
UNIT 2 MANAGING WINDOWS 2000 SERVER

Structure	Page Nos.
2.0 Introduction	19
2.1 Objectives	19
2.2 Using Windows 2000 Server and Client	19
2.3 Logging Onto the Network	21
2.4 Browsing Network Resources	26
2.5 Accessing Network Resources Using My Network Places	28
2.6 Mapping a Folder	32
2.7 Summary	33
2.8 Solutions/ Answers	33

2.0 INTRODUCTION

In the previous unit we examined the structure and basic networking support of Windows 2000. In this unit we will explain how to manage Windows 2000 server.

By default Windows 2000 restricts most system management features to specially privileged users called administrators. Unlike Windows 95 and Windows 98, most of the management tasks cannot be performed until the user is logged on using the administrator's account. As a part of the setup process, Windows 2000 creates a built-in account called Administrator and requires that the user may enter a password for that. Windows 2000 also creates a built-in group called administrator. Any user who is a member of this group can perform management tasks as well.

2.1 OBJECTIVES

After studying this unit you should be able to:

- describe Windows 2000 client & Server architecture;
- log onto the network;
- browse network resources;
- access network resources using My Network Places;
- map a drive letter to a network resource (a folder or a shared folder), and
- use Windows explorer.

2.2 USING WINDOWS 2000 SERVER AND CLIENT

Microsoft Windows 2000 Server is a more robust network operating system than Windows 95 or 98. A **server** is a single computer that provides extensive multi-user access to network resources.

Here is a diagram of a server-based network (*Figure 1*) .

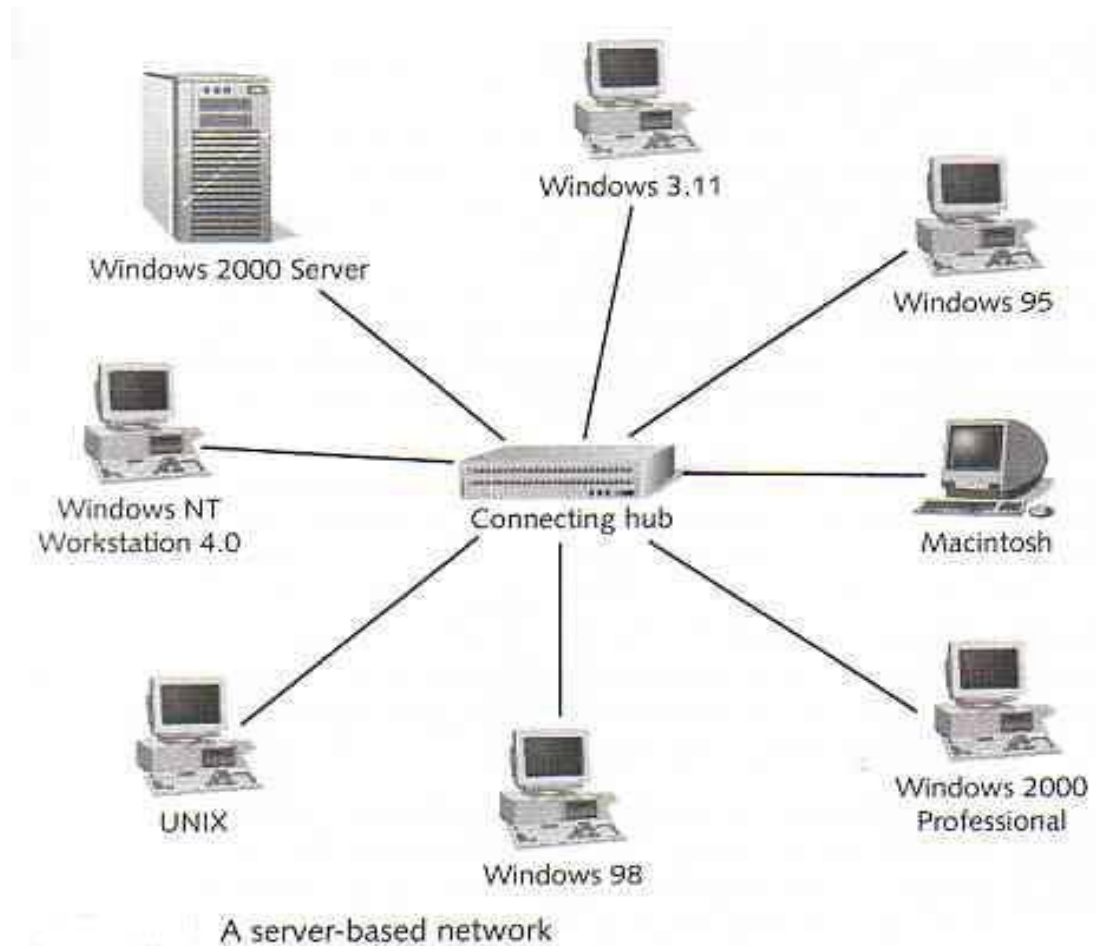


Figure 1: A Server-based network

Windows 2000 Server can provide the following advantages:

- Sharing of files among member computers.
- Sharing of printers and other resources.
- Centralised control and administration of resources.
- The server administrator can save time when installing software upgrades.
- Software applications can be shared among members of a client sever network.
- All computers can be backed up more easily.

Windows 2000 Server and Windows 2000 Professional Compared

The basic server version is called Windows 2000 Server, and Windows 2000 Professional is designed for workstations.

Windows 2000 Server offers services including:

- Virtually unlimited numbers of users simultaneously (optimally for 10 users).
- Active directory management.
- Effective network management.
- Web-based management services.
- Network-wide security management.
- Remote network access.
- Application services management.
- Network printer management through the Active directory.

