

Running VMLite XP Mode with VMLite Workstation A How-to Guide for Average PC User

Copyright © 2009 VMLite

Part 1: Introduction to VMLite XP Mode for Windows

1) What is VMLite XP Mode?

According on wikipedia, Virtual machine (VM) is a software implementation of a machine (computer) that executes programs like a real machine, and platform virtualization separates an operating system from the underlying platform resources.

VMLite Workstation is a virtualization component that allows you to run more than one operating system (OS) at the same time on a single physical computer. VMLite Workstation runs the operating system and applications directly on top of an existing operating system without any modification.

VMLite XP Mode (VXP) is a virtualization engine derived from VMLite Workstation, and it allows Microsoft Windows XP runs seamlessly on different OS platforms. In another word, it generates XP virtual machine that runs seamlessly on different OS platforms. Right now, the host operating system it supports includes Windows 2000/XP/Vista/7.

2) Why VMLite XP Mode is needed?

Owing to the Wintel alliance, Windows had approximately 93% of the market share of the PC operating systems while Windows XP is still powering 71 percent of business PCs. Recent release of Windows Vista was a disaster for Microsoft. It lacks of proper drivers and has lots of application compatibility issues. As of today, 92 percent of PC software developers are ignoring it. Industry expects Windows XP will continue to play significant role after Windows 7 release to avoid similar issues caused by Windows Vista.

To improve application compatibility on Windows 7, and to ease the transition from older Windows operating systems to Windows 7, is crucial for the success of Windows 7, and Microsoft has done tremendous works to achieve such a goal. First, Windows 7 ships a large number of device drivers to for better hardware support. Microsoft also provides a free tool call "Windows 7 Upgrade Adviser" that will run on your current PC prior to Windows 7 upgrade and it predicts if there are known incompatibilities with third-party programs and hardware. For those are reliant on their legacy applications, Windows 7



adds a new feature called Windows XP Mode allows applications that are only compatible with XP run as virtual applications in Windows 7 in the same desktop.

The limitations of Windows XP Mode are significant. According to Microsoft website, "Windows XP Mode will only run on Windows 7 Professional and Windows 7 Ultimate editions". It also "requires a CPU with the Intel® Virtualization Technology or AMD-VTM feature turned on." The latter requirement creates 2 major drawbacks for PC users: first, most PC chips in the market including majority of Core 2 Duo CPUs do not support this feature, and second, this feature is disabled by default on most supporting CPUs, which means a trip into the BIOS to enable hardware virtualization is needed. As conclusion, users want to benefit from Windows XP Mode will have to buy new hardware, even though this solution may not work.

VMLite is releasing VMLite XP Mode to do the same things as Windows XP Mode does. VMLite XP Mode supports Intel® Virtualization Technology or AMD-V[™] feature, but it does not require such feature. VMLite XP Mode, as a XP Mode for every PC, could ease consumers on the transition from legacy Windows OSs to Windows 7.

Coming soon is our VMLite MyOldPCs product, which turns all files, file structure, and working environment on a single PC into a plug-and-play portable file, that allows user access and operate on such file as if on the old PC.

VMLite believes its offer of VMLite XP Mode with MyOldPCs combination provide the optimal solution for PC OS migration, including upgrade to Windows 7.

3) Requirements of VMLite XP Mode

- Windows 95/98/Me/2000/XP/Vista/7
- Additional 256MB of RAM
- Additional 2GB of available disk space
- No requirement on processors with hardware-assisted virtualization feature

For more information on VMLite Workstation and VMLite XP Mode, please visit: <u>http://www.vmlite.com/</u>

4) Features

Besides its light-weight characteristic, VMLite XP Mode offers superior performance on the following features:

• Easy to Set Up: With the necessary files in place, with just a few clicks followed a simple setup wizard from VMLite Workstation, an average PC user can set up VMLite XP Mode in 10 minutes.

• **Seamless Applications**: applications installed on VMLite XP Mode can be published and launched directly from the host Windows PC.



• Network Gateway and Printer Redirection: as long as the host had been configured for networking and printing, one can go networking and print directly under VMLite XP Mode as if from the host.

• **Clipboard Sharing**: bi-directional clipboard sharing as cut and paste between Windows host and any VMLite XP Mode environment is allowed. It can be changed to no or one-directional sharing.

• Files' and Folders' Transparent Separation between Host and Guest: Unless specified, the files and their following changes under VMLite XP Mode environment are not saved on the same logical space of host PC. However, both host and XP Mode environment can easily share same files by specify the files and folders as shared ones. The sharing of files and folders can be limited to read-only.

• USB Support: at this moment, user can access USB devices attached to the host by allowing USB devices shared between the host and VMLite XP Mode.

