12.2.4 Optional Lab: Customize Settings in Windows 7

Introduction

Print and complete this lab.

This lab is comprised of five parts. This lab is designed to be completed in multiple lab sessions.

Part 1: Managing Virtual Memory, Startup Options, and Windows Update in Windows 7

In this part of the lab, you will customize Virtual Memory settings. You will customize the Startup Folder and RunOnce Key in the Registry. You will change the default Windows Update option.

Recommended Equipment

- A computer running Windows 7
- Internet access

Step 1

Log on to Windows as an Administrator.

Click **Start > Computer**.

The "Computer" window appears.

	A Carrier Commu	
Organize System pro	perties Uninstall or change a program »	
 ▲ ★ Favorites ■ Desktop ▶ Downloads ■ Recent Places 	 Hard Disk Drives (4) Local Disk (C:) 56.3 GB free of 78.0 GB New Volume (F:) New Vol 	sk (E:) lume (G:)
 ✓ □ Libraries ▷ □ Documents ▷ ↓ Music 	4.83 GB free of 4.88 GB 469 MB f Devices with Removable Storage (2)	free of 499 MB
 Pictures Videos 	Floppy Disk Drive (A:)	Drive (D:)
VICKI-PC Workg Proce	roup: WORKGROUP Memory: 3.00 GB essor: Intel(R) Pentium(R) 4 C	

Step 2

Double-click the Local Disk (E:) drive.

Click Format disk to confirm the drive E: is to be formatted.



The "Format Local Disk (E:)" window appears.

Select NTFS in the File system drop-down menu.

Click Start.

			×
Compute	Format Local Disk (E:)	Search Computer	Q
Organize Properties	Capacity:	program »	
organize + Properties	4.88 GB 🔻		•
🔶 Favorites 🕺	File system	-	
ka Desktop	NTFS (Default)		
🚺 Downloads	Allocation unit size	Local Disk (E:)	
🖳 Recent Places	4096 bytes 👻	New Veluce (C)	
		New Volume (G:)	
Libraries	Restore device defaults	469 MB free of 499 MB	
Documents Music	Velove lebel	-	
Pictures	volume label		
Videos	Earnah anti-an	DVD RW Drive (D:)	
	Pormat opuons		
🜏 Homegroup	Create an MS-DOS startup disk		
🖳 Computer			
🏭 Local Disk (C:)			
👝 Local Disk (E:) 🚽	Start Close		
Local Disk (E:)			
Local Disk		U	

A "Warning" window appears.

Click OK.

	Format Local Disk (E:)
Organize Properties	Capacity: 4.88 GB ▼
★ Favorites ■ Desktop ↓ Downloads	File system NTFS (Default) Allocation unit size Local Disk (E:)
 Secent Places □ Libraries □ Documents 	4096 bytes Restore device defaults New Volume (G:) 469 MB free of 499 MB
 J Music S Pictures M Videos 	Vol Format Local Disk (E:) F WARNING: Formatting will erase ALL data on this disk. To format the disk, click OK. To quit, click CANCEL.
🔣 Homegroup	OK Cancel
Local Disk (C:)	Start Close
Local Disk (E:) Local Disk	

Windows formats the drive.

When the "Format Complete" message appears, click **OK**.

Compute	Formatting Local Disk (E:)
	Capacity:
Organize + Properties	4.88 GB
🔶 Favorites	File system
📃 Desktop	NTFS (Default) Local Disk (E:)
🐌 Downloads	Allocation unit size
🖳 Recent Places	4096 bytes
📜 Libraries _≡	Restore device defaults
d Music	Ve Formatting Local Disk (E:)
Pictures	Format Complete.
nt Homegroup	ОК
🖳 Computer	
🕌 Local Disk (C:)	
🧫 Local Disk (E:) 🚽	Start Cancel
Local Disk (E:) Local Disk	4.88 GB NTFS

The "Format Local Disk (E:)" window re-appears.

Click Close.

Compu	Format Local Disk (E:)
Organize Propert	Capacity:
organize · · · · ropert	4.88 GB ▼ □ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
🔶 Favorites	File system
🧮 Desktop	NTFS (Default) Local Disk (E:)
🚺 Downloads	Allocation unit size
🖳 Recent Places	4096 bytes
	New Volume (6:)
Cal Libraries	Restore device defaults 469 MB free of 499 MB
Documents	
Music Distures	Volume label
Videos	DVD RW Drive (D:)
La videos	Format options
🖏 Homegroup	Quick Format
🖳 Computer	
🚢 Local Disk (C:)	
👝 Local Disk (E:)	Start Close
Local Disk (E	4.88 GB
Local Disk	NTFS

Close all open windows.

Step 4

Click Start > Control Panel > System and Security > System > Advanced system settings.



The "System Properties" window appears.

Select the Advanced tab and then click Settings in the "Performance" area.

ystem Properties					×
Computer Name	Hardware	Advanced	System Protection	Remote	
You must be lo Performance Visual effects	gged on as a	an Administra cheduling, m	tor to make most of th emory usage, and vir	tual memor	ges. y
User Profiles Desktop settir	ngs related to	o your logon			3
				Settings	
Startup and R	ecovery o. system fail	lure, and deb	ugging information		
				Settings	
			Environme	ent Variable	s)
		ОК	Cancel	A	oply

Step 5

The "Performance Options" window appears.

Click the Advanced tab.



What is the current size of the Virtual Memory (paging file)?

Click **Change** in the "Virtual memory" area.

sual Effects Adv	anced Data Execution Prevention
Processor sched	uling
Choose how to a	allocate processor resources.
Adjust for best p	performance of:
Programs	Background services
Virtual memory	
A paging file is a if it were RAM.	n area on the hard disk that Windows uses as
Total paging file	size for all drives: 3071 MB
	Change

The "Virtual Memory" window appears.

Remove the check mark from Automatically manage paging file size for all drives.

Drive [Volume Label]	Paging File Size (MB)
C: [Local DIsk]	System managed
E:	None
F: [New Volume]	None
H:	None
Selected drive:	C: [Local DIsk]
Space available:	60809 MB
Custom size:	
Initial size (MB):	
Maximum size (MB):	
System managed s	size
🔘 No paging file	Set
Total paging file size f	or all drives
Minimum allowed:	16 MB
Recommended:	4606 MB
Currently allocated	2071 MR

What Drive or [Volume Label] contains the paging file?

Choose the E: drive.

Click the **Custom size** radio button.

Paging file size for eac	h drive	(10)
Drive [Volume Label]	Paging File Siz	ze (MB)
C: [Local DIsk]	System	managed
F: [New Volume] G: [New Volume] H:	None None None None	
Selected drive:	E:	
Space available:	4947 MB	
Q Custom size:		
Invisial size (MB):		
Maximum size (MB):		
System managed s	ize	
No paging file		Set
Total paging file size f	or all drives	
Minimum allowed:	16 MB	
Recommended:	4606 MB	
Currently allocated	3071 MB	

Look at the recommended size in the "Total paging file size for all drives" section of the "Virtual Memory" window.

Type in a number smaller than the recommended file size in the Initial size (MB): field.

Type in a number that is larger than the Initial size but smaller than the recommended file size in the **Maximum size (MB):** field.

Click Set.

Paging file size for eac	th drive		
Drive [Volume Label]	Pa	ging File Siz	ze (MB)
C: [Local DIsk]		System	managed
E: F: [New Volume] G: [New Volume] H:		None None None	
Selected drive:	E:		
Space available:	4947 MB		
Oustom size:		_	
Initial size (MB):	2606		
Maximum size (MB):	3606		
System managed s	size		
No paging file			Set A
Total paging file size f	or all drives		- 0
Minimum allowed:	16 MB		
Recommended:	4606 MB		
Currently allocated:	3071 MB		

Select the C: drive.

Click the No paging file radio button, and then click Set.

Drive [Volume Label]	Pagin	ng File Size (MB)
C: [Local DIsk]		System managed
E: F: [New Volume] G: [New Volume] H:		2606 - 3606 None None None
Selected drive: Space available:	C: [Local DIsk 60809 MB]
Custom size:		_
Initial size (MB):	2606	
Maximum size (MB):	3606]
System managed s	size	
No paging file		Set 💦
Total paging file size f	or all drives	
Minimum allowed:	16 MB	
Recommended:	4606 MB	
Currently allocated:	3071 MB	

The "System Properties" warning message appears.



Click Yes.

Click **OK** to accept the new virtual memory settings.

Drive [Volume Label]	Paging File Size (MB)
C: [Local DIsk]	None
F: [New Volume]	None
G: [New Volume]	None
H:	None
Selected drive:	C: [Local DIsk]
Space available:	60809 MB
Custom size:	
Initial size (MB):	
Maximum size (MB);	
System managed s	size
No paging file	Set
Total paging file size fi	or all drives
Minimum allowed:	16 MB
Recommended:	4606 MB
Currently allocated	3071 MB

The "Performance Options" window re-appears, click **OK**.



Click OK.

The "System Properties" message window appears.

System Properties					×
Computer Name	Hardware	Advanced	System Protection	Remote	
You must be log Performance Visual effects,	gged on as a processor s	an Administra cheduling, m	tor to make most of the emory usage, and vir	hese chang tual memory Settings	y
User Profiles					
Desktop settin	igs related to	o your logon		Settings	
Startup and R	ecovery				
System startup	o, system fail	ure, and deb	ugging information	Settings	
			Environme	ent Variable:	s
		ОК	Cancel	Ap	ply

Click OK.

Navigate to and open the "Virtual Memory" window.

What Drive or [Volume Label] contains the paging file?

raging the size for eac	in drive
Drive [Volume Label]	Paging File Size (MB)
C: [Local DIsk]	None 2606 - 3606
F: [New Volume]	None
G: [New Volume]	None
H:	None
Selected drive:	C: [Local DIsk]
Space available:	60809 MB
Custom size:	
Initial size (MB):	
Maximum cizo (MP)	
System managed s	size
No paging file	Set
Total paging file size f	or all drives
Minimum allowed:	16 MB
Recommended:	4606 MB
	5677 MR

Reset the virtual memory back to the original settings.

Select drive C: [Local Disk] > System managed size > Set.

Next select drive **E: > No paging file > Set**.

Add the check mark to **Automatically manage paging file size for all drives**, and then click **OK**.

Drive [Volume Label]	Paging File Size (MB)
C: [Local DIsk] E: [New Volume] F: [New Volume] G: [New Volume] H: [New Volume]	None None None None None
Selected drive: Space available:	C; [Local DIsk] 60809 MB
Custom size: Initial size (MB): Maximum size (MB):	
 System managed s No paging file 	ize Set
Total paging file size fo	or all drives
Minimum allowed: Recommended: Currently allocated:	16 MB 4606 MB 5677 MB

The "System Properties" restart warning message appears.

Click OK.



Click **OK** to close the following windows: Performance Options, and System Properties.

The "You must restart your computer to apply these changes" message appears, click **Restart Now**.

Microsoft Windows
You must restart your computer to apply these changes
Before restarting, save any open files and close all programs.
Restart Now Restart Later

Click Start > All Programs > Games > right-click FreeCell > Send To > Desktop (create shortcut).