2.3 LOGGING ONTO THE NETWORK

In Windows 2000 environment a user can log on either as a **local user** or a **domain user**.



Figure 2: Logging on the Window Screen

Domain User Account permits the user to log on to the domain and allows him to access resources on the network whereas a local user can log on to a local computer to be able to access resources on that machine.

Local User Account: Local user accounts are not replicated to domain controller, rather they are created in local machine security database.

By default a user has access to a domain via any other computer in that domain if it is a domain member. Then there are groups, which is a collection of user accounts. Individual users can be members of more than one group.

Windows 2000 supports two types of groups:

- Security Groups
- Distribution Groups.

Security groups are responsible for assigning access permission for resources.

Distribution groups are used for non-security related functions.

Now the actual log on procedure to enter the domain:

Windows 2000 by default assumes that the user wishes to log on as a local user. However in a networked environment in an organisational set up it asks for both user name as well as domain name.

In the Log On to Windows Dialog box as shown in *Figure 2* in the User name box type

Username_+@domainname :

Example: `user1@domain2`

Where user1 is the user name domain2 is the **domain name as shown in Figure 3 and Figure 4** click on it. An expanded dialog box appears and then choose the **domain from log on to:** list box but remember if user name is entered with @ symbol in the user name box then **options** box will be grayed out at the end when the user wants to

log on as another user press ctrl+alt+del and choose log of option then logging off would be confirmed by displaying the **yes**. Click on it to confirm **logging off**. In the process windows shuts down all applications that are currently executing. After this the machine is available for log on. Windows 2000 has a built-in administrator account.

The following windows *Figure 3* and *Figure 4* adds new user, **user1** to the existing network:

Figure 3: User Basic Information Screen

Figure 4: Add User Password Screen

Windows 2000 also supports built-in group accounts.

1. While creating a new user account with the wizard's help, select the Standard user option. With this option the user's account becomes a member of the power user group. Users of this group can participate in installation as shown in *Figure 5* and *figure 6*.
2. If the user selects Restricted User option, user account becomes member of built-in user's group.



Figure 5: Grant Access Level Screen

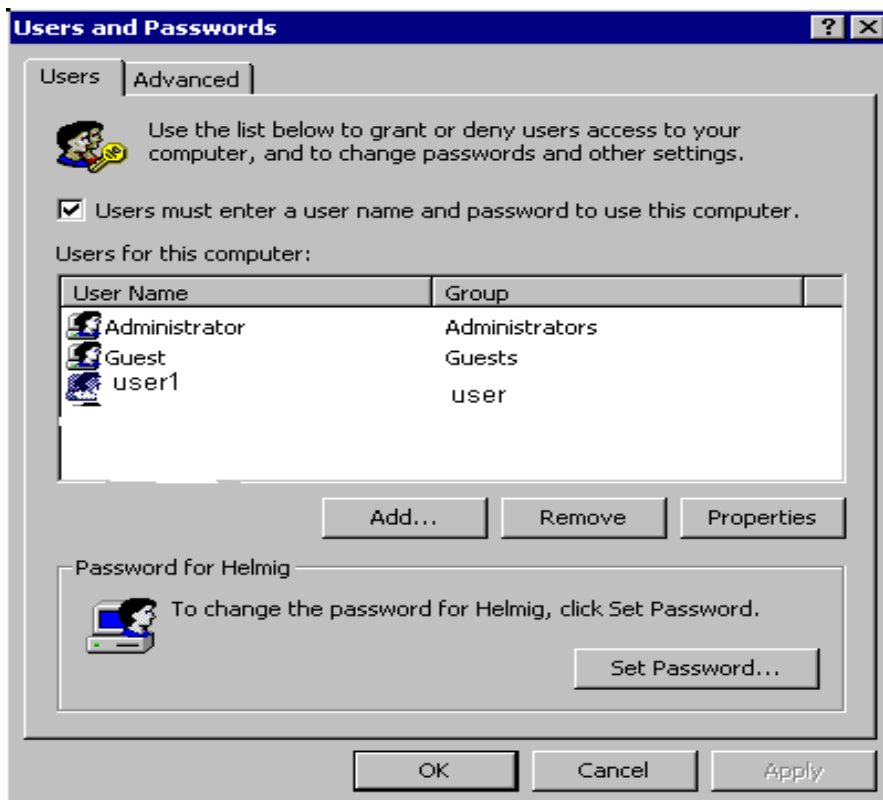


Figure 6: Change User Password Screen

You can view in detail the list of groups with each right/privilege:

The following set of windows add members to a group

While creating a new group, users can be added immediately to become a member of the group. But users can be added later to become a member of a group as well as in *Figure 7* and *Figure 8*.