• Host Registry and Malware Protection: The Windows Registry is of uttermost importance to the Windows operating system. Malicious software makes use of the capacities of the Windows Registry. Because VMLite XP Mode uses VMLite virtualization technology, it creates a separate registry from host registry for each VMLite XP Mode environment. Registry penetration caused by malware can be limited on XP Mode environment naturally. Once the sharing of host C: drive is limited to readonly, malware introduced from every day usage of VMLite XP Mode environment will not produce any damage on host PC files and file structure. VMLite XP Mode environment can be a perfect sandbox for such malware. Owing to VMLite's light weight characteristic, for better protection, a user can generate a couple VMLite XP Mode environments from one PC, and dedicate each of them for particular purpose.

• Instantaneous XP Mode Snapshot and Recovery: It takes a few seconds and a couple kilobytes to make a snapshot and save as a recovery point of VMLite XP Mode current status. To go back to a recovery point as defined by any of snapshots taken, it only takes another few seconds. It is definitely a booster for developers' productivity. With the popularity of malwares, the forever discovered Windows operating system security loopholes and corresponding continuous delivered security patches, the separation between host and virtualized environment is critical. For home use, each VMLite XP Mode can be used as a ghost substitute to protect against malwares, as the registry, files and folders on the host are intact. In case of system crash or malware attack, one can just shutdown or kill the current VXP instance, and go back to any snapshot preset.



Part 2: Get Ready for Installation

To install VMLite XP Mode, it needs

- 1) VMLite Workstation and
- a licensed copy of Windows XP in virtualized image file format. A licensed copy of virtualized Windows XP image file can be the one provided by Microsoft, or prepared by VMLite Workstation or 3rd party vendor such as VMWare from licensed Windows XP in factory CD/DVD.

For illustration purpose, here we use Microsoft provided virtualized Windows XP image file to describe the installation steps.

1) VMLite Workstation is available from <u>www.vmlite.com</u>

VMLite Workstation supports both 32-bit and 64-bit Windows system.

2) Microsoft provides a licensed copy of Windows XP in virtualized image file format named "Windows XP Mode PC". Be sure to choose the right language and right type of Windows 7 system you are using.

http://www.microsoft.com/windows/virtual-pc/download.aspx

Once you get both VMLite Workstation and a licensed copy of Windows XP in virtualized image file format, you are good to go.



Part 3: VMLite XP Mode Installation

1) Installation of VMLite Workstation

Double click the VMLite Workstation Setup file.

B VMLite Workstation	- • •
Welcome to the VMLite Workstation Setup Wiz	ard VMLine
The installer will guide you through the steps required to install VMLite Workstat computer.	ion on your
WARNING: This computer program is protected by copyright law and internation Unauthorized duplication or distribution of this program, or any portion of it, may or criminal penalties, and will be prosecuted to the maximum extent possible unc	nal treaties. result in severe civil ler the law.
Cancel < <u>B</u> ack	<u>N</u> ext >

Click "Next"



B VMLite Workstation		
License Agreement		VMLire
Please take a moment to read the licens Agree'', then ''Next''. Otherwise click ''C	e agreement now. If you accept the ancel''.	e terms below, click ''l
VMLite Personal Use Licens	e Agreement	<u>^</u>
The enclosed software including binaries, source code, sample programs and documentation (hereinafter the "SOFTWARE") is licensed, not sold, to you by Remotesoft Inc. ("Remotesoft") or its distributors for use only under the terms of this License, and Remotesoft reserves any rights not expressly granted to you. You own the media where the Software is recorded or stored, but Remotesoft retains ownership of the Software itself.		
⊚ I <u>D</u> o Not Agree	I <u>Ag</u> ree I	
	Cancel < <u>B</u> ack	<u>N</u> ext >

Read the Agreement, check "I Agree", click "Next".

岁 VMLite Workstation	
Select Installation Folder	VMLine
The installer will install VMLite Workstation to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter it be	low or click "Browse".
<u>F</u> older:	
C:\Program Files\VMLite\VMLite Workstation\	B <u>r</u> owse
	Disk Cost
Install VMLite Workstation for yourself, or for anyone who uses this compu	iter:
Everyone	
⊘ Just <u>m</u> e	
Cancel < <u>B</u> ack	<u>N</u> ext >



Decide if VMLite XP Mode is available to yourself only or to all users of this computer, then click "Next".

븅 VMLite Workstation	
Confirm Installation	VMLine
The installer is ready to install VMLite Workstation on you	ur computer.
Click "Next" to start the installation.	
Cancel	< <u>B</u> ack <u>N</u> ext >

Click "Next"



授 VMLite Workstation	
Installing VMLite Workstatior	n VMLire
VMLite Workstation is being installed.	
Please wait	
C	Cancel < <u>B</u> ack <u>N</u> ext >

Then wait.

