

# Mastering Windows V.1.2

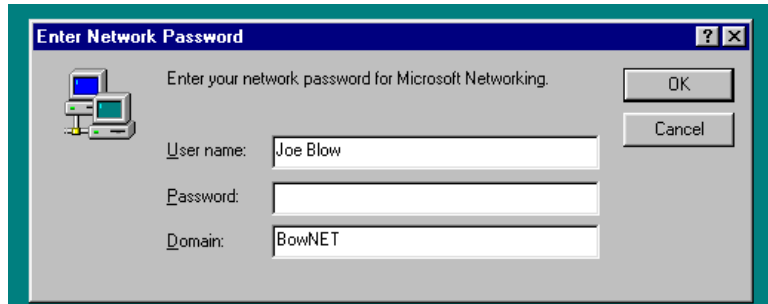
## Logging On: What's a BowNET?

**Windows:** By Windows, we're referring to the Microsoft operating systems Windows '95, Windows '98, Windows 2000 and Windows XP. While these operating systems differ under the hood, 95% of what you'll see as a user in this session is identical. I will point out the differences as needed.

**BowNET:** BowNET, is the name of the district wide computer network which connects all of the schools in the Bow School District together and to the rest of the world via the Internet. Our three buildings are physically linked via a fiber cables, and our three buildings are logically linked via a "server farm" which is located in my office. This server farm consists of ten file servers which all share a common database of users, passwords, and privileges. This database is known as a "Domain", and our "Domain" is BowNET.

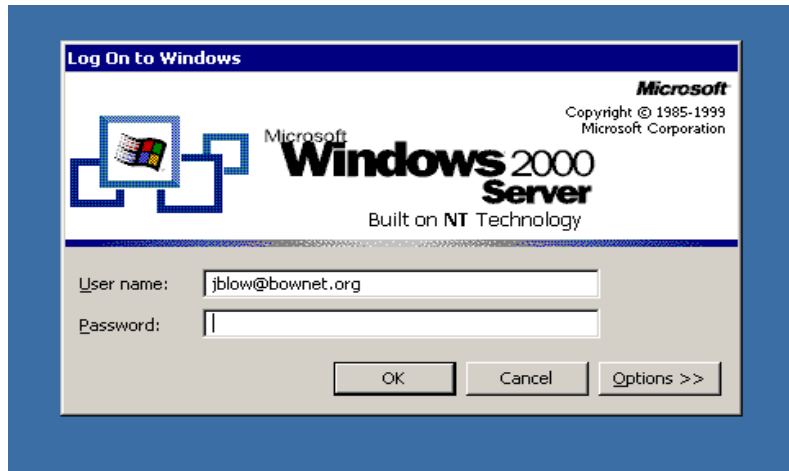
BowNET, the Domain, consists of a list of servers, workstations, files, and users which all interact with each other any time you do anything to any computer in any of our buildings. For example, student Joe Blow "logs in" to computer PC102 at Bow Elementary School. He logs into the Domain "BowNET" with his username "Joe Blow" and his current password, "\*\*\*\*\*". All of this information travels over the network to Roy's office in the high school where one of the domain controllers (server) validates the user. Is there a BowNET user named Joe Blow who has permission to use PC102 at BES at this time of day with the password "\*\*\*\*\*".

If Joe is a valid user, the domain controller then informs the rest of the server farm where Joe is and what he has permission to access. The domain controller then lets the computer Joe is using "PC102" execute Joe's "Login Script". This script assigns drive letters to parts of the network that Joe has access to (i.e. H: for Joe's Home Directory).



**Above:** Example of a 3-line authenticator

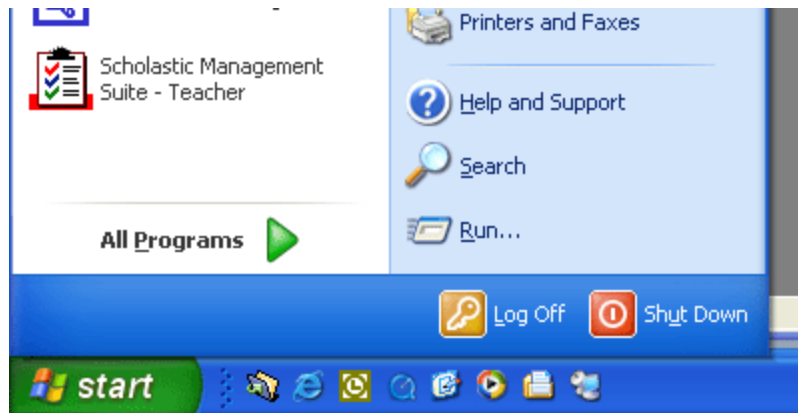
**Below:** Example of a 2-line authenticator



Depending on which version of Windows you are using, you may be presented with either a 3-line or a 2-line authenticator. Windows 9x should always be a 3-line, where you enter your username, your password, and your domain (Bownet). Windows 2000 and Windows XP can present you with a 2 line authenticator.