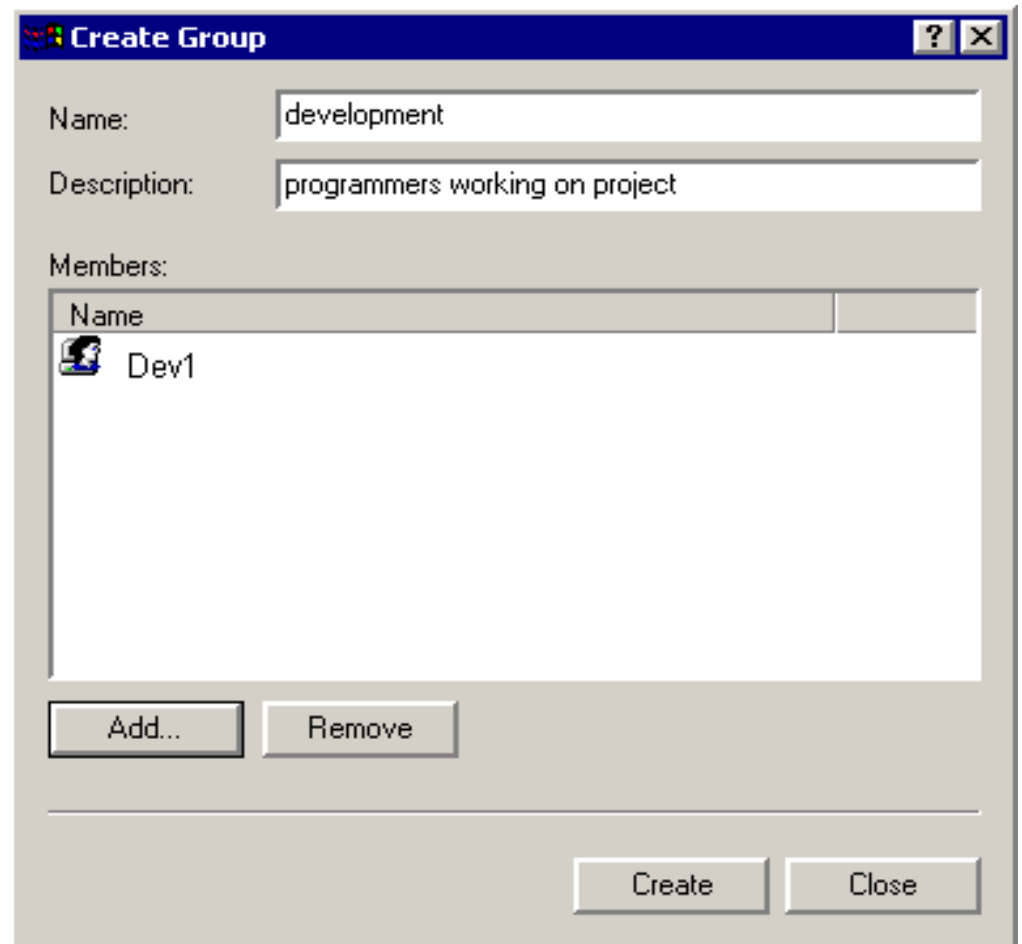


Figure 7: Create Group User Screen

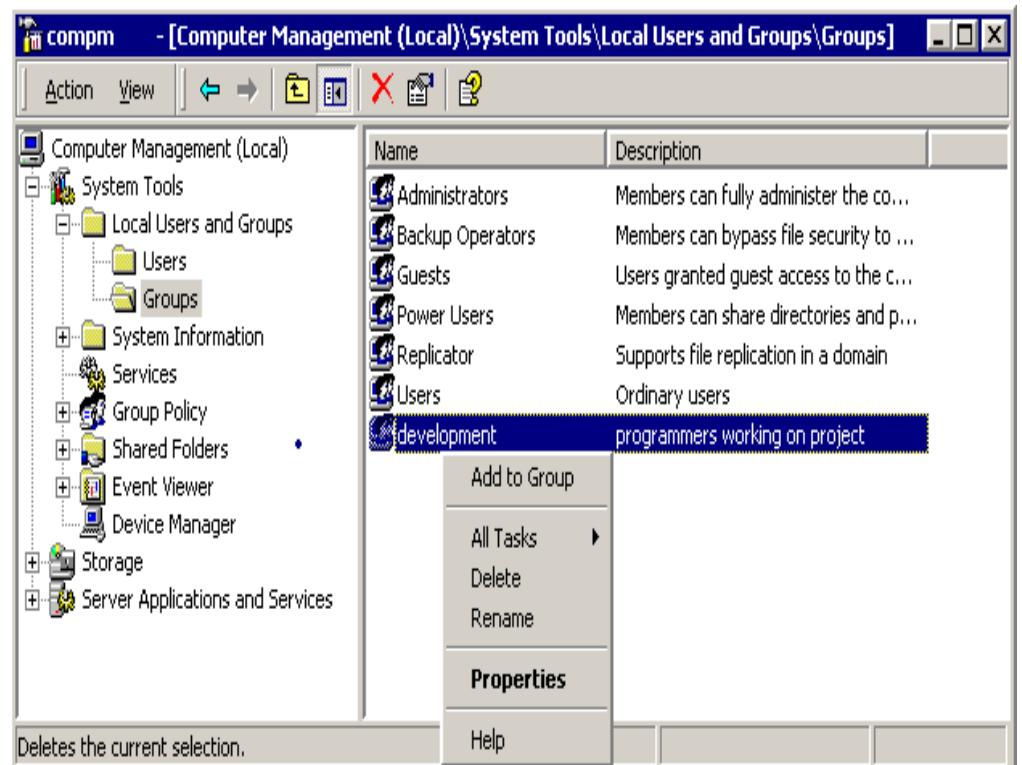


Figure 8: User Addition Screen

But to see in detail the permission/rights/privileges of a group, you need to “**drill down**” in the “**Group – Policies**” 4 levels down as in Figure 9.

