



Agilent Technologies

G1701DA
Version D.01.00
Installation of the BootP Server

This document is believed to be accurate and up-to-date. However, Agilent Technologies, Inc. cannot assume responsibility for the use of this material.
The information contained herein is intended for use by informed individuals who can and must determine its fitness for their purpose.

Installing Agilent BootP Service

Agilent BootP Service software should only be installed for older GC/MSD systems (5973 Series MSD firmware version 3.01.57 and 6890 GC with the JetDirect card installed) is not used for the 6890N GC.

Agilent BootP Service

Agilent BootP Service provides central administration of IP addresses for Agilent instruments residing on a LAN. This service can run on any Windows 2000 or XP PC on the instrument LAN. The PC running Agilent BootP Service must be running TCP/IP network protocol and cannot run a DHCP server or another BootP server.

When an instrument is first powered on, an Agilent JetDirect card located in the instrument broadcasts a request for an IP address or Host Name and provides its hardware address as an identifier. The request may continue for up to 5 minutes. The Agilent BootP Service can answer this request and pass a previously defined IP address and Host Name associated with the hardware address to the requesting instrument.

When the instrument receives its IP address and Host Name from the BootP Service, it stops broadcasting the request. The instrument maintains the IP address as long as it is powered on. Powering down the instrument causes it to lose its IP address and the Agilent BootP Service must be running when the instrument is next powered on to reestablish the correct address.

NOTE

There are small appearance differences between Windows 2000 and Windows XP but content and functions in the following figures are the same for either operating system.

Prior to installing and configuring BootP service:

- 1 You need to know the IP address of your system:
 - If on a system LAN, it will need to be entered into the TCP/IP configuration, or use the DHCP option
- 2 You need to know the IP address of your system components:
 - An IP address for the MSD which is a fixed IP address, not DHCP
 - An IP address for the GC which is a fixed IP address, not DHCP
- 3 You need to know Subnet Mask and Gateway addresses for your system:
 - If you are on a building LAN then Select Start > Run > CMD and click OK
 - At the command prompt enter IPCONFIG:

```

C:\>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

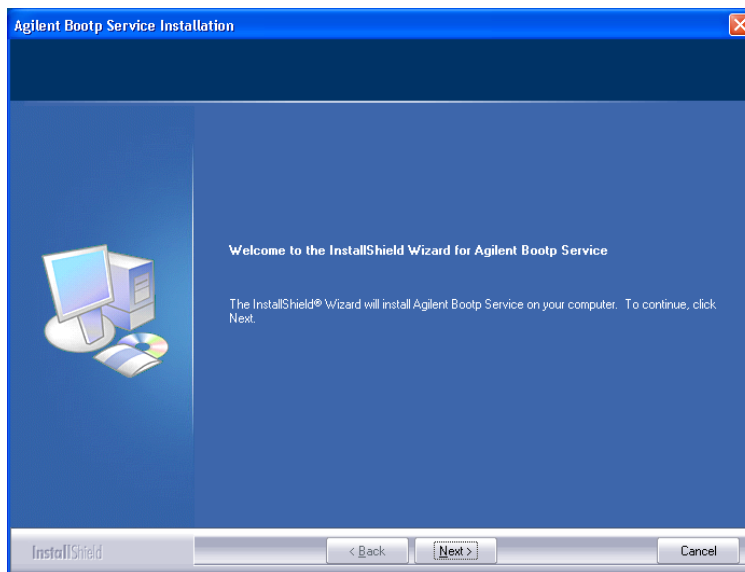
    Connection-specific DNS Suffix  . : fyi.fyi.com.
    IP Address. . . . . : 187.20.267.914
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : 187.20.264.70
  
```

- Record Subnet Mask and Default Gateway addresses to be used in configuring BootP services.
- Note that default addresses can be used if the system is not on a building LAN.