	Open file location Play More Games from Microsoft Support Pin to Taskbar Pin to Start Menu Restore previous versions			Vicki Documents Pictures Music
•	Send to Cut Copy Delete Rename Properties FreeCell			Compressed (zipped) folder Desktop (create shortcut) Documents Fax recipient Mail recipient Floppy Disk Drive (A:) DVD RW Drive (D:) Removable Disk (H:)
Se	Games Explorer Solitaire Back arch programs and files	-	[Help and Support Run Shut down

Step 8

Click and drag the shortcut FreeCell icon to the Start button.

Do not release the shortcut icon.



The "Start menu" appears.

Drag the icon to All Programs.

The "All Programs" menu appears.

Drag the icon to the bottom of the **Startup** folder.

When a blue text **Move to Startup** appears next to the FreeCell shortcut icon, release the icon.



You should see the FreeCell icon listed below Startup.

退 Startup	ocnees and rankers
🐺 FreeCell	Default Programs
🍌 VMware	and the second second
	Help and Support
◀ Back	Run
Search programs and files	Shut down
😰 🖉 🚞 O	

Log off Windows.

Log on to Windows as an Administrator.

What happens when you log in?

Close the FreeCell application.

5 FreeCell	
Game Help	
	Q 6 2 Q 3 8 Q 3 10 Q 3 10 Q 3 10 Q 3 4 Q 3 4 Q 3 4 Q 3 5 Q 4 5 Q 4 5 Q 4 5 Q 4 5
Build stacks of cards by arranging them in sequence from high number to low; in alternating suit colors red and black.	
Game #14514	Cards left: 52

Step 10

Click Start > Search for programs and files > type run > Enter.

🖅 Run	×
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	<mark>regedit</mark>
	OK Cancel Browse

Type **regedit** In the Open: field **> OK > Yes**.

CAUTION: Incorrect changes to the registry can cause system errors and/or system instability.

The "Registry Editor" window appears.

Registry Editor			- • ×
File Edit View Favorites Help			
Computer KKEY_CLASSES_ROOT KKEY_CLASSES_ROOT KKEY_CURRENT_USER KKEY_LOCAL_MACHINE KKEY_UOSERS KKEY_CURRENT_CONFIG	Name	Туре	Data
Computer			

Expand the **HKEY_CURRENT_USER** Key.

Expand the Software Key.

Expand the **Microsoft** Key.

Registry Editor			
File Edit View Favorites Help			
File Edit View Favorites Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Image: Help Help Image: Help	Name ab (Default)	Type REG_SZ	Data (value
	▼ <		F
Computer\HKEY_CURRENT_CONFIG			

Expand the **Windows** Key.

Expand the **CurrentVersion** Key.

Select the RunOnce Key.

💣 Re	🖞 Registry Editor							
File	Edit	View Favorite	es Help		_			
		a 🌗 Wind	ows	*	Name	Туре	Data	
			Action Center Applets Controls Folder Device Installer Device Installer Device Metadata Explorer Ext Group Policy HomeGroup ime Internet Settings MCT NetCache Policies RADAR Run RunOnce Screensavers Shell Extensions Sidebar Telephony	ш	(Default)	REG_SZ	(value not set)	
•	_	III		•	•	III	4	
Comp	outer\H	HKEY_CURRENT_	USER\Software\Micr	osoft\Wi	ndows\CurrentVer	sion\RunOnce		

Right-click anywhere in the white space on the right side of the window.

File Edit View Favorites Help		🙀 Registry Editor							
Windows	*	Name	Туре	Data					
- CurrentVersion - - Action Center - - Applets		ab (Default)	REG_SZ	(value not set)					
Device Metadata		New 🕨	Кеу						
> -1 Ext > -1 Ext > -1 Group Policy > -1 HomeGroup > -1 Internet Settings > -1 Internet Settings > -1 NetCache -1 Policies -1 Run -1 RunOnce	III		String Value Binary Value DWORD (32-bit) QWORD (64-bit) Multi-String Valu Expandable Strin	Value Value Je g Value					
> - □ Screensavers > - □ Shell Extensions > - □ Sidebar > - □ Telephony	+	<	п]	Þ					

Hover over New and select String Value.

Click anywhere in the white space of the window.

Right-click **New Value #1 > Rename**.

Type Solitaire and press Enter.

Reg Re	gistry	Editor					
File	Edit	View Favori	tes Help				
		a 퉬 Wind	lows	*	Name	Туре	Data
			Action Center Action Center Applets Controls Folder Device Installer Device Installer Explorer Ext Group Policy HomeGroup Internet Settings MCT NetCache Policies RADAR Run RunOnce Screensavers Schell Extensions Sidebar Telephony		(Default)	REG_SZ REG_SZ	(value not set)
•				•	•		4
Comp	uter∖⊦	KEY_CURRENT	_USER\Software\Micr	osoft\Wi	ndows\CurrentVer	sion\RunOnce	ii.

Right-click **Solitaire > Modify**.

le Edit View Favorites	Help				
ile Edit View Favorites Windov Cur Cur Cur Cur Cur Cur Cur Cur	Help vs rentVersion Action Center Applets Controls Folder Device Installer Device Metadata Explorer Ext Group Policy HomeGroup ime Internet Settings MCT NetCache Policies RADAR Run RunOnce Screensavers Shell Extensions Sidebar		Name	Type REG_SZ REG SZ Modify Delete Rename	Data (value not set)
Þ - 🚺 -	Telephony	-			
		•	•	III	

Type C:\Program Files\Microsoft Games\Solitaire\Solitaire.exe in the Value data field.

Click OK.

File Edit View Favorites Help Image: Solitaire Type Data Image: Solitaire REG_SZ (value not set) Image: Solitaire Solitaire REG_SZ Image: Solitaire Solitaire REG_SZ Image: Solitaire Solitaire ReG_SZ Image: Solitaire Solitaire Solitaire Image: Solitaire Solitaire Solitaire <	Registry Editor				- • ×
Devic Devic Devic Devic Devic Value name: Solitaire Solitaire Solitaire Value data: Devic C:\Program Files\Microsoft Games\Solitaire.exe Devic McT Devic MCT Devic MCT Devic Rappare Devic Run Run Run Run Screensavers Devic Screensavers Devic Screensavers Devic Screensavers	File Edit View Favorites H	elp /ersion on Center ets Edit String	Name (Default) (Default) (Default)	Type REG_SZ REG_SZ	Data (value not set)
NetCache Policies RADAR Run Run Screensavers Policies	→ bevi → Devi → Explo → Ext → Scru → A Grou → A G	Value name: Solitaire Value data: C:\Program Files\M	g ame: sta: ram Files\Microsoft Games\Solitaire\Solitaire.exe OK Cancel		
Image: Sidebar Image: Telephony	> - Ji MC T Ji NetC Ji RAD, Ji Run Ji Run Ji Sidel >Ji Sidel >Ji Telej	ache E ies AR Doce ensavers Extensions Dar ohony			
	<u>∢ </u>	•			4

Close the "Registry Editor" window.

Import		-	Name	Туре	Data
Export			ab (Default)	REG_SZ	(value not set)
Load Hive Unload Hive			ab Solitaire	REG_SZ	C:\Program Files\Microsoft Games\Solitaire\Solitaire.ex
Connect Network	Registry rk Registry				
Print	Ctrl+P				
	Internet Settings MCT NetCache RADAR Run Screensavers Screensavers Schell Extensions Sidebar Ciephony				

Log off Windows.

Log on to Windows as an Administrator.



What happens when you log in?

Close all open Windows.

Remove FreeCell game from Startup.

Click Start > All Programs > Startup > right-click FreeCell > Delete > Yes.



Click Start > Control Panel > System and Security > Windows Update > Change settings.



In the Important updates drop-down menu select Check for updates but let me choose whether to download and install them.

🚱 🕞 🖉 « Windows Update → Change settings 🔹 47 Search Control Panel 🔎
Choose how Windows can install updates
When your computer is online, Windows can automatically check for important updates and install them using these settings. When new updates are available, you can also install them before shutting down the computer.
How does automatic updating help me?
Important updates
Never check for updates (not recommended)
Install updates automatically (recommended) Download updates but let me choose whether to install them Check for updates but let me choose whether to download and install them
Recommended)
🕼 Give me recommended updates the same way I receive important updates
Who can install updates
Allow all users to install updates on this computer
Microsoft Update
Give me updates for Microsoft products and check for new optional Microsoft software when I update Windows
Software notifications
Show me detailed notifications when new Microsoft software is available
Note: Windows Update might update itself automatically first when checking for other updates. Read our privacy statement online.
Cancel

Click OK > Continue.

Windows checks for updates.

The "New updates are available" balloon appears.

Double-click the **shield** icon in the system tray.



Click the link that shows how many updates have been downloaded. Example: **50 important updates are available**.



The "Select updates to install" window appears.

Place a check mark next to the important and optional updates to be installed, and then click \mathbf{OK} .

Select the	upo	ates you want to install Name	Size		*	Windows Malicious
mnortant (16	W	indows 7 (16)		^		Software Removal Tool -
inportant (10	1	Cumulative Security Update for Internet Explorer 8 fo	8.6 MB			(KB890830)
Optional (2)		Cumulative Update for Media Center for Windows 7 5 Security Update for Windows 7 (KB2296199) 2	5.0 MB		=	After the download this
	1		241 KB			tool runs one time to check
	1	Security Update for Windows 7 (KB2305420)	708 KB		your computer for	your computer for
	V	Security Update for Windows 7 (KB2385678)	154 KB			infection by specific, prevalent malicious software (including Blaster,
	1	Security Update for Windows 7 (KB2423089)	300 KB			
	1	Security Update for Windows 7 (KB2436673)	1.1 MB			Sasser, and Mydoom) and
		Security Update for Windows 7 (KB2442962)	77 KB			helps remove any infection
	1	Update for Internet Explorer 8 Compatibility View List	25 KB			infection is found, the tool
		Update for Internet Explorer for Windows 7 (KB24676	28 KB		+	will display a status report

When the "Windows Update" window appears click Install updates.

Control Panel Home	Windows U	pdate		
Check for updates				
Change settings View update history Restore hidden updates Updates: frequently asked questions	۲	Download and ins 16 important updates a available 2 optional updates are available	tall your selected u re 8 important upo selected, 11.1 N	pdates lates IB
	Most recent ch Updates were in You receive up	eck for updates: Today nstalled: 10/22/ dates: For Wi Updat	at 4:09 PM 2010 at 11:32 AM. View up ndows and other product	odate history s from Microsoft
	Find out mo	e about free software fro	m Microsoft Update.	

The "Downloading and installing updates..." balloon appears.



You have successfully completed this part of the lab once the "Downloading and installing updates..." balloon appears.

Reboot the computer.

Part 2: Windows 7 Hard Drive Maintenance

In this part of the lab, you will examine the results after using Disk Check and Disk Defragmenter on a hard drive.

Recommended Equipment

• A computer running Windows 7

Step 1

Log on to Windows as an administrator.

Start > Computer > double-click New Volume (G:).

Right-click anywhere in the white space of the folder area for drive **G**: > **Properties** > **Tools** tab > **Check Now**.

