

## Microsoft TCP/IP Configuration

You are required to enter a valid IP address for the following fields:

- Default gateway
- IP address
- Subnet mask

When you click the Advanced>> button, you can also set the following fields:

- Scope ID
- Number of sessions

## Microsoft TCP/IP - Connectivity Configuration

The Connectivity dialog box enables you to set options for Microsoft TCP/IP utilities and other TCP/IP-based applications, including Windows Sockets applications.

You can enter values in the following fields:

- Use DNS for hostname resolution
- Primary DNS server (available only when using DNS for hostname resolution)
- Secondary DNS server (available only when using DNS for hostname resolution)
- Enable Windows Sockets
- Number of socket sessions (available only when Windows Sockets is enabled)
- Hostname
- Domain

**IP Address**

Specifies the IP address associated with your local workstation.

Your network administrator should provide you with the correct value for this parameter.

**Default Gateway**

Specifies the IP address of the default gateway used to forward packets to other networks or subnets. You must enter a valid value for this parameter if you want to communicate with nodes on other networks.

Your network administrator should provide you with the correct value for this parameter.

**Subnet Mask**

Specifies the subnet mask associated with the adapter to which TCP/IP is bound. The subnet mask enables the workstation to separate an IP address into host and network IDs.

Your network administrator should provide you with the correct value for this parameter.

**Scope ID**

Specifies the NetBIOS scope parameter for the NetBIOS over TCP/IP (NBT) module. All computers on a NetBIOS network must have the same scope ID to be able to communicate with each other.

Your network administrator can provide you with the correct value for this parameter. Generally, you can leave this value blank.

**Number of Sessions**

Specifies the number of simultaneous NetBIOS over TCP/IP (NBT) sessions that your workstation can have.

If you enable Windows Sockets on the Connectivity dialog, the sum of the Number of Sessions and the Number of Socket Sessions must be less than or equal to 22.

**Use DNS for Hostname Resolution**

Determines whether or not to enable domain name system (DNS) hostname resolution on your workstation. When this box is checked, the domain name resolver (DNR) software is loaded when you start your workstation and is used, in conjunction with the local HOSTS file, to resolve hostnames.



**Primary DNS Server**

Specifies the IP address for the primary domain name system (DNS) that will be used to resolve hostnames.

This field is enabled only when DNS is to be used resolving domain names. This happens when the Use DNS for Hostname Resolution box is checked.

**Secondary DNS Server**

Specifies the IP address of the secondary domain name system (DNS) used for hostname resolution.

This field is enabled only when DNS is to be used resolving domain names. This happens when the Use DNS for Hostname Resolution box is checked.

**Enable Windows Sockets**

Specifies whether or not the sockets interface will load when you start the workstation. You should enable (check) this option only if you are running applications that use the Microsoft MSDOS sockets interface or Windows Sockets.

For a list of vendors and applications that use Windows Sockets, see the *Windows Sockets Vendor Information* card.

**Number of Socket Sessions**

Specifies the number of sockets sessions that will be allocated at startup. This value is enabled only when the Window Sockets box is checked. The sum of the Number of Socket Sessions and the Number of Sessions (on the Configuration dialog box) parameters must be less than or equal to 22.

**Hostname**

Specifies the hostname for this computer. This name is used to identify the local workstation for authentication by utilities. Other TCP/IP-based utilities and applications may use this value to learn the name of the local workstation. This value defaults to the Windows for Workgroups computer name, but you can change this name without affecting the computernames value. The **Hostname** is optional.

## **Domain**

Specifies the name that identifies your group in the domain name system (DNS) hierarchical naming convention, with descending levels of detail. The fully qualified domain name (FQDN) for the workstation is the hostname followed by a period (.) and by the domain name. For example, **rhino.microsoft.com**, where **rhino** is the hostname and **microsoft.com** is the domain name. During DNS queries, the local domain name is appended to short names. The **Domain** is optional.

**Note:** The DNS domain is not the same as a LAN Manager domain.

## **IP Address**

Identifies a computer on a network with a unique 32-bit address, represented in dotted decimal notation.  
An IP address looks like this:

102.54.94.97

A **subnet mask** is used to extract the host ID and the network ID from an IP address.

## **Transmission Control Protocol/Internet Protocol (TCP/IP)**