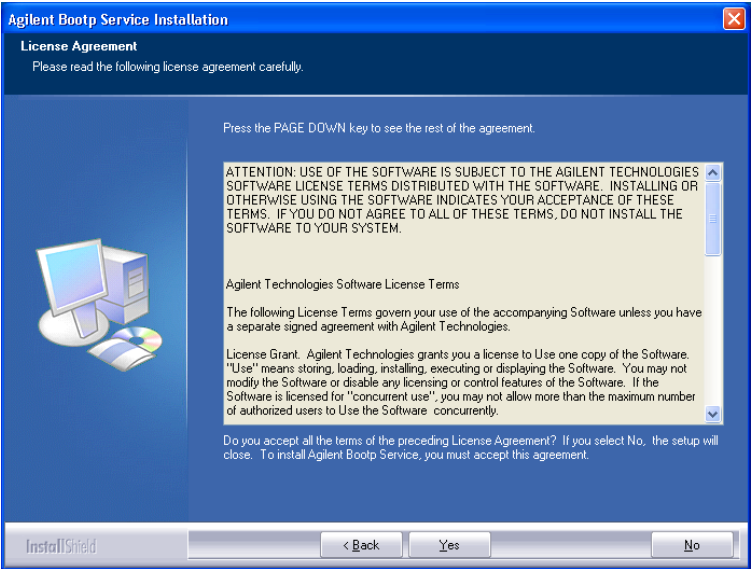
Device	Address
PC	10.1.1.100
MSD	10.1.1.101
GC	10.1.1.102
Gateway	10.1.1.100
Subnet mask	255.255.255.0

Agilent BootP Service installation

- 1 Close all Windows programs.
- 2 If not already, log on as Administrator or other user with Administrator privileges.
- 3 Insert the MSD ChemStation Productivity Software CD into your CD-ROM drive. Click Cancel to exit the MSD ChemStation software setup program should it start automatically (the ChemStation software will be installed separately as described in [Chapter 4](#)).
- 4 The BootP Service installer is located in the BootP directory, \Bootp.
- 5 Select Start > Run > Browse > x:\bootp\setup.exe (where x is the CD-ROM drive letter).
- 6 A Welcome menu is displayed upon starting BootP installation. Click Next to continue with the installation.