The "Check Disk New Volume (G:)" window appears. Make sure there is not a check mark in either checkbox then click **Start**.

		□ X
Computer > New Volume (G:) - 49 Search New Volume (G	:)	٩
File New Volume (G:) Properties		
Organ Security Previous Versions Quota Customize	•	
General Tools Hardware Sharing Date modified Type	2	Size
Error-checking This option will check the drive for errors. Check Disk New Volume (G;) Check disk options Automatically fix file system errors Scan for and attempt recovery of bad sectors Bac		
OK Cancel Apply		4

When the "Your device or disk was successfully scanned" screen appears, click the expand button next to **See details**.

Checking Disk New Volume (G:)
Your device or disk was successfully scanned
No problems were found on the device or disk. It is ready to use.
If you removed the device or disk before all files were fully written to it, parts of some files might still be missing. If so, go back to the source and recopy those files to your device or disk.
Hide details
Volume label is New Volume.
CHKDSK is verifying files (stage 1 of 3) 256 file records processed.
File verification completed. 0 large file records processed.
0 bad file records processed.
0 EA records processed.
0 reparse records processed.
CHKDSK is verifying indexes (stage 2 of 3) 280 index entries processed.
Index verification completed.
CHKDSK is verifying security descriptors (stage 3 of 3) 256 file SDs/SIDs processed.
Security descriptor verification completed. 12 data files processed.
Windows has checked the file system and found no problems.
511999 KB total disk space. 349268 KB in 8 files.
16 KB in 14 indexes.
5295 KB in use by the system.
157420 KB available on disk.
4096 bytes in each allocation unit.
127999 total allocation units on disk.
39355 allocation units available on disk.

How many stages were processed?

Click Close.

Select the **Tools** tab, click **Check Now**. Remove the check mark next to **Automatically fix file system errors**. Place a check mark in the checkbox next to **Scan for and attempt recovery of bad sectors > Start**.



When the "Your device or disk was successfully scanned" screen appears click the expand button next to **See details**.

Checking Disk New Volume (G:)
Your device or disk was successfully scanned
No problems were found on the device or disk. It is ready to use.
If you removed the device or disk before all files were fully written to it, parts of some files might still be missing. If so, go back to the source and recopy those files to your device or disk.
Hide details
Volume label is New Volume.
CHKDSK is verifying files (stage 1 of 5) 256 file records processed.
File verification completed. 0 large file records processed.
0 bad file records processed.
0 EA records processed.
0 reparse records processed.
CHKDSK is verifying indexes (stage 2 of 5) 280 index entries processed.
Index verification completed.
CHKDSK is verifying security descriptors (stage 3 of 5) 256 file SDs/SIDs processed.
Security descriptor verification completed. 12 data files processed.
CHKDSK is verifying free space (stage 5 of 5) 39355 free clusters processed.
Free space verification is complete. Windows has checked the file system and found no problems.
511999 KB total disk space. 349268 KB in 8 files.
16 KB in 14 indexes. 5295 KB in use by the system.
4608 KB occupied by the log file. 157420 KB available on disk.
4096 bytes in each allocation unit. 127999 total allocation units on disk. 39355 allocation units available on disk.

What stages were processed?

Click Close.

Select the **Tools** tab, click **Check Now**.

Place a check mark in both checkboxes then click **Start**.

Check Disk New Vo	olume (G:)
Check disk option	ns
Automatically	fix file system errors
Scan for and	attempt recovery of bad sectors
	Start Cancel

An information window opens.

Microsoft Windows
Windows can't check the disk while it's in use
Do you want to dismount this volume first? Note: All opened handles to this volume will become invalid.
Force a dismount Cancel

Why will Check Disk not start?

Note: This message is displayed because a boot partition will be scanned, or a non-boot partition that is going to be scanned is open.

Click Force a dismount.

When the "Your device or disk was successfully scanned" screen appears click the expand button next to **See details**.

Checking Disk New Volume (G:)
Your device or disk was successfully scanned
No problems were found on the device or disk. It is ready to use.
If you removed the device or disk before all files were fully written to it, parts of some files might still be missing. If so, go back to the source and recopy those files to your device or disk.
Hide details Close
Volume dismounted. All opened handles to this volume are now invalid. Volume label is New Volume.
CHKDSK is verifying files (stage 1 of 5) 256 file records processed.
File verification completed. 0 large file records processed.
0 bad file records processed.
0 EA records processed.
0 reparse records processed.
CHKDSK is verifying indexes (stage 2 of 5) 280 index entries processed.
Index verification completed.
CHKDSK is verifying security descriptors (stage 3 of 5) 256 file SDs/SIDs processed.
Security descriptor verification completed. 12 data files processed.
CHKDSK is verifying file data (stage 4 of 5) 240 files processed.
File data verification completed. CHKDSK is verifying free space (stage 5 of 5) 121275 free clusters processed.
Free space verification is complete. Windows has checked the file system and found no problems.
511999 KB total disk space. 21588 KB in 7 files. 16 KB in 14 indexes. 5291 KB in use by the system. 4608 KB occupied by the log file. 485104 KB available on disk.
4096 bytes in each allocation unit. 127999 total allocation units on disk. 121276 allocation units available on disk.

What stages were processed?

What is being verified in each of the stages?

Were any problems found with the volume?

If so what are they?

Click **Close** and close all open windows.

Step 2

Start > Control Panel > System and Security > View event logs. In the left pane expand Windows Logs > select Application.

8 Event Viewer						
File Action View Help						
Event Viewer (Local)	Application Nu	mber of events: 1,401				Actions
Custom Views Windows Logs	Level	Date and Time	Source	Event ID	Task Category	Application 🔺 📤
Application	() Information	12/24/2010 8:32:45 AM	Chkdsk	26214	None	🗕 👩 Open Save
Security	(i) Information	12/24/2010 8:30:23 AM	VSS VSS	8224	None	V Create Cu
Setup	(i) Information	12/24/2010 8:27:23 AM	Chkdsk	26212	None	Import Cu =
🛃 System	(i) Information	12/24/2010 8:16:50 AM	VSS	8224	None	*
Forwarded Events Prove Applications and Serviv	Event 26214, Chk General Detail Chkdsk was e Checking file	dsk s xecuted in read/write moc svstem on G: 	le.		×	Clear Log Filter Curr Frid Save All Ev Attach a T
< III +					P	view v
	P					

Double-click the top event in the middle pane. If the displayed event is not Chkdsk, click the black down arrow until the Chsdsk event appears.

General Details			
Chkdsk was executed in read/write mode.			
Checking file system on G			
Volume dismounted. All opened handles	to this volume are now invalid.		
Volume label is New Volume.			
CHKDSK is verifying files (stage 1 of 5)			
256 file records processed.	File verification completed.		
0 large file records processed.	0 bad file records processed.	0 EA records	
processed. U repa	arse records processed.	CHKDSK is verifying indexes (stage 2	
290 index entries processed	Index varification completed		
280 index entries processed.	index verification completed.		
CHKDSK is varifying security descriptors (s	tage 2 of 5)		
256 file SDs/SIDs processed	Cleaning up 2 unused index ent	tries from index \$SII of file 0v0	
Cleaning up 2 unused index entries from it	dev SDH of file 0v9	thes norminated \$511 of the 0.05.	
Cleaning up 2 unused security descriptors			
Security descriptor verification completed.			
12 data files processed.	CHKDSK is verifying file data (stag	e 4 of 5)	
240 files processed.	File data verification completed.		
CHKDSK is verifying free space (stage 5 of	5)		_
121275 free clusters processed.	Free space verification is cor	mplete.	1
Windows has checked the file system and	found no problems.		
511999 KB total disk space.			
21588 KB in 7 files.			
16 KB in 14 indexes.			
5291 KB in use by the system.			
4608 KB occupied by the log file.			
485104 KB available on disk.			
4096 bytes in each allocation unit.			
127999 total allocation units on disk.			
121276 allocation units available on disk	•		

Which stages are shown as completed?

Close all open windows.

Step 3

Start > Computer > right-click drive (C:) > Properties > select Tools tab > click Defragment Now button.

The "Disk Defragmenter" window appears.

Scheduled defragmenta	tion is turned on	() (Configure schedule
Run at 1:00 AM every Wed	dnesday		
Next scheduled run: 12/29	9/2010 2:33 AM		
urrent status:			
Disk	Last Run	Pr	rogress
Local DIsk (C:)	12/22/2010 8:45 AM (0% fragm	nented)	
📷 (E:)	Never run		
New Volume (F:)	Never run		
New Volume (G:)	Never run		
(H:)	Never run		
System Reserved	12/22/2010 8:44 AM (0% fragm	nented)	
nlv disks that can be defrage	mented are shown.		

Make sure drive C: is selected and then click Defragment disk.

Windows starts defragmenting hard drive (C:).

👸 Disk Defragmenter		
Disk Defragmenter performance. <u>Tell r</u>	consolidates fragmented files on you me more about Disk Defragmenter.	ur computer's hard disk to improve system
Schedule:		
Scheduled defragment	tation is turned on	Configure schedule
Run at 1:00 AM every W	ednesdav	Consider Structure
Next scheduled rup: 12/	29/2010 2:32 AM	
Acke Scheduled full: 12/		
Current status:		
Disk	Last Run	Progress
🚢 Local DIsk (C:)	Running	42% analyzed
👝 (E:)	Never run	and the second states of the second states and the
👝 New Volume (F:)	Never run	
👝 New Volume (G:)	Never run	
👝 (H:)	Never run	
System Reserved	12/22/2010 8:44 AM (0% frag	mented)
Only disks that can be defra	gmented are shown.	
To best determine if your di	sks need defragmenting right now, y	ou need to first analyze your disks.
		Stop operation
		Close

What is the first process during defragmenting (See "Progress" column)?

What are the three tasks performed for each Pass (See "Progress" column)?

How many passes did it take to defragment drive C:?

Dick Defragmenter		
performance. <u>Tell m</u>	consolidates fragmented files on your c ne more about Disk Defragmenter.	computer's hard disk to improve system
chedule:		
		Configure estadula
Scheduled defragmenta	ation is turned on	Configure schedule
Run at 1:00 Alvi every we	anesday	
Next scheduled run: 12/2	9/2010 2:32 AM	
Current status:		
Dick	Last Run	Progress
	12/24/2010 0:02 AM4/02/ 6	riogress
Local Disk (C:)	12/24/2010 9:08 AM (0% fragme	nted)
(E:)	Never run	
New Volume (F:)	Never run	
New Volume (G:)	Never run	
👝 (H:)	Never run	
👝 System Reserved	12/22/2010 8:44 AM (0% fragme	nted)
Only disks that can be defrag ™o best determine if your dis	mented are shown. ks need defragmenting right now, you @Anal	need to first analyze your disks. yze disk

When defragmenting is completed click **Close**.

Close all windows.

Note: It is not possible to view the detail of the defragmented hard drive through the GUI version of defragmenter.

Part 3: Managing Processes, and Regional and Language Settings in Windows 7

In this part of the lab, you will examine regional and language settings, and explore how to manage processes in Task Manager.

Recommended Equipment

• A computer running Windows 7

Step 1

Log on to Windows as an administrator.

