

Laboratorio di Amministratore di Sistema

5. Windows Server

[Cisco ITESS II - Chapter 8]

Università di Venezia – Facoltà di Informatica
feb-mag 2013 - [A. Memo](#)



ver 2.2

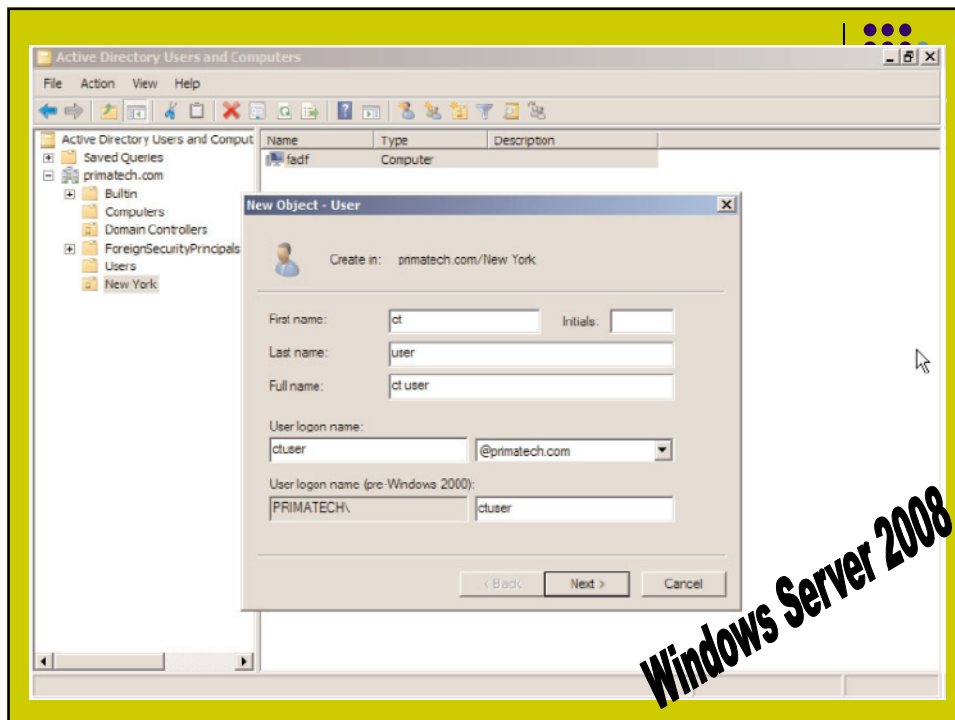
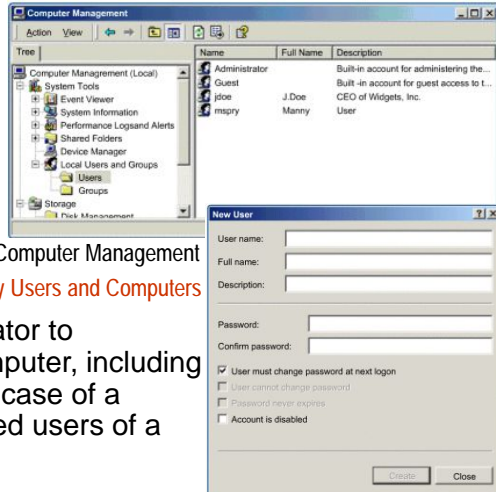
Windows 2000 Professional



- 8.1 Installation
- 8.2 Administration/User Interface
- 8.3 User Accounts
- 8.4 Managing the File System
- 8.5 Services

Adding Users

- Before logging on to any Windows 2000 client, a user account must first be created on the appropriate network server.
- The task of creating this account in Windows 2000 is performed with the Computer Management tool
Start > Programs > Administrative Tools > Computer Management
Active Directory Users and Computers
- It allows a system administrator to manage all aspects of a computer, including authorized users, and in the case of a network server, the authorized users of a network domain.