With a 2-line authenticator, your username must be a combination of your domain and your username, and both operating systems would be looking for your email address, i.e. [jblow@bownet.org](mailto:jblow@bownet.org). You also have the option of pressing the "Option" button which presents you with the 3-line authenticator.

Permissions to networked resources (files, programs, printers, etc.) are assigned to an individual's user name (Joe Blow) or by groups of individuals (Faculty). **Important:** When you "log in" to a computer, you give it (and anyone sitting at it) access to all network resources you have access to. That level of access remains until such time as you "log-off" of the computer. "Log Off" on a Windows machine is accomplished by going to the "Start Menu", selecting "Shut Down" and then selecting "log off?". Shutting down the computer, also logs you out of the network.



## Security

**File Security:** When properly used, BowNET is a very secure (and safe) environment. **All valuable files should be saved to your "Home Directory" (H:).** Saving files to H: provides the following advantages:

- **Security:** Files saved to your home directory are only accessible by you\*\*, while files you save to the local computer "C:" are accessible by anyone who sits at the computer.
- **Availability:** Files saved to your home directory are accessible within the district from any computer (Mac or PC) as well as remotely from home. Files saved to the local computer "C:" are accessible only from that computer.
- **Safety:** All files saved on the server farm are backed up nightly onto DAT tapes. Even if the building burns to the ground, files saved to the server farm can be restored from tapes kept off-premise.

\*\* Please note that access to files is based on the following hierarchy: "Guest" on the bottom, followed by "Student", followed by "Faculty", followed by "Administration", followed by "Domain Administrators". Guest's can only access files, which are shared to "Everyone", "Students" can only access files in their own home directory, "Faculty" can access all "Student" folders, but only their own "Faculty" home directory. "Administrators" can access all folders.

## Changing Your Password

File security can be maintained by remembering to "log-in" and "log-out", not sharing passwords, regularly changing passwords and choosing appropriate passwords. Domain passwords are changed as follows:

- **Windows 2000/XP:** 3-Finger Salute (Ctrl)(Alt)(Delete), and then click on "Change Password".
- **Windows '95 & '98:** Go to "Start Menu", select "Settings", select "Control Panel", and double click "Passwords", select "Change Windows Password" and select "Microsoft Networking". Please note that this will immediately change your Domain password and the password for local access on that particular machine. Local access passwords will still have to be changed at each Window's 95/98 machine that you use.

Please note that when you change your "Domain" password, it affects all "Domain" resources such as e-mail, and Internet access. It does not affect non-domain passwords such as MMS2000 accounts or Personal folder encryption.

## Finding Networked Resources

The "Log-In Script" which runs when you "log-in", automatically connects you to the network resources you are most likely to need. These "volumes" are available by opening the "My Computer" window.

### Example of a "Log-In Script":

```
net use h: /home
```

```
net use l: \\odyssey\clipmedia
```

```
net use r: \\enterprise\readmore
```

```
net use t: \\reliant\besmms2k
```

```
net use v: \\defiant\WWNet
```

```
net time \\odyssey /set /yes
```

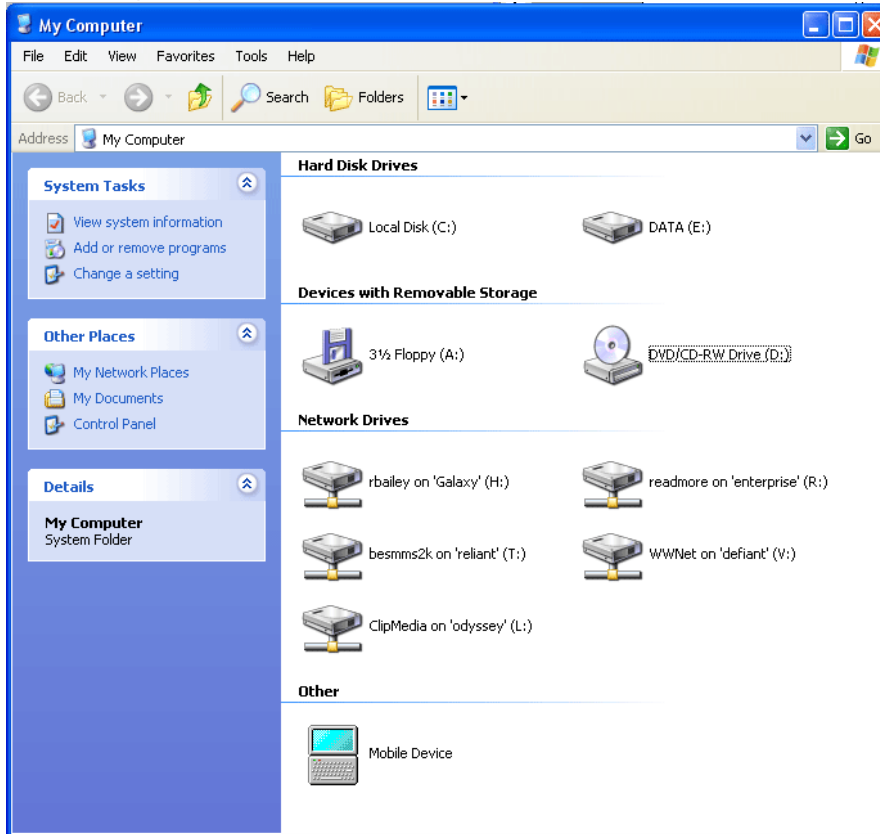
```
REM Microsoft Systems Management Server (start)
```

```
REM SMS Build 1493
```

