:INFO
JOB 0 "LOGIN OPERATOR
ENABLE
SYSTEM:STSJ1
^ESET LOGIN ANY
OPR
TAKE SYSTEM:SYSTEM.CMD
TAKE SYSTEM:NCP.CMD
"
$
$type system.cmd
ENABLE LOGGING
ENABLE OUTPUT-DISPLAY BUGINF-MESSAGES
ENABLE OUTPUT-DISPLAY BUGCHK-MESSAGES
ENABLE OUTPUT-DISPLAY SYSTEM-MESSAGES
ENABLE OUTPUT-DISPLAY ALL-MESSAGES /JOB
SET BATCH-STREAM 0:3 TIME-LIMIT 11000
SET BATCH-STREAM 0:3 PRIORITY-LIMITS 1:63
START BATCH-STREAM 0:3
!WAIT 5
!NCP SET CIRCUIT NI-0-0 SERVICE ENABLED
!NCP SET CIRCUIT NI-0-0 STATE ON
SEND ALL System in operation
$
$type ncp.cmd
!
!      NCP.CMD
!
WAIT 5
NCP SET EXEC HARDWARE ADDRESS AA-00-04-00-9B-10
NCP SET EXEC CPU DECSYSTEM-1020
!
WAIT 3
NCP SET KNOWN LOGGING STATE ON
!
WAIT 3
!      LINE NI-0-0 is already started at this point
NCP SET CIRCUIT NI-0-0 SERVICE ENABLED
NCP SET CIRCUIT NI-0-0 STATE ON
!
WAIT 3
```

```
NCP SET NODE 4.154 NAME KANGA
NCP SET NODE 4.156 NAME TIGGER
!
!NCP SHOW EXEC CHAR
NCP SHOW KNOWN NODES
NCP SHOW KNOWN CIRCUITS
NCP SHOW KNOWN LINES
$
$type internet.address
IPNI#0, 192.168.4.155, PACKET-SIZE:1500, LOGICAL-HOST-MASK:255.255.0.0, DEFAULT, PREFERRED
$
$type internet.gateways
PRIME 192.168.0.1
$
$type internet-ethernet-mappings.txt
!       This is the mapping file for network c3cyphers.com
HOST 48-22-54-A0-B5-80 192.168.0.1        ;C3Firewall
HOST 98-B7-85-22-3A-52 192.168.0.9        ;EASCortez
HOST 98-B7-85-22-3A-54 192.168.3.1        ;EASCortez_3_Subnet
HOST 98-B7-85-22-3A-55 192.168.4.1        ;EASCortez_4_Subnet
HOST 98-B7-85-22-38-53 192.168.5.1        ;EASCortez_5_Subnet
HOST 7C-83-34-BF-38-05 192.168.0.12       ;DNS_Liandra
HOST AA-00-04-00-97-0C 192.168.3.151      ;Eeyore
HOST 08-00-27-2D-34-66 192.168.4.51       ;Goddard
HOST 08-00-27-24-5C-13 192.168.4.52       ;VonBraun
HOST AA-00-04-00-9A-10 192.168.4.154      ;Kanga
HOST AA-00-04-00-9B-10 192.168.4.155      ;Roo
HOST AA-00-04-00-9C-10 192.168.4.156      ;Tigger
$
$type <chives.v1.config>resolv.config
;<chives.v1.config>RESOLV.CONFIG.1,  Aug-2025, Edit by SgC
;
; This is the configuration file for XX's domain resolver.
; At the moment there isn't any documentation other than this
; file to explain why certain things are set up the way they are.
;
; Default (safety belt) nameservers.  These are contacted when we
; are completely unable to figure out who ask a particular query.
DSERVE 192.168.0.12          ;dns.c3cyphers.com.
DSERVE 192.168.4.51          ;dns2.c3cyphers.com.
;
; Locally loaded zones and search paths.
;
; Remote searches.
RSEARCH       .                    ;Try for fully specified name first
RSEARCH       c3cyphers.com.       ;Local Domain
;
;Privileged user(s) who can send resolver control messages
WHOPR         OPERATOR      ;System Jobs
;
$
$type <domain>resolv.config
; Default (safety belt) nameservers.  These are contacted when we
; are completely unable to figure out who ask a particular query.
DSERVE 192.168.0.12
DSERVE 192.168.4.51
;
; Locally loaded zones and search paths.
;
; Remote searches.