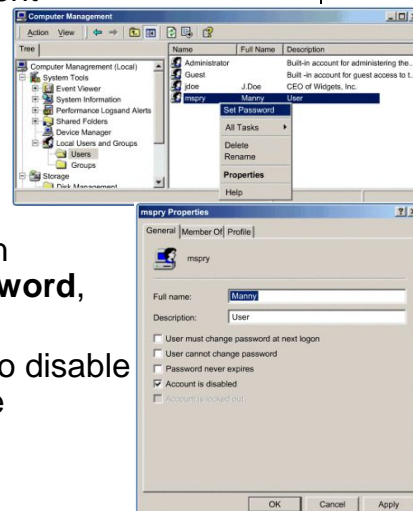
Windows Server 2008

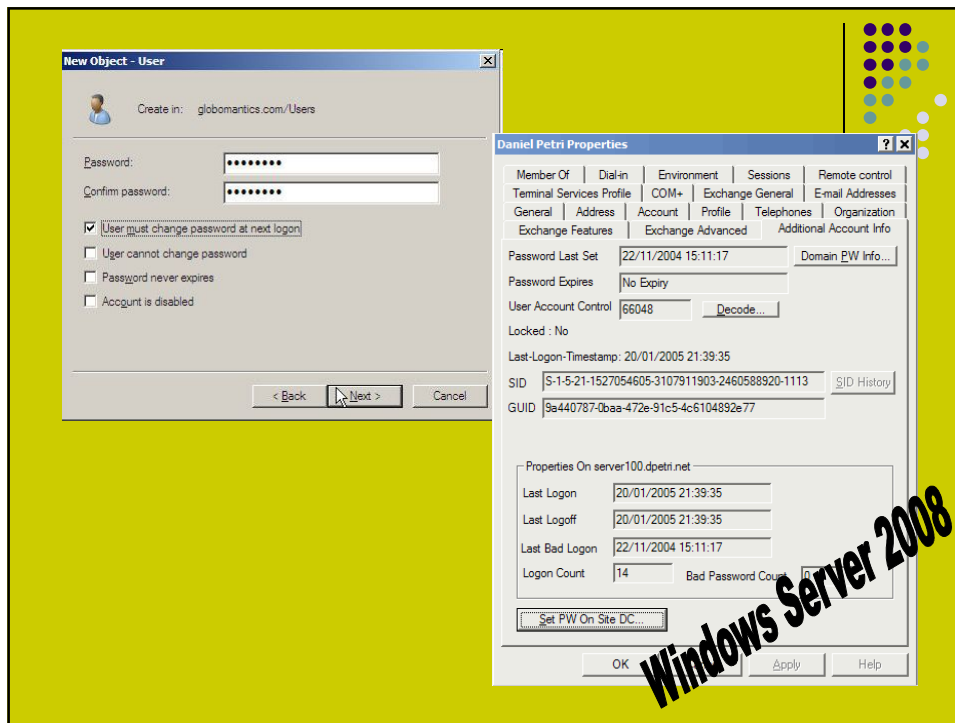
Alcuni links

- **Add user to Ubuntu server using terminal**
<http://www.youtube.com/watch?v=F1aNqjedEYg>
- **Add User on Ubuntu 8.10**
<http://www.youtube.com/watch?v=NMdY0Pvic3g>
- **Creare un Utente in Ubuntu 8_04**
<http://www.youtube.com/watch?v=kJ8gnK4mFSA>
- **Windows Server 2008 add users to active directory**
<http://www.youtube.com/watch?v=8Js3H9jG67l>
- **Windows Server 2008 dsadd, add users to active directory with command line**
<http://www.youtube.com/watch?v=fLFpHvQApFc>

Managing User Accounts

- The simplest user management technique is to right-click the user name listed in the right half of the Computer Management window and select the appropriate task from the menu.
- The system administrator can instantly choose to **Set Password**, **Delete**, or **Rename** the user.
- Selecting **Properties** can also disable the account and checking the **Account is disabled** box.





Functions and Permissions of the Administrator

- Typically, the **administrator account** will have rights and permissions to control, configure, or change anything in the operating system.
- Windows uses a variety of different built-in administrator account.
- Windows 2000 Pro automatically creates the main administrator account to manage the overall system.

Built-in Windows Groups account



Administrators have complete and unrestricted access to the computer/domain.

Backup Operators can override security restrictions for the sole purpose of backing up or restoring file.

Guests have the same access as members of the Users group by default, except for the Guest account which is further restricted.

Power Users possess most administrative powers with some restrictions. Thus, Power Users can run legacy applications in addition to certified applications.