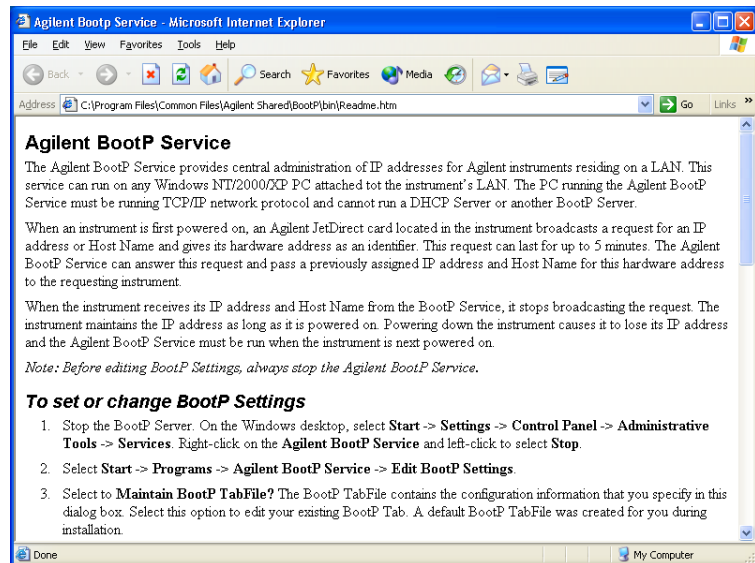


7 After reviewing the License Agreement, click **Next** to continue:

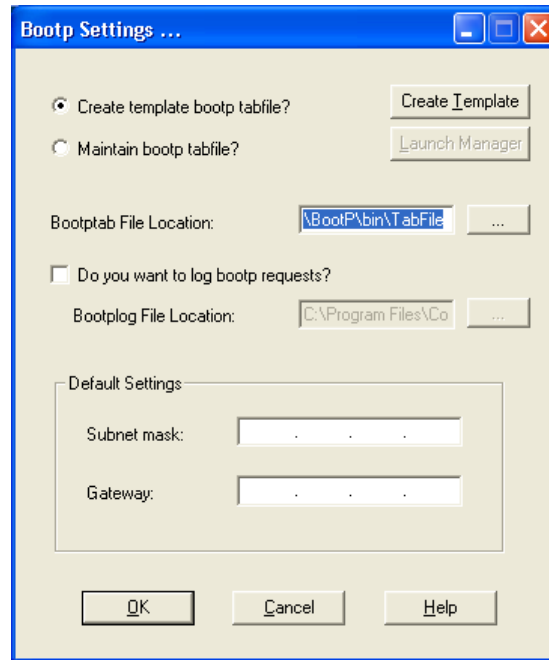


8 Installation proceeds and ends with three screens presented:

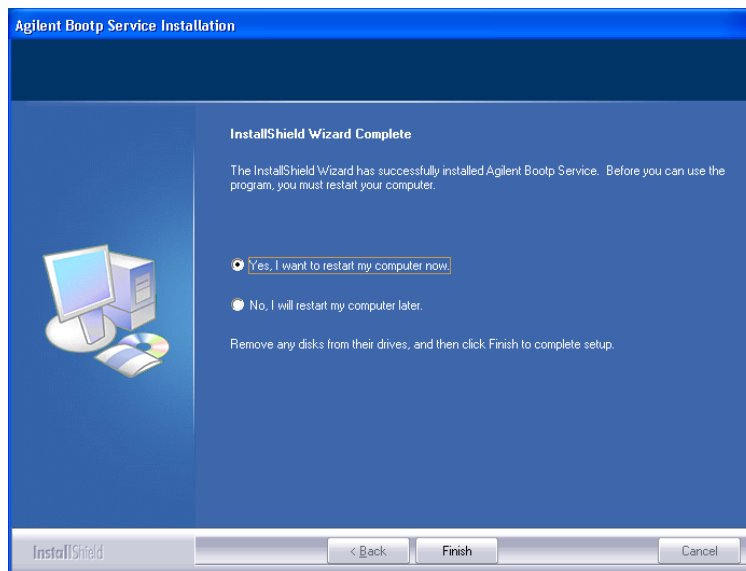
- **Agilent BootP Service information:** making sure you have a printer connected/configured, select File and Print as you will need a printed copy at-hand during configuration. Close the screen after printing:



- The BootP Settings screen which, at this time, shows unconfigured default settings. Close the screen by clicking **Cancel**:



- The BootP install complete screen which, at this time, should be closed by clicking Finish to reboot your PC:

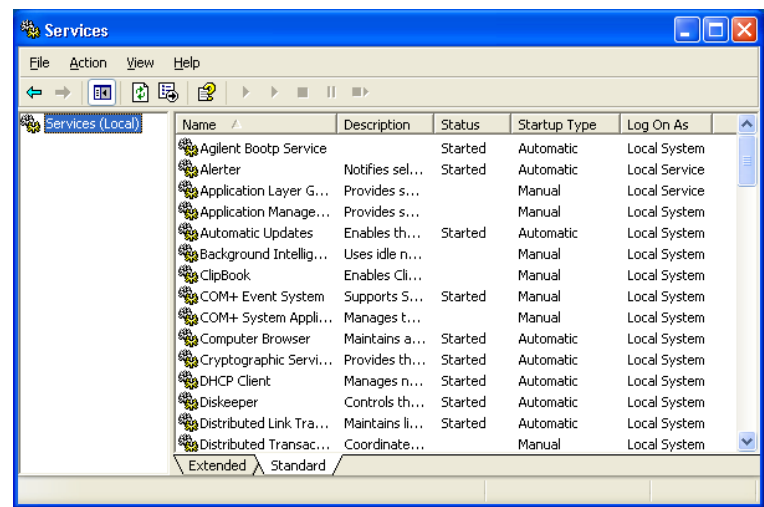


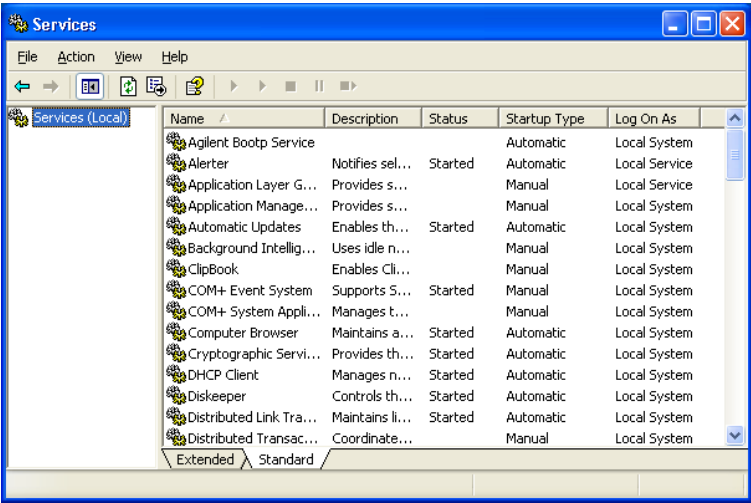
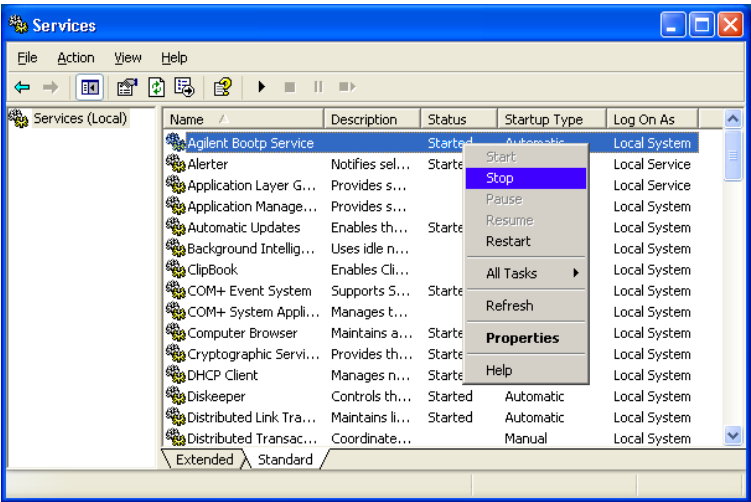
This completes BootP Service installation. After rebooting your PC, BootP must be configured as described in the next section.

Configuring Agilent BootP Service

BootP service starts automatically as your PC reboots. At any time, to properly configure BootP settings, the service must be stopped via the following procedure.

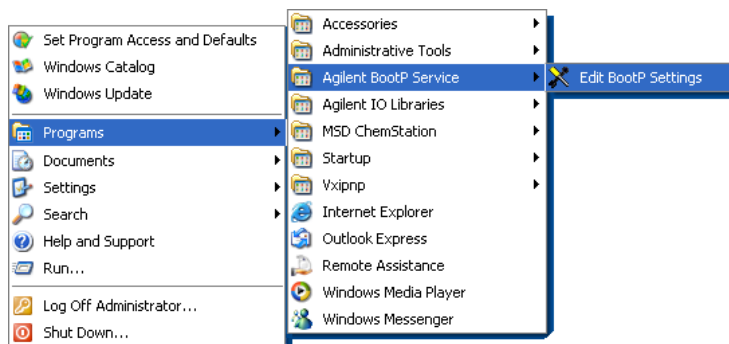
- 1 From your Windows desktop Start button, select **Start > Settings > Control Panel > Administrative Tools > Services**. Right-click **Agilent BootP Service**, then left-click to get a menu from which you select **Stop**:



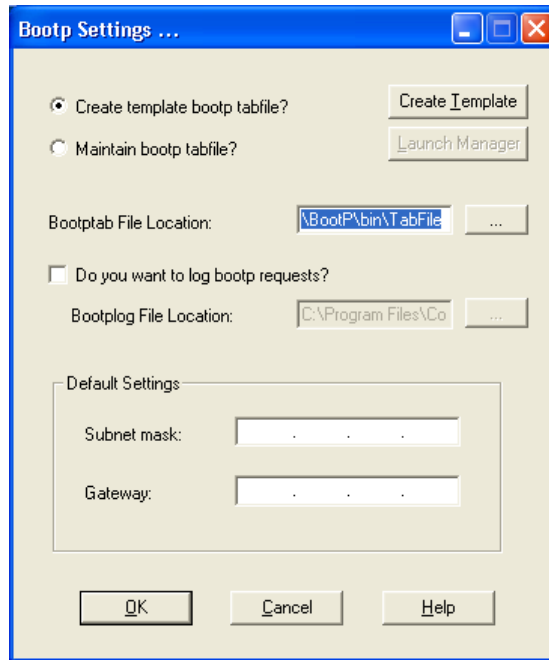


After stopping BootP service, close Services, Administrative tools, and Control Panel screens.

- 2 Again from the Windows desktop Start button, next select **Start > Programs > Agilent BootP Service > Edit BootP Settings**:




- 3 The resulting BootP Settings screen shows default settings provided at initial installation. You may find items defined differently if you are here to change settings later in an already established system:

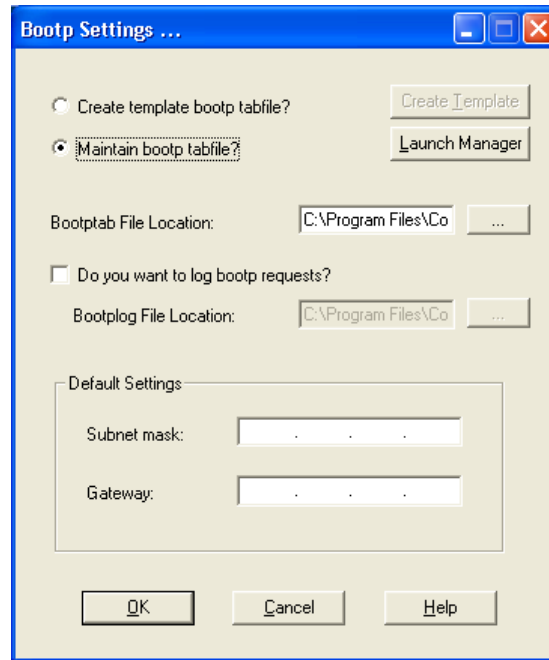


- Select **Maintain bootp tabfile?** to enable to edit the existing BootP tabfile, an ASCII text file which contains configuration information entered into this screen.

A default settings tabfile was created as part of BootP installation and located in the folder \Program Files\ Common Files\Agilent Shared\BootP\bin\ as the file TabFile. If you wish to keep the file elsewhere, use the


Browse button,  , to choose a different folder.

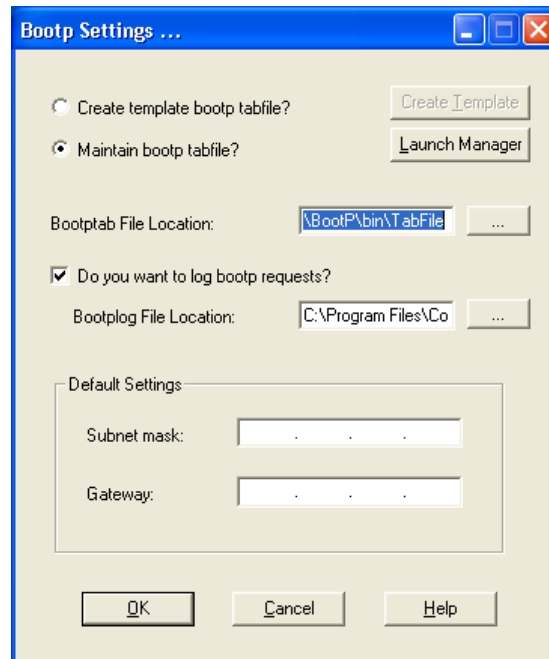
If you you want to create your own template for the BootP tabfile, select **Create template bootp tabfile?** and click the **Create Template** button. Note that a valid BootP tabfile location must already exist.