Press keys Ctrl-Alt-Delete > click Start Task Manager > Processes tab.

Windows Task Man ile Options View	ager Help				
Applications Processe	S Services	Performance	Networking	Users	
Image Name	User Name	CPU Memo	ry (Private Wo	orking Set)	Description
csrss.exe		01		8,656 K	
dwm.exe	Vicki	00		13,236 K	Desktop Window Manager
explorer.exe	Vicki	00		18,628 K	Windows Explorer
hqtray.exe	Vicki	00		1,424 K	VMware Host Network Access Status Tray Application
msseces.exe	Vicki	00		2,272 K	Microsoft Security Essentials User Interface
rundll32.exe	Vicki	00		2,252 K	Windows host process (Rundll32)
Snagit32.exe	Vicki	00		15,324 K	Snagit
SnagitEditor.exe	Vicki	00		21,204 K	Snagit Editor
SnagPriv.exe	Vicki	00		680 K	Snagit RPC Helper
taskhost.exe	Vicki	00		1,308 K	Host Process for Windows Tasks
taskmgr.exe	Vicki	01		1,520 K	Windows Task Manager
TscHelp.exe	Vicki	00		668 K	TechSmith HTML Help Helper
winlogon.exe		00		1,408 K	
Show processes	s from all user	5			End Process
cesses: 41 CP	U Usage: 0%	5 Phy	sical Memor	y: 28%	

Click Show processes from all users.

lications Processe	s Services	Performance	Networking	Users		
Image Name	User Name	CPU Memo	ory (Private Wo	orking Set)	Description	1
csrss.exe	SYSTEM	00		1,180 K	Client Server Runtime Process	1
csrss.exe	SYSTEM	00		8,656 K	Client Server Runtime Process	
CTAudSvc.exe	SYSTEM	00		772 K	Creative Audio Service	
dwm.exe	Vicki	00		13,244 K	Desktop Window Manager	
explorer.exe	Vicki	00		17,484 K	Windows Explorer	
ngtray.exe	Vicki	00		1,424 K	VMware Host Network Access Status Tray Application	
sass.exe	SYSTEM	00		2,572 K	Local Security Authority Process	
sm.exe	SYSTEM	00		796 K	Local Session Manager Service	
MsMpEng.exe	SYSTEM	00		49,144 K	AntiMalware Service Executable	
msseces.exe	Vicki	00		2,272 K	Microsoft Security Essentials User Interface	
rundll32.exe	Vicki	00		2,252 K	Windows host process (Rundll32)	
SearchIndexer	SYSTEM	00		4,440 K	Microsoft Windows Search Indexer	
services.exe	SYSTEM	00		3,292 K	Services and Controller app	
smss.exe	SYSTEM	00		232 K	Windows Session Manager	
Snagit32.exe	Vicki	00		15,160 K	Snagit	
SnagitEditor.exe	Vicki	00		21,396 K	Snagit Editor	
SnagPriv.exe	Vicki	00		680 K	Snagit RPC Helper	
spoolsv.exe	SYSTEM	00		3,152 K	Spooler SubSystem App	
svchost.exe	SYSTEM	00		2,388 K	Host Process for Windows Services	
svchost.exe	NETWO	00		2,440 K	Host Process for Windows Services	
svchost.exe	LOCAL	00		13,616 K	Host Process for Windows Services	
svchost.exe	SYSTEM	00		35,984 K	Host Process for Windows Services	
svchost.exe	SYSTEM	00		13,076 K	Host Process for Windows Services	
Show processes f	rom all users					_

Double-click the border around the tabs.

Windows Task Manager is now in compact mode.

Image Name	User Name	CPU	Memory (Private Working Set)	Description	1
csrss.exe	SYSTEM	00	1, 180 K	Client Server Runtime Process	
csrss.exe	SYSTEM	00	8,656 K	Client Server Runtime Process	-
CTAudSvc.exe	SYSTEM	00	772 K	Creative Audio Service	
dwm.exe	Vicki	00	13,244 K	Desktop Window Manager	
explorer.exe	Vicki	00	17,476 K	Windows Explorer	
hqtray.exe	Vicki	00	1,424 K	VMware Host Network Access Status Tray Application	
sass.exe	SYSTEM	00	2,516 K	Local Security Authority Process	
sm.exe	SYSTEM	00	784 K	Local Session Manager Service	
MsMpEng.exe	SYSTEM	00	48,904 K	AntiMalware Service Executable	
msseces.exe	Vicki	00	2,272 K	Microsoft Security Essentials User Interface	
rundll32.exe	Vicki	00	2,252 K	Windows host process (Rundll32)	
SearchIndexer	SYSTEM	00	4,440 K	Microsoft Windows Search Indexer	
services.exe	SYSTEM	00	3,240 K	Services and Controller app	
smss.exe	SYSTEM	00	232 K	Windows Session Manager	

Click Image Name.

Image Name	User Name	CPU	Memory (Private Working Set)	Description	-
WUDFHost.exe	LOCAL	00	1,168 K	Windows Driver Foundation - User-mode Driver Fra	_
wmpnetwk.exe	NETWO	00	3,484 K	Windows Media Player Network Sharing Service	=
winlogon.exe	SYSTEM	00	1,376 K	Windows Logon Application	
wininit.exe	SYSTEM	00	712 K	Windows Start-Up Application	
vmware-usbarb	SYSTEM	00	1,032 K	VMware USB Arbitration Service	
vmware-authd	SYSTEM	00	3,332 K	VMware Authorization Service	
mnetdhcp.exe	SYSTEM	00	744 K	VMware VMnet DHCP service	
vmnat.exe	SYSTEM	00	840 K	VMware NAT Service	
TscHelp.exe	Vicki	00	668 K	TechSmith HTML Help Helper	
taskmgr.exe	Vicki	00	1,816 K	Windows Task Manager	
taskhost.exe	Vicki	00	1,784 K	Host Process for Windows Tasks	
System Idle Pro	SYSTEM	99	12 K	Percentage of time the processor is idle	
System	SYSTEM	00	40 K	NT Kernel & System	
sychost eve	LOCAL	00	1,648 K	Host Process for Windows Services	-

Click Image Name again.

What effect does this have on the columns?

Image Name	User Name	CPU	Memory (Private Working Set)	Description	1
System Idle Pro	SYSTEM	99	12 K	Percentage of time the processor is idle	
System	SYSTEM	00	40 K	NT Kernel & System	-
smss.exe	SYSTEM	00	232 K	Windows Session Manager	
TscHelp.exe	Vicki	00	668 K	TechSmith HTML Help Helper	
SnagPriv.exe	Vicki	00	680 K	Snagit RPC Helper	
wininit.exe	SYSTEM	00	712 K	Windows Start-Up Application	
vmnetdhcp.exe	SYSTEM	00	744 K	VMware VMnet DHCP service	
CTAudSvc.exe	SYSTEM	00	772 K	Creative Audio Service	
sm.exe	SYSTEM	00	796 K	Local Session Manager Service	
vmnat.exe	SYSTEM	00	840 K	VMware NAT Service	
vmware-usbarb	SYSTEM	00	1,032 K	VMware USB Arbitration Service	
WUDFHost.exe	LOCAL	00	1,168 K	Windows Driver Foundation - User-mode Driver Fra	
csrss.exe	SYSTEM	00	1,180 K	Client Server Runtime Process	
winlogon.exe	SYSTEM	00	1,376 K	Windows Logon Application	

Click Memory (Private Working Set).

What affect does this have on the columns?

Double-click the outside border again to return to tabs mode.

Step 2

Open a browser.

Note: Firefox is used in this lab. However, any browser will work. Just substitute your browser name whenever you see the word Firefox.

Return to the Windows Task Manager.

oplications Process	es Services	Performance	Networking L	Jsers		
Image Name	User Name	CPU Memo	ry (Private Work	ing Set)	Description	*
csrss.exe	SYSTEM	00		1,200 K	Client Server Runtime Process	
csrss.exe	SYSTEM	00		8,620 K	Client Server Runtime Process	
CTAudSvc.exe	SYSTEM	00		772 K	Creative Audio Service	
dwm.exe	Vicki	00	1	3,348 K	Desktop Window Manager	Ξ
explorer.exe	Vicki	00	1	8,836 K	Windows Explorer	
firefox.exe	Vicki	00	2	7,804 K	Firefox	
hotray.exe	Vicki	00		1,424 K	VMware Host Network Access Status Tray Application	
lsass.exe	SYSTEM	00		2,544 K	Local Security Authority Process	
lsm.exe	SYSTEM	00		800 K	Local Session Manager Service	
MsMpEng.exe	SYSTEM	00	5	0,148 K	AntiMalware Service Executable	
msseces.exe	Vicki	00		2,272 K	Microsoft Security Essentials User Interface	
rundll32.exe	Vicki	00		2,252 K	Windows host process (Rundll32)	
SearchIndexer	SYSTEM	00		5,928 K	Microsoft Windows Search Indexer	
services.exe	SYSTEM	00		3,324 K	Services and Controller app	
smss.exe	SYSTEM	00		232 K	Windows Session Manager	
Snagit32.exe	Vicki	00	1	5,360 K	Snagit	
SnagitEditor.exe	Vicki	00	2	2,108 K	Snagit Editor	
SnacPriv.exe	Vicki	00		680 K	Snadit RPC Helper	Ŧ
Show processes	from all users				Cad Day and	

Click Image Name so the list is in alphabetical order, then locate and select firefox.exe.

plications Proces	ses Services	Perfor	mance N	etwor	king Users				
Image Name	mage Name User Name CPU Memory		(Private Working Set) Description			ion			
csrss.exe	SYSTEM	7EM 00		1,200 K		Client Server Runtime Process		_	
csrss.exe	SYSTEM	00	8,600 K			Client Server Runtime Process			
CTAudSvc.exe	SYSTEM	00			772 K Creative Audio Service		e Audio Service		
dwm.exe	Vicki	00			13,356 K	Desktop Window Manager			
explorer.exe	Vicki	00			18,844 K	Windows Explorer			
firefox.exe	Open File Location End Process End Process Tree Debug UAC Virtualization				38,020 K Firefox				
hqtray.exe					1,424 K VMware Host Network Access Status Tray Applicati				
lsass.exe				2,532 K Local Security Authority Process 800 K Local Session Manager Service 43,532 K AntiMalware Service Executable 2,272 K Microsoft Security Essentials User Interface 2,252 K Windows host process (Rundli32)					
lsm.exe									
MsMpEng.ex									
msseces.exe									
rundll32.exe									
SearchIndex	archIndex Create Dump File			5,928 K			Microsoft Windows Search Indexer		
services.exe	create ban	create bump rife		3,264 K		Services and Controller app			
smss.exe	Set Priority		Realtime		ession Manager				
Snagit32.ex SnagitEditor SnagPriv.ex	Set Affinity			High	pr				
	Properties Go to Service(s)		Above Norma			Helper			
Show proc			Normal		43	End Proces	s		

Right-click **firefox.exe > Set Priority**.

What is the default priority for the browser?
Set the priority to **Above Normal**.

Windows Task Manager
Do you want to change the priority of 'firefox.exe'?
Changing the priority of certain processes could cause system instability.
Change priority Cancel

Click **Change priority** to the Windows Task Manager warning message.

