IT Essentials 5.0

5.3.4.6 Lab - Managing System Files with Built-in Utilities in Windows 7

Introduction

Print and complete this lab.

In this lab, you will use Windows built-in utilities to gather information about the system and to troubleshoot system resources.

Recommended Equipment

The following equipment is required for this exercise:

• A computer running Windows 7

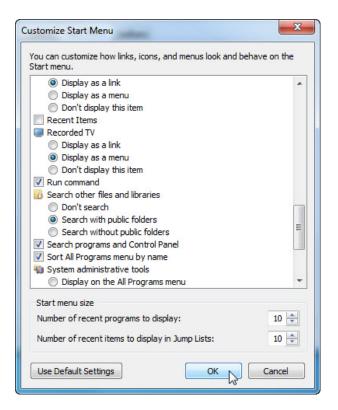
Step 1

Log on to the computer as an administrator.

To add Run to the Start menu right-click Start > Properties > Start Menu tab > Customize....

L Taskbar and Start Mer	nu Properties
Taskbar Start Menu To	polbars
To customize how links, i behave in the Start men	cons, and menus look and u, dick Customize.
Power button action: (Shut down 🔻
Privacy	
Store and display re	ecently opened programs in the Start menu
Store and display re taskbar	ecently opened items in the Start menu and the
How do I change the wa	y the Start menu looks?
	OK Cancel Apply

Scroll down until you see the Run command. Click in the box next to Run command. Click OK.



Click **Apply > OK** to close the "Taskbar and Start Menu Properties" window.

Open the command prompt by clicking Start > Run > type cmd > click OK.



What is the drive path shown?

Type help and press Enter.

C:\Windows\sy	stem32\cmd.exe
	dows [Version 6.1.7600] 2009 Microsoft Corporation. All rights reserved.
Copyright (c)	2009 Microsoft Corporation. Hil rights reserved.
C:\Users\John	>help
	rmation on a specific command, type HELP command-name
ASSOC	Displays or modifies file extension associations.
ATTRIB BREAK	Displays or changes file attributes. Sets or clears extended CTRL+C checking.
BCDEDIT	Sets properties in boot database to control boot loading.
CACLS	Displays or modifies access control lists (ACLs) of files.
ALL	Calls one batch program from another.
:D	Displays the name of or changes the current directory.
HCP	Displays or sets the active code page number.
CHDIR	Displays the name of or changes the current directory.
CHKDSK CHKNTFS	Checks a disk and displays a status report. Displays or modifies the checking of disk at boot time.
CLS	Clears the screen.
CMD	Starts a new instance of the Windows command interpreter.
COLOR	Sets the default console foreground and background colors.
COMP	Compares the contents of two Files or sets of files.
COMPACT	Displays or alters the compression of files on NTFS partitions.
CONVERT	Converts FAT volumes to NTFS. You cannot convert the
Сору	current drive. Copies one or more files to another location.
DATE	Displays or sets the date.
DEL	Deletes one or more files.
DIR	Displays a list of files and subdirectories in a directory.
DISKCOMP	Compares the contents of two floppy disks.
DISKCOPY	Copies the contents of one floppy disk to another.
DISKPART	Displays or configures Disk Partition properties.
OSKEY	Edits command lines, recalls Windows commands, and creates macros.
DRIVERQUERY	Displays current device driver status and properties.
ECHO	Displays messages, or turns command echoing on or off.
ENDLOCAL	Ends localization of environment changes in a batch file.
ERASE	Deletes one or more files.
EXIT	Quits the CMD.EXE program (command interpreter).
FC	Compares two files or sets of files, and displays the differences between them.
FIND	alfferences between them. Searches for a text string in a file or files.
FINDSTR	Searches for a text string in a file of files.
FOR	Runs a specified command for each file in a set of files.
FORMAT	Formats a disk for use with Windows.

What is the command to change directory?

What is the command to display the contents in a directory?

Type cd .. and press Enter.



What is the drive path shown?

Change back to original drive path. Example: Type **cd John** and press **Enter**.

What is the drive path shown?