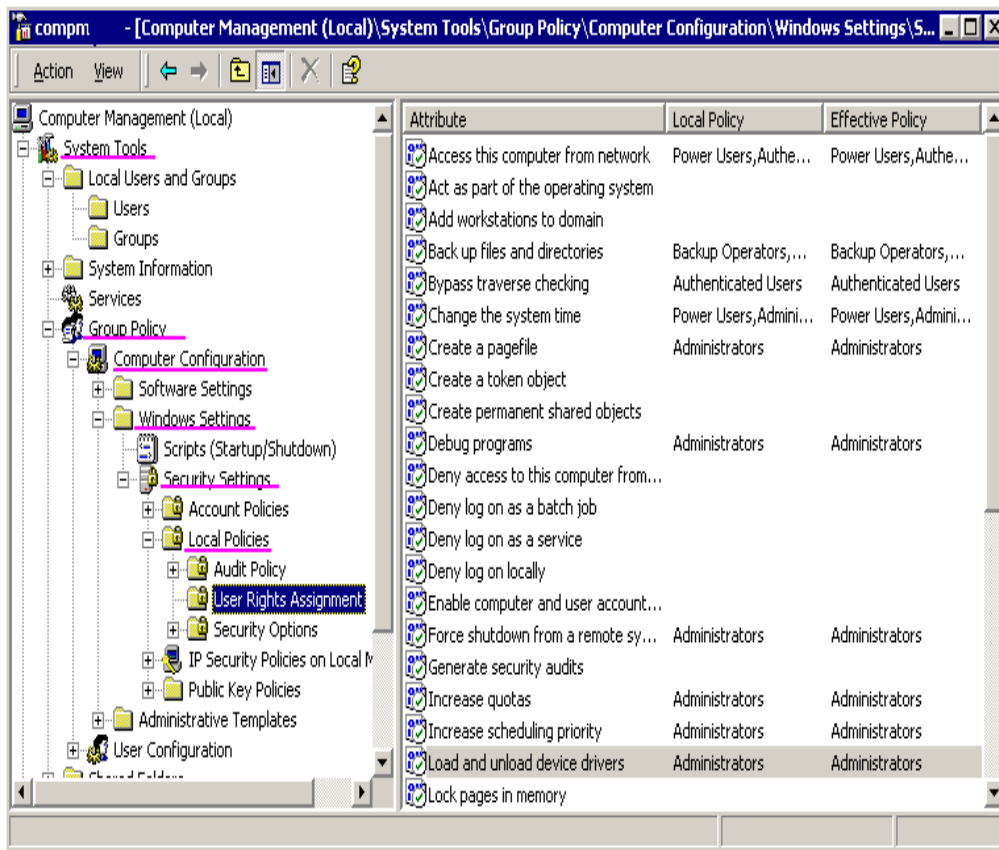


Figure 9: Detailed Permission Screen

For example, “regular users” do not have the right/permission/privilege to make backups.

To enable another group (one of the predefined or our own-defined groups) to have a right/privilege (like: make a backup), you need to add the group to the list: as shown in Figure 10.

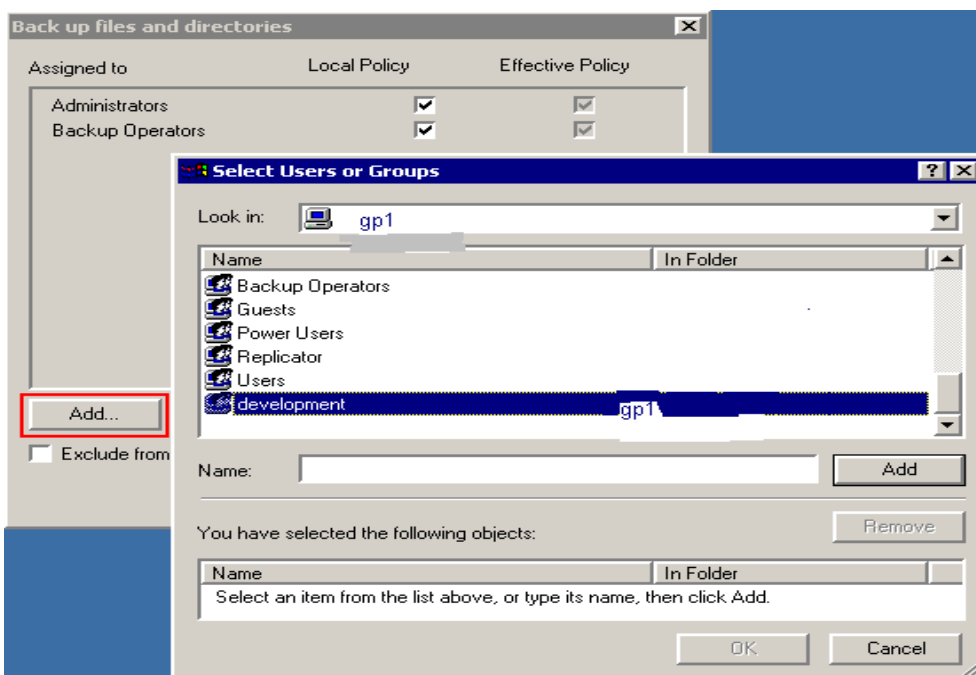


Figure 10: Printages/Permission Screen

2.4 BROWSING NETWORK RESOURCES

When installed, Windows 2000 creates a set of folders to store program and data files. Windows folders and subfolders correspond to DOS directories and subdirectories but system folders do not.

Some of the system folders are:

1. Desktop
2. My Documents
3. My Computer
4. My Network Places
5. Recycle Bin
6. Internet Explorer

Descriptions of these folders are given below:

Desktop



The desktop includes:

My Documents, My Computer, and My Network Places system folders. Here Files and folders can be saved and created.

If the user creates folders, save files on the desktop – then these are stored in Desktop under user's own user profile.

My Documents



This icon is a short-cut of the actual folder that the user uses for data files.

My Computer



This is responsible for the displaying of:

- All local drives
- Shared network drives
- Mapped drives
- Control Panel icon

This is a completely virtual folder, i.e., no file can be created or saved in this. My Computer folder is a system folder.

My Network Places



This is another virtual folder; it is responsible for providing access to all the network resources. Here you find the list of rights/privileges for all the jobs on your system.