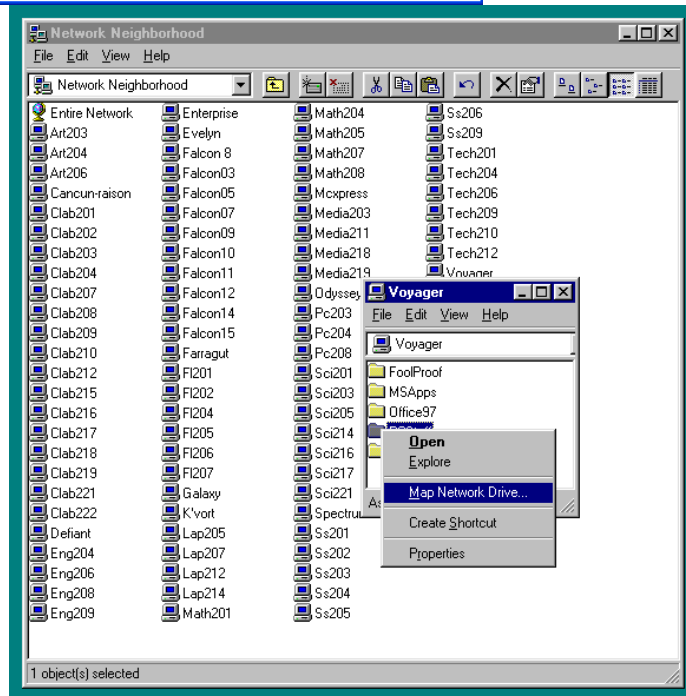
```
call %0\..\smsls
```

```
REM Microsoft Systems Management Server (end)
```

## Resulting "My Computer":

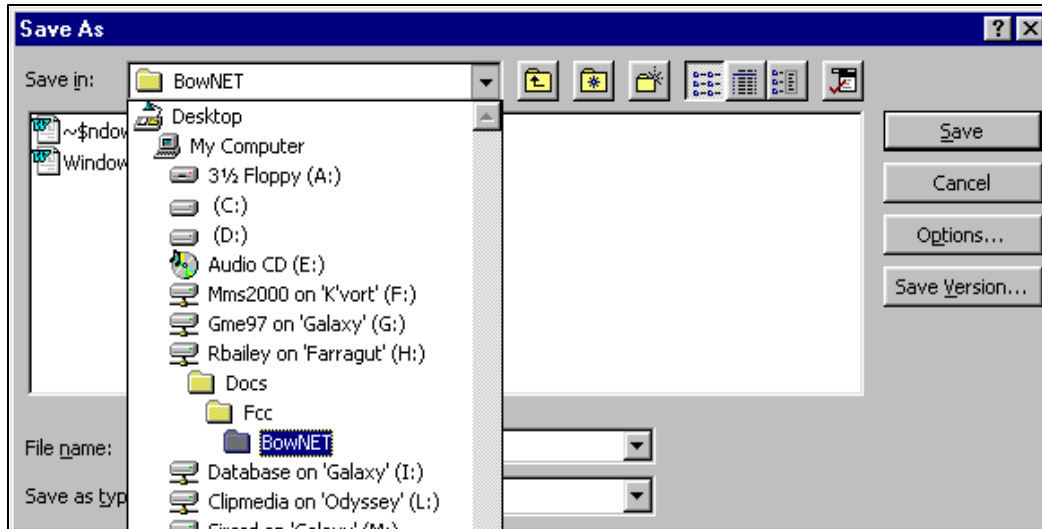


If you wish to connect to additional networked volumes, or networked printers, you can do so through the "Network Neighborhood" a.k.a. "My Network Places". "Double-Clicking" the desired computer will reveal its shared volumes and printers. "Double-Clicking" on a printer you have access to, will install that printer to your computer. "Double-Clicking" on a shared volume you have access to, will open the volume. You may also map an accessible volume to a drive letter by clicking on it with your right mouse button and selecting "Map Network Drive".



