digital

DIGITAL Server 3300/5300/7300 Readme First

The following documentation describes how to configure your system's network information from AlphaBIOS. This is only required if you plan on using any of the following features:

- Upgrade system firmware over a network from AlphaBIOS
- Run ARC applications from a server over a network from AlphaBIOS
- Install future versions of the Windows NT operating system over a network (not yet supported).
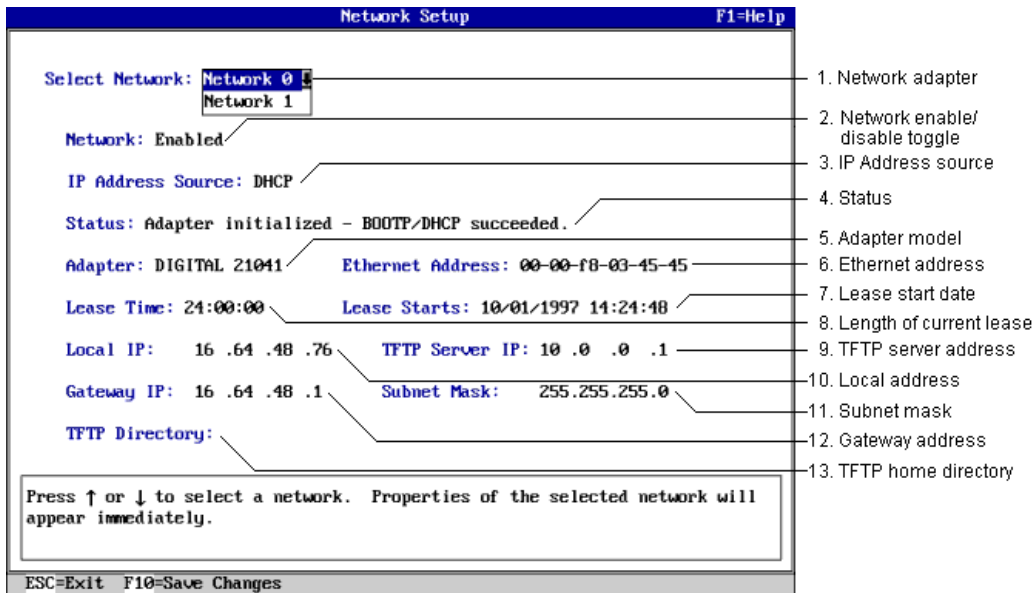
Unless you are planning on using any of the above features, you should leave the network setting as "DISABLED", which is the default. Network settings made from AlphaBIOS do not affect Windows NT network settings.

Network Setup Screen

The Network Setup Screen displays the configuration of a selected network. Each installed DC21x4 network adapter corresponds to a network. Users can change settings and save them for each network shown. Some changes are effective immediately while others require a reboot to take effect.

ER-KXFWW-AA. A01

```
        Network Setup                    F1=Help

Select Network: Network 0 ▮──────────────────────  1. Network adapter
                Network 1
                                                    2. Network enable/
   Network: Enabled                                    disable toggle
                                                    3. IP Address source
   IP Address Source: DHCP

   Status: Adapter initialized - BOOTP/DHCP succeeded. 4. Status

                                                    5. Adapter model
   Adapter: DIGITAL 21041   Ethernet Address: 00-00-f8-03-45-45  6. Ethernet address
                                                    7. Lease start date
   Lease Time: 24:00:00   Lease Starts: 10/01/1997 14:24:48
                                                    8. Length of current lease
   Local IP:    16 .64 .48 .76   TFTP Server IP: 10 .0   .0  .1   9. TFTP server address
                                                   10. Local address
   Gateway IP: 16 .64 .48 .1   Subnet Mask:    255.255.255.0
                                                   11. Subnet mask
   TFTP Directory:                                 12. Gateway address
                                                   13. TFTP home directory

Press ↑ or ↓ to select a network.  Properties of the selected network will
appear immediately.


ESC=Exit  F10=Save Changes
```

1. Network adapter

Each network adapter in your system is assigned a number, starting at zero. If multiple
adapters are present, their settings are stored separately.

2. Network enable/disable toggle

A reboot is needed to initialize and enable the network if it was not initialized (e.g.,
bypassed or disabled). If a network was initialized at startup, it can be disabled and re-
enabled without a reboot.

3. IP address source

Permits you to choose a source for an IP address. There are three possible sources: DHCP,
BOOTP, and STATIC. STATIC requires the user to input all the needed information on
the network screen. If you make a change to BOOTP or DHCP and save it, a request
message to the BOOTP and DHCP servers is issued immediately.

4. Status

Displays the network initialization status, including the status of adapter initialization and the call to the BOOTP or DHCP server. There are several messages:

- Adapter initialized - BOOTP/DHCP succeeded
- Adapter initialized - BOOTP failed
- Adapter initialized - DHCP failed
- Adapter initialized - Using Local Settings
- Adapter is not initialized (Network bypassed or disabled)
- Adapter initialization failed.

5. Adapter model

The Network Adapter model.

6. Ethernet address

The physical address of the network card connecting the system to the currently selected network.

7. Lease start date

Date and time when the lease was granted. It will be N/A if the IP address source is BOOTP or STATIC, or if a call to a DHCP server failed.

8. Length of current lease

The time for which the DHCP server has leased the IP address to the AlphaBIOS client. It will be N/A if the IP address source is BOOTP or STATIC, or if a call to a DHCP server failed.

9. TFTP server address

10. Local address

11. Subnet mask

These fields allow you to display and change IP address information. Changes to these fields take effect immediately. When using DHCP as an IP address source, all IP addresses taken from the server or from user's changes to the client will be used for the current run only. The values are not saved in non-volatile memory of the client.

To use IP addresses saved in non-volatile memory of the client, you must change the IP address source field to STATIC. Since the DHCP server doesn't provide a TFTP Server IP address to DHCP client, you must input it by hand and save it for the current run. To save the server IP address in the non-volatile memory for the next run, you must change the IP address source field to STATIC, save the mode, input the TFTP server IP address, save it then go back to DHCP mode. When using BOOTP as IP address source, a successful call will overwrite all the IP addresses saved in the non-volatile memory. If the TFTP server is on a different subnet from the client, a subnet mask and a router IP address must be provided, either by user or by a BOOTP or DHCP server.

12. Gateway address

This field is used when your system resides in a different subnet than the DHCP server. The address is the IP address of the router connecting the 2 subnets.

Note   Your router must have BOOTP/DHCP relay support. This support enables a router to properly forward DHCP packets from one subnet to another.

13. TFTP home directory

This field can be left blank if the TFTP files are in the default directory on the server. If a default path has been set on the TFTP server, then the TFTP directory will be a sub-directory of the default path. Generally, if a TFTP directory exists, it should always be started and ended by a backslash. For DHCP client that uses MS-DHCP server, since the SP1 DHCP server doesn't provide a TFTP directory (under the context of Boot file name field), the user has to input by hand and save it for the current run.