Job list includes:

- Accessing this computer from the Network
- Backup files and directories
- Restore files and directories (yes, it is a different right/privilege)
- Load and unload device drivers --> Configure hardware, reserved for Administrators.

You can view in detail the list of groups with each right/privilege of networked computers. It provides the same functionality as was provided by the Network Neighbourhood in Windows 95/98.

Recycle Bin



This folder is used to store files that are temporarily deleted from the system and has options for permanent deletion or restoring of files to their original locations.

Internet Explorer



Viewing Folders as Web Pages

Windows 2000 provides an opportunity to display each folder as a web page.

This feature can be activated/deactivated for all folders using the option Web View on General tab of the folder options dialog box.

If you check enable web content in folders then info pane is available at all times for all folders.

If a use windows classic folder is selected then only a simple list of icons can be viewed without web content.

Four special attributes are associated with every file and folder for controlled access

On new files that are created by users these four attributes are always off.
These special attributes are:

1. System
2. Archive
3. Read Only
4. Hidden

Windows Explorer

It is an all purpose system utility, it lets the user organise files in folders, allows for searching for documents and also data editing.

Windows explorer supports two views:

1. Single folder view
2. Two-pane explorer view.

Using the single folder view the contents of the current drive or folder can be viewed, whereas using two-pane explorer view all the drives, folders and resources on the user's computer and the network can be viewed in a tree structure. Two-pane view is also possible.

Arranging files and folders

Contents of folder window can be sorted by name, type, size or date. To sort files within a folder, pull down view menu and choose arrange Icons and choose any among the following options:

- a. By name
- b. By type

- c. By size
- d. By date

Even the width of folder panes can be changed by pointing to the vertical dividing line between the panes. When the mouse pointer changes to a two-headed arrow, click and drag.

2.5 ACCESSING NETWORK RESOURCES USING MY NETWORK PLACES

My Network places are the system folder. It includes icons for all those computers that are part of the network in our domain (Servers and workstation). In Windows 95 Network Neighborhood was there. Windows 2000 has **Computer Near Me** which is similar to network neighborhood of Windows 95.

1. The most convenient way to gain access to or to manage files folders that are stored on another computer on the network is using My Network Places folder.
2. But if the shared folder is in another domain, a user name and a password is required to access the machine's resources. Thus the easiest way to find shared resources on your network is via My Network Places.

In My Network Places Folder

1. Double click on Entire Network icon, then choose Search for the shared resource on a network.
2. After entering the name of the computer that contains the shared resource in computer Name Box, click Search now. Also on double clicking Microsoft windows Network icon you get to see all other computers and domains on your network.
3. Another icon is Computers Near Me icon. This icon is available only if the network is a workgroup not a domain.

Step wise short cut

Double clicking icons on My Network Places can be a tedious task, on large networks Windows 2000 provide a mechanism by which shortcuts can be created.

In order to create a short cut on My Network Places folder double click on add network place icon on Add Network places folder.

For shared computer use \\computer-name. Shows all shares that are available on a given computer.

1. FFTP server – shortcuts, user can browser for files on a server. Using FTP use ftp://server_name
2. Web folder (HTTP Server) – lets the user save files directly on web server. Using http://server_name
3. Shared folder or drive: use \\computer_name\share_name

Following windows (*Figure 11*) describe My Network places:

As shown in *Figure 11* From “**My Network Places**”, we find the equivalent of “*Network Neighborhood*” as “**Computers Near Me**”.(Note: if you make a [logon to a domain server](#), there will be no “**Computer Near Me**” displayed).

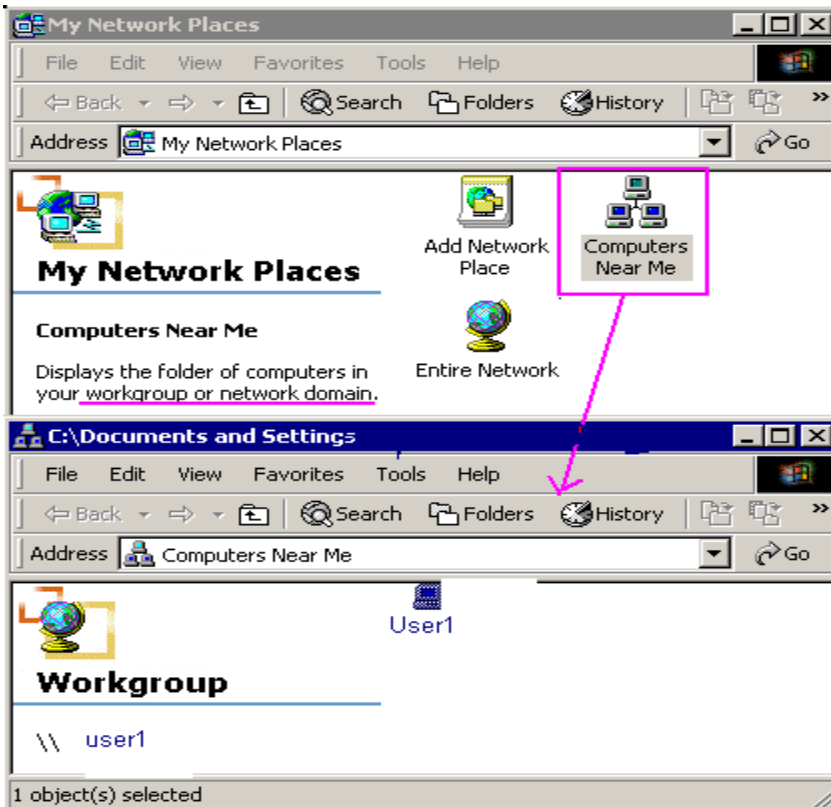


Figure 11: My Network Places

Searching for a particular workgroup (as shown in *Figure 12*, *Figure 13* and *Figure 14*).