Select **Do you want to log bootp requests?** if you want to have a log entry every time the the device host requests configuration information from BootP. This feature is useful if you want to see all requests made to the host.

A default log file was created as part of BootP installation and located in the folder \Program Files\Common Files\Agilent Shared\BootP\bin\ as the file logfile. If you wish to keep the file

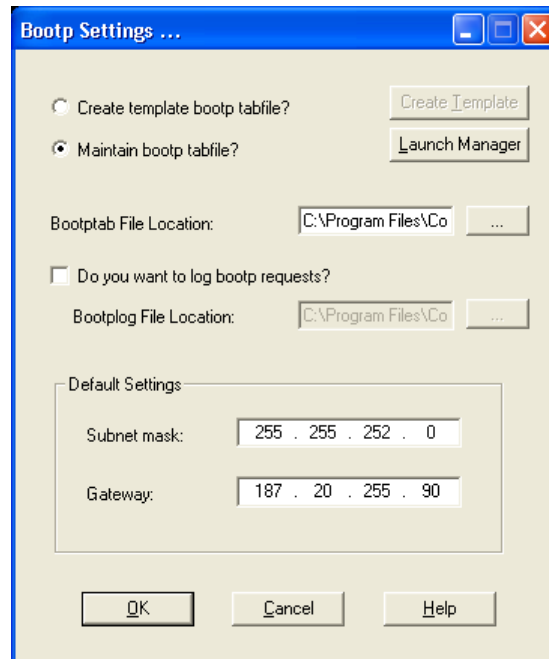
elsewhere, use the [Browse] button,  , to choose a different folder.



- In the **Default Settings** portion of the screen, enter your network **Subnet mask** address. See your network administrator if you do not know this information.

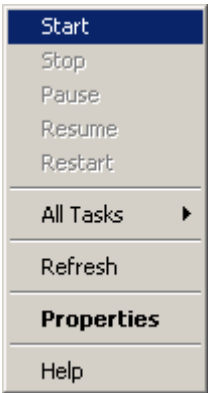
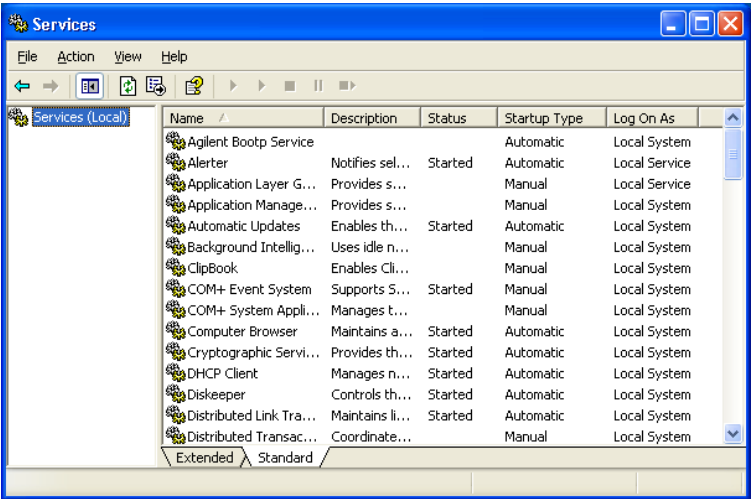
The Subnet mask, combined with the IP address identifies the network where your device host machine resides.

