

**Qemu Manager 7.0 – User Manual – 4th April 2010**  
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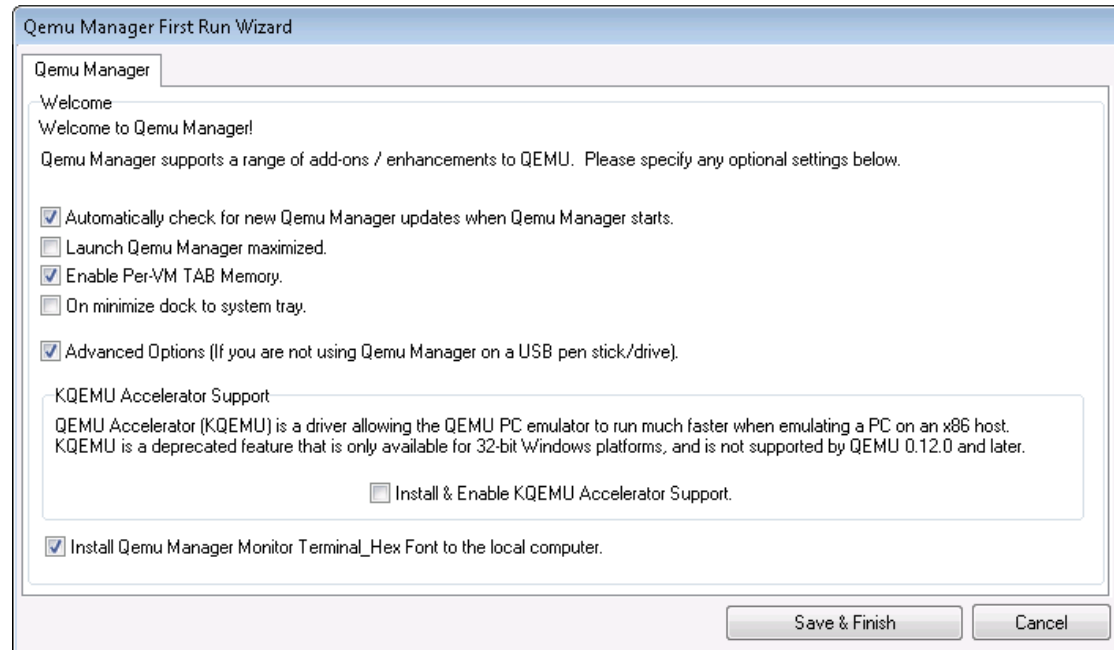
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This documentation has been generated for reference ONLY, I cannot be held responsible for any incorrect data contained within it. All remarks and comments and based completely on my own opinions and again may be incorrect.

## **Chapter 1 – Introduction**

Welcome to the QEMU Manager, this program has been designed to assist new and existing users to operate the QEMU Processor Emulator (<http://fabrice.bellard.free.fr/qemu>).

When you first run the Qemu Manager program you will be prompted with the first run wizard.



The first run wizard allows you to specify specific options for Qemu Manager.

If you are not planning to use Qemu Manager on a portable USB Pen/Drive, you can click the "Advanced Options" check box to view more options.

### **Description of options**

#### **Automatically check for new Qemu Manager Updates when Qemu Manager starts**

This option will allow Qemu Manager to check for new updates when it's started.

#### **Launch Qemu Manager Maximized**

Selecting this option will maximize the Qemu Manager window when the program is started.

#### **Enable Per-VM TAB Memory**

Qemu Manager contains 5 Main Tabs at the top of the main window (Depending on the options you have selected).

Qemu Manager can remember which tab you was last using before moving to another virtual machine. If you require this option tick this box.

## On Minimize Dock to System Tray

Selecting this option will place Qemu Manager on the system tray when you minimize the main window.

## KQEMU Accelerator Support