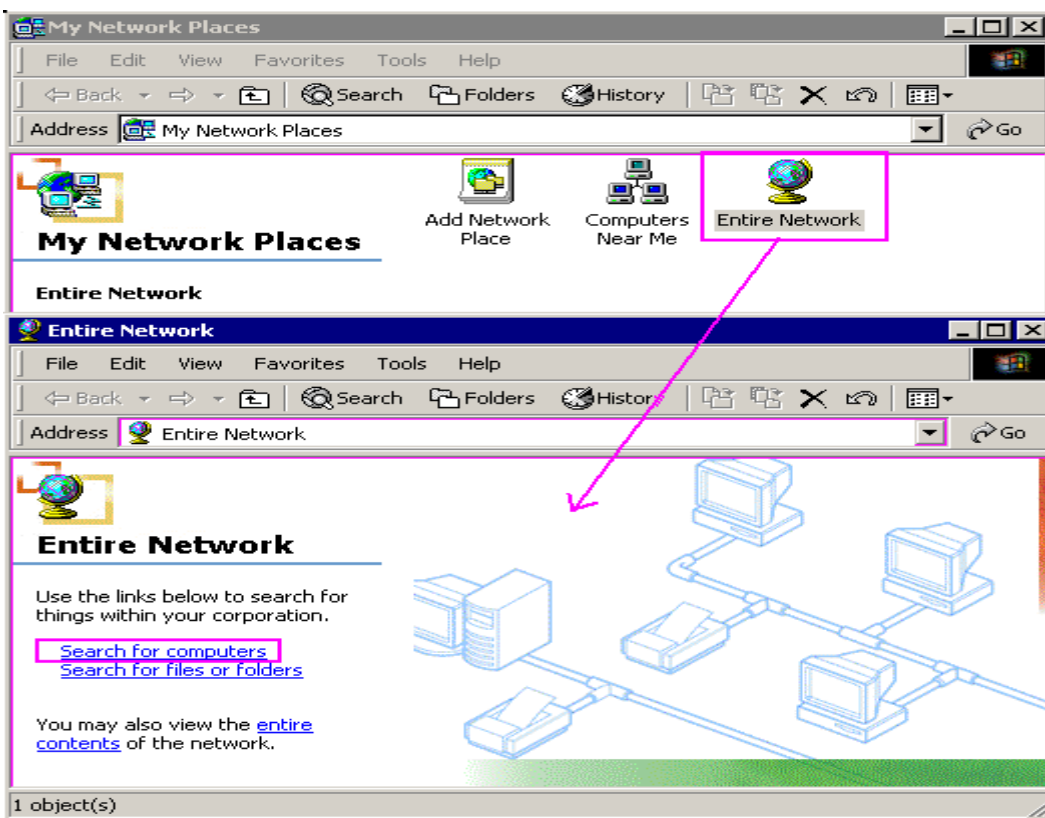


Figure 12: My Network Places Screen

Our search results give location, which is the workgroup only (as shown in *Figure 13*)