Step 3

Click View > Select Columns.

pplications P	Refresh Nov	v F5	tworking Users		
Image Name	Select Colur	mns	rivate Working Set)	Description	*
csrss.exe		50 63	1,200 K	Client Server Runtime Process	
csrss.exe	SYSTEM	00	8,596 K	Client Server Runtime Process	
CTAudSvc.exe	SYSTEM	00	772 K	Creative Audio Service	-
dwm.exe	Vicki	01	13,372 K	Desktop Window Manager	=
explorer.exe	Vicki	00	18,836 K	Windows Explorer	
firefox.exe	Vicki	00	43,316 K	Firefox	
hqtray.exe	Vicki	00	1,424 K	VMware Host Network Access Status Tray Application	
lsass.exe	SYSTEM	00	2,532 K	Local Security Authority Process	
lsm.exe	SYSTEM	00	788 K	Local Session Manager Service	
MsMpEng.exe	SYSTEM	00	43,208 K	AntiMalware Service Executable	
msseces.exe	Vicki	00	2,272 K	Microsoft Security Essentials User Interface	
rundll32.exe	Vicki	00	2,252 K	Windows host process (Rundll32)	
SearchIndexer	SYSTEM	00	5,268 K	Microsoft Windows Search Indexer	
services.exe	SYSTEM	00	3,308 K	Services and Controller app	
smss.exe	SYSTEM	00	232 K	Windows Session Manager	
Snagit32.exe	Vicki	00	15,292 K	Snagit	
SnagitEditor.exe	Vicki	00	21,920 K	Snagit Editor	
SnagPriv.exe	Vicki	00	680 K	Snadit RPC Helper	*
Show processes	from all users			End Proces	ss

The "Select Process Page Columns" window appears.

Select Process Page Columns	X
Select the columns that will appear on the Process page	of Task Manager.
Memory - Paged Pool Memory - Non-paged Pool Page Faults Page Fault Delta	*
Base Priority Base Priority Handles Threads USER Objects GDI Objects	E
I/O Reads I/O Writes I/O Other I/O Read Bytes I/O Write Bytes I/O Other Bytes	
OK N	Cancel

Place a check mark next to **Base Priority >** click **OK**.

Expand the width of the "Windows Task Manager" so the "Base Priority" column is visible.

Options View Help				
Processes Serv	ices Performance N	etworkin	g Users	
Image Name	User Name	CPU	Memory (Private Working Set)	N Race Dri
Custom Idle Deserve	OVETEM	00	themory (involte working set)	N/A
System Idle Process	STSTEM	99	12 K	Namal
System	STSTEM	00	70 K	Normal
smss.exe	STOTEM	00	1 200 K	Normal
csrss.exe	STOTEM	00	1,200 K	Normal
csrss.exe	STOTEM	00	2 252 4	Normal
services.exe	STOTEM	00	3,232 K	Normal
Isdss.exe	STOTEM	00	2,320 K	Normal
ism.exe	STOTEM	00	700 K	Normal
svchost.exe	NETWORK SERVICE	00	2,372 K	Normal
McMoEng eve	EVETEM	00	2,452 K	Normal
suchast eve		00	13,230 K	Normal
sychost.exe	EUCAL SERVICE	00	13,024 K	Normal
sychostiexe	STOTEM	00	12,000 K	Normal
sychost exe		00	12,900 K	Normal
sychost.exe	NETWORK SERVICE	00	2,900 N	Normal
Svchostlexe	Viele	00	4,010 K	Normal
snageriv.exe	VICKI	00	000 K	Normal
spoolsv.exe		00	10 226 K	Normal
svchost.exe	LOCAL SERVICE	00	10,336 K	Normal
svchost.exe	LOCAL SERVICE	00	3,740 K	Normal
svenosilexe	LUCAL SERVICE	00	1,070 K	Normal
vinware-usbarbitrator.exe	STOTEM	00	1,032 K	Normal
WIDEHest eve		00	1 169 1	Normal
woordbro.exe	LUCAL SERVICE	00	1, 100 N	Normal
vmnetuncp.exe	STOTEM	00	2 226 K	Normal
TacHolo ava	Viele	00	3,330 K	Normal
tad/bast ava	Vicki	00	1 794 4	Normal
avalarar ava	Vicki	00	1,7046	Normal
rundll32 eve	Vicki	00	10,000 N	Normal
	Vicki	00	2,232 N	Normal
hotrav eve	Vicki	00	1 474 K	Normal
SearchIndever eve	SYSTEM	00	1,724 N	Normal
wmpnetwk eve	NETWORK SERVICE	00	3,200 N	Normal
Snagit32 eve	Vicki	00	15 274 K	Normal
SnagitEditor eve	Vicki	00	13,324K	Normal
firefox eve	Vicki	00	22,200 N 43 309 M	Above Normal
wininit eve	SYSTEM	00	א סטכוכד ש כו ל	High
<	III	00	712K	riigh M
Show processes from all u	isers			(sale
- onow processes in onli all u	10010			End Process

Click Base Pri.

Which image name has a base priority of N/A?

List the image name that has a base priority of Above Normal?

Step 4

Reset Firefox.exe base priority to normal. Right-click **firefox.exe > Set Priority > Normal > Change priority**.

Click View > Select Columns > uncheck Base Priority > OK.

Select Process Page Columns	×
Select the columns that will appear on the Process page of Ta	sk Manager.
Memory - Peak Working Set Memory - Working Set Delta Memory - Private Working Set Memory - Compute Size	^
Memory - Paged Pool Memory - Non-paged Pool Page Faults	E
Page Fault Delta Base Priority Handles Threads	
USER Objects GDI Objects I/O Reads	
OK C	• Cancel

Close Firefox.

plications Processes g	Services Performar	nce Networkir	ng Users	
Image Name	User Name	CPU	Memory (Private Working Set)	Description
csrss.exe	SYSTEM	00	1,200 K	Client Server Rur
csrss.exe	SYSTEM	00	8,620 K	Client Server Rur
CTAudSvc.exe	SYSTEM	00	772 K	Creative Audio S
dwm.exe	Vicki	00	13,396 K	Desktop Window
explorer.exe	Vicki	00	18,856 K	Windows Explore
hqtray.exe	Vicki	00	1,424 K	VMware Host Net
sass.exe	SYSTEM	00	2,532 K	Local Security Au
lsm.exe	SYSTEM	00	788 K	Local Session Mar
MsMpEng.exe	SYSTEM	00	43,596 K	AntiMalware Serv
msseces.exe	Vicki	00	2,272 K	Microsoft Securit
rundll32.exe	Vicki	00	2,252 K	Windows host pri
SearchIndexer.exe	SYSTEM	00	5,264 K	Microsoft Windov
services.exe	SYSTEM	00	3,328 K	Services and Con
smss.exe	SYSTEM	00	232 K	Windows Session 🚽
•	III			4
Show processes from	all users			End Dragons

Is Firefox listed as a process?

Close all open windows.

Step 5

Click Start > Control Panel > Clock, Language, and Region > Region and Language.



The "Regional and Language" window appears.

🐓 Region and Language	×
Formats Location Key	boards and Languages Administrative
Format:	
English (United State	s) 🔹
Date and time form	ats
Short date:	M/d/yyyy 👻
Long date:	dddd, MMMM dd, yyyy
Short time:	h:mm tt 🔹
Long time:	h:mm:ss tt 🔹
First day of week:	Sunday 👻
What does the nota	tion mean?
Examples	
Short date:	12/24/2010
Long date:	Friday, December 24, 2010
Short time:	10:54 AM
Long time:	10:54:18 AM
	Additional settings
Go online to learn abo	but changing languages and regional formats
	OK Cancel Apply

What regional format is being used?

Click Additional settings.

Numbers Cu	rrency Time Date		
Example			
Positive:	123,456,789.00	Negative:	-123,456,789.00
Decim	al symbol:	I	-
No. of	digits after decimal:	2	•
Digit g	rouping symbol:	<i>i</i> .	•
Digit g	rouping:	123,456,78	9 🗸
Negati	ve sign symbol:	-	•
Negati	ve number format:	-1.1	•
Display	/ leading zeros:	0.7	•
List sep	parator:		•
Measu	rement system:	U.S.	•
Standa	rd digits:	012345678	9 🔹
Use na	tive digits:	Never	•
Click Reset numbers, c	to restore the system defa urrency, time, and date.	ault settings for	Reset

What are the tabs that can be customized?

Click Cancel.

Click the drop-down menu in "Formats" area. Select Belarusian (Belarus).

🐓 Region and Languag	e Xa
Formats Location Key	boards and Languages Administrative
Format:	
Belarusian (Belarus)	
Die lie de	
Date and time form	ats
Short date:	dd.MM.yyyy
Long date:	d MMMM уууу
Short time:	H:mm 🔹
Long time:	H:mm:ss 🔹
First day of week:	панядзелак
What does the nota	tion mean?
Examples	
Short date:	24.12.2010
Long date:	24 снежня 2010
Short time:	11:18
Long time:	11:18:25
	Additional settings
Go online to learn ab	out changing languages and regional formats
	OK Cancel Apply

Notice the changes to the output in the "Example" area of how data is displayed using this format.

Click the drop-down menu in the "Format" area.

Return the setting to the original format.

Click Keyboards and Languages tab > Change keyboards.

General Language Bar Advanced Key Settings]
Default input language Select one of the installed input languages to us fields.	se as the default for all input
English (United States) - US	•
Installed services Select the services that you want for each input Use the Add and Remove buttons to modify this EN English (United States)	Add
	Properties
	Move Up

Click Add.

Scroll down the list of options and expand **Belarusian (Belarus) > Keyboard >** select **US > OK**.



Click **Apply** to accept the changes.

Default input language	_
Select one of the installed input languages fields.	to use as the default for all input
English (United States) - US	•
Select the services Select the services that you want for each Use the Add and Remove buttons to modify EN English (United States) Keyboard US BE Belarusian (Belarus)	nput language shown in the list. y this list. Add
US	Remove
	Properties
	Move Up
3	Move Down

Close all opened windows

Step 6

Right-click the Taskbar.

Select **Toolbars > Language bar** to ensure that the **Language bar** is shown in the **Taskbar**.



Right-click the Language bar in the Taskbar.

Select Settings.



The "Text Service and Input Languages" window appears.

neral Language Bar Advanced Key Sett	ings
Default input language Select one of the installed input languages fields.	to use as the default for all input
English (United States) - US	-
Installed services	
Select the services that you want for each	input language shown in the list.
EN English (United States) Keyboard US BN Bengali (Bangladesh) Keyboard	Add
Neyboard	20
· US	Remove
• US	Remove Properties
• US	Remove Properties Move Up

What is the Default input language?

Close all opened windows.

Part 4: Managing Windows 7 System Performance

In this part of the lab, you will manage and monitor Windows 7 system performance.

Recommended Equipment

• A computer running Windows 7

Step 1

Log on to Windows as an administrator.

Note: Some antivirus or antispyware programs must be uninstalled on the computer for Windows Defender to work.

To see if Windows Defender is turned off click **Start >** in Search programs and files type **Defender >** select **Windows Defender**.