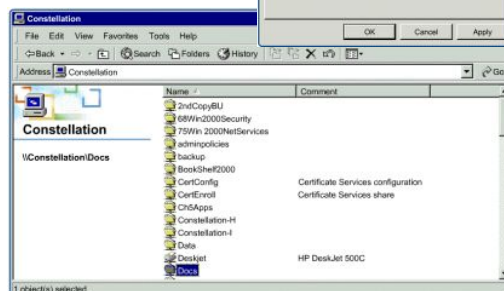
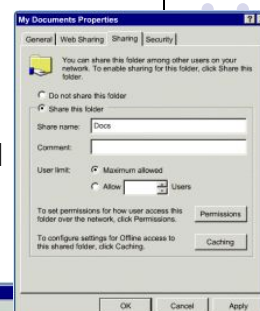
Replicator supports file replication in a domain.

Users are prevented from making accidental or intentional system-wide changes. Thus, Users can run certified applications, but not most legacy applications.

Debugger Users can debug processes on this machine, both locally and remotely.

Creating and Sharing Folders

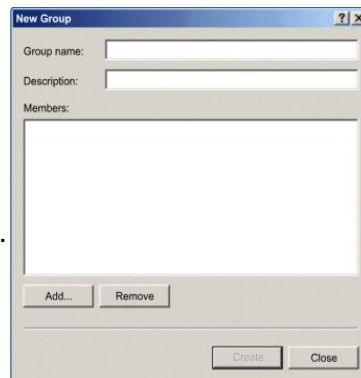
- A system administrator creates folders and directories that users throughout the network will share and use to backup files.
- To share a new folder the administrator will right-click on the folder and select Sharing.
- The administrator selects the Permissions tab to assign which users or groups will have permission to access this directory.
- Another way to share a folder is to create a drive on the server (recommended way).



Creating Groups and Adding Users



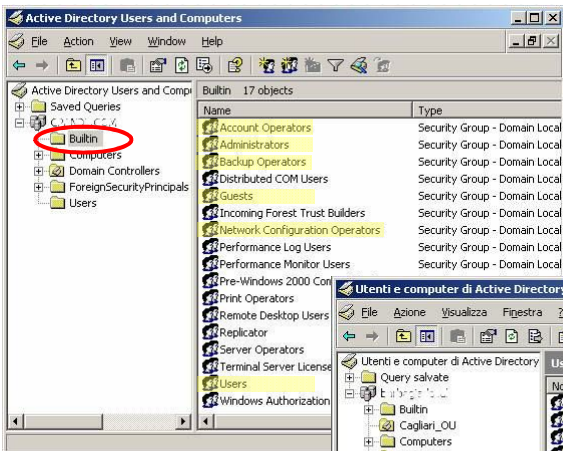
- Windows allows system administrators to create groups of users
- A “**local group**” exists only on a single computer and is comprised of various users of that computer
- Network-oriented groups include **global groups**, **domain local groups** and **universal groups**.
- During installation Windows 2000 creates default local groups such as the Administrators and Users groups.
- Each group has differing levels of control over the local system.
- Users can create new local groups using the Computer Management tool.
- To add more users, rename, or delete the group, simply right-click the group name in the window and select the appropriate menu choice.



Gruppi in Windows 2003 Server

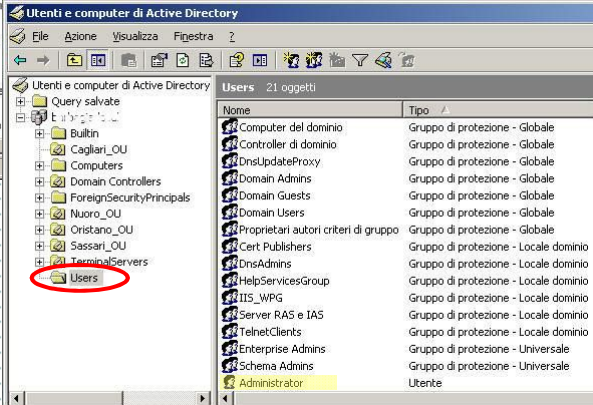


- classificazione in base al tipo di attività del gruppo
 - **Security Groups** (*usati per applicare permessi a risorse, alle quali può accedere un largo numero di utenti*)
 - **Distribution Groups** (*usati per comunicazioni di gruppo tramite e-mail*)
- classificazione in base all'ambito del gruppo
 - **Machine Local Groups** (*applicati solo a oggetti locali della macchina, solo per compatibilità con Windows 2000*)
 - **Domain Local Groups** (*possiedono permessi a risorse presenti nel solo dominio in cui risiedono*)
 - **Global Groups** (*possiedono permessi a risorse presenti in qualsiasi dominio del gruppo padre*)
 - **Universal Groups** (*possiedono permessi a risorse presenti in qualsiasi foresta di domini, Multiple-Domain*)



