

*Preparing Students for
MTA Certification*

MICROSOFT TECHNOLOGY ASSOCIATE

Exam Review Kit

EXAM 98-349

**Windows® Operating System
Fundamentals**

Module 1



LESSON 1.1

98-349 Windows Operating System Fundamentals

Configuring Control Panel Options and Desktop Settings

Lesson Overview

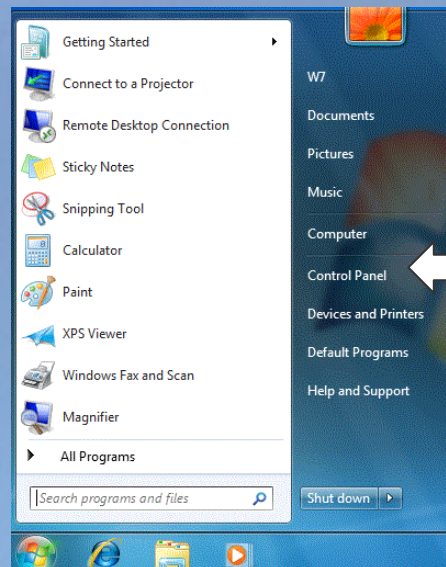
How can the Windows 7 experience be customized?

In this lesson, you will learn to:

- Configure Control Panel options
- Access applications within Administrative Tools
- Define accessibility options
- Configure desktop settings
- Add gadgets to the desktop

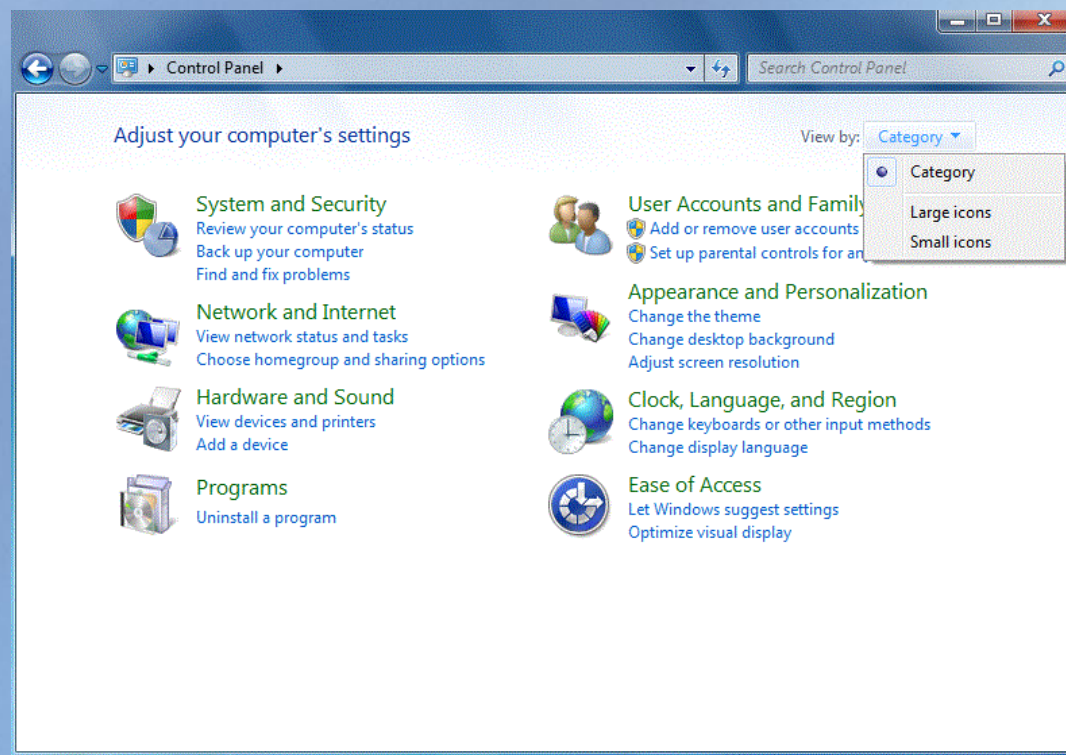
Configure Control Panel options

- The Control Panel enables users to configure operating system features and perform related tasks such as hardware and software setup and configuration, security, system maintenance, and user account management.
- To access the Control Panel, click Start and select Control Panel.



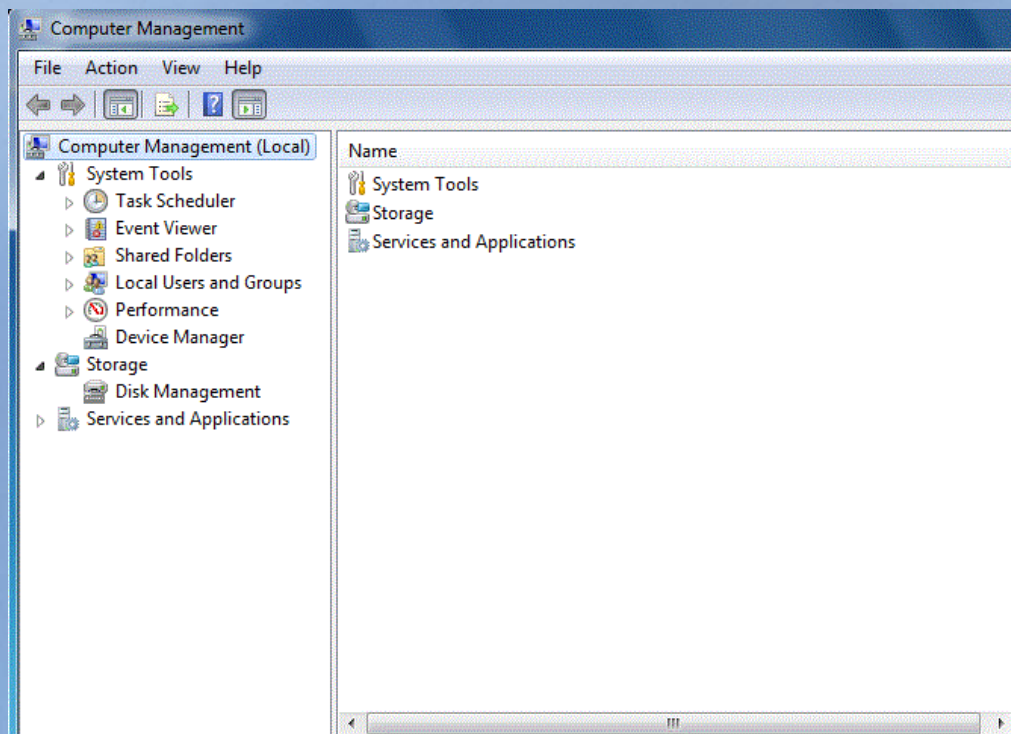
Configure Control Panel options (continued)

- Control Panel has three options for display:
 - Category, as displayed here
 - Large Icons
 - Small Icons



Access applications within Administrative Tools

- Administrative Tools is a collection of several important applications.
- The Computer Management console can be a starting point.