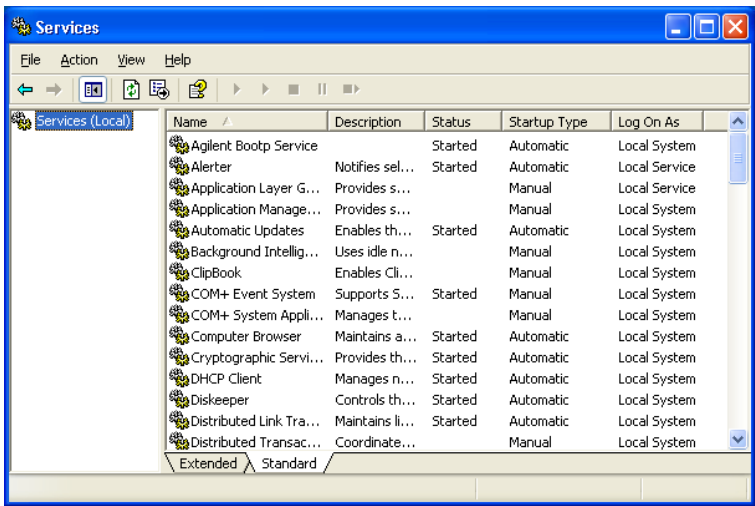
- Similarly, enter your network **Gateway** address, or all 0's (zeroes) if you have no Gateway. Again, see your network administrator if you do not know this information.



- Close the screen either by clicking OK to accept and save your settings, or by clicking Cancel to exit without saving the settings.

- 4 Restart BootP by returning to the Services screen via selecting **Start > Settings > Control Panel > Administrative Tools > Services**. Right-click on **Agilent BootP Service**, then left-click to get a menu from which you select **Start**:





After restarting BootP service, close Services, Administrative tools, and Control Panel screens. This completes configuring and restarting BootP service.

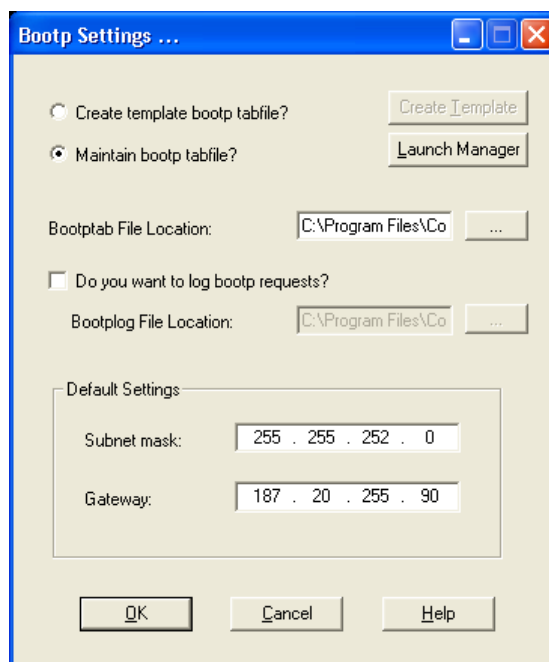
Setting Up an Instrument on Agilent BootP Service

Agilent BootP Service maintains association between a unique identification code (MAC address) provided with the LAN card installed in a given instrument and the specific IP address assigned to that instrument. Therefore, whether adding a new instrument, exchanging an instrument (or its LAN card), or changing the IP address assigned to an instrument, all require defining or redefining this association.

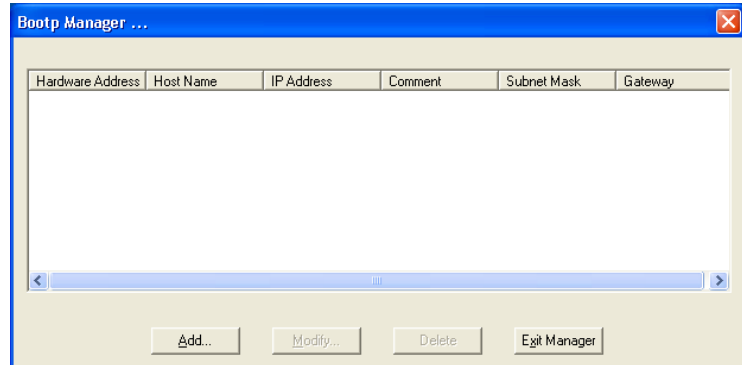
For convenience, record the following for your system:

Instrument	MAC address	IP address
ChemStation computer		130.27.53.203
MSD1	0060b0dd03d8	130.27.53.204
GC1		
MSD2		
GC2		
MSD3		
GC3		
MSD4		