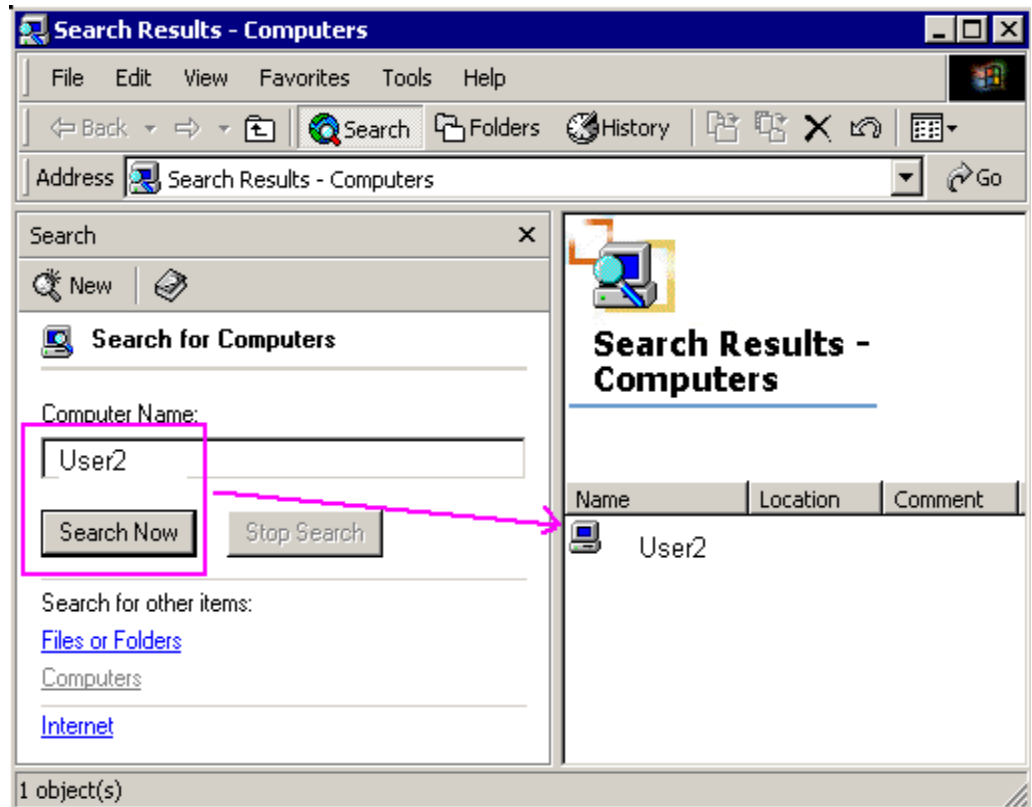


Figure 13: Search Result Screen

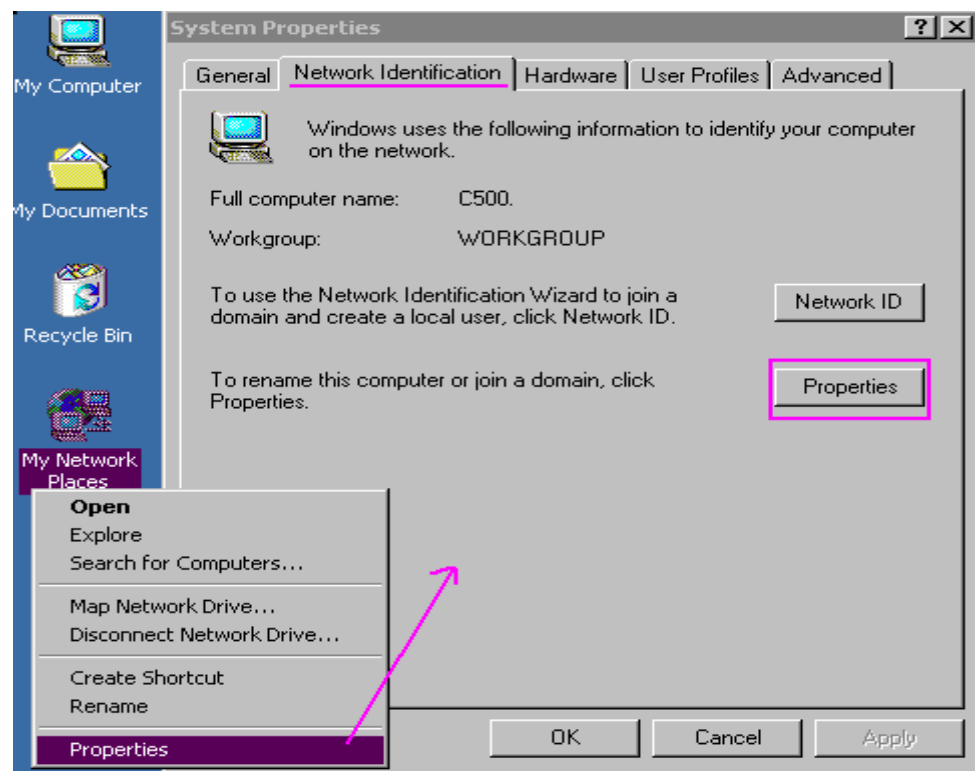


Figure 14: System Properties Screen

The following window is the place to define or make changes (as shown in *Figure 15*)

- Computer name
- Member of Domain or Workgroup
- Domain/Workgroup Name.

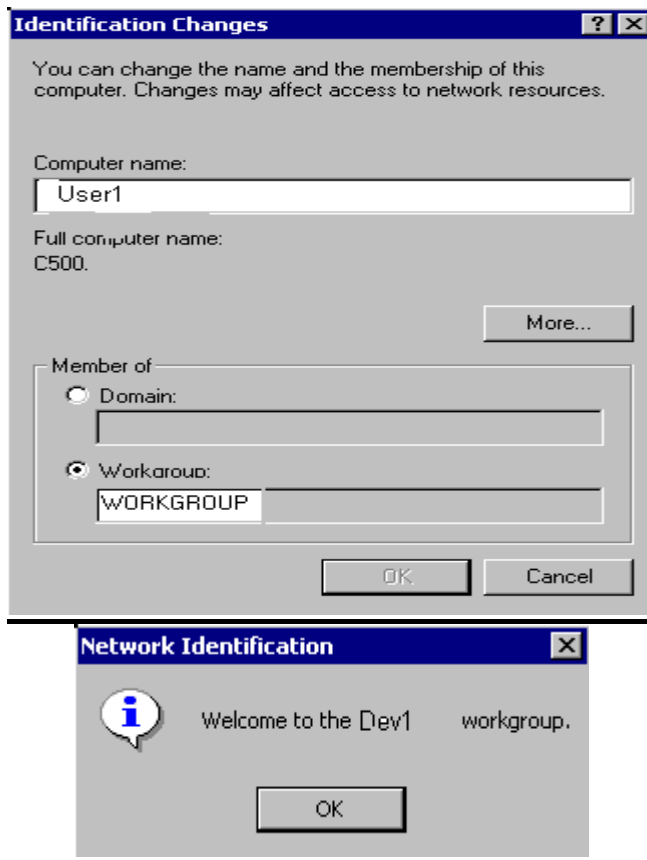


Figure 15: Change/Network Identification Screen

The workgroup, to which your system belongs is defined in the Properties of “My Computer”, Tab: “Network Identification”. By default, the name of the workgroup is “**WORKGROUP**”

To implement the change click on the button “**Properties**” as shown in *Figure 16*.