Windows Security
Would you like to install this device software?
Name: VMLite Inc. Storage controllers Publisher: Remotesoft, Inc.
Always trust software from "Remotesoft, Inc.".
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?

VMLite uses its proprietary codes to make sure VMLite Workstation works seamless with Microsoft Windows systems. During this installation, you will experience the security warnings of software non-compatibility similar to the one shown above a couple times. Just ignore those warnings. Click "Install"



• Windows Security
Would you like to install this device software?
Name: VMLite Inc. Network Service Publisher: Remotesoft, Inc.
Always trust software from "Remotesoft, Inc.".
You should only install driver software from publishers you trust. <u>How can I decide</u> <u>which device software is safe to install?</u>

Click "Install"

• Windows Security
Would you like to install this device software?
Name: VMLite Inc. Network adapters Publisher: Remotesoft, Inc.
Always trust software from "Remotesoft, Inc.".
You should only install driver software from publishers you trust. How can I decide which device software is safe to install?

Click "Install"



提 VMLite Workstation			- • •
Installation Complete			VMLite
VMLite Workstation has been successfu	lly installed.		
Click "Close" to exit.			
✓ Start VMLite Workstation after installa	ation		
	Cancel	< <u>B</u> ack	

Click "Close".

The installation of VMLite workstation is now completed.

2) Installation of licensed virtualized XP under VMLite Workstation.

Go to the "Start" icon at the lower left corner of Windows 7, check "All Programs", then check "VMLite Workstation"



😿 Default Programs 📑 Desktop Gadget Gallery 🏈 Internet Explorer		
🦪 Windows DVD Maker 🗃 Windows Fax and Scan	John	-
Windows Media Center Windows Media Player	Documents	
Windows Update XPS Viewer	Pictures	
Accessories Games	Music	
Maintenance Startup	Games	
VMLite Workstation	Computer	
VMLite Wizard	Control Panel	
VIVILITE WORKStation	Devices and Printers	
	Default Programs	
1 Back	Help and Support	
Search programs and files	Shut down 🕨	

Choose "VMLite Wizard".



💗 VMLite XP Mode Setup	- • •
Specify Package for VMLite XP Mode	
Select the location for the Microsoft Windows XP Mode package:	
Specify the folder of the package if already installed. If the folder can be automatically determined, it will be filled in.	
Specify the path of the XP mode package or a virtual disk file	
Ownload from the Internet.	
Windows XP Mode language: English	•
< <u>B</u> ack <u>N</u> ext > Cancel	Help

Select "Specify the path of the WindowsXPMode_xx-xx.exe file if downloaded" and click "..." icon. Find the location where you save the licensed virtualized XP image file.



💗 Select the XP N	/lode package file		×
Look in:	Documents 💌	🗢 🗈 💣 📰 🔻	
Recent Places Desktop Libraries Computer	Name en_windows_xp_mode_x86_x64_439180	Date modified 10/18/2009 1:45 PM	Type Applicatic
Network	Image: File name: Image: Self Extracting files (*.exe)	• •	Open Cancel

Double click the virtualized XP image file.

🌾 VMLite XP Mode Setup	
Specify Package for VMLite XP Mode	
Select the location for the Microsoft Windows XP Mode package:	0
Specify the folder of the package if already installed. If the folder can be automatically determined, it will be filled in.	
Specify the path of the XP mode package or a virtual disk file	
C:\Users\John\Documents\en_windows_xp_mode_x86_x64_439180.exe	
O Download from the Internet.	
Windows XP Mode language: English	-
< <u>B</u> ack Cancel	Help



Click "Next"

VIVILITE XP IVIODE SETUP	
VMLite XP Mode Package Extraction	
Please wait while the package is being extracted, it may take a few minutes.	
Once finished, you can proceed to next step.	
Start extracting sources\xpm	
Estimated time left: 4 cos	39%
Esumated unle left: 4 sec	
< Back Next > Cancel	Help
	Пер
Then wait.	
VMLite XP Mode Setup	- • ×
VMLite XP Mode Setup VMLite XP Mode Package Extraction	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes.	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step.	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step.	
 VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. 	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step.	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. The msi file has been successfully extracted	
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. The msi file has been successfully extracted Estimated time left: 0 sec	100%
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. The msi file has been successfully extracted Estimated time left: 0 sec	100%
VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. The msi file has been successfully extracted Estimated time left: 0 sec	100%
 VMLite XP Mode Setup VMLite XP Mode Package Extraction Please wait while the package is being extracted, it may take a few minutes. Once finished, you can proceed to next step. The msi file has been successfully extracted Estimated time left: 0 sec 	100%

Click "Next".