I gruppi predefiniti si trovano nei contenitori Builtin e Users

Gruppi in Windows 2003 Server



Passwords and Permissions

- A password is a secret collection of characters that only one user knows.
- Passwords are used in conjunction with a user name when logging on to a NOS to verify the identity of the user.
- Passwords do not necessarily need to be unique among users but should be kept secret to ensure network security.
- Administrators often require passwords to be frequently changed.

Password:	Good or bad?	Reason:
fsh	Bad	Too short, at least five characters recommended.
fishing	Bad	At least one numeric or special character recommended. Using complete English words is not a good idea.
f!shngco94	Good	Longer than five characters. Uses an exclamation point and numerals. Not an English word, is not easily guessed.

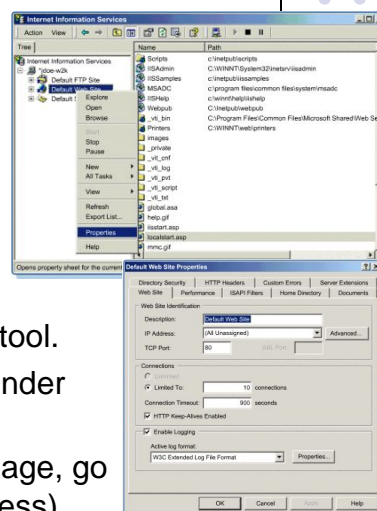
Passwords and Permissions

- Permissions are restrictions created by the administrator that enable or disable some actions
- Permissions are assigned to user during the account creation process; typically are classified in
 - Read permission
 - Write permission
 - Execute permission



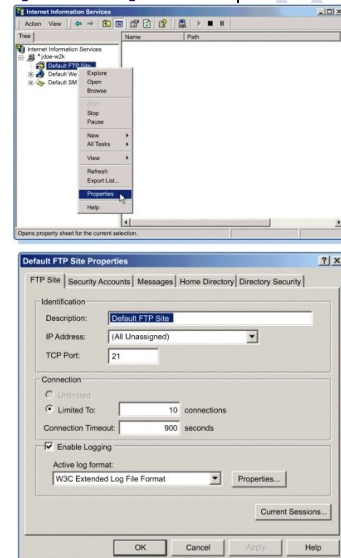
Hypertext Transfer Protocol (HTTP)

- By enabling the Hypertext Transfer Protocol (HTTP) service on a NOS, the computer becomes a web server capable of sending out information over the World Wide Web (WWW).
- This service is activated and configured through the use of the Internet Information Service (IIS) tool.
- The HTTP web service is found under the name **Default Web Site**.
- To view the system default web page, go to <http://127.0.0.1> (loopback address)



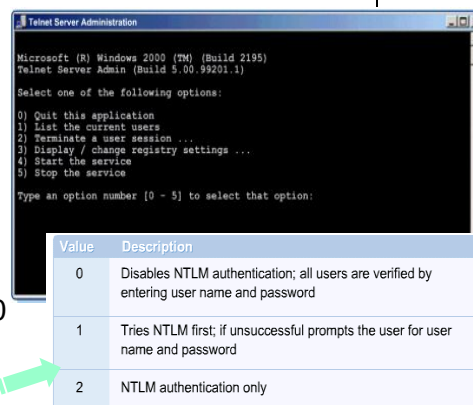
File Transfer Protocol (FTP)

- The Internet Information Services (IIS) tools are necessary to run both the FTP and HTTP services for Windows 2000 computers.
- Once the IIS component is added, the FTP service is ready to be configured, launching
Start > Programs > Administrative Tools > Internet Services Manager
- By opening the right-click menu on the **Default FTP Site** icon, the system administrator can start, stop, and pause the service in addition to configuring its various properties.



Telnet

- For security reasons, only a user with administrator privileges can manage the Telnet server on a Windows 2000 machine (*backdoor?*).
- For a user to Telnet to a Windows 2000 machine, the user must also be able to log on to that machine locally.
- By default, the Windows 2000 Telnet server is configured to use Windows NT LAN Manager (NTLM) for user authentication.
- To restrict telnet access to specific local users, a local Telnet Client group can be created.