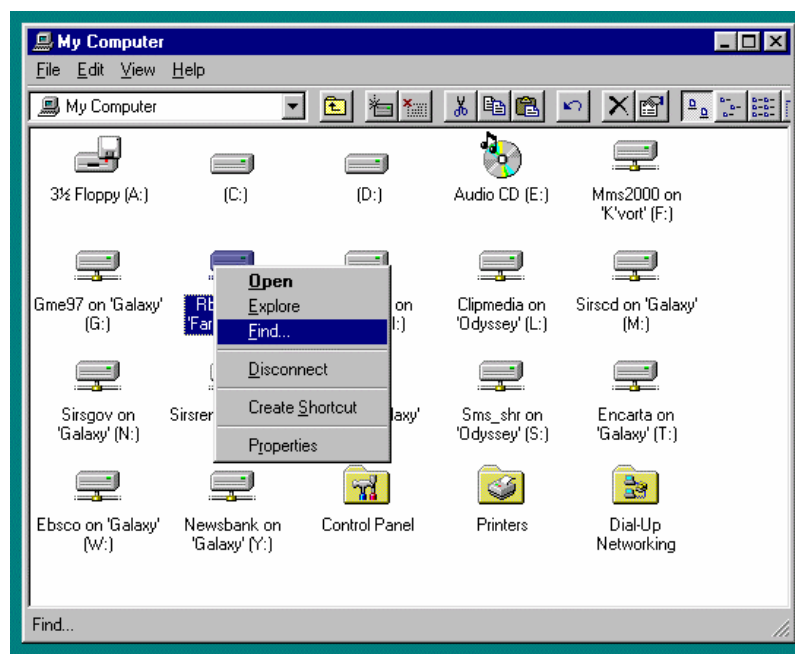
## Saving Files:

**Students and Faculty should save all important files to the network.** This is done by saving to the appropriate "sub-folder" on H:. Please note that Windows tries to save files to "My Documents" by default. Both of these directories are "usually" located on C: (local).



## Finding Files:

One of the most important steps in "Saving files" is remembering where you saved them. Should you forget, you can search for a file using "wildcards" on any local or networked volume by clicking on it with the right mouse button and selecting "Find". For example, if looking for an Excel file on H:, you'd click on H: with the right mouse button and select "Find". In the "Named" field, you'd enter the wildcard symbol (\*) followed by the suffix for excel files (.xls). "\*.xls" This results in a listing of all excel files stored on sub-directories you have access to on H:



## What's a GUI?

GUI stands for *Graphical User Interface*, and it is a term for how the computer interacts with you as a user. Windows is a GUI based on the concept of manipulating "windows". Thus a program runs in window. Data is copied from program to program by copying data from "window" to "window", etc...

## GUI Basics

You will usually interact with your "windows" via a device held in your hand called a mouse. Moving the **mouse** left and right, or up and down results in the **cursor** on your screen moving left and right, or up and down.



**Programs** and **Files** are represented on your computer screen via **Icons**. The mouse usually has two buttons. The left button is used most of the time and is used to select or activate the program or file represented by an icon. You can click once on an icon to select it, or quickly click it twice (**Double Click**) to activate the icon. The right button is used for secondary functions like calling up a program's properties.

### Example:

- left click on the icon to select and move the icon
- left double-click on the icon to run the program, open the file/folder
- right click on the Outlook icon to change the program's properties

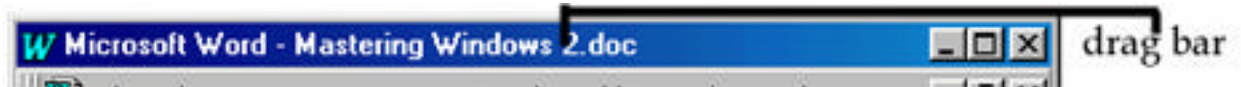


Result of a "right-mouse-button-click"

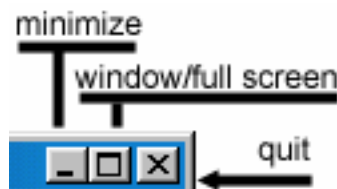
## Using "Windows"

You will normally **Launch** (run) a program by selecting its icon from the "Start Menu" (usually found in the lower left side of the screen). You could also launch a program by double-clicking on its icon or on a file associated with it.