Type **dir** /? and press **Enter**. If asked, press any key to continue.

:\Users\John isplays a li)dir /? ist of files and subdirectories in a directory.	
IR [drive:][[/0[[:]sort	[path][filename] [/A[[:]attributes]] [/B] [/C] [/D] [/L] [/N] [order]] [/P] [/Q] [/R] [/S] [/T[[:]timefield]] [/W] [/X] [/4]	
[drive:][pa	th][filename] Specifies drive, directory, and∕or files to list.	
∕A attributes	Displays files with specified attributes. D Directories R Read-only files H Hidden files A Files ready for archiving S System files I Not content indexed files L Reparse Points - Prefix meaning not	
∕B ∕C	Uses bare format (no heading information or summary). Display the thousand separator in file sizes. This is the default. Use \prime -C to disable display of separator.	
/D /L	Same as wide but files are list sorted by column. Uses lowercase.	
/N /0	New long list format where filenames are on the far right. List by files in sorted order.	
sortorder	N By Trane (alphabetic) S By size (smallest first) E By extension (alphabetic) D By date/time (oldest first) G Group directories first - Prefix to reverse order	
/P /Q /R /S	Pauses after each screenful of information. Display the owner of the file.	
∕R ∕S	Display alternate data streams of the file. Displays files in specified directory and all subdirectories.	
/T	Controls which time field displayed or used for sorting	
timefield	C Greation A Last Access W Last Written	
/₩ /X /4	Uses wide list format. This displays the short names generated for non-8dot3 file names. The format is that of \wedge with the short name inserted before the long name. If no short name is present, blanks are displayed in its place. Displayed jun its place.	
witches may reset switch	be preset in the DIRCMD environment variable. Override les by prefixing any switch with - (hyphen)-for example, /-W.	

Which switch displays a wide list format?

Type **dir** and press **Enter**.

Type **dir /w** and press **Enter**.

C:\Windows\syst	tem32\cmd.exe			• X
Volume Serial	>dir ive C has no label. 1 Number is 347C-0C96 C:\Users\John			A
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2:30 AM (DIR) 2:30 AM (DIR) 2:30 AM (DIR) 2:31 AM (DIR) 2:30 AM (DIR) 13 Dir(s) 59,830,734	Documents Documents Docunents Downloads Favorites Links Music Pictures Saved Games Searches Videos Ø bytes 1,848 bytes free		Ш
	>dir ∕w ive C has no label. 1 Number is 347C-0C96			
Directory of [.] [Downloads] [Saved Games]] [Music] s] Ø bytes	[Documents] [Pictures]	
C:\Users\John)	>			-

What is the difference between these two commands?

Type **VOL**. What is the volume name for drive C?

Close the Command prompt window.

Step 2

Open System Information by clicking Start > Run > type msinfo32 > click OK.

Click the **plus sign** next to Hardware Resources, Components, and Software Environment. Expand the window so you can see all the content.

System Summary	Item	Value
Hardware Resources	OS Name	Microsoft Windows 7 Professional
··· Conflicts/Sharing	Version	6.1.7600 Build 7600
DMA	Other OS Description	Not Available
Forced Hardware	OS Manufacturer	Microsoft Corporation
1/0	System Name	VICKI-PC
IRQs	System Manufacturer	To Be Filled By O.E.M.
Memory	System Model	To Be Filled By O.E.M.
Components	System Type	X86-based PC
Multimedia	Processor	Intel(R) Pentium(R) 4 CPU 3.00GHz, 2998 Mhz, 1 Core(s), 2 Logical Processor(s
- CD-ROM	BIOS Version/Date	American Megatrends Inc. 080009, 9/1/2004
Sound Device	SMBIOS Version	2.3
Display		
Infrared	Windows Directory	C:\Windows
🖲 · Input	System Directory	C:\Windows\system32
Modem	Boot Device	\Device\HarddiskVolume1
Network	Locale	United States
Ports	Hardware Abstraction Layer	Version = "6.1.7600.16385"
Storage	User Name	Vicki-PC\John
Printing	Time Zone	Pacific Daylight Time
- Problem Devices	Installed Physical Memory (RAM)	3.00 GB
L USB	Total Physical Memory	3.00 GB
Software Environment	Available Physical Memory	2.04 GB
- System Drivers	Total Virtual Memory	5.99 GB
- Environment Variables	Available Virtual Memory	4.97 GB
Print Jobs	Page File Space	3.00 GB
- Network Connections	Page File	C:\pagefile.sys
Running Tasks		
- Loaded Modules		
Services		
Program Groups		
Startup Programs		
OLE Registration		
Windows Error Reporting		
Find what:		Find Close Find