Access applications within Administrative Tools (continued)

- Computer Management includes the following administrative snap-ins:
 - **Event Viewer:** The central event logging console for troubleshooting. System, security, application errors, and warnings are written to event logs.
 - **Local Users and Groups:** A console used for creating local users, as well as modifying group membership, which can determine the privileges they will have during their session.
 - **Device Manager:** A console used for managing locally attached and internal devices. Device Manager can be used to update drivers or troubleshoot hardware problems.
 - **Services and applications:** A console for managing system and application services. These services essentially run or “are” the operating system.

Access applications within Administrative Tools (continued)

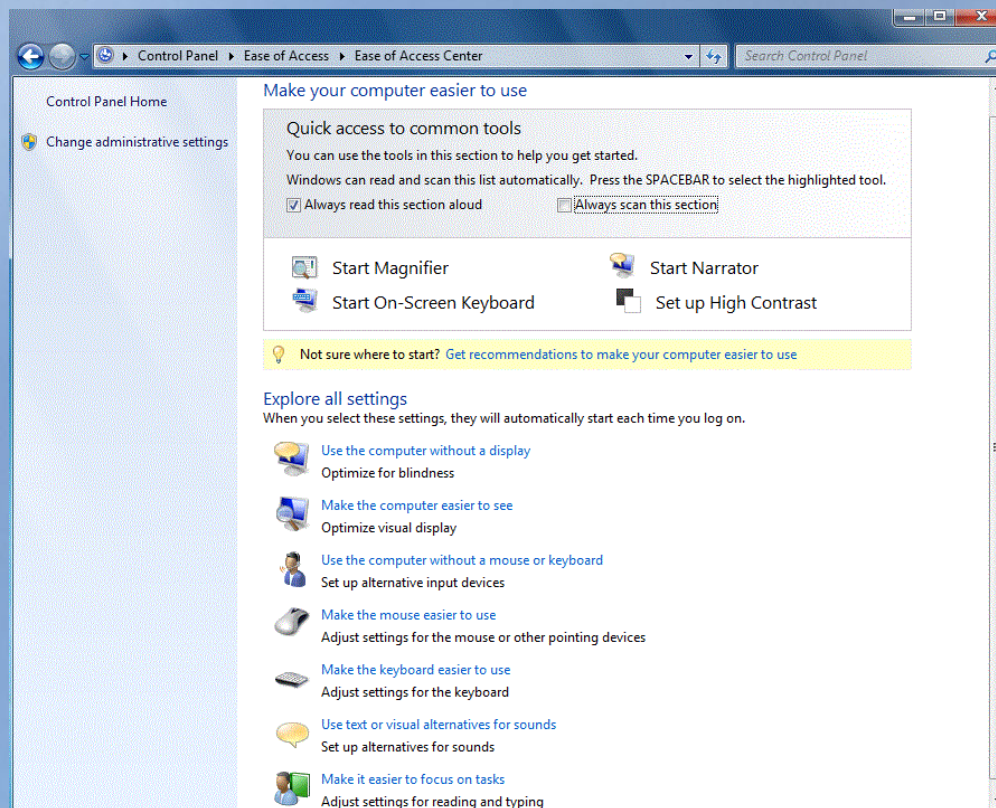
- **System Configuration:** A tool that can help identify problems that might prevent Microsoft Windows from starting correctly.
- **Task Scheduler:** Helps you schedule automated tasks that perform actions at a specific time or when a certain event occurs.
- **Performance Monitor:** Lets you examine how programs you run affect your computer's performance, both in real time and by collecting log data for later analysis.
- **Local Security Policy:** Group Policy settings used to customize and security the desktop.

Define accessibility options

- The features of Windows 7 that assist with accessibility options are found in the Ease Of Access Center within the Control Panel.
- Ease Of Access allows the system to be customized in the following areas:
 - Optimize for blindness
 - Optimize for visual display

Define accessibility options (continued)

- The Ease Of Access Center within Control Panel is shown here:

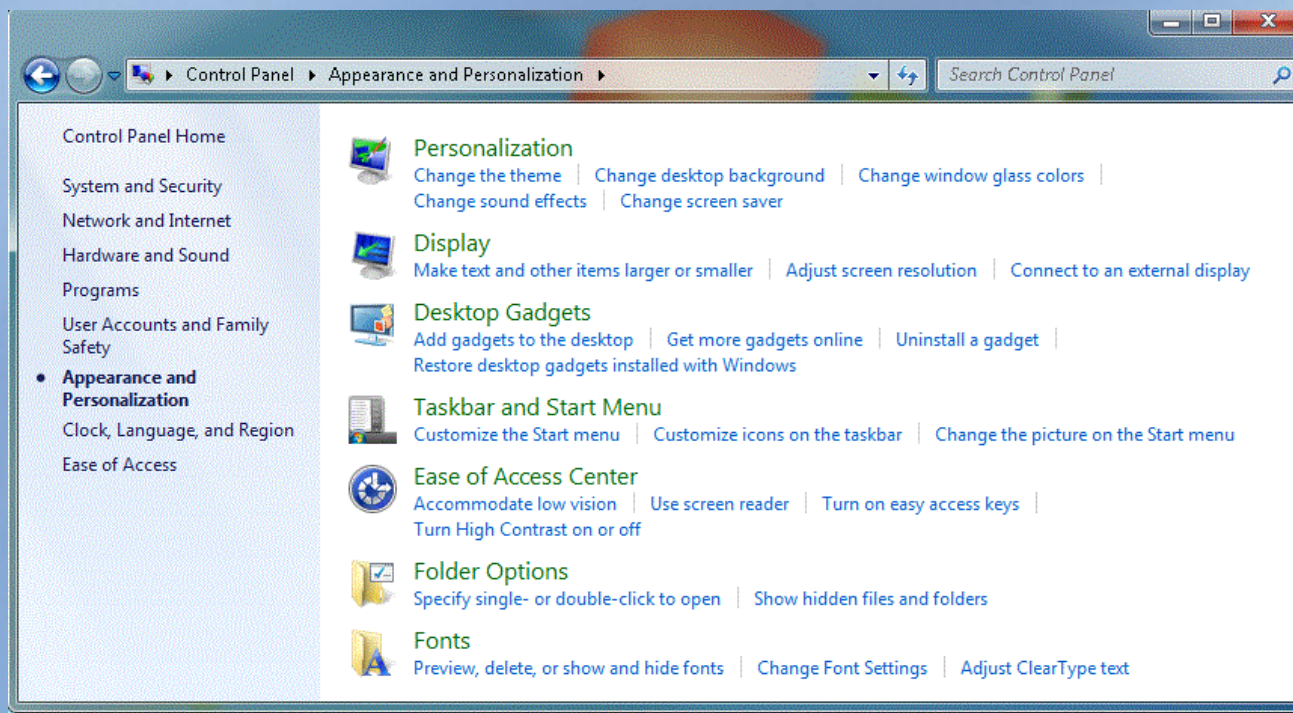


Configure desktop settings

- The Windows desktop can be defined as an onscreen work area that uses icons and menus to simulate the top of a desk.
- Items that can be customized can include the following:
 - **Themes:** A visual display setting that can modify the background, a screen saver, window border color, sounds, and sometimes icons and pointers.
 - **Screen resolution:** Refers to the clarity of the text and images on your screen. At higher resolutions, items appear sharper. They also appear smaller, so more items fit on the screen. At lower resolutions, fewer items fit on the screen, but they are larger and easier to see.
- Both can be customized through Control Panel under Appearance and Personalization.

Configure desktop settings (continued)

- The theme (along with other items) can be changed through the Personalization option.
- Screen resolutions can be changed through the Display option.

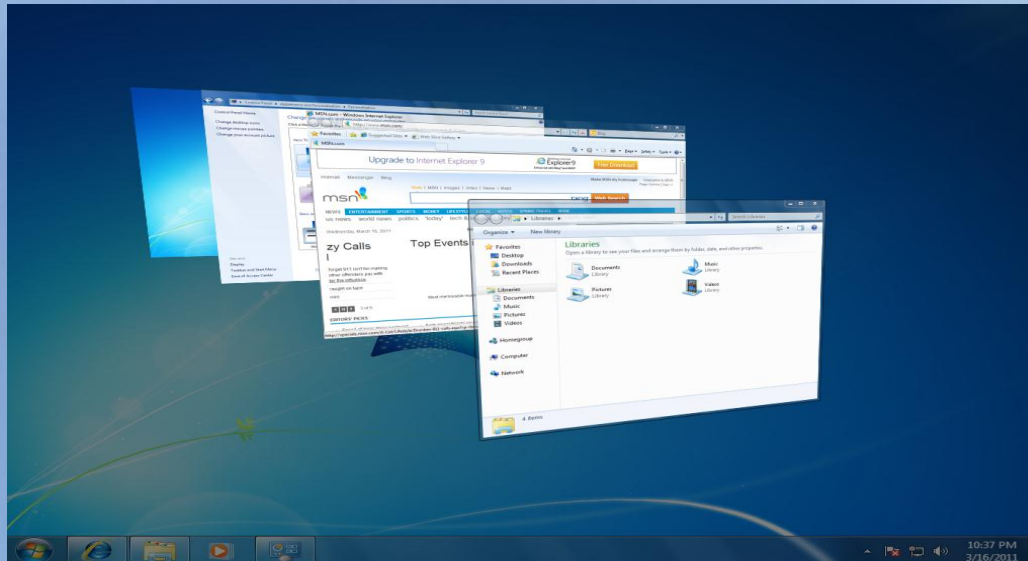


LESSON 1.1

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Configure desktop settings (continued)

- Aero themes use a higher amount of memory.
- Basic and high contrast themes use less memory.
- The Aero desktop allows for the “glass” display, along with other enhanced display features and options.
 - Allows for functions such as Aero Peek and Aero Shake.



Add gadgets to the desktop

- A gadget is a single-purpose application that puts information like news, pictures, or games on the Windows 7 desktop.



LESSON 1.1

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Complete Student Activity 1.1