🐐 VMLite XP Mode Setup
Windows XP Mode License Agreement
Review the license agreement and make a selection. To proceed with Setup, you must accept the license agreement.
END-USER LICENSE AGREEMENT FOR MICROSOFT SOFTWARE MICROSOFT WINDOWS XP MODE (WINDOWS XP PROFESSIONAL SERVICE PACK 3 IN VIRTUAL HARD DISK IMAGE FORMAT FOR USERS OF WINDOWS 7 PROFESSIONAL, ENTERPRISE AND ULTIMATE EDITIONS) IMPORTANT—READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Microsoft Corporation or one of its affiliates ("Microsoft") for the Microsoft software that accompanies this EULA, which includes computer software and may include associated media, printed materials, "online" or electronic documentation, and Internet-based services ("Software"). An amendment or addendum to this EULA may accompany the Software. Victual machine technology enables multiple operation systems to run concurrently on a single I accept the license terms Printable version
< <u>B</u> ack <u>N</u> ext > Cancel Help

Read the Agreement, check "I accept the license terms", click "Next".

💗 VMLite XP Mode Setup		- • •
Specify the password fo	r VMLite XP Mode	
Virtual machine name:	VMLite XP Mode	
User name:	XPMUser	
Password:	•••••	
Confirm password:	•••••	
Remember credent	tials (recommended)	
	< Back Next > Cancel	Help

Input and remember your password, click "Next".



📬 VMLite XP Mode Setup 📃 📼 💌				
Help protect your computer				
With Automatic Updates, Windows can routinely check for the latest security updates for your computer and install them automatically.				
 Help protect my computer by turning on Automatic Updates now. (recommended) 				
🚫 💿 Not right now				
If you haven't turned on Automatic Updates, your computer is more vulnerable to viruses and other threats.				
Find out more about Automatic Updates				
No information is collected that can be used to identify you or contact you				
Please read the Windows Update Privacy Statement				
< <u>B</u> ack <u>N</u> ext > Cancel Help				

Click "Next"



Then wait.



💗 VMLite XP Mode Setup	- • ×
Virtual Hard Disk Initialization	
Please wait while the virtual disk is being initialized, which may take a few minutes.	
Once Finish button is enabled, click it to finish this wizard.	
Virtual disk has been successfully prepared	
< <u>B</u> ack <u>Einish</u> Cancel	Help

Click "Finish".

You may see a popup window like the following. Please be patient

🔀 VMLite XP Mode [Running] - VMLite Workstaution	- • ×
Setting up VMLite XP Mode for first use	
	Details >>



🕵 VMLite XP Mode 2 [Running] - VMLite Workstaution	
<u>Machine Devices Help</u>	
2	
Recycle Bin	
æ	
Internet Explorer	
Windows Media	
Player	
Administrator	
Internet Explorer My Documents	
E-mail	
Outlook Express My Pictures	
MSN 🔡 My Music	
Windows Media Player	
Control Panel	
Windows Messenger	
Tour Windows XP Service And Article And Ar	
Files and Settings Transfer	
Wizard Search	
All Programs	
🔎 Log Off [💽 Shut	nwo
fi start	12:13 PM
	🎱 🕀 🗗 🛄 🖉 😣 Right Ctrl

Once you see the popup window like this, the installation of VMLite XP Mode is finished and is ready to use.

Part 4: Working with VMLite XP Mode

1) Launch and Shutdown of VMLite XP Mode

- i) VMLite XP Mode can be launched through 4 different ways.
- a) Double click the "VMLite XP Mode" icon on the desktop
- b) Double click the "Internet Explorer (Secure) icon on the desktop
- c) Launch "VMLite XP Mode" from "VMLite Workstation" group from the "Start" button as following.



🐨 Default Programs 📑 Desktop Gadget Gallery ぼ Internet Explorer (Secure)		
Internet Explorer Windows DVD Maker	John	
 Windows Fax and Scan Windows Media Center 	Documents	-
Windows Media Player	Pictures	
Accessories	Music	
Games Maintenance	Games	
VMLite Workstation	Computer	
VMLite command prompt VMLite Wizard	Control Panel	
💗 VMLite Workstation 💗 VMLite XP Mode	Devices and Printers	
4	Default Programs	
Back		
Search programs and files	Shut down 🕨	

d) Launch "VMLite Workstation" from "VMLite Workstation" group from the "Start" button as shown above. Select "VMLite XP Mode" created as following, then select "Start"





ii) Shutdown of VMLite XP Mode

If click the red check mark on the VMLite XP Mode popup window, by default, the system will treat the virtual machine as hibernating, and save the current working environment of virtual machine upon exit. Then the status of VMLite XP Mode will marked as "Saved", as shown above.