Stopping and Starting Services in Windows



- Windows provides a Services Management Control screen to operate with services
 - Start > Programs > Administrative Tools > Services
 - *Right click on My Computer > Manage > in the MMC, select Services and Applications > Services*
- Microsoft Management Console (MMC) allows management of networks, computers, services and system components
- The services are displayed in alphabetical order by name.
- A description of what each service does is displayed to the right.

Stopping and Starting Services in Windows



- MMC provides a common host environment for **snap-ins**, provided by Microsoft and third party software vendors.
- Snap-ins provide the actual management behavior.
- The MMC project's goal is to support simplified administration through integration, delegation, task orientation, and overall interface simplification.

Stopping and Starting Services in Windows

Properties dialog box:

General tab:

- Name
- Path
- Starting method
- Status
- Start, stop, pause, resume

Log On tab

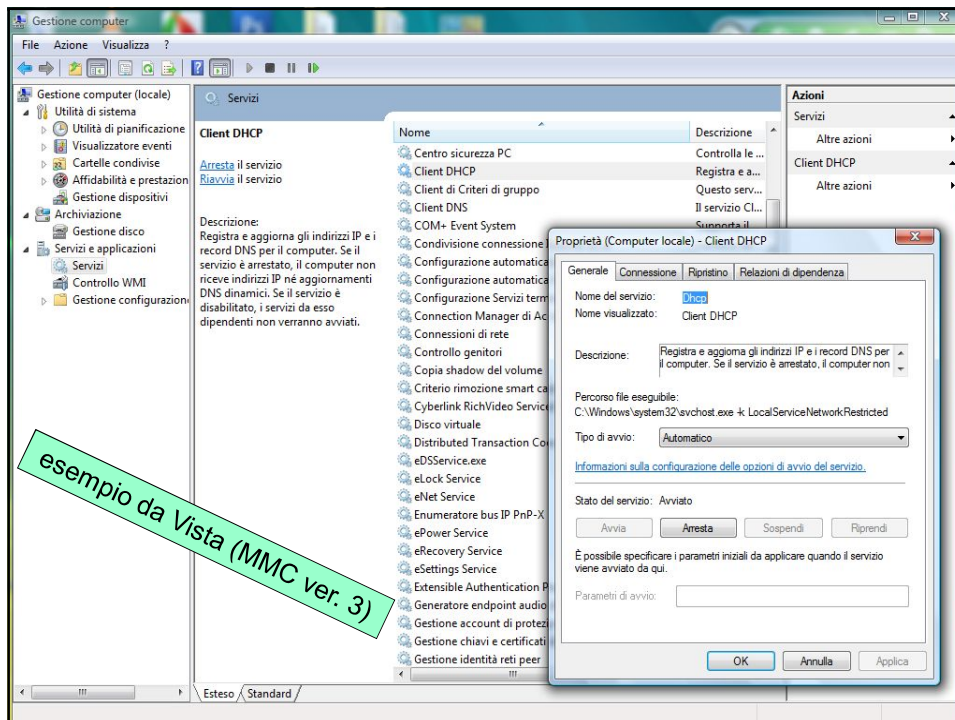
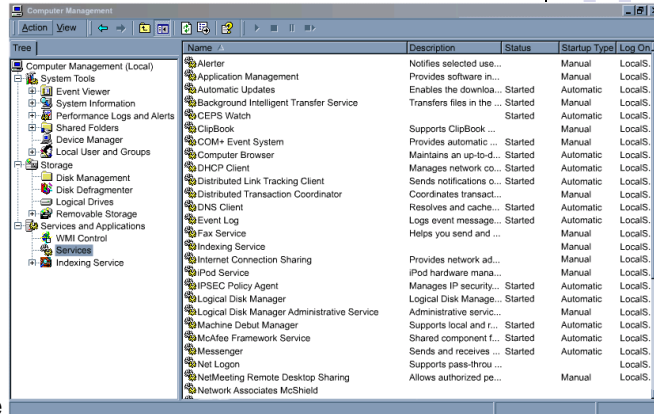
- Account used to run the service
- Hardware profile used by the service

Dependencies tab

- Services running before the selected service

Recovery tab

- Action if the service fails (first, second or additional failures) : no action, restart, run a file, reboot the system



