



System i  
Networking  
Bootstrap Protocol

*Version 5 Release 4*







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**Note**

Before using this information and the product it supports, read the information in "Notices," on page 5.

**Fifth Edition (February 2006)**

This edition applies to version 5, release 4, modification 0 of IBM i5/OS (product number 5722-SS1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

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## Bootstrap Protocol

Bootstrap Protocol (BOOTP) provides a dynamic method for associating workstations with servers. It also provides a dynamic method for assigning workstation Internet Protocol (IP) addresses and initial program load (IPL) sources.

BOOTP is a TCP/IP protocol. It allows a client to find its IP address and the name of a load file from a server on the network. A client uses BOOTP to find this information without intervention from the user of the client.

The BOOTP server listens on the well-known BOOTP server port 67, which Dynamic Host Configuration Protocol (DHCP) also uses. Because of this, BOOTP and DHCP cannot operate at the same time on the same system. (DHCP is the preferred method for supporting BOOTP clients.) When the server receives a client request, it looks up the IP address for the client and returns a reply to that client. This reply contains both the IP address of the client and the name of the load file. The client then initiates a Trivial File Transfer Protocol (TFTP) request to the server for the load file.

You can work with BOOTP server properties through iSeries™ Navigator.

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## Configuring the BOOTP server

To configure the BOOTP server, you can use the Configure TCP/IP BOOTP (CFGTCPBP) command or the Configure TCP/IP Applications (CFGTCPAPP) command.

There are two ways to configure the BOOTP server:

- Specify the CFGTCPBP command from the command prompt.
- Specify the Configure TCP/IP Applications (CFGTCPAPP) command from the command line and select option 4 (Configure BOOTP).

After you specify the command, the following display appears:

```
Configure TCP/IP BOOTP                               System:  SYSNAM01

Select one of the following:

1. Change BOOTP attributes
2. Work with BOOTP table
```

Figure 1. Configure TCP/IP BOOTP display

The following commands control the BOOTP server:

- The Change BOOTP Attributes (CHGBPA) command allows an administrator to set the configurable attributes for the BOOTP server.
- The Work with BOOTP Table (WRKBPTBL) command allows an administrator to work with the BOOTP table.

### Changing BOOTP attributes

From the Change BOOTP Attributes (CHGBPA) display, you can specify the AUTOSTART attribute. This attribute determines whether the BOOTP server starts automatically when TCP/IP is started using the STRTCP command, or when the STRTCP SVR SERVER(\*AUTOSTART) command is issued.

To change BOOTP attributes, follow these steps:

1. Specify the CFGTCPBP command from the command prompt.
2. Select option 1 (Change BOOTP Attributes) on the Configure TCP/IP BOOTP display to view the Change BOOTP Attributes display.

You can also type CHGBPA, and then press F4.

**Note:** You must have \*IOSYSCFG special authority to make changes to the BOOTP attributes with the Change BOOTP Attributes (CHGBPA) command.

```
Change BOOTP Attributes (CHGBPA)

Type choices, press Enter.

Autostart server . . . . . *YES          *YES, *NO, *SAME
```

Figure 2. Change BOOTP Attributes (CHGBPA) display

### Working with the BOOTP table

From the Work with BOOTP Table display, you can add, change, remove, or display an entry in the BOOTP table.

To work with BOOTP table, perform the following steps:

1. Specify the CFGTCPBP command from the command prompt.
2. Select option 2 (Work with BOOTP Table) on the Configure TCP/IP BOOTP display to view the Work with BOOTP Table display.

You can also type WRKBPTBL.



```
Work with BOOTP Table          System:  SYSNAM01
Type options, press Enter.
  1=Add  2=Change  4=Remove  5=Display

Client
Host      MAC      IP
Opt  Name      Address  Address
-----
act01.ibm.com  02.01.8C.06.34.98  9.130.42.1
```

Figure 3. Work with BOOTP Table (WRKBPTBL) display



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## Appendix. Notices

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