For example, if user is watching Youtube flash, then s/he shut down VMLite XP Mode this way in the middle of watching. Next time, when the user re-launch VMLite XP Mode, it goes right back to the moment of flash watched when it was quitted. Same thing if user is in the middle of editing a Word file.

If VMLite XP Mode is shutdown by choosing "Shut Down" through the "Start" button of virtual machine, then the system will treat the command as normal exit, and it will not save the current working environment of virtual machine upon exit. Then the status of VMLite XP Mode will marked as "Powered Off", as shown following for "VMLite XP Mode 1".





2) Display of VMLite XP Mode

By playing around the command "Fullscreen Mode", "Seamless Mode" and/or the maximize/restore button at the VMLIte XP Mode frame, user can also get different displays as full screen mode, seamless mode as followings show respectively.



	🖉 Machine Devices VMLite XP Mode (Snapshot 2) 📃 💥	Í.
	Storage Devices	
Kecyoe Lin	Network Adapters	
~	Shared Folders	
	USB Devices	
Internet	A Install Guest Additions	
Exports		
2 Worksure		
Media Player		
a start		🔇 😴 8:17 PM





3) Taking snapshot of VMLite XP Mode and Recovery

Snapshot is saved as a recovery point of VMLite XP Mode. To take snapshot of virtualized environment could never be easier under VMLite XP Mode. A snapshot of VMLite XP Mode only takes very tiny space, a couple kilobytes, and can be done in seconds. By default, system always saves the current status upon exit. In case of virtualized environment crash or under attack of malicious software attacks, one can shut down XP mode, go back to preset recovery point right away.

To take snapshot, go to the virtualized machine menu, select "Take Snapshot...".



1	MLite XP Mode [Running] - VML	Lite Workstaution
Ma	hine Devices Help	
	Fullscreen Mode	Host+F
	Seamless Mode	Host+L
-	Auto-resize Guest Display	Host+G
3	Adjust Window Size	Host+A
3	Disable Mouse Integration	Host+I
•	Insert Ctrl-Alt-Del	Host+Del
0	Take Snapshot	Host+S
Ø	Session Information Dialog	Host+N
0	Reset	Host+R
00	Pause	Host+P
٢	ACPI Shutdown	Host+H
	Close	Host+Q
2	start	
Take	a snapshot of the virtual machin	ne

User can then input comment for the snapshot taken.

🚮 Take	e Snapshot of Virtual Machine
	Snapshot <u>N</u> ame
xp	Snapshot 1
	Snapshot Description
	10182009 After sharing folder and protecting host C: drive
	OK Cancel <u>H</u> elp



🚮 VMLite XP Mode: Taking a 💌		
Saving the machine state	. (3/4)	
93%		
Time remaining: 00:00:00		

To go back to the latest recovery point of virtualized environment, shut down the virtual machine first. Next step, on host PC, select "VMLite Workstation" under "VMLite Workstation" program group. In the following case, some work had been done after the first snapshot was taken.

Right click the "Current State (changed)", there are 3 options available: "Take Snapshot", "Revert to Current Snapshot", and "Discard Current Snapshot and State".

"Take Snapshot" allows generation of next snapshot. In this case, it will be Snap Shot 2. "Revert to Current Snapshot" means go back to the state of the latest snapshot and the system discard the latest changes after it, which is Snap Shot 1.

To choose "Discard Current Snapshot and State", system will discard the latest changes and the latest snapshot, and go back to the recovery point when the second latest snapshot was taken.





If more than 1 snapshots are present, in order to go back to earlier recovery point as preset by earlier snapshot, use will need to "Discard Current Snapshot and State" of the latest snapshot one at a time. In the following example, to go back to Snap Shot 1, one will have to discard Snap Shot 2 first.

The action of taking snapshot, restore VMLite XP Mode, discarding snapshot is fast and easy. However, the snapshot, once discarded, is not recoverable. Please use carefully with this feature.



4) File Shuring and Acces	4)	File	Sharing	and	Access
---------------------------	----	------	---------	-----	--------

Time remaining: 00:00:03

VMLite Workstation provides transparent separation between the host PC and the virtualized environment. It creates an independent registry and file system for the XP Mode environment. The sharing of two environments is easy and safe.



i) Clipboard, printer, and network connection

By default, Clipboard content is shared bi-directionally between host and guest. One can use traditional copy-and-paste back and forth between the host PC and XP Mode. The sharing can be disabled, or changed to one direction as host to guest, or guest to host. Conventional control-C/control-V feature is provided to copy and paste files between VM and host.