If the "This program is turned off" screen appears, click click here to turn it on.



Windows Defender should start, if not, uninstall any antivirus or antispyware programs and then click **Start >** in Search programs and files type **Defender >** select **Windows Defender**.

Click Start > Control Panel > System and Security > Administrative Tools > Computer Management > expand Services and Applications > select Services.

Close the Administrative Tools window.

Windows Defender								_ _ ×
💽 💮 🏠 Home 🏓 S	ican 🔹 🕗 History 🐧 Tools 🤇	?) -						
Protection against spyware and	potentially unwanted software							
	P. C. M.							
Check for new definiti	ons							
Updated definitions ena	able detections of the latest harmful or	unwanted software and pre	vent it from run	ning on yo	ur computer.	Chec	c for up	odates now
						Go online to view t	rouble	shooting tips
Second Se								
File Action View Help								
🗢 🔿 🙍 🗔 🖬 💿								
🜆 Computer Management (Lo	O. Services							Actions
a 🎁 System Tools		(Services 🔺
Task Scheduler	Windows Defender	Name	Description	Status	Startup Type	Log On As	^	More >
Custom Views	Ston the service	Windows Color Sys	The WcsPlu		Manual	Local Service		
🖌 🚉 Windows Logs	Restart the service	Windows Connect	WCNCSVC		Manual	Local Service		Windows 🔺
🛃 Application		Windows Defender	Protection	Started	Automatic (Delayed Start)	Local System		More 🕨
🛃 Security	Description:	Windows Error Ren	Allows error	Statteu	Manual	Local System		
Setup	Protection against spyware and	Windows Event Col	This service		Manual	Network Service		
E System	potentially unwanted software	Windows Event Log	This service	Started	Automatic	Local Service		
Applications and		Windows Firewall	Windows Fi	Started	Automatic	Local Service		
Subscriptions		Windows Font Cac	Optimizes p		Manual	Local Service		
b 1 Shared Folders		🌼 Windows Image Ac	Provides im	Started	Automatic	Local Service		
Local Users and Group		🔍 Windows Installer	Adds, modi		Manual	Local System		
Performance		🔍 Windows Manage	Provides a c	Started	Automatic	Local System		
Device Manager		🖓 Windows Media Ce	Windows M		Manual	Network Service		
A Storage		Windows Media Ce	Starts and s	2 2	Manual	Network Service		
A Services and Application		Windows Media Pl	Shares Win	Started	Automatic (Delayed Start)	Network Service		
Services		Windows Modules	Enables inst		Manual	Local System	=	
WMI Control		Windows Remote	Windows P		Manual	Network Service		
		Areadame Caraal	Dan idea an	(1.1.1.1	A	Level Contene	-	
	Extended Standard					1		1

Resize and position both windows so they can be seen at the same time.

Can Windows Defender check for updates?

Scroll the "Computer Management" window so you see the "Windows Defender" service.

What is the Status of the service?

💮 Computer Management							l	- 🗆 🗙
File Action View Help								
🗢 🔿 🙋 🗔 🗋 🔤 🛛								
🛓 Computer Management (Local	O. Services							Actions
A 🎇 System Tools	1.55		2				-	Services 🔺
Iask Scheduler	Windows Defender	Name	Description	Status	Startup Type	Log On As	^	More 🕨
Shared Folders	Share the same first	🖓 Windows Audio E	Manages a	Started	Automatic	Local System		
Analysis and Groups	Restart the service	Windows Backup	Provides W		Manual	Local System		Windows 🔺
Performance		Windows Biometri	The Windo		Manual	Local System		More 🕨
Device Manager	Description	Windows CardSpa	Securely en		Manual	Local System		
🔺 📇 Storage	Protection against spyware and	Windows Color Sy	The WcsPI		Manual	Local Service		
📷 Disk Management	potentially unwanted software	Windows Connect	WCNCSVC		Manual	Local Service		
Services and Applications		Windows Defender	Protection	Started	Automatic (Delayed Start)	Local System		
Services		Windows Driver F	Manages u	Started	start	Local System		
will Control		Windows Event C	This service		Stop	Network Ser		
		Windows Event Log	This service	Started	Pause	Local Service		
		Windows Firewall	Windows Fi	Started	Resume	Local Service		
		Windows Font Ca	Optimizes		Restart	Local Service		
		Windows Image A	Provides i	Started	All Tasks	Local Service		
		Windows Installer	Adds, modi			Local System		
		🖏 Windows Manage	Provides a	Started	Refresh	Local System	Ξ	
		Windows Media C	Windows		Properties	Network Ser		
		Windows Media C	Starts and s			Network Ser		
		Windows Media P	Shares Win	Started	Help	Network Ser	Ψ.	
4	Extended Standard					8		
Stop service Windows Defender on L	ocal Computer							

Right-click Windows Defender service > select Stop.

Note: The reason this service will be stopped is so you can easily see the results. When stopping a service, to free up system resources the service uses, it is important to understand how the overall system operation will be affected.

The "Service Control" window appears and closes.

Select the **Windows Defender** window so it is active.

🌍 😚 Home 🏓 Sca	in 🗸 🧶 History 🐧 Tools 🕡 🗸
ction against spyware and po	tentially unwanted software
Service has stopped	
A problem caused this pro computer.	ogram's service to stop. To start the service, click the Start now button or restart your
1984/1 2	
atus	
Last scan:	Not available
C 1 1 1	Daily around 2:00 AM (Quick scan)
Scan schedule:	Off
Scan schedule: Real-time protection:	
Scan schedule: Real-time protection: Antispyware definitions:	Version 1.93.1238.0 created on 11/4/2010 at 7:14 PM

What must be done so Windows Defender can run?

Start the Windows Defender service, click Start now.

Windows Defender		
💽 💮 🏠 Home 🏓 Scar	n • 🤌 History 🔇 Tools 🜔 •	
Protection against spyware and pot	entially unwanted software	
Check for new definitions	5	
Updated definitions enable prevent it from running on	e detections of the latest harmful or unwanted software and your computer.	Check for updates now
Status	Not available	
Last scan:		
Last scan: Scan schedule:	Daily around 2:00 AM (Quick scan)	
Last scan: Scan schedule: Real-time protection:	Daily around 2:00 AM (Quick scan) On	

Can Windows Defender check for updates?

Close the Windows Defender window.

Step 2

Make sure the Computer Management window is open.

Expand Event Viewer > Windows Logs > select System.

Select the second event in the list.

E Computer Management								X
File Action View Help								
🗢 🄿 🖄 🖬 🛛 🗖								
🛃 Computer Management 🔺	Level	Date and Time		Source	Event ID	Task Categ 🔺	Action	IS
System Tools	(i) Information	12/24/2010 1:41:47	PM	Service Control Ma	7036	None	System	n 🔺 📥
A Event Viewer	Information	12/24/2010 1:41:42	PM	Service Control Ma	7036	None	i 👩 🖸	p
Custom View	1	NS 1000000000000000000000000000000000000				•	7	.r
a 📫 Windows Log	Event 7036 Service (Control Manager				×	Г. _Б	m
Partice Application		control manager						
Security =	General Details							E
Setup	TI WELL D						1 × F	ilt
Forwarde	The Windows De	efender service entered the sto	pped state.				P	r
Applications							F 🔐	ín
🛗 Subscriptions	Log Name	System				-		a
Shared Folders	Source:	Service Control Manager	Logged:	12/24/2010 1:41:42 PM		-	A	.tt
Decal Users and (Decal Users and (Decal Users)	Event ID:	7036	Task Category:	None			V	iew 🕨
Device Manager	Level	Information	Keywords:	Classic				
A 🔄 Storage	User:	N/A	Computer	Vicki-PC				e
📄 Disk Managemer 👻	OnCode:	Info				-	12 +	lelp 🕨
							Event	7 🔺 🔻

Look below the General tab then explain what has happened to the **Windows Defender** service.

Click the up arrow button on the keyboard or select the event above this one.

Antina View Hele									_
Action View Help									
🔿 🔁 🔃 🚺 🖬									
Computer Management 🔺 📔	Level	Date and Time		Source	Event ID	Task Cate	A	ctions	
System Tools	(i) Information	12/24/2010 1:41:47	PM	Service Control Ma	7036	None	S	ystem	
Control Task Scheduler	 Information 	12/24/2010 1:41:42	PM	Service Control Ma	7036	None		Op	
Custom View	<u> </u>						- 1 i -	r Cr	
Windows Loc	F 17035 G 1 G								
Applicatic	Event 7036, Service Con	.trol Manager					× -	lm	
💽 Security 😑	General Details							CI	
Setup							-	Filt	
💽 System	The Windows Defer	nder service entered the run	ning state.					Pr	
Forwarder							0	6 Fin	
Applications	1						0	3	
Shared Folders	Log Name:	System				;	= 1	Sa	
Local Users and (Source:	Service Control Manager	Logged:	12/24/2010 1:41:47 PM				Att	
Performance	Event ID:	7036	Task Category:	None				View	•
🚔 Device Manager	Level:	Information	Keywords:	Classic				Re	
🚔 Storage	User:	N/A	Computer:	Vicki-PC				Hole	
C D' 1 14							_	neip	,

Look below the General tab then explain what has happened to the **Windows Defender** service.

Close all opened windows.

Step 3

Click Start > Control Panel > System and Security > Administrative Tools > Performance Monitor.

(%) Performance Monitor	
No File Action View Window He	elp _ # ×
← → 🔲 🛛 🖬	
 Performance Monitoring Tools Performance Monitor Data Collector Sets Reports 	Overview of Performance Monitor Image: Construct on the second
	System Summary
	\\\\\ICKI-PC Memory % Committed Bytes In Use 13.985 2.317.000 Cache Faults/sec 0.000 Network Interface isatap.(F1E062E3-39EC-4E5A-B53B-D88BBE23DB0B) Isata Public ,
Done	• Contribute
Done	

Expand Data Collector Sets > right-click User Defined > New > Data Collector Set.

No. Performance Monit	or	
No File Action Vi	ew Window H	lelp – 🖉 🛪
🗢 🔿 🗖 🖬		
 Performance Monitoring To Performance Data Collector Q. User Define 	ols ce Monitor Sets cd	Overview of Performance Monitor Image: Second Se
 System Event Tr Startup Reports 	New New Window f Refresh Help	Data Collector Set click Performance Monitor, or expand Data Collector Sets or Reports. ew Resource Monitor lets you view detailed real-time information about hardware resources (CPU, disk, rk, and memory) and system resources (including handles and modules) in use by the operating system, es, and running applications. In addition, you can use Resource Monitor to stop processes, start and stop es, analyze process deadlocks, view thread wait chains, and identify processes locking files. Open Resource Monitor
		System Summary VVICKI-PC Memory % Committed Bytes In Use 14.259 Available MBytes 2,301.000 Cache Faults/sec 0.000 Network Interface isatap.(F1E062E3-39EC-4E5A-B53B-D88BBE23DB0B) isatap.(F95ADB84-8F8F-4) +
Create a new Data Coll	ector Set.	

The "Create new Data Collector Set" window appears.