E-Mail Server/Client Relationship



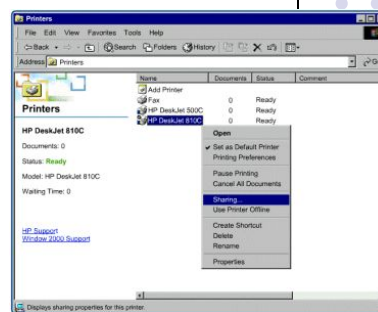
- Microsoft uses Exchange as the e-mail server.
- The client side can be a variety of office suite products.
- When a user sends e-mail to another user, it is sent first to the server where it will be placed in the recipient's mailbox.
- The user who is receiving the e-mail opens the e-mail program and reads the e-mail from the mailbox.
- E-mail works as a store-and forward application.
- Today e-mail can be used as file transfer (attached files) and is spawned into a variety of instant messaging systems.



Printing in Windows 2000

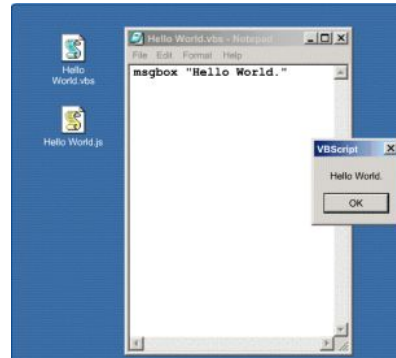


- A print server is a computer dedicated to handling client print jobs in the most efficient manner.
- A printer server should have:
 - a powerful processor
 - adequate hard disk space
 - adequate memory
- Sharing a local printer:
 - go to the Printers folder, and then right-click, the printer name.
 - choose **Sharing**, click **Shared as** option button, and then either enter a share name or accept the default.
- Connecting to a shared printer:
 - use **Add Printer Wizard**, or use the **net use** command
 - `net use LPT1: \\computername\printername`

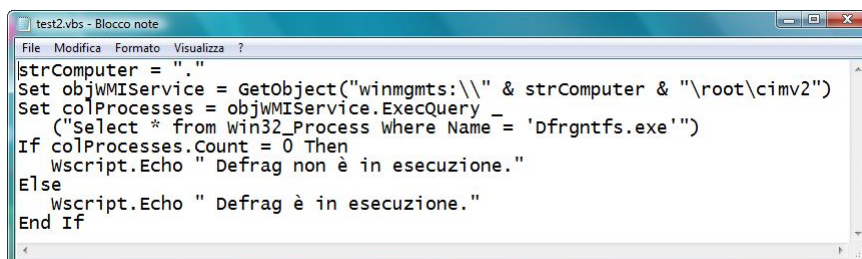
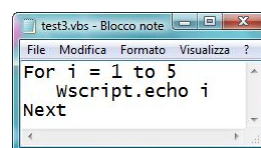
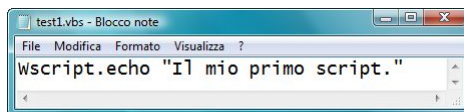


Scripts

- Windows 2000 can accommodate many types of scripting languages using its built-in Windows Script Host (WSH).
- This component of Windows 2000 and XP enables users to create scripts using either the VBScript or JavaScript languages. Or any other scripting language the user desires.
- Users can open the Notepad text editor to edit scripts.
- The file extension indicates its scripting language to WSH
 - Visual Basic Script (.vbs)
 - JavaScript (.js)
- To launch a script can be used Cscript or Wscript



Visual Basic Script (vbs)



```
test4.vbs - Blocco note
File Modifica Formato Visualizza ?
Wscript.Echo "Cinque numeri casuali tra 1 e 100"
intMaggiore = 100
intMinore = 1
For i = 1 to 5
    Randomize
    intNumero = Int((intMaggiore - intMinore + 1) * Rnd + intMinore)
    Wscript.Echo intNumero
Next
```

```
test5.vbs - Blocco note
File Modifica Formato Visualizza ?
Set objWMIService = GetObject("winmgmts:")
Set objLogicalDisk = objWMIService.Get("win32_LogicalDisk.DeviceID='c:'")
Wscript.Echo "Spazio libero sul disco C: " + objLogicalDisk.FreeSpace
```

```
test7.vbs - Blocco note
File Modifica Formato Visualizza ?
" lanciare test7.vbs uno due tre
For Each strArgomenti in Wscript.Arguments
    Wscript.Echo strArgomenti
Next
```