😳 VMLite XP Mode 1 - Sett	ings ? 💌
General	General
 Display Storage Audio Network Serial Ports Shared Folders Virtual Applications Logon Credentials Close 	Basic Advanced Description Snapshot Folder: Image: C:\Users\John\VMLites\Machines\VMLite XP Mode 1\Snapshots Shared Clipboard: Bidirectional Disabled Disabled Host To Guest Guest To Host Bidirectional en/Seamless Bidirectional Y
	Defines the mode of sharing the dipboard between the guest and the host OS. Note that this feature requires Guest Additions to be installed in the guest OS. OK Cancel

VMLite Workstation automatically configures the network connection and printing setup of XP Mode to use the setup of host PC's counterparts. As long as the host PC was configured for proper networking and printing, one can go networking and print directly under VMLite XP Mode as if from the host PC.

ii) Access to host PC C: drive

By default, Host PC C: drive is fully shared between host and guest. It is listed under "sfs on '.host'(H:)" if viewed by Windows Explorer.

Due to security reason, to share host PC's C: drive with virtualized environment is not recommended. User can limit the sharing of host PC's C: drive to be read only from guest side.



😂 sfs on '.host' (H:)			
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools	Help		
🌀 Back 🝷 🕥 - 🏂 🔎 S	iearch 😥 Folders 🛄 🗸		
Address 😹 H:\			💙 🄁 Go
Folders X Image: Desktop My Documents Image: Desktop My Computer Image: Desktop My Computer Image: Desktop Image: Desktop Image: Desktop Image: Desktop	C	P File 0 KB	

To change the sharing privilege, select "Share Folder..." under "Devices" menu.





🐼 Shared F	olders	f	
Name	Path	Access	
⊿ Mach	nine Folders		
C	C:\	Full	
D	D:\	Full	
		OK Cancel He	elp i

The "Machine Folders" as shown above refer to the folders on host PC. Select "C C:\" and click the middle folder icon "." on the right hand side to edit.

😡 Edit Share	? 💌
Folder Path:	C:\ •
Folder Name:	С
	Read-only
	Make Permanent
	OK Cancel

Check "Read-only" and click "OK".



Shared Fo	olders	8	×
Name	Path	Access	
⊿ Machi	ne Folders		
C	C:\	Read-only	
D	D:\	Full	
⊿ Transie	ent Folders		
E	.E E:\	Full	
		OK Cancel <u>H</u> e	lp

Then it limits the host PC's C: drive to be Read-only from guest side.

iii) Access to CD/DVD Drive

VMLite XP Mode automatically recognizes the optical drive(s) on the host PC. See the following screenshot.





In rare case you do not see your CDROM/DVD drive, you can do the following to get it mounted:

Pick "Storage Devices..." from "Device" Menu.

Storage Devices	? 💌	
Storage Tree	Attributes	
🔶 IDE Controller	Name: IDE Controller	
VMLite XP Mode.vhd Empty Floppy Controller Empty Empty	Ţype: PIIX4 ▼	
	OK Cancel <u>H</u> elp	

Pick the icon of CD-ROM



Storage Devices	? 💌
Storage Tree	Attributes
DE Controller	Slot: [IDE Secondary Master 👻
- 😂 VMLite XP Mode.vhd	CD/DVD Device: Empty 🔹 🗔
Empty	Passthrough
Ploppy Controller	Information
L 💾 Empty	Size:
	Location:
	Attached Io:
	OK Cancel <u>H</u> elp

Pick the drop-down menu of "Empty" on the right hand panel.

Storage Devices		8	×
Storage Tree	Attributes		
DE Controller	Slot:	IDE Secondary Master	-
- S VMLite XP Mode.vhd	CD/DVD Device:	Empty -	
L 💽 Empty		Host Drive 'D:'	
😂 Floppy Controller L 💾 Empty	Information Size: Location: Attached To:		
	OK	Cancel <u>H</u> elp	• • • • • • • • • • • • • • • • • • •

Select "Host Drive 'D:"".



Storage Devices	? 🔀
Storage Tree	Attributes
DE Controller	Slot: [IDE Secondary Master -
- 🎱 VMLite XP Mode.vhd	CD/DVD Device: Host Drive 'D:' 🔹 🗔
Host Drive 'D:'	Passthrough
😂 Floppy Controller	Information Size: Location: Attached To:
	OK Cancel <u>H</u> elp



iv) Access to USB drive from XP Mode for the first time also needs to make USB drive shared. For security reason, the sharing of USB drive can be limited to selected file or file folder from VMLite XP Mode side. In the following, we show the sharing of whole USB flash drive between host and guest.

Pick "Shared Folders..." from "Devices" menu.