Once the program is running, you can move it's window by clicking on the "**drag**" bar which runs along the top of it's window.



The 3 little boxes found on the top right hand corner of the drag bar are used to minimize, switch from windowed to full screen, or to quit the program or file running in



the window.

You can also maximize the size of a window by double-clicking on the drag bar. You can relocate a window's position on your screen by "**dragging**" it via its drag bar. If you "minimize" a window, you can restore it to its previous size by clicking on its "button" as seen on the "**taskbar**".



You can also switch between multiple opened programs by clicking on their taskbar button or by pressing the "tab" key while holding down the "alt" key.

You can also resize any window by clicking on an outside edge or corner and dragging it to the desired size.

You exit a program by selecting "Exit" from the program's Files Menu or by pressing **(Alt)F4**.

## File Management

### Desktop

When you first log into a Windows computer, the screen you end up at is the "desktop". On a typical machine the desktop might include icons for "My Computer", "Internet Explorer", "Outlook" (email), "Network Neighborhood", and more. You can customize the appearance of your desktop, save and open files, and run programs from it.

**Important:** For security purposes, you should "save" files only to your home directory "H:". Your network home directory gives you the following advantages:

- **Security:** Files on the network can only be accessed by users with proper credentials
- **Safety:** Files on the network are backed up to DAT on a nightly basis. Any deleted or damaged files can be restored if Roy is notified within 5 days.
- **Access:** any computer on our network (assuming user has proper credentials) can access files on the network

### My Computer

If you open "My Computer", you will see all the "volumes" available for your use. These include both "local" and "networked" resources.

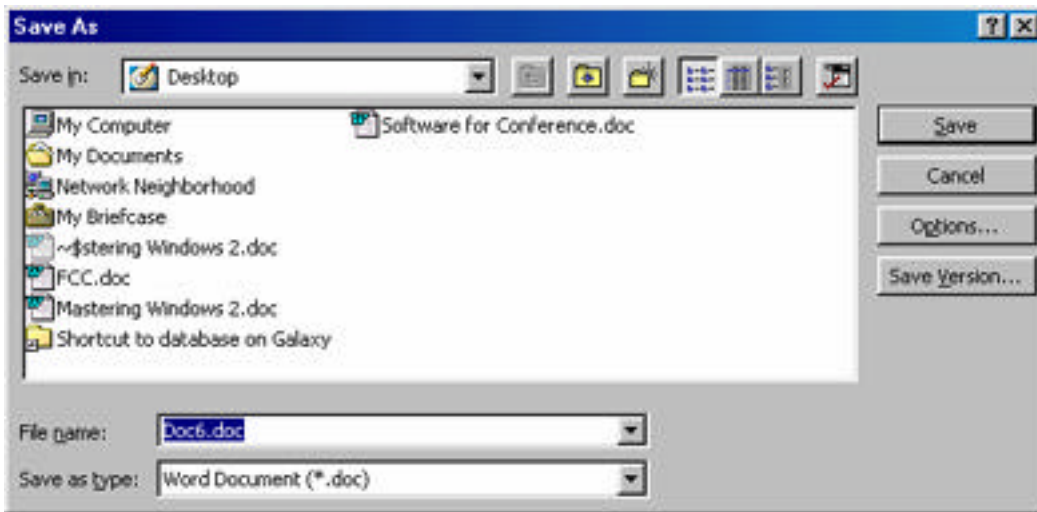
- A: Floppy Disk (B:)
- C: Hard Drive
- D: CD-ROM
- H: Home Directory
- Others are Network Resources which vary upon user



## ***Saving from Programs***

Saving "files" is accomplished in the same manner for most programs. While the program is running, go to the "**File Menu**" and select "**Save**". Save (brings you to the File Requestor Window (first time only)).

- "Save in"
- "File Name"
- "Save as Type"



"**Save As**" (brings you to File Requestor Window) Use when you wish to change:

- "Save in" location
- "File Name"
- "Save as Type"

## ***Opening from Programs***

Opening "files" is accomplished in the same manner for most programs. While the program is running, go to the "**File Menu**" and select "**Open**". "**Open**" brings you to the File Requestor Window.