Under the System Summary heading locate and list the following: Processor

BIOS Version/Date

Total Physical Memory

Under the Hardware Resources heading locate and list the following: DMA channels and the device using the resources.

I/O address range for these devices: Printer Port (LPT1)

Communications Port (COM1)

Communications Port (COM2)

IRQ address for these devices: System timer

Communications Port (COM1)

Communications Port (COM2)

Under the Components heading and Software heading look around to see what information is provided in these areas.

Close the System Information window.

Step 3

Open System Configuration by clicking **Start > Run >** type **msconfig >** click **OK**. Note: It is very important that you do not make any changes in this utility without instructor permission.

📮 Systen	n Config	uration								x
General	Boot	Services	Startup Too	ls						2
0 N	up select ormal sta oad all d	artup	s and services							Ĩ
		: startup c devices ar	nd services on	y						
© <u>s</u>		d system se								
		d startup ite original boo	ems ot configuratio	1						
					ОК	C	ancel	ly [Help	

Click the **General** tab if it is not already active.

What are the startup options?

Click the **Boot** tab. This tab is for modifying boot options.

Click the **Services** tab. This tab lists the computers services and there status.

Service	Manufacturer	Status	Date Disabled	-	
Application Experience	Microsoft Corporation	Stopped		_	
Application Layer Gateway Service	Microsoft Corporation	Stopped			
Application Identity	Microsoft Corporation	Stopped			
Application Management	Microsoft Corporation	Stopped			
Windows Audio Endpoint Builder	Microsoft Corporation	Running			
Windows Audio	Microsoft Corporation	crosoft Corporation Running			
ActiveX Installer (AxInstSV)	Microsoft Corporation	Stopped			
BitLocker Drive Encryption Service	Microsoft Corporation	Stopped			
Base Filtering Engine	Microsoft Corporation	Running			
Background Intelligent Transfer	Microsoft Corporation	Running			
Computer Browser	Microsoft Corporation	Stopped			
Bluetooth Support Service	Microsoft Corporation	Stopped		-	
ote that some secure Microsoft service	s may not be disabled.	Enable	all Disable	all	

Can you enable and disable services at this tab?

Click the **Startup** tab. This tab lists the programs that are automatically loaded every time you turn on your computer.

Click the **Tools** tab.

eneral Boot	Service	Startup	Tools				
Tool Name		De	escription				-
About Windows		Di	splay Wind	lows version informa	tion.		
Change UAC Settings		C	hange User	r Account Control se	ttings.		E
Action Cent	er	0	pen the Ac	tion Center.			
Windows Tr	oubleshooti	ng Tr	oubleshoot	t problems with your	computer.		
Computer N	lanagement	Vi	ew and con	nfigure system settin	ngs and compo	onents.	
System Info	ormation	Vi	ew advance	ed information abou	t hardware ar	nd software setti	ings.
System Info Event View				ed information abou ring and troubleshoo			ings.
		Vi	ew monitor		ting message:	s.	ings.
Event View	er	Vi La	ew monitor aunch, add ew basic in:	ring and troubleshoo	ting messages s and Window	s. s components.	ings. +
Event Viewe Programs	er	Vi La	ew monitor aunch, add	ring and troubleshoo or remove programs	ting messages s and Window	s. s components.	ings. +
Event Viewe Programs	er perties	Vi La	ew monitor aunch, add ew basic in:	ring and troubleshoo or remove programs	ting messages s and Window	s. s components.	ings. +
Event View Programs System Pro	er Derties mand:	Vi La Vi	ew monitor aunch, add ew basic in III	ring and troubleshoo or remove programs	ting messages s and Window	s. s components.	ings. •
Event View Programs System Pro	er Derties mand:	Vi La Vi	ew monitor aunch, add ew basic in III	ring and troubleshoo or remove programs	ting messages s and Window	s. s components.	ings. ▼
Event View Programs System Pro	er Derties mand:	Vi La Vi	ew monitor aunch, add ew basic in III	ring and troubleshoo or remove programs	ting messages s and Window	s. s components.	ings.