LESSON 1.2

98-349 Windows Operating System Fundamentals

Understand Native Applications and Tools

Lesson Overview

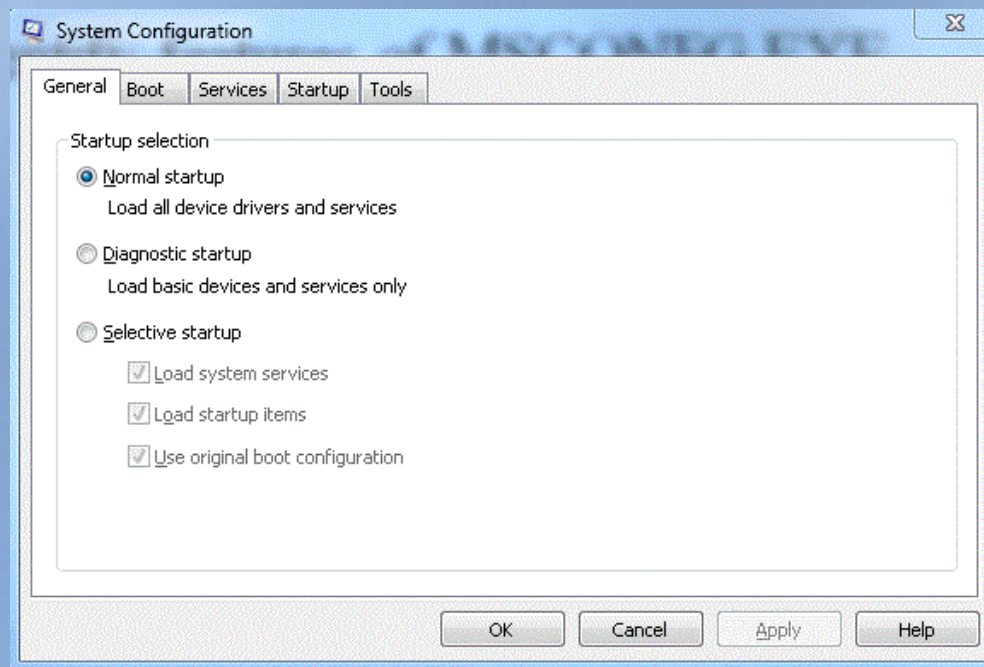
Understanding native applications and tools

In this lesson, you will explore:

- MSCONFIG features
- Windows Media Player features
- Windows Media Center features
- Windows Internet Explorer features
- Windows Explorer

MSCONFIG.EXE Features

- MSCONFIG.EXE is now referred to as System Configuration.
- It can be accessed by clicking Start and entering MSCONFIG or System Configuration in the Search Programs And Files field.



Windows Media Player Features

- Windows Media Player is available on all Windows 7 editions.
- It can be located by clicking Start, Programs, Windows Media Player.
- When first started, Windows Media Player will scan your computer for all media files to be the default application used for those file types.
- Windows Media Player features include:
 - Built-in support for many popular audio and video formats.
 - The Play To feature streams music and video to other PCs running Windows 7 or compatible devices, including TVs and stereos.

LESSON 1.2

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Windows Media Player Features (continued)

- Windows Media Player can organize music by Artist, Album, and Genre.
- You can create custom playlists within Windows Media Player.



Windows Media Center Features

- Use Windows Media Center to:
 - View, pause, and record HDTV.
 - Watch DVDs.
 - Listen to music.
 - Display photos.
 - View online shows.
 - Share media from one PC to another PC and to other home- and business-capable devices within the HomeGroup feature in Windows 7.
- Windows Media Center is available in the Home Premium, Professional, Ultimate, and Enterprise editions of Windows 7.

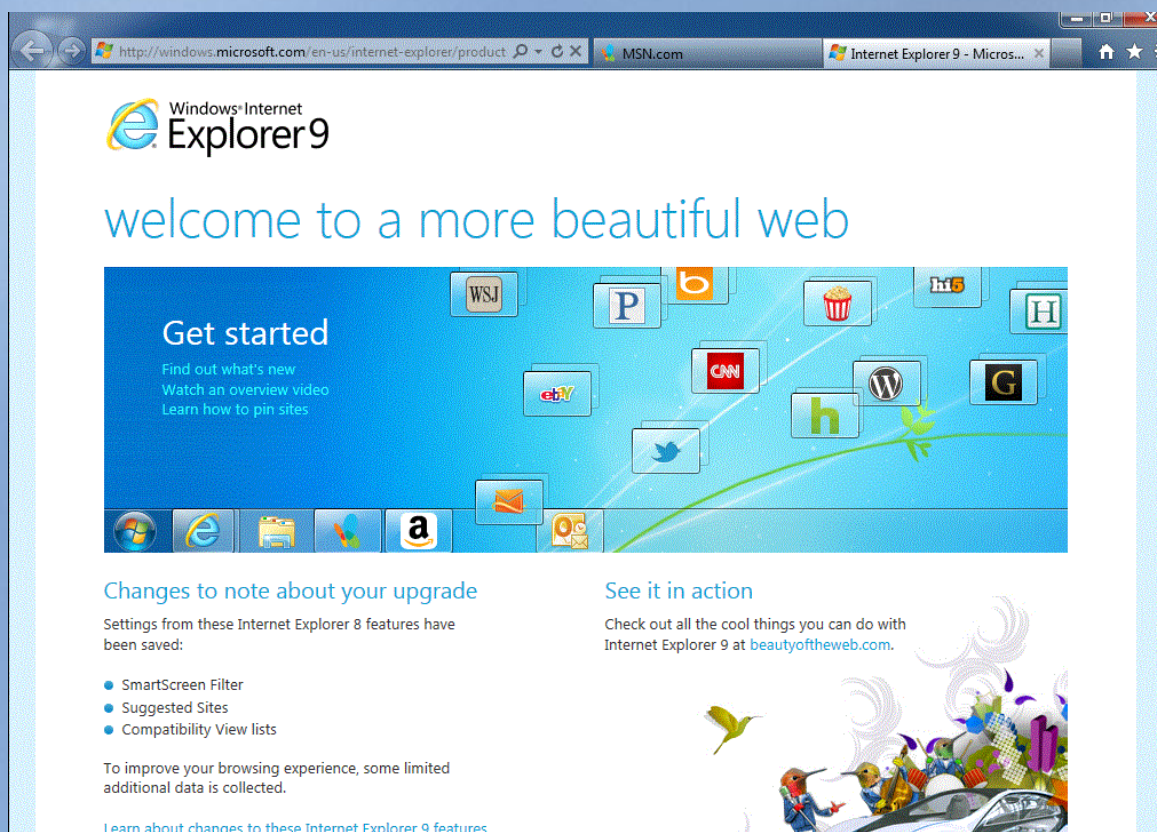
Windows Media Center Features (continued)

- Windows Media Center provides a desktop gadget for Windows 7 for easy navigation and selection.



Internet Explorer Features

- Internet Explorer is Microsoft's free web browser.