- "Look in" location
- "File Name"
- "Files of Type"

## **Using “My Computer” to Manage Files**

- Selecting Volumes
- Selecting Folders (double click to open)
- Folder Options:
  - **Views:** You can also change the way icons appear and are arranged in your folders by using the **View** menu. Viewing items as a list, includes additional information such as file size and creation dates.
  - **Arrange** allows you to sort files based on name, date, size, or kind (i.e. Word files vs Excel files, etc.)
- Creating\Deleting Folders and Sub-Folders
- Drag and Drop to Copy, Move, & Delete Files
- Right Mouse Button and Properties to Copy, Move, & Delete Files
- **SEARCH**

### **Shortcuts:**

For programs you access regularly, you may want to create a shortcut to allow accessing it from locations other than the volume/folder it is installed in. To create a shortcut, click once on the program's icon with the RIGHT mouse button and select “Create Shortcut”

### **Using “Windows Explorer” to manage files**

- Hierarchy of Folders

### **Accessing the Faculty Folder:**

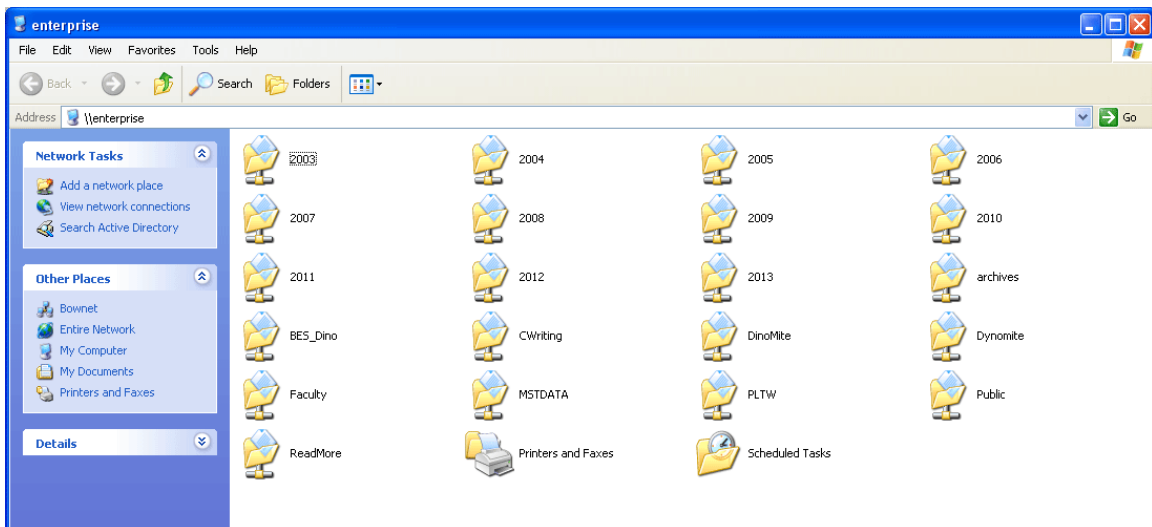
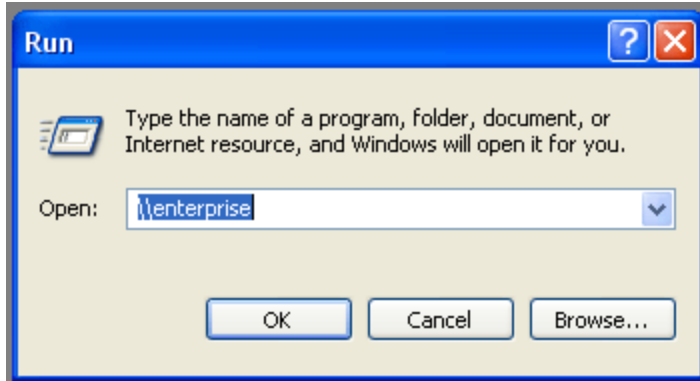
With Windows 9x, H: is mapped to the network share [\\enterprise\faculty](#). This was actually a bug in Windows 9x (H: should be mapped to teacher's individual folder in that share). However, since we were stuck using Windows 9x for many years, folks got used to seeing the entire faculty folder in H:, and started using shared folders stored in Faculty. Then along comes Windows 2000 and Windows XP which uses H: correctly. Now Joe Blow sees [\\enterprise\faculty\jblow](#) as H: and wonders how he can get at all that cool stuff in the “shared” folders. He can access it one of two ways; the easy way or the fast way:

#### “My Network Places” a.k.a. the easy way:

- 1) go to the Start Menu or your desktop and access “My Network Places”
- 2) if “Enterprise” isn't already visible, click on “Entire Network” followed by a click on “Windows Network”.
- 3) This displays all of our workgroups and domain. You should select “BowNET”
- 4) Double Click on “Enterprise” to display all of it's shares.
- 5) Double Click on “Faculty” to open it and see all faculty folders

“Start Menu” a.k.a. the fast way:

- 1) Goto the “Start Menu” and click on “Run”
- 2) Type in [\\enterprise](#) and press “ok” to see all of it’s shares.
- 3) Double click on faculty to open it and see all faculty folders



### **Accessing the Student Folders:**

When students log into BowNET, their H: drives are mapped to a different folder on the Enterprise than the one used by faculty. However all Bow Faculty and Administration can access the student folders using the “My Network Places” method or “Start Menu” method listed above. However, instead of opening the “Faculty” folder, open the folder that matches up with the students “year of graduation”. Example, Joe graduates in 2011 so his folder is [\\enterprise\2011](#).