🔣 VMLite XP Mode (Snapshot 1) [Running] - VMLite Workstaution	
Machine Devices Help	
CD/DVD Devices	
Recycle Bir 🔤 Network Adapters	
📻 Shared Folders	
🤣 🖉 USB Devices 🔸	
Internet Explorer 🔗 Install Guest Additions Host+D	
Windows Media Flayer	
🛃 start	🧐 🅎 🈚 7:40 PM
Create or modify shared folders	🎱 💽 🗗 💼 🔟 🛛 🔇 💽 Right Ctrl 👾

Select "+" sign on the upper right hand corner of popup window.

🐼 Add Share	? 💌
Folder Path:	•
Folder Name:	
	Read-only
	Make Permanent
	OK Cancel
	OK Cancel

Click the downward arrow.



🗟 Add Share	? 💌
Folder Path: Folder Name:	<not selected=""> <not selected=""></not> Other Read-only Make Permanent </not>
	OK Cancel

Select "Other"

Browse For Folder	×
Select a directory	
🐌 Tasks	*
📕 Temp	
🌗 tracing	
🍑 twain_32	
Vss	
D 🌗 Web	
winsxs	
DVD Drive (D:)	
EENTON USB (E:)	
Network	=
	Ŧ
Make New Folder OK Cance	.

Select USB drive, which has the same label on the host drive. Click "OK".



🐼 Add Share	? 💌
Folder Path:	E:\ 🔻
Folder Name:	E_DRIVE
	Read-only
	Make Permanent
	OK Cancel

Click "OK".

🐼 Shared Folders	8	×
Name Path	Access	
Machine Folders		
C C:\	Full	
D D:\	Full	_
Transient Folders		
E:\	Full	
	OK Cancel <u>H</u> el;	>

Click "OK" to confirm. The drives shows up on Windows Explorer.



😂 sfs on '.host' (H:)		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools	Help	1
G Back 🝷 🕥 - 🏂 🔎	Search 📂 Folders 🛄 -	
Address 😪 H:\		💌 🄁 Go
Folders ×		
 Desktop My Documents My Computer Jy Floppy (A:) Local Disk (C:) CD Drive (D:) S fs on '.host' (H:) E_DRIVE E_DRIVE Shared Documents Shared Documents Administrator's Documents My Network Places Recycle Bin 	c E_DRIVE	

v) Setting of VMLite XP Mode

The setting VMLite XP Mode can be changed through VMLite Workstation once VMLite XP Mode had been shut down.

As following shows, the setting is not accessible if the VMLite XP Mode is on "saved" status, which means the guest environment contain saved working environment information prior to exit. User has to discard such information in order to change setting of VMLite XP Mode. Those information once discarded is not recoverable.





Pick "VMLite XP Mode 2", click the yellow "Discard" button.



Click "Discard".





For VMLite XP Mode marked with "Powered Off", click "Setting" to change the setting of guest environment.



😳 VMLite XP M	ode 1 - Settir	ngs 🛛 😵 💌
📃 General		General
 System Display Storage Audio Network Serial Ports Shared Fol Virtual App Logon Cree Close 	s ders plications dentials	Basic Advanced Description Name: VMLite XP Mode 1 Operating System: Microsoft Windows Version: Windows XP
		Select a settings category from the list on the left side and move the mouse over a settings item to get more information. OK Cancel



🔅 VMLite XP Mode 1 - Sett	ings ? 💌
📃 General	System
🔝 System	
📮 Display	Motherboard Processor Acceleration
Storage	Processor(s):
Ð Audio	1 CPU 4 CPUs
Network	Extended Features: Enable PAE/NX
🔉 Serial Ports	
Shared Folders	
Virtual Applications	
🔑 Logon Credentials	
💥 Close	
	Select a settings category from the list on the left side and move the mouse over a settings item to get more information.
	OK Cancel <u>H</u> elp



The default size of memory allocated for VMLite XP Mode is 256MB.

😳 VMLite XP Mode 1 - Sett	ings 🔹 💽 💌
General	System
 Display Storage Audio Network Serial Ports Shared Folders Virtual Applications Logon Credentials Close 	Motherboard Processor Acceleration Base Memory: 256 MB 4 MB 1500 MB Boot Order: Image: Floppy Image: CD/DVD-ROM Image: Floppy Image: Hard Disk Image: Network Extended Features: Enable IO APIC Image: Enable EFI (special OSes only)
	Select a settings category from the list on the left side and move the mouse over a settings item to get more information. OK Cancel

By default, the video memory under "Display" is 12MB.