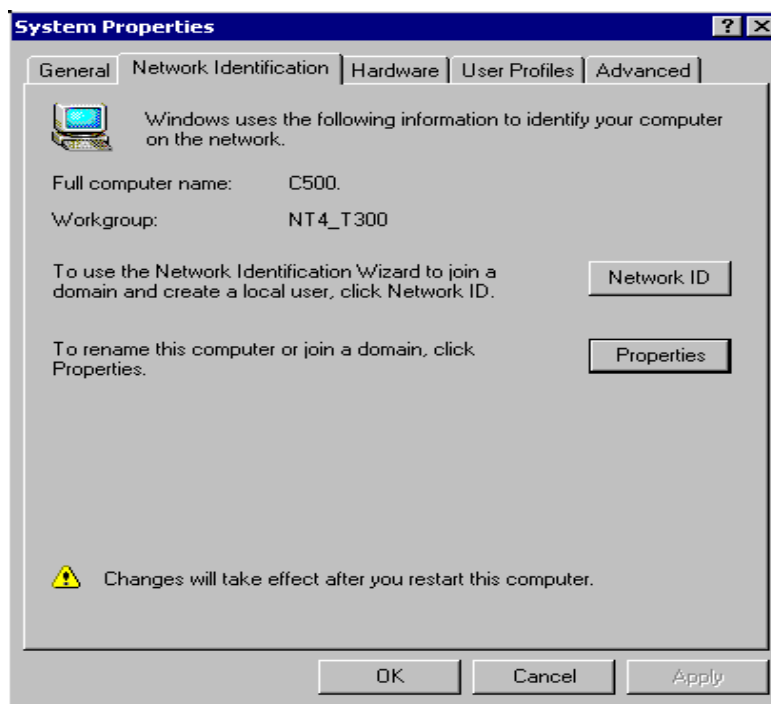


Figure 16: System Properties Screen

☞ Check Your Progress 1

Fill up the blanks:

- 1) _____ includes icons for all networked computers (servers and workstations) in a workgroup or domain in Windows 2000.
- 2) By default Windows 2000 assumes that user wants to log in using _____ account.
- 3) In order to lock a local computer press ctrl+alt+del and click _____ option.
- 4) To share a folder, by default Windows 2000 uses name of the _____ as the name of the share.
- 5) If the user is a member of administrator group on a local computer, the user can see and manage all share folders from a central location in _____.
- 6) A user name in windows 2000 can be _____ character long.
- 7) Contents of folder window can be sorted out by _____ regardless of the view, i.e., chosen by the user.
- 8) For access control every file and folder has four special attributes _____, _____, _____, _____.

2.6 MAPPING A FOLDER

(Using Windows 2000 user can map a drive letter to network resources – **a printer, a drive, a folder**. After mapping a drive letter shared resources can be treated as if they were on a local drive).

To map a network drive, right-click on the network share-name (*NOT on the Computer and not on any folder inside the share*) and select “**Map Network Drive**”. Select the drive character to be used, decide on whether to “**Reconnect at Logon**”. (If yes select the check box or else leave it).

Select the drive character to be used as shown in *Figure 17*.

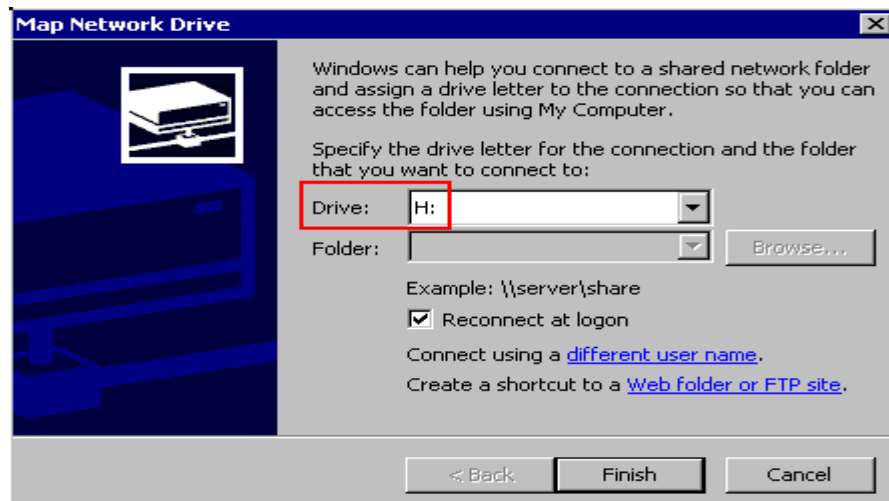


Figure 17: Drive Character Selection Screen

Mapping a network resource to a drive letter from explorer window (*Figure 18*)

1. From pull down Tools menu, choose Map Network Drive.
2. In the drive box, select the drive letter.
3. Write the name of the shared resource in the Folder box.
4. Click finish after you are done with all the steps.

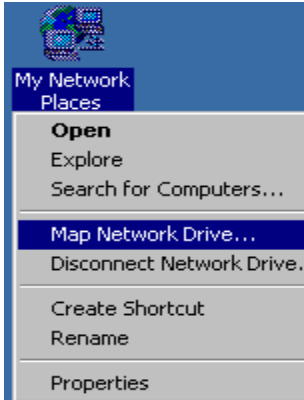


Figure 18: My Network Places

Following these steps can disconnect a mapped drive:

1. In any explorer window, in the Tools menu, choose Disconnect Network Drive. Since window displays a list of all currently mapped drives (as shown in *Figure 21*).
2. In the My computer window, choose mapped drive icon, right click on it, choose Disconnect from the shortcut menu.

Note: In order to assign a mapped drive to different drive, letter drive needs to be disconnected and then remapped to a new drive letter.

2.7 SUMMARY

After reading this unit the user is able to use Windows 2000 server and client. A user can log-on to the network, browse through network resources and access network resources using **My Network Places**. This unit describes the method of Mapping a folders. It also explains how to Map Shared Folders m to devices. There after reading this unit a user can access network resources (files, devices, printers) etc.

2.8 SOLUTIONS/ ANSWERS

Check Your Progress 1

- 1) My Network Places
- 2) Local
- 3) Lock computer
- 4) Folder
- 5) Computer management console
- 6) 64
- 7) Name,type,size,date
- 8) System, archive, read-only, hidden.

