

NEXTSTEP for Intel Processors

Title: Network Booting for Token Ring across Source Routing Bridges

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Overview

The NEXTSTEP 3.3 source routing implementation contains a flaw preventing a token ring client machine from booting if its boot server is not connected to the same physical ring. At network startup time, the client

machine attempts to contact the server using BOOTP requests. The server receives them, but replies using packets containing no source routing information. The packets have no way of returning to the client machine and after a number of unsuccessful attempts to contact the server, the client reports:

```
No response from network configuration server.
```

```
Type Control-C to start up computer without a network connection.
```

Workaround

Boot the client machine single-user by entering `-s` at the boot prompt. At the shell prompt enter:

```
driverLoader d=IBMTOKENRING
```

Enter `y` to the next two prompts. The driver should now be loaded and initialized. Now enter:

```
ifconfig tr0 <client_ip_address> netmask <client_netmask>
```

where `<client_ip_address>` and `<client_netmask>` correspond to the client machines IP address and netmask respectively. Exit the shell by typing `Ctrl-D`. The rest of network startup should proceed normally. The client will be able to communicate with other machines on the network, regardless of whether they are located on the same ring or not.