😳 VMLite XP Mode 1 - Sett	tings ? 🔀
📃 General	Display
🔝 System	
📃 Display	<u>V</u> ideo <u>R</u> emote Display
🧐 Storage	Video Memory:
🐌 Audio	1 MB 128 MB
Network	Extended Features: Enable 3D Acceleration
🛞 Serial Ports	Enable 2D Video Acceleration
Shared Folders	
Virtual Applications	
🔑 Logon Credentials	
💥 Close	
	Select a settings category from the list on the left side and move the mouse over a settings item to get more information.
	OK Cancel <u>H</u> elp

Part 5: Using Windows XP Applications in the Virtual Environment

Once an application under VMLite XP Mode is used, its icon will be published under "VMLite Workstation" program group on host PC. One can launch program under guest environment directly from desktop. For example, the Notepad program in VMLite XP Mode as shown following.



Internet Explorer (Secure) Internet Explorer Vindows DVD Maker			
Windows Fax and Scan		John	
Windows Media Player Windows Update		Documents	
XPS Viewer		Pictures	
Games Maintenance	-	Music	
퉬 Startup		Games	
VMLite Workstation VMLite command prompt		Computer	•
VMLite Workstation		Control Panel	
VMLite XP Mode Applications		Devices and Printers	
Accessories Notepad	-	Default Programs	
Back		Help and Support	
Search programs and files		Shut down 🕨	

The following case shows the push to extreme. 4 VMLite XP Mode were generated on the same desktop. Each of them contains different program.

VMLite XP Mode: Microsoft OfficeVMLite XP Mode 1: FirefoxVMLite XP Mode 2: SkypeVMLite XP Mode 3: BitTorrent

As shown by the following screenshots, VMLite XP Mode produces seamless applications.



	MLite XP Mode (Snapshot 2 chine Devices Help	2) (Running) - VMLite Workstaution		Machine Devi	ide1 (Snapshot1) (Running) - VM ces Help	Lite Workstaution		
Recycle Bin	cyde En	<mark>1 - Microsoft Word</mark> Yew Insert Figmat Iools Ti	ipje Muqon Reb X	Recycle Bin	YouTube - The X Factor 20	109 Whitney Houston	: Million Dollar Bill - Live Results 2 (i. #t=158	···
Internet Explore	Contract approximation of the second	: New Roman • 72 • B I		Contract Explorer	More g	reat clips at m/xfactor	ba .	
VMLite XP Mode 1	Participation of the second se	ML	ite	Hazila Firefax		- 4		
VMURe XP Mode Z	F	Rocks	3	Windows Media Player				
ST.	Page 1 S	ec 1 1/1 At 1.3" 1	2 Col 6		Fransferring data from v9.iscache2.c.	youtube.com	1:03/5:12 •44	
Means	start 🔛 Docum	ert1 - Microsof	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	🐉 start	😸 YouTube - The X Fact	🕘 YouTube - The X Fact		9 @ 7.37 PM
VMLite XP M Modilia Fi Modilia Fi Modilia VMLite XP M Shope Shope	tode 2 (2) tode 3 tode 1 Applications irefex Ila Firefex (Safe Mode) Ila Firefex tode 2 Applications	John Documents Pictures	VMLite XP Mode 3 (Sn Machine Devices He Recycle Bin Pite Option Pite Option Pite Option	ent 67	VMLite Workstauti	EZ Machine XP Machine D Recycle Dn	Mode 2 (Snepshot 2) (Running) - VMLite W ence: Mep. Logic Skype** - vm	×
VMLite XP M	t lode 3 Applications at rrent	Music Games	Internet Explorer Occupiet Dative (Inactive	(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	کر انجاع ک مراب داران کر انجاع کر کر انجاع کر انجاع کر کر انجاع کر ان کر انجاع کر ان کر انجاع کر انجا	Internet Explorer	Cel mobile there are dendres at creations	ee. Ize • zeizzi
VMLite XP M Accessori	Itell Iode Applications E ies It Office proft Office Excel 2003	Computer Control Panel Devices and Printers	Bittorrent 🖾 All Feed	k Availability: Transfer Time Elaps	r ed: Remaining: Wasted:	Shipe Shipe	Knew Search Contacts, Groups and Contacts Conversations 11,778,113 people orange Call phones	Co
Micro Micro Back	osoft Office PowerPoint	Default Programs Help and Support	Windows Media Player	Downloads Download s D: 0.0 kB/s T: 1	id: Uploaded: Seeds: Speetpload Speed: Peers:	Windows Media Player	Q Directory	
Search programs	and files	Shut down (I.P.)	💱 start 🔰 💽	ictionent 6.2	• •	94 Start	S Skype ^{rri} • ymke	C Col Participation
	0 1						- 🕫 🕅	10/19/2009

Besides the above convenient benefit, VMLite Workstation actually turns a single desktop into multiple PCs. Owing to the protection from the transparent separation of registry and file system by VMLite XP Mode, each VMLite XP environment can be used for dedicated purpose without extra expense.