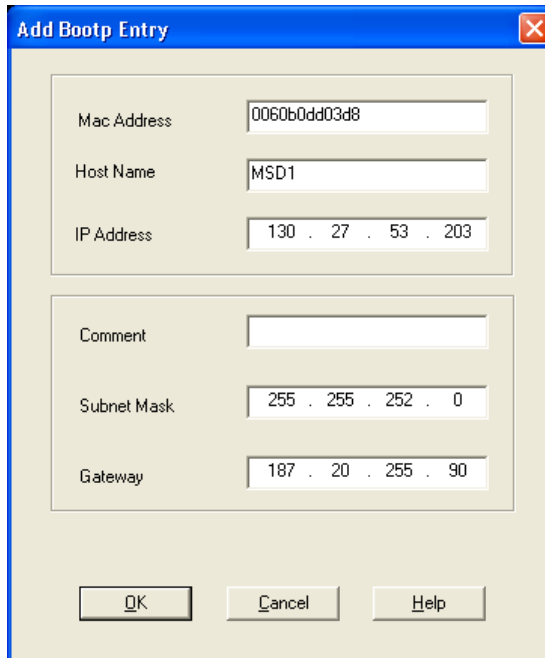
- 1 As described in the previous section, stop BootP service and open the BootP Settings screen via Edit BootP Settings:



- 2 Click the **Launch Manager** button to open BootP Manager. For a new installation, no instruments are listed:



- 3 In BootP Manager, click the **Add . . .** button to obtain the Add BootP Entry screen. Here, enter information to correctly associate the given instrument MAC address with its assigned IP address:

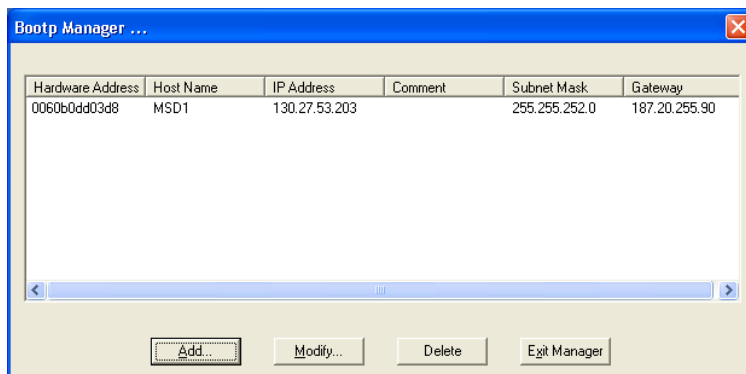
A screenshot of a Windows-style dialog box titled "Add Bootp Entry". The dialog has a blue title bar with a close button (X) in the top right corner. The main area is light beige and contains two groups of input fields. The first group includes "Mac Address" (0060b0dd03d8), "Host Name" (MSD1), and "IP Address" (130 . 27 . 53 . 203). The second group includes "Comment" (empty), "Subnet Mask" (255 . 255 . 252 . 0), and "Gateway" (187 . 20 . 255 . 90). At the bottom are three buttons: "OK", "Cancel", and "Help".

Mac Address	0060b0dd03d8
Host Name	MSD1
IP Address	130 . 27 . 53 . 203
Comment	
Subnet Mask	255 . 255 . 252 . 0
Gateway	187 . 20 . 255 . 90

OK Cancel Help

- You must also enter an assigned **Host Name** and **Subnet Mask** associated with this IP. Host Name must begin with alpha char.
- You may enter a **Comment** if desired.
- Enter the **Gateway** address for the instrument. This is either the building LAN Gateway if on a house LAN system, or the IP address of the connected PC if not on a house LAN system.

- 4 Click on the OK button to accept the added instrument settings. The newly-added instrument is now shown in the BootP Manager table:



- 5 Repeat the process for any other instrument(s) to be added at this time. When finished, click the Exit Manager button, then click OK on the BootP Settings screen to complete the adding/editing process.
- 6 As described in the previous section, restart Agilent BootP service.
- 7 Power cycle the instrument(s) to confirm they are properly configured in the BootP server.