### Accessing Printers:

There are at least 3 different ways that you can access a printer, and all require different instructions as follows:

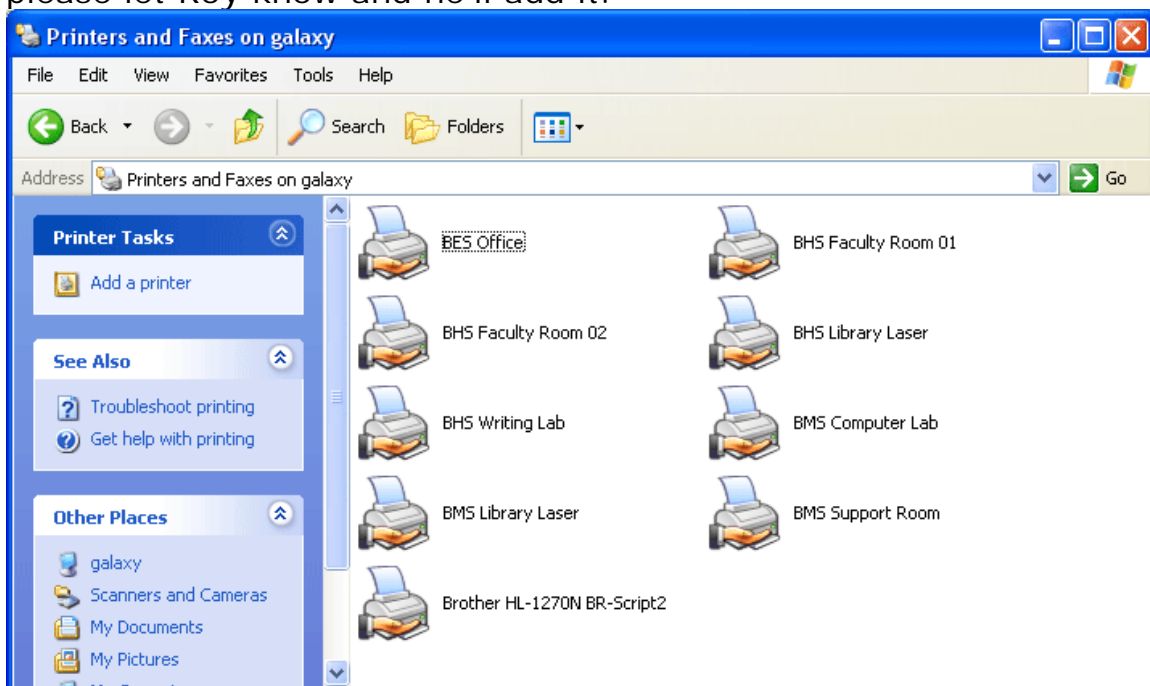
Direct Connect (lucky person has their own personal printer): The printer is directly attached to the computer you are using. To print, make sure that the printer is turned on, loaded with paper, and selected as the default printer for your computer. Press "print".

Peer to Peer Connect (the most common hookup for BowNET): In this scenario, the printer is a non-network personal printer as described above and it is attached to a computer other than the one you are using. However the computer it is attached to is sharing the printer. If your computer is already setup to print to a printer this way, simply make sure both the printer and the computer it is attached to are running and press "print". If you need to get connected to a "peer-to-peer" printer, you'll need to know the name of the computer the printer is attached to. Then you can either use the "My Network Neighborhood" or "Start Menu" methods described above to find the computer in question, and then double click on the icon that represents the printer it is sharing. If your computer and the computer that is sharing the printer, are both running the same operating system, this process is fairly painless. If you're running two different operating systems, (ie. you have XP and they have Windows 98) things could get dicey and you'll want to call in your building's Technology Assistant. The common problems with the "peer-to-peer" connect are caused by the host computer or the printer not being on when you try to print. Do so, can result in a variety of problems.



The black check indicates that the printer is the "default" printer.