RSEARCH       .             ;Try for fully specified name first
RSEARCH       c3cyphers.com.
;
; Privileged user(s) who can send resolver control messages
```

```
WHOPR          OPERATOR       ;System Jobs
;
$
$type hosts.txt
;
; Panda system ROO Internet Host Table
;
; The format for entries is:
;
; NET     : NET-ADDR : NETNAME :
; GATEWAY : ADDR, ADDR : NAME : CPUTYPE : OPSYS : PROTOCOLS :
; HOST    : ADDR, ALTERNATE-ADDR (if any): HOSTNAME,NICKNAME : CPUTYPE :
; OPSYS   : PROTOCOLS :
;
; Where:
;;  ADDR = internet address in decimal, e.g., 26.0.0.73
;;  CPUTYPE = machine type (PDP-11/70, VAX-11/780, FOONLY-F3, C/30, etc.)
;;  OPSYS = operating system (UNIX, TOPS20, TENEX, ITS, etc.)
;;  PROTOCOLS = transport/service (TCP/TELNET,TCP/FTP, etc.)
;;  : (colon) = field delimiter
;;  :: (2 colons) = null field
NET     : 192.168.0.0    : c3cyphers.com :
GATEWAY : 192.168.0.1    : c3firewall.c3cyphers.com             : : : IP/GW,TCP/TELNET :
HOST    : 192.168.0.9    : eascortez.c3cyphers.com, eascortez   : AMD64  : WIN11   : TCP/TELNET,TCP/FP,TCP/SMTP
:
HOST    : 192.168.0.12   : liandra.c3cyphers.com, liandra, dns  : LINUX  : LINUX   : TCP/TELNET,TCP/FTP :
HOST    : 192.168.3.51   : goddard.c3cyphers.com, goddard, dns2 : AMD64  : LINUX   : TCP/TELNET,TCP/FTP :
HOST    : 192.168.4.52   : vonbraun.c3cyphers.com, vonbraun     : AMD64  : LINUX   : TCP/TELNET,TCP/FTP,TCP/SMTP
:
HOST    : 192.168.3.1    : eascortez_3                          : AMD64  : WIN11   : :
HOST    : 192.168.4.1    : eascortez_4                          : AMD64  : WIN11   : :
HOST    : 192.168.5.1    : eascortez_5                          : AMD64  : WIN11   : :
HOST    : 192.168.0.1    : c3firewall.c3cyphers.com, c3firewall : : : IP/GW,TCP/TELNET :
HOST    : 192.168.4.155  : roo.c3cyphers.com, roo               : KLH-KL : TOPS-20 : TCP/TELNET,TCP/FTP,TCP/SMTP
:
HOST    : 192.168.4.154  : kanga.c3cyphers.com, kanga           : KLH-KL : TOPS-20 : TCP/TELNET,TCP/FTP,TCP/SMTP
:
HOST    : 192.168.4.156  : tigger.c3cyphers.com, tigger         : KLH-KL : TOPS-20 : TCP/TELNET,TCP/FTP,TCP/SMTP
:
HOST    : 192.168.3.151  : eeyore.c3cyphers.com, eeyore         : KLH-KL : TOPS-20 : TCP/TELNET,TCP/FTP,TCP/SMTP
:
;
; All known Panda TOPS-20 sites are listed below
;
HOST : 172.16.36.36 : KanKan.Twenex.ORG : KLH-KL : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
;
; Other known KLH-KL TOPS-20 systems
;
HOST : 158.174.114.159 : Tina.Update.UU.SE : KLH-KL : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
;
; Known TOAD systems
;
HOST : 192.94.202.40   : Toad.XKL.COM     : TOAD-1 : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
HOST : 192.108.197.6   : Toad.Stupi.COM   : TOAD-1 : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
HOST : 66.96.161.132   : XKL.RestStop.COM : TOAD-1 : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
HOST : 50.78.42.60     : XKLeten.PaulAllen.COM : TOAD-1 : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
;
; Known SC systems
;
HOST  : 192.36.150.1   : Storm.Stupi.SE : SC30M : TOPS20 : TCP/TELNET,TCP/FTP,TCP/SMTP :
;
; Known ITS systems
;
HOST  : 71.19.150.46   : ITS.Svensson.ORG : KLH-KS : ITS : TCP/TELNET,TCP/FTP,TCP/SMTP :
;
;
; Known TOPS-10 systems
;
$
```