Internet Explorer features (continued)

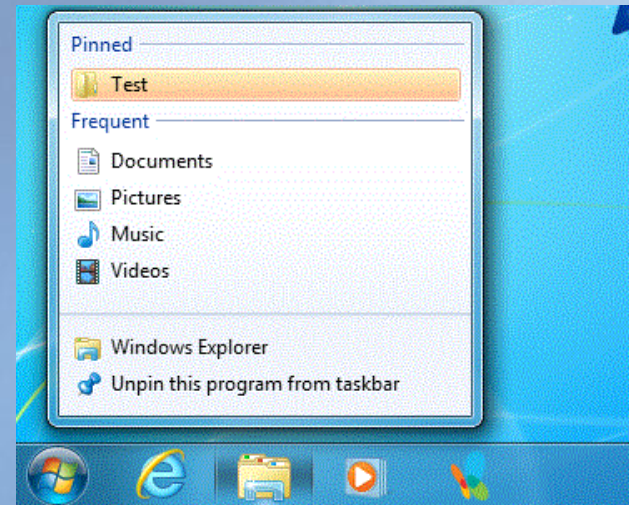
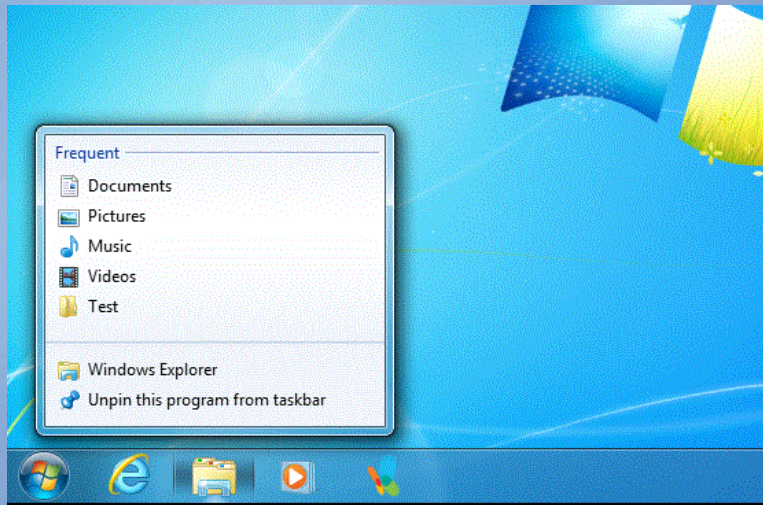
- The latest version of Internet Explorer boasts performance improvements over its predecessors using hardware-accelerated text, video, and graphics.
- Internet Explorer has a new combined search and address bar.
- Pin favorite websites to your taskbar.
 - This feature is available only with Internet Explorer 9. Windows 7 comes bundled with Internet Explorer 8.
- A safer Internet browsing experience has been made available due to the following security features:
 - ActiveX Filter
 - Cross-site scripting filter (XSS)
 - InPrivate Browsing

Configure Windows Explorer

- Windows Explorer is used to navigate through your Windows file system.
- Windows Explorer contains several time-saving features to manage your desktop experience:
 - Jump lists
 - Improved search speeds
 - Libraries
 - Favorites

Configure Windows Explorer (continued)

- A document can be pinned to a jump list for quick access.

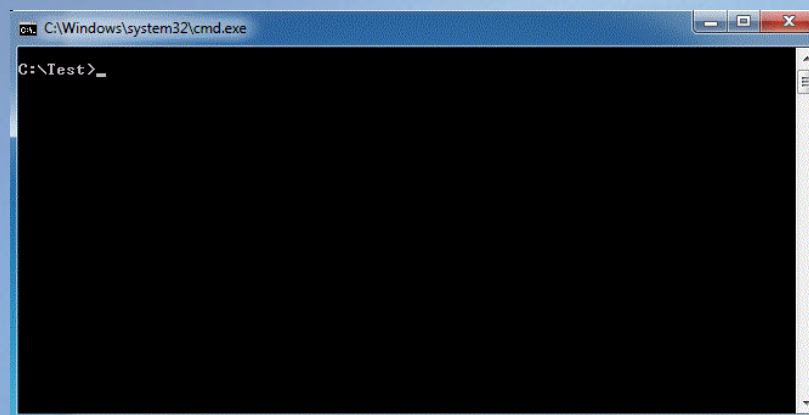
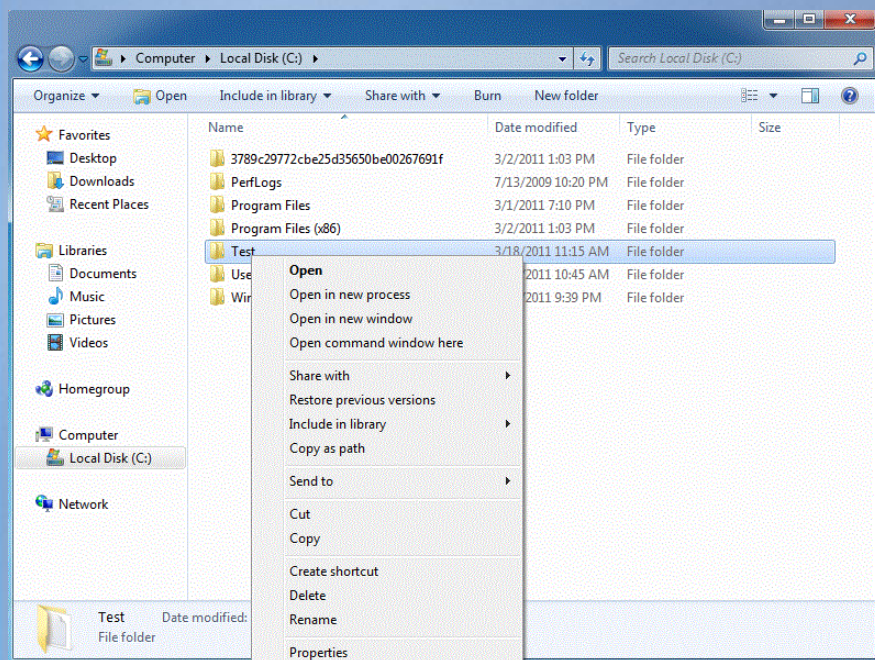


LESSON 1.2

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Configure Windows Explorer (continued)

- Jump to a folder in a command window by holding down the SHIFT key, right-clicking the folder, and selecting Open Command Window Here.