Network Printer (becoming more common): In this scenario, the printer is plugged into a network jack, not a computer. These printers tend to be far more reliable as they don't depend on the host computer being on, etc... Ideally, you'd get your building's Technology Assistant to set up a "TCP/IP" port on your computer so that it directly connects to the network printer, however if you need to print "now", there is a printer queue on the server [\\galaxy](#) which contains most of these network printers. To access the queue, use either the "My Network Neighborhood" or "Start Menu" methods described above to access [\\galaxy](#) . You should see the network printers listed here. Double click on the one you want to use. If you should ever encounter a network printer which isn't listed in the Galaxy queue, please let Roy know and he'll add it.



**Important Tips for all printer types:** If you try to print a document, and nothing comes out, hitting print again is usually not a good idea. First, you should review the steps above to assure that you are printing to the correct printer, that it is on and loaded with paper/ink, and if it is connected to a different computer, make sure that computer is running. Too often, folks forget we're a network and hit print a dozen times not knowing that they are printing to a different building. If you confirm all of the steps above but can't print please contact your building's Tech Assistant. Don't keep pressing "print".

### **Accessing eMail:**

To have complete access to our District email, you will need to use a computer with Outlook 2000 or higher installed (not to be confused with Outlook Express). In addition to Outlook, you'll have to setup an Outlook Profile so the computer knows who you are and whose email you're trying to read. This process is beyond the scope of this class, but you can visit <http://www.bownet.org/fcc/Tutorials.htm> for both handouts and a video on how to do so. You can also elect to attend a future Faculty Computer Club session on Outlook. Until then, you can access your email via the web with no additional software or setup required (FYI – This work from anywhere in the world that you have Internet access):

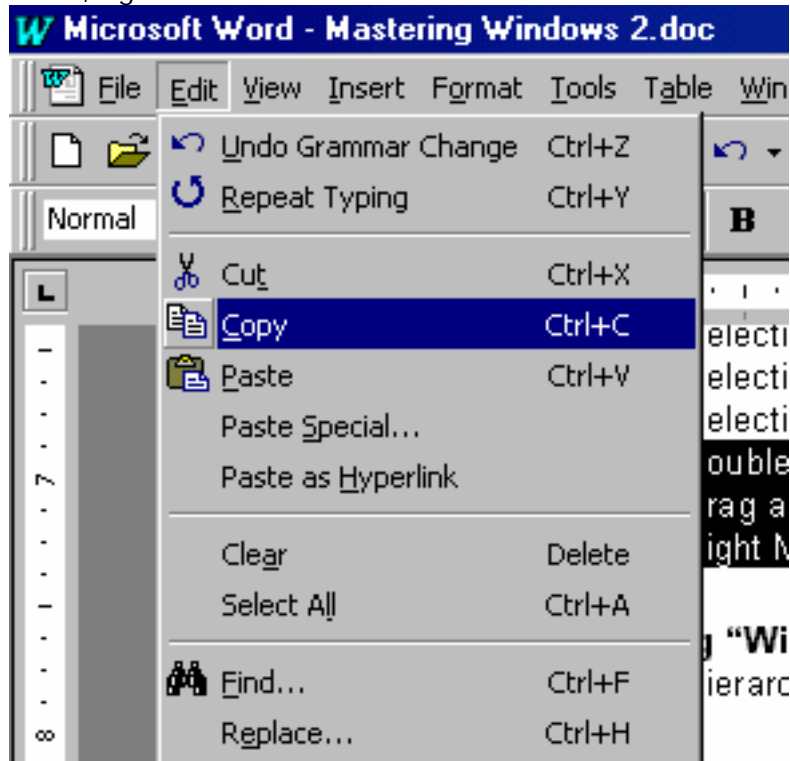
- 1) Get on the Internet and goto <http://mail.bownet.org/exchange>
- 2) You'll be prompted with either a 2 line or a 3 line authenticator (see beginning of this handout)
- 3) For 3 line authentication, username=username, password=password, and domain=bownet
- 4) For 2 line authentication, username needs to be a combination of domain and username. In this case it would be "bownet\username". Please note the direction of the "\" as the other one won't work.

**Settings - Control Panel:** Depending on the version of Windows you are using and the security policy for the computer you are using, the following control panels may or may not be available to you:

- System
- Display
- Date and Time
- Mouse
- Sounds and MultiMedia
- Passwords
- Printers

## Hot Keys to Know!

There are certain keyboard shortcuts, which are universal to most Windows programs. These shortcuts are also known as "hot keys" and are usually indicated in a program's menu, right next to the related menu item.



## Some Common Hot Keys:

- HELP: **F1**
- Save: **Ctrl+S**
- New: **Ctrl+N**
- Open: **Ctrl+O**
- Print: **Ctrl+P**
- Select All: **Ctrl+A**
- Cut: **Ctrl+X**
- Paste: **Ctrl+V**
- Copy: **Ctrl+C**
- Undo: **Ctrl+Z**
- Quit: **Alt + F4**