What can you do in this tab?

Click **Cancel** to close the "System Configuration" window.

Step 4

Open the DirectX Diagnostic Tool by clicking **Start > Run >** type **dxdiag >** click **OK**. If you are asked to have DirectX check driver signatures click **No**.

Note: When the DirectX Diagnostic Tool first opens, it may take a minute to load all information. Your DirectX Diagnostic Tool may not appear exactly as shown in this lab.

System	Dieplay 1	Display 2	Sound 1	Sound 2	Sound 3	lonut										
-,	Dispidy 1	Dispidy 2	Sound 1	Journa 2	Sound S	mpar	-									
This to	ol reports d	etailed infor	mation abo	ut the Dire	ctX compo	nents an	d dr	vers ins	stalled	on you	ur syster	n.				
	know what ach page in	area is caus sequence.	ing the pro	blem, click	the approp	oriate tab	ab	ove. Of	therwis	se, you	i can use	the "Ne	ext Page	a" butt	on belo	w to
Syste	em Informa	nor														
				Date/Time			nber	06, 20	10, 2:0	05:37	AM					
				outer Name												
			Operat	ing System	: Window	s 7 Profe	ssio	nal 32-b	oit (6.1	, Build	7600)					
					: English	-			nglish)							
			System Ma													
			Sy	stem Mode												
					BIOS Da		1									
				Processor	: Intel(R)	Pentium	(R) •	CPU 3	.00GHz	z (2 CP	'Us), ~3	.0GHz				
					: 3072MB											
					: 1133MB	10000000	051	18 avail	able							
			Dire	ctX Version	: DirectX	11										
	heck for Wi	HQL digital s	ignatures													
			DxDiag 6	.01.7600.1	16385 32-b	it Unicod	e C	opyrigh	t © 19	98-20	06 Micro	soft Corp	ooration	n. All r	ights re	served

Make sure the System tab is active.

What does this tool report?

Click Next Page until you are at the Display tab.

Display 1 Display 2 Sound 1 Sound 2 Sound 3 Input Device Name: ATI Radeon HD 2600 XT AGP (Microsoft Manufacturer: ATI Technologies Inc. Attraction of the second sec	Drivers Main Driver: atidxx32.dll,atidxx64,atiumdag.dll,at Version: 6.56.1.15
Chip Type: n/a DAC Type: Internal DAC(400MHz) Approx. Total Memory: 754 MB	Date: 7/13/2009 6:14:55 PM WHQL Logo'd: n/a DDI Version: 10
Current Display Mode: 1600 x 1200 (32 bit) (60Hz) Monitor: Generic PnP Monitor	Driver Model: WDDM 1.1
DirectX Features DirectDraw Acceleration: Enabled Direct3D Acceleration: Enabled AGP Texture Acceleration: Enabled	
Notes No problems found.	

What information is listed on this page?

Click **Next Page** until you are at the Sound tab.

ystem Display 1 Display 2 Sound 1 Sound 2 Sound 3 Input	
Device	Drivers
Name: Speakers (SB Audigy)	Name: P17.sys
Hardware ID: PCI\VEN_11028DEV_00078SUBSYS_100A11028RE	Version: 5.12.0001.2020 (English)
Manufacturer ID: 1	Date: 10/16/2009 2:11:56 AM
Product ID: 100	WHQL Logo'd: n/a
Type: WDM	Other Files:
Default Device: Yes	Provider: CREATIVE
Notes	
No problems found.	

What information is listed on this page?

Click **Next Page** until you are on the Input tab.

What information is listed on this page?

Click Exit.