LESSON 1.2

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Complete Student Activity 1.2

LESSON 1.3

98-349 Windows Operating System Fundamentals

Understand Mobility, Remote Management, and Assistance

Lesson Overview

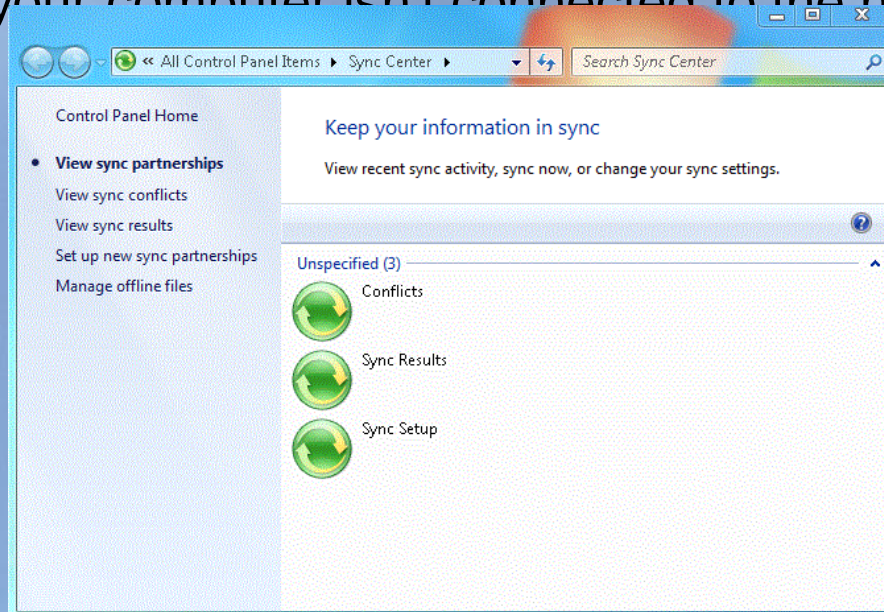
Managing mobility and remote machines

In this lesson, you will:

- Identify features of Sync Center
- Configure Windows Mobility Center
- Use Remote Desktop
- Use Windows PowerShell for management tasks
- Create custom Microsoft Management Consoles (MMCs)

Features of Sync Center

- Sync Center enables you to check the results of recent sync activity if you have set up your computer to sync files with a network server.
- Synced files enable copies of your network files to be accessed even when your computer isn't connected to the network.

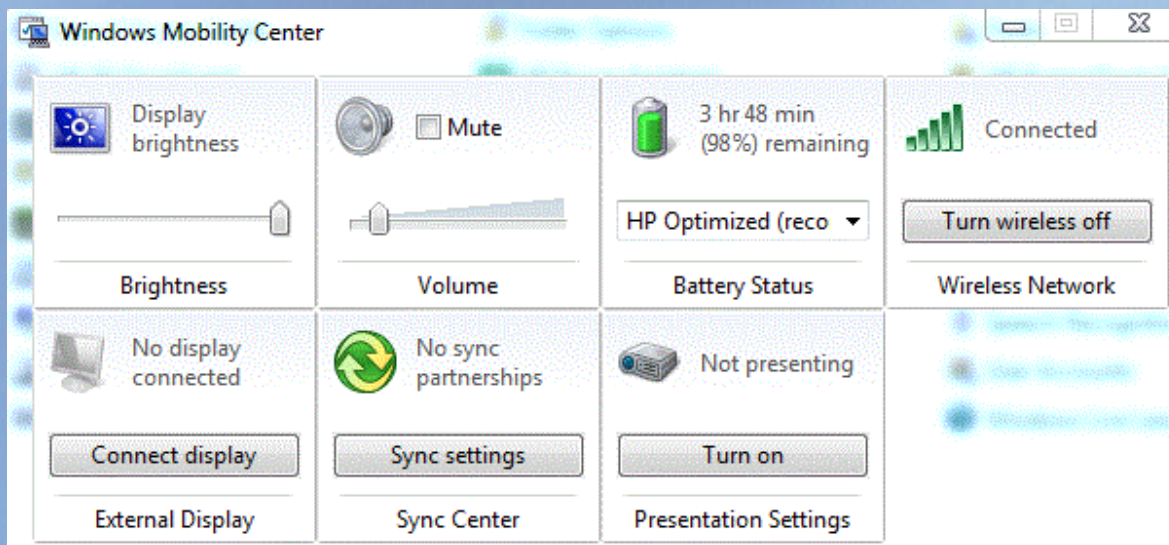


Configure Windows Mobility Center

- Windows Mobility Center displays the most commonly used settings, such as brightness, volume, battery status, and wireless network status.
- Different tiles are displayed depending on the system, and some tiles are added by the laptop manufacturer. The most common items include:
 - Brightness
 - Volume
 - Battery status
 - Wireless network
 - Screen rotation
 - External display
 - Sync Center
 - Presentation settings

Configure Windows Mobility Center (continued)

- Windows Mobility Center is used with mobile devices such as laptops or netbooks. It is not installed on desktops by default.
- Access Windows Mobility Center in the Control Panel.
- Windows Mobility Center gives mobile users a single center to adjust laptop settings for different places without searching for each setting.

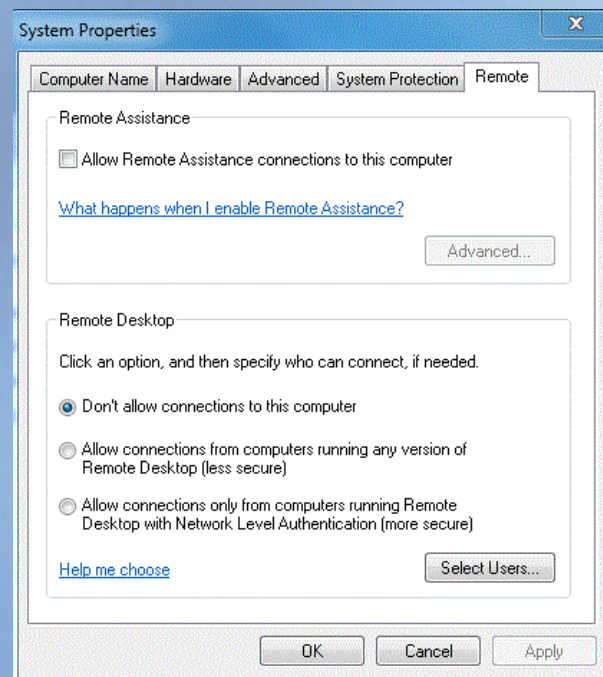


Using Remote Desktop

- Remote Desktop Connection is a technology that allows the user to sit at a computer and connect to a remote computer in a different location.
- Remote Desktop must be enabled on the remote computer to allow incoming requests.
- This can be configured by accessing your system settings through Control Panel, System and Security, System and click Remote Settings in the left panel.
 - Shortcut: right-click the Computer icon on the Start menu, select Properties, and click Remote Settings in the left panel.

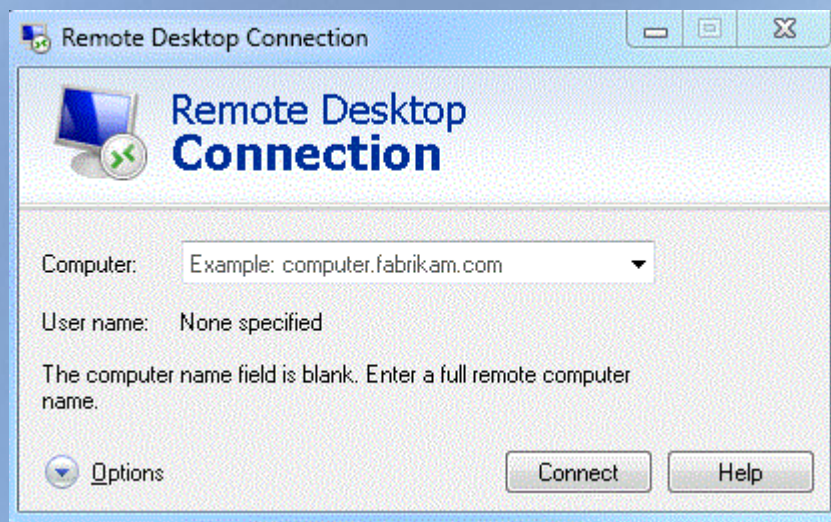
Using Remote Desktop (continued)

- There are three options to enable Remote Desktop:
 - Don't Allow Connections To This Computer (default)
 - Allow Connections From Computers Running Any Version Of Remote Desktop (less secure)
 - Allow Connections Only From Computers Running Remote Desktop With Network Level Authentication (more secure)



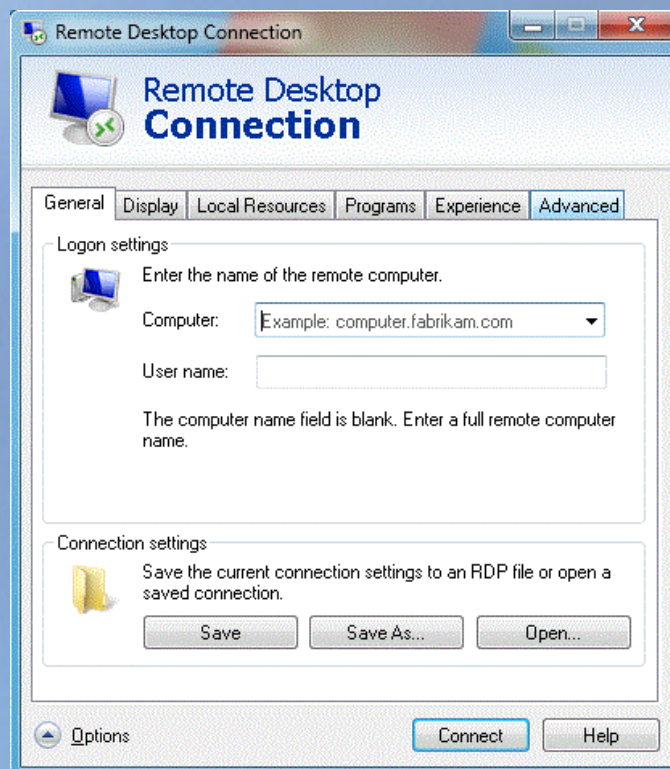
Using Remote Desktop (continued)

- The Remote Desktop Connection is used to initiate a session with a remote computer.
- The client can be found by clicking Start and selecting Search Programs And Files. Type Remote Desktop Connection and hit ENTER.



Using Remote Desktop (continued)

- The Remote Desktop Connection can be configured to enhance your remote desktop experience.

