A/UX: TCP/IP Configuration

How is TCP/IP configuration performed in A/UX?
This article has been archived and is no longer updated by Apple.

First Time Configuration

Before beginning configuration, collect the information needed which includes a unique host name for the system (31 characters (letters, numbers or hyphens) or less, all lowercase), an unique TCP/IP address, and the valid subnet mask for your network. It may be necessary to obtain this information from your network administrator.

1) Login to the system as root.

2) Open a CommandShell window.

3) Enter the following command:
```
newconfig ao
```
Note: ao stands for Apple on-board ethernet. This command will prompt for configuration of all Apple ethernet cards detected in the system, beginning with the built-in interface on the logic board, ao0.

4) At the prompt, "ao0: Would you like to configure this interface for IP? [y/n, default = y] >>>", enter:
```
y
```

5) At the prompt, "Please enter a host name (it must be unique):", enter the host name desired for this system.

6) At the prompt, "ao0: Please enter an NIS domain name [none]:" enter:
```
none
```

7) At the prompt, "ao0: Please enter an internet address:" enter the IP address for this system.

8) At the prompt, "ao0: Please enter a netmask [none]:" enter the correct netmask for your network.

9) The newconfig command routine then displays the address and subnet values for confirmation. To accept them, enter:
```
y
```

10) If additional ethernet cards are installed in your system, the process will begin again at step 4.

11) When all interfaces have been examined, the following message is displayed, "newconfig: To avoid kernel inconsistencies, reboot immediately. The new configuration will take full effect when the system is rebooted." At this point the newconfig routine is complete.

12) If your network includes a TCP/IP router and/or a domain name server, complete the configuration as indicated below.

Changing TCP/IP Address

If you want the change to be permanent, modify the "/etc/NETADDRS" file to reflect the new IP address, and restart the computer. This file contains the TCP/IP address, broadcast address, and netmask information used by the system's network interfaces in this format:
interface-id IP-address broadcast-address [netmask]

Changing The Host Name

The host name of the system is stored in the /etc/HOSTNAME file. Changes take effect after restarting the system. This file format follows the format:
host-name domain-name.

Note: It is not unusual for the domain-name to be "none".

Designating A Gateway Router

1) Adding a gateway router to the TCP/IP configuration requires modification of the /etc/rc file using the vi text editor. It is recommended that you backup this file before editing with vi. The gateway router is defined as the first TCP/IP router that traffic from this system encounters on its way to the rest of the network.

2) If you have not done so already, login to the system as root and open a command shell.

3) Enter the following command to open the /etc/rc file in vi:

```
vi /etc/rc
```

4) Use the down arrow key to move the cursor to the last line of the file.

5) Use the right arrow key to move the cursor to the last character of the last line.

6) Enter the following single letter command to append input after the last character:
```
a
```

7) Add the following line to designate the gateway router, using your gateway router's TCP/IP address in place of xxx.xxx.xxx.xxx:
```
/usr/etc/route add default xxx.xxx.xxx.xxx 1
```

8) Suspend text input by pressing the escape key.

9) Enter the following to save changes and quit vi:
```
:wq
```

10) Note: To exit vi without saving changes enter:
```
:q!
```

Designating A Domain Name Server

1) Obtain the address of your domain name server and the name of your local domain from your network administrator. This information will be added to the /etc/resolv.conf file.

2) If you have not done so already, login to the system as root and open a command shell.

3) Enter the following command to open the /etc/resolv.conf file in vi:
```
vi /etc/resolv.conf
```

4) Enter the following single letter command to append input after the cursor:
```
a
```

5) Enter the following two lines, substituting the correct information for your network:
```
domain xyz.corp.com
nameserver xxx.xxx.xxx.xxx
```

6) Suspend text input by pressing the escape key.

7) Enter the following to save changes and quit vi:
```
:wq
```

8) Note: To exit vi without saving changes enter:
```
:q!
```
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