Terms Name	X
S Create new Data Collector Set.	
How would you like to create this new data collector set?	
Name:	
Memory Logs	1
 Create from a template (Recommended) <u>How do I work with templates?</u> Create manually (Advanced) <u>How do I choose data collectors manually?</u> 	
Next D Finish Car	ncel

In the Name field, type **Memory Logs**. Select the **Create manually (Advanced)** radio button **> Next**.

Terms Name	x
S Create new Data Collector Set.	
What type of data do you want to include?	
Oreate data logs	
Performance counter	
Event trace data	
System configuration information	
Performance Counter Alert	
Next Next	Cancel

Select **Performance counter > Next**.

Term Nets	x
C Create new Data Collector Set.	
Which performance counters would you like to log?	
Performance counters:	
Add Remove	
Sample interval: Units:	
15 Seconds V	
Next Finish C	ancel

Click Add.

From the list of available counters locate and expand **Memory**. Select **Available MBytes** > **Add**.

valiable counters		Added counters			
Select counters from computer:		Counter	Parent	Inst	Computer
<local computer=""></local>	Browse				Compare
Memory	^ ^				
% Committed Bytes In Use					
Available Bytes					
Available KBytes					
Available MBytes					
Cache Bytes					
Cache Bytes Peak					
Cache Faults/sec					
Commit Limit	· ·				
	▼ Search				
	Add >>	Remove <<			

Click OK.

Viliation from annual terr		Added counters				
elect counters from computer:		Counter	Parent	Inst	Computer	
<local computer=""></local>	▼ Browse	Memory				- ^
Memory	^ ^	Available MBytes				
% Committed Bytes In Use						
Available Bytes						
Available KBytes						
Available MBytes						
Cache Bytes						
Cache Bytes Peak						
Cache Faults/sec						
Commit Limit	-					
	▼ Search					
	Add >>	Remove <<				

Set the Sample interval field to 4 seconds. Click Next.

	x
S Create new Data Collector Set.	-
Which performance counters would you like to log?	
\Memory\Available MBytes Add	
Remove	
Sample interval: Units:	
Next Finish	Cancel

Click Browse.

S Create new Data Collector Set.
Where would you like the data to be saved?
Root directory:
%systemdrive%\PerfLogs\Admin\Memory Logs Browse
143 IV
Next Finish Cancel

Select drive (C:) > PerfLogs > OK.



The "Create new Data Collector Set" window appears.

🚱 🔞 Create new Data Collector Set.
Where would you like the data to be saved?
Root directory:
C:\PerfLogs Browse
Next S Finish Cancel

Click Next.

	×
Create new Data Collector Set.	
Create the data collector set?	
Run as: <default> Change</default>	
 Open properties for this data collector set Start this data collector set now Save and close 	
Next Finish	Cancel

Click Finish.

Step 4

Expand User Defined > select Memory Logs > right-click Data Collector01 > Properties.



The "DataCollector01 Properties" window appears.

	ile	
Performance counters:		
Memory (Available MB)	rtes	Add
Log format:		Maxim m camples:
Comma Separated Tab Separated SQL Binary Data source name:	Units: Seconds	

Change the Log format: field to **Comma Separated**.

Select the File tab.

Performance Counters	File		
Log file name:			
DataCollector01			
File name format:			
			\geq
Prefix file with con	puter name		
Log mode			
Overwrite			
Append			
Circular (require	s a non-zero maximum fil	e size)	
-			
Example file name:	20101224-000001\Data	Collector01 csv	
C: Penilogs Wicking	_20101224-000001/pata	Collector 01.CSV	

What is the full path name to the example file name?

Click OK.

Step 5

Select the **Memory Logs** icon in the left pane of the "Performance Monitor" window.

Performance Monitor				- • ×
🔊 File Action View Window H	elp			- 8 ×
🗢 🔿 🖄 📰 🗙 🖬 🍳 🖶 🛽] 🖬 🖳 🔳 💼 🔛			
 Performance Monitoring Tools Performance Monitor Data Collector Sets User Defined Memory Logs System Event Trace Sessions Startup Event Trace Sessions Reports 	Name Start the Data Co	llector Set. Type Performance Cou	Output	
	•	III.		

Click the green arrow icon to start the data collection set.

Notice a green arrow is placed on top of the Memory Logs icon.	

No. Performance Monitor			
 No File Action View Window H Image: Image: Im	lelp 2 🗊 🕨 🔳 📩 🛄		- 5 ×
 Performance Monitoring Tools Performance Monitor Data Collector Sets User Defined Memory Logs Systam Event Trace Sessions Startup Event Trace Sessions Reports 	Name	Type Performance Counter	Output C:\PerfLogs\VICKI-PC_20101224-000001\E
	•	m	•

Step 6

To force the computer to use some of the available memory, open and close a browser.

Click the **black box** icon to stop the data collection set.



What change do you notice for the Memory Logs icon?



Step 7

Click Start > Computer > double-click drive C: > PerfLogs > Continue > VICKI-PC_20101224-00001 > Continue.

G → I + Computer + Local DIsk (C:) + PerfLogs + VICKI-PC_20101224-000001	← ← Search VICKI-PC_20101224-000001 P
File Edit View Tools Help	
Organize ▼ Include in library ▼ Share with ▼ Burn New folder	
 ★ Favorites ■ Desktop ▶ Downloads ™ Recent Places 	
•	

Double-click DataCollector01.csv file.

Note: If "Windows cannot open the file:" message appears select radio button **Select a** program from a list of installed programs > OK > Notepad > OK.

DataCollector01.csv - Notepad	x
File Edit Format View Help	
"(PDH-CSV 4.0) (Pacific Standard Time) (480)", "\\VICKI-PC\Memory\Available MBytes" "12/24/2010 14:20:56.043", "2272" "12/24/2010 14:21:00.059", "2271" "12/24/2010 14:21:04.012", "2271" "12/24/2010 14:21:08.012", "2272" "12/24/2010 14:21:12.012", "2247" "12/24/2010 14:21:16.012", "2270" "12/24/2010 14:21:20.012", "2261" "12/24/2010 14:21:28.012", "2277" "12/24/2010 14:21:32.013", "2260" "12/24/2010 14:21:36.013", "2231" "12/24/2010 14:21:40.013", "2231" "12/24/2010 14:21:40.013", "2231" "12/24/2010 14:21:48.013", "2233" "12/24/2010 14:21:48.013", "2223" "12/24/2010 14:21:48.013", "2223" "12/24/2010 14:21:48.013", "2223" "12/24/2010 14:21:52.013", "2269" "12/24/2010 14:21:56.013", "2269" "12/24/2010 14:21:56.013", "2261" "12/24/2010 14:22:04.013", "2261" "12/24/2010 14:22:08.013", "2260"	*

What does the column farthest to the right show?

Step 8

Close the DataCollector01.csv file and the window with the PerfLogs folder.

Select the **Reliability and Performance Monitor** window. Right-click **Memory Logs > Delete > Yes**.

No. Performance Monitor			- • ×
S File Action View Wind	ow Help		- 5 ×
N Performance	Name	Туре	Output
 Monitoring Tools Performance Monitor Data Collector Sets User Defined Memory Logs 	E DataCollector01	Performance Counter	C:\PerfLogs\VICKI-PC_20101224-000001\E
 Reports 	Start Stop Save Template Data Manager Latest Report New View New Window from Here Delete Refresh Export List Properties		
	Help		Þ
Deletes the current selection.			

Open drive C: > PerfLogs folder > right-click VICKI-PC_20101224-000001 > Delete > Yes.

Close all open windows.

Part 5: Managing Windows 7 Remote Access

In this part of the lab, you will remotely connect to a computer, examine device drivers, and provide remote assistance.

Recommended Equipment

- Two computers running Windows 7 that are directly connected to each other or through a switch or hub.
- The two computers must be part of the same Workgroup and on the same subnet.

Step 1

Log on to Computer2 as a member of the administrator group. Ask your instructor for the user name and password.

Click Start > Control Panel > System and Security > Allow remote access.

omputer Name	Hardware	Advanced	System Protecti	on Remote
Remote Assist	ance			
Allow Rem	ote Assistan	ce connection	ns to this compute	er
What happen:	s when I ena	ble Remote /	Assistance?	
				Advanced
				, at an o cam
Remote Deskt	ор			
Click an option	n, and then s	pecify who c	an connect, if ne	eded.
On't allow	connection	s to this comp	outer	
Allow conn	ections from	computers ru	unning any versio	n of
	esktop (iess :	secure)		12
Allow conn Desktop w	iections only ith Network	Level Authen	tication (more sec	cure)
Help me choo	se			Select Users

In the "Remote Desktop" area, select the radio button next to Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure).

If a message appears warring the computer is set to go to sleep, click the **Power Options** link.



The "Select a power plan" screen appears.

Street & Lower	Charles &		
Control Panel > Hard	ware and Sound 🔸 Power Options 🔸 Edit Plan Settings	s 🔻 🍫 Search Control Panel	٩
Change setti Choose the sleep Turn off the Put the com	ngs for the plan: Balanced o and display settings that you want your computer to us display: Never • puter to sleep: Never •	е,	
Change advance Restore default s	d power settings ettings for this plan		
		Save changes Cancel	

Click Change plan setting > select Never > select Never > Save changes.



Click **OK** to close the warning message.

In the "Remote Desktop" area, click the Select Users button.

emote Desktop Users		? ×
The users listed below can on the Administrators group car	connect to this computer, a 1 connect even if they are 1	and any members of not listed.
ohn_Computer2 already ha	s access.	
Add Remov	re	
To create new user account Panel and open <u>User Accou</u>	ts or add users to other gro <u>ints</u> .	ups, go to Control
	ОК	Cancel
Help me choose	ОК	Cancel

Which user already has remote access?

Since you will use this account to gain remote access, you do not need to add any users, click **Cancel**.

Click **Apply > OK** to close "System Properties" window.

Computer Name	Hardware	Advanced	System Protect	ion Remote
Remote Assist	ance			
Allow Remo	ote Assistan	ce connection	ns to this comput	er
What happens	when Lena	ble Remote /	Assistance?	
What happene	WHEN I GHE	ble Hemole /	<u>Issistance :</u>	
				Advanced
Remote Deskt	ор			
Click an option	and then s	necify who c	an connect if ne	eded
Ont allow	connection	s to this comp	outer	
Allow conn Remote De	ections from sktop (less s	computers ru secure)	inning any versio	n of
Allow conn Desktop wi	ections only th Network	from comput Level Authen	ers running Remo tication (more se	ote cure)
Help me choos	<u>se</u>			Select Users
<u></u>				

Click Start > Control Panel > System and Security > Windows Firewall > Turn Windows Firewall on or off.

😋 🕞 🖉 🏕 Control Panel 🔸 System and Security 🔸 Windows Firewall 🔸 Customize Settings 💿 👻 🍫 Search Control Pan	el 🔎
Customize settings for each type of network You can modify the firewall settings for each type of network location that you use. What are network locations? Home or work (private) network location settings Image: Setting and the intervent of the intervent location settings Image: Setting and the intervent locatin	
•	
OK N Cancel	

Make sure the Turn on Windows Firewall radio button is selected then click OK.

Close all open windows, log off computer2, and move to Computer1.