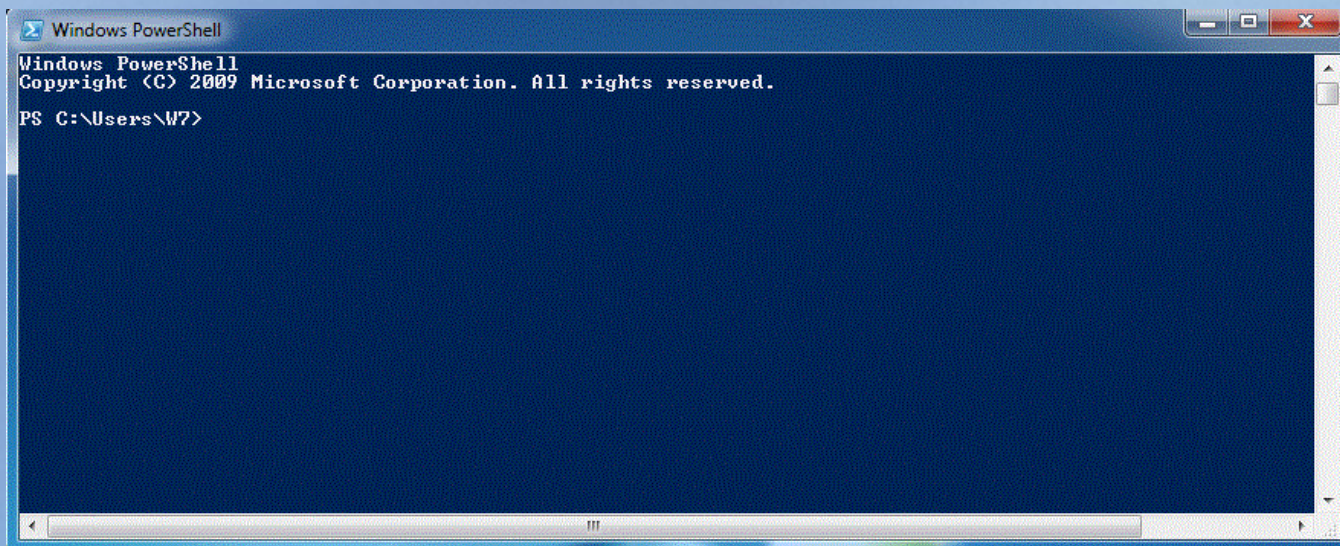


Using Windows PowerShell for Management Tasks

- Windows PowerShell is a task-based command-line shell and scripting language designed especially for systems administration.
- It includes the following features:
 - Cmdlets for performing common systems administration tasks, such as managing the registry, services, processes, and event logs and using Windows Management Instrumentation (WMI).
 - A task-based scripting language and support for existing scripts and command-line tools.
 - Simplified, command-based navigation of the operating system, which lets users navigate the registry and other data stores by using the same techniques that they use to navigate the file system.

Using Windows PowerShell

- Windows PowerShell can be accessed by clicking Start, All Programs, Accessories, Windows PowerShell, and Windows PowerShell.
- You can issue cmdlets in PowerShell or develop your own scripts to be run on a particular machine or remote machines.
- The Windows PowerShell interface is similar to a command window with file system navigation. Note the current path below. C:\users\w7



Using Windows PowerShell

Example:

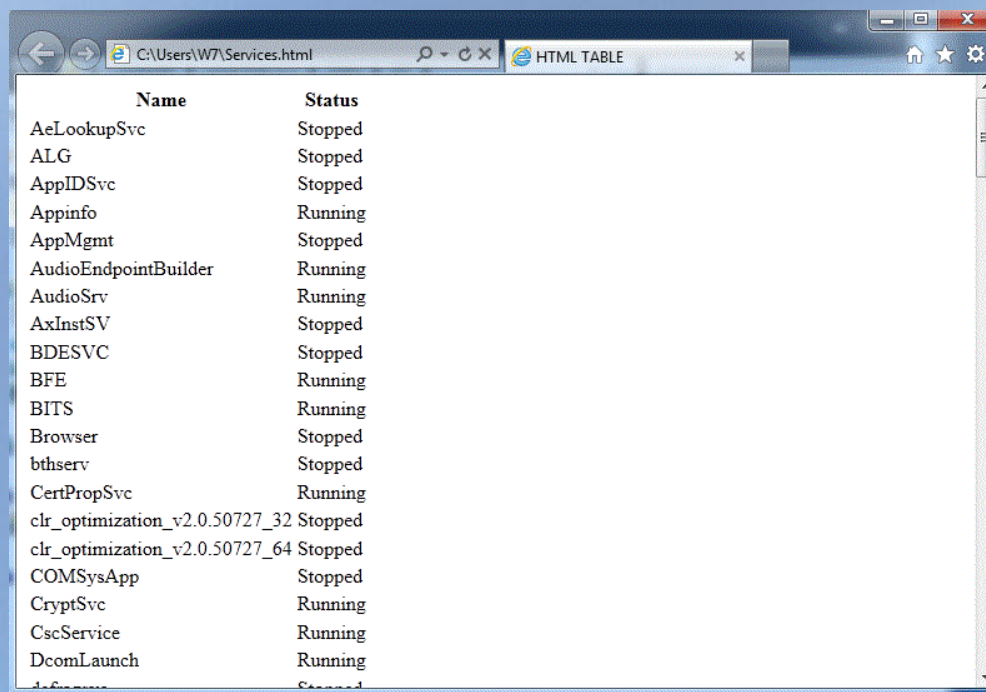
```
Get-Service | Select Name,Status | ConvertTo-HTML | Out-File  
Services.html
```

- **Get-services** command to retrieve the services on the local system.
 - **Select Name,Status** filters the information and returns just the name of the service and its status.
 - **ConvertTo-HTML** converts the output to an HTML-formatted table.
 - **Out-File Services.htm** creates an output file called Services.htm in the current directory.
- The “|” (Pipe) operand is a very important part of the command. It takes the output of one command and “pipes” it to the next command.
 - The output from **Get-Service** is sent to the cmdlet **Select Name,Status**. The output from the **Select** statement is sent to the cmdlet **ConvertTo-HTML**, where the output is finally sent to the **Out-File** cmdlet.

Using Windows PowerShell

Example:

- Browse to the directory issued (in this case, C:\Users\W7) and open Services.html.



The screenshot shows a web browser window with the address bar displaying 'C:\Users\W7\Services.html'. The browser is displaying an HTML table with two columns: 'Name' and 'Status'. The table lists various Windows services and their current status.

Name	Status
AeLookupSvc	Stopped
ALG	Stopped
AppIDSvc	Stopped
Appinfo	Running
AppMgmt	Stopped
AudioEndpointBuilder	Running
AudioSrv	Running
AxInstSV	Stopped
BDESVC	Stopped
BFE	Running
BITS	Running
Browser	Stopped
bthserv	Stopped
CertPropSvc	Running
clr_optimization_v2.0.50727_32	Stopped
clr_optimization_v2.0.50727_64	Stopped
COMSysApp	Stopped
CryptSvc	Running
CscService	Running
DcomLaunch	Running
dsrm	Stopped

Creating Custom MMCs

- MMCs can be customized to create personal management consoles.
- Click Start, type mmc, and hit ENTER.
- Click File and select Add/Remove Snap-ins.
- Select Computer Management. You have the option to manage the local computer or a remote machine.
 - More than one snap-in can be added to your console.

LESSON 1.3

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Complete Student Activity 1.3