Step 2

Log on to Computer1 as an administrator or a member of the administrator group. Ask your instructor for the user name and password.

Click Start > All Programs > Accessories > Remote Desktop Connection.

Accessories	*
Galculator	
Command Prompt	
Connect to a Network Projector	
🖳 Connect to a Projector	
📑 Getting Started	_
🛃 Math Input Panel	
Notepad	
🔊 Paint	
🖅 Run	=
😪 Snipping Tool	
🖞 Sound Recorder	
🍖 Sticky Notes	
🔞 Sync Center	
🥽 Windows Explorer	
📇 WordPad	
Ease of Access	
퉬 System Tools	
鷆 Tablet PC	Ŧ
4 Back	
perte das autoritations	
Search programs and files	

When the "Remote Desktop Connection" window appears, type **Computer2** in the Computer field and click **Connect**.

nemote D	Desktop Connection
	Remote Desktop Connection
Computer:	Computer2 -
User name:	None specified
You will be as	sked for credentials when you connect.
Options	Connect Help

In the "User name" field, type the account name you used to log on to Computer2. For example: **John_Computer2**.

In the "Password" field, type the password for the user.

Note: The user account must have a password.

Windows Security	
Enter your These credenti	credentials als will be used to connect to Computer2.
	John_Computer2 Domain:
🔲 Reme	mber my credentials
	OK Cancel

Click OK.



Click **Yes** to allow the connection.

What happened to the desktop on Computer1?

Step 3

From Computer1, right-click the desktop of **Computer2 > New > Folder**.



Name the folder **Remote Permission**.

Right-click the **Remote Permission** folder **> Properties > Sharing > Advanced Sharing > Share this folder** checkbox **>** keep the default name **Remote Permission > OK**.

Click the **Security** tab. Make sure the user name from Computer1 is listed. If it is not, create and add the user name. Example: Click **Edit > Add >** type **John_Computer1 > OK**.

H	Comp	uter2		_ 8 ×
Permissions for	Remote Permissions Prope General Sharing Security F Remote Permissions	rties Previous Versions	Customize sktop\Remote Perr	
Security Object name: I Group or user na John_Comp & SYSTEM John_Comp & Administrato	2:\Users\John_Computer2\Desktop\Rr nes: uter1 (COMPUTER2\John_Computer1) uter2 (COMPUTER2\John_Computer2) rs (COMPUTER2\John_Computer2) Add F	amote Perrr	mputer2) (s) Edit y Deny	Remote
Permissions Full control Modify Read & execu List folder cont Read Learn about acce	e Allow I et allow I e	Deny	Advanced	Permissions

Click OK > Close.

Click Start > the arrow next to Log off > Disconnect.



Step 4

Log on to Computer2.

Click Start > Control Panel > System and Security > Allow remote access



Notice "Remote Assistance" is activated by default.

Click Advanced.

The "Remote Assistance Settings" window appears.

Remote Assistance Settings	×
You can set limits for the use of Remote Assistance on this computer. Remote control	
Allow this computer to be controlled remotely	
Invitations Set the maximum amount of time invitations can remain open	
1 V Hours V	
Create invitations that can only be used from computers running Windows Vista or later	
OK Canc	el

Make sure there is a check mark in the Allow this computer to be controlled remotely checkbox, set the invitation to 1 Hours, place a check mark in the Create invitations that can only be used from computers running Windows Vista or later checkbox, and then click OK.

When the System Properties window appears, click Apply.

Step 5

On Computer2, click Start > All Programs > Maintenance > Windows Remote Assistance.



The "Do you want to ask for or offer help?" screen appears.



Click Invite someone you trust to help you.

The "How do you want to invite your trusted helper?" screen appears.

	—
🚱 🚨 Windows Remote Assistance	
How do you want to invite your trusted helper? You can create an invitation and send it to your helper. You can also use Easy Connect to sir connections to your helper. <u>How do I know which to choose?</u>	nplify
Save this invitation as a file You can send this invitation as an attachment if you use web-based e-mail.	
Use e-mail to send an invitation If you use a compatible e-mail program this will start the e-mail program and attach t invitation file.	he
Use Easy Connect Use this option if Easy Connect is also available to your helper.	
	Cancel

Which methods can you use to contact someone for assistance?

Click the Save this invitation as a file.

Locate the shared **Remote Permission** folder, and name the file **Invitation to Computer1.**

🐣 Save As				×
C Re	mote Permissions	• 4j	Search Remote Permissi	ions 🔎
Organize 🔻 Ne	w folder		8==	• 🕡
 ★ Favorites ■ Desktop Downloads Secent Places ■ Libraries ■ Documents Music 	Name	No items match y	Date modified our search.	Туре
Pictures Videos File name: Save as type:	 Invitation to Computer1 RA Invitations (*.msrcIncident) 	III.		•
lide Folders			Save C	ancel

What type of extension does the file have?

Click Save.

🕹 Windows Remote Assistance	
< Chat 🔯 Settings 📠 Troubleshoot 🔞 Help	
Give your helper the invitation file and password	
ZYK3XMW5HS7P	
Waiting for incoming connection	h

When the "Windows Remote Assistance" window appears, record the invitation password.

Example: ZYK3XMW5HS7P

Click Settings.

🕹 Windows Remote Assistance Settings				
You can customize Remote Assistance by changing the settings below.				
 Use ESC key to stop sharing control Save a log of this session 				
Bandwidth usage - Medium - Turn off background				
-Don't allow full window drag				
What do these settings mean?				

Make sure there is a check mark next to Use ESC key to stop sharing control.

Set the Bandwidth usage to Medium.

Which features are disabled with a Medium bandwidth usage?

Click OK.

Step 6

On Computer1, click Start > Control Panel > Network and Internet > View network computers and devices > double-click Computer2.

If you are asked to log on, use the user account from Computer1

O ♥ ♥ Netwo	rk 🕨 🔻 🗙 Search Network	>
Organize 🔻 Networ	rk and Sharing Center 🛛 Add a printer 🛛 Add a wireless device 🛛 🖶 💌 🔞	
★ Favorites ■ Desktop ▶ Downloads ₩ Recent Places ■ Libraries	Computer (6) COMPUTER1 COMPUTER2	•
 Documents Music Pictures Videos 	Windows Security Enter Network Password Enter your password to connect to: COMPUTER2	
Computer	John_Computer1 Domain: COMPUTER1 Remember my credentials	
	S Logon failure: unknown user name or bad password.	
	OK Cancel	-
	2 Categories: Computer Network location: Network Workgroup: WORKGROUP	

Double-click the folder **Remote Permission**. Double-click the file **Invitation to Computer1**.

Core 📜 « com	PUTER2 Remote Permis	isions 👻 🐓	Search Remote Permissions	<u>× ا</u>
Organize - Includ	le in library 🔻 🛛 Burn	New folder		
★ Favorites ■ Desktop ▶ Downloads ₩ Recent Places				
Cibraries	Invitation to Computer1			
1 item	Offline status: Online line availability: Not availab	ble		
When the "Remote Assistance" window appears, type in the password recorded in Step 5. Example: ZYK3XMW5HS7P

Remote Assistance
Enter the password to connect to the remote computer
You can get this password from the person requesting assistance. A Remote Assistance session will start after you type the password and click OK. Enter password:
ZYK3XMW5HS7P
OK Cancel



Step 7

From Computer2, answer Yes to allow access to the computer.



Select the **Windows Remote Assistance – Being helped by John_Computer1** window so it is activated.

A Windows Remote Assistance - Being helped by John_Computer1	
🙈 Stop sharing 👖 Pause 📿 Chat 🎡 Settings 🔞 Help	
Your helper can now see your desktop	

Click Chat.



In the chat field type Hi John_ Computer1, my optical drive will not work. Click Send.

Step 8

From Computer1, click the **Request control** button in "Windows Remote Assistance" main menu.



Step 9

From Computer2, click the Allow John_Computer1 to respond to User Account Control prompts checkbox. Click Yes.



Step 10

From Computer1, select System Properties window for Computer2.

Windows Remote Assistance - Helping John	n_Computer2	- • ×							
🥾 Stop sharing 🔄 Actual size 🤿 Chat 🎲 Settings 🔞 Help									
**A Remote Assistance connection has been established. John Computer2: Hi John Computerd, my optical drive will not work. **John Computer has requested to share control of the computer. **John Computer his sharing control of the computer.	System Properties Computer Name Name A Remote Assistance - Being helped by lohn; A Stop sharing II Pause @ Chat @ Setting? @ Helped by lohn; A Remote Assistance on helped by lohn; Device Manager is all the Natives devices installed by computer National Computer Name Inho, Computer Name Tohn; Computer Name Viabn; Computer Name	Remote Permissions							
	Send								
	Your helper is sharing control of your computer								
Send									
Sharing control of the computer									

Note: If the **Computer2** System Properties window is closed, you need to open it before you continue.

Click Hardware tab > Device Manager.

🕹 Windows Remote Assistance - Helping Jo	ohn_Computer2				×			
🧶 Stop sharing 🕼 Actual size 🔿 Chat 🍈 Settings 🔞 Help								
**A Remote Assistance connection has been established. John_Computer2. Hi John_Computerd, my optical drive will not work. **John_Computer has requested to share control of the computer. **John_Computer is sharing control of the computer.	Recycle Bin Recycle Bin A Windows Remote Assistance "A	stance - Being helped by John, C e Chat Statings Helped by John, C e Chat Statings Helped by John, C mitition his been opened mitition his been	Advanced System Protection Renote work Manager lists all the hardware devices installer renorder. Use Bolevola Manager to change but tes of any device. Device Manager TA Device Update Driver Software Enable Update Driver Software changes Properties 2010		Remote Permissions			
Sharing control of the computer								

Right-click the **optical drive** that has a black down arrow. Select **Enable**.

🕹 Windows Remote Assistance - Helping John_Computer2	- • ×							
🕭 Stop sharing 🖂 Actual size 🤿 Chat 🎡 Settings 🔞 Help								
**A Remete Assistance connection has been established. John, Computer2, Hi John, Computer3, my optical drive will not work. **John, Computer3 has requested to share control of the computer. **John, Computer1 has requested to share the solution of the computer has requested to share the solution of the computer. **John, Computer3, has a first the solution of the computer has requested to share the solution of the computer has requested to share the solution of the computer. **John, Computer3, has a first the solution of the computer has the solution of the computer has requested to share the solution of the computer has requested to share the solution of the computer has the solution of the computer has the solution of the solution of the computer has the solution of the solution of the solution of the computer has the solution of the solution of the solution of the solution of the computer has the solution of the	Renote Permissions							
Send								
Sharing control of the computer								

Click the Stop Sharing button in Windows Remote Assistance main menu.

Click the **red X** button to close the Windows Remote Assistance connection.



Close all open windows and log off Computer1.

Step 11

On Computer2, click on Device Manager so it is activated.



Dose the optical drive have a black arrow?

Close the **Device Manager** window and the **Windows Remote Assistance** window.

Delete the **Remote Permission** folder and empty the Recycle Bin.

Select the System Properties window.

Select the **Remote** tab and place a check mark next to **Don't allow connection to this** computer > OK.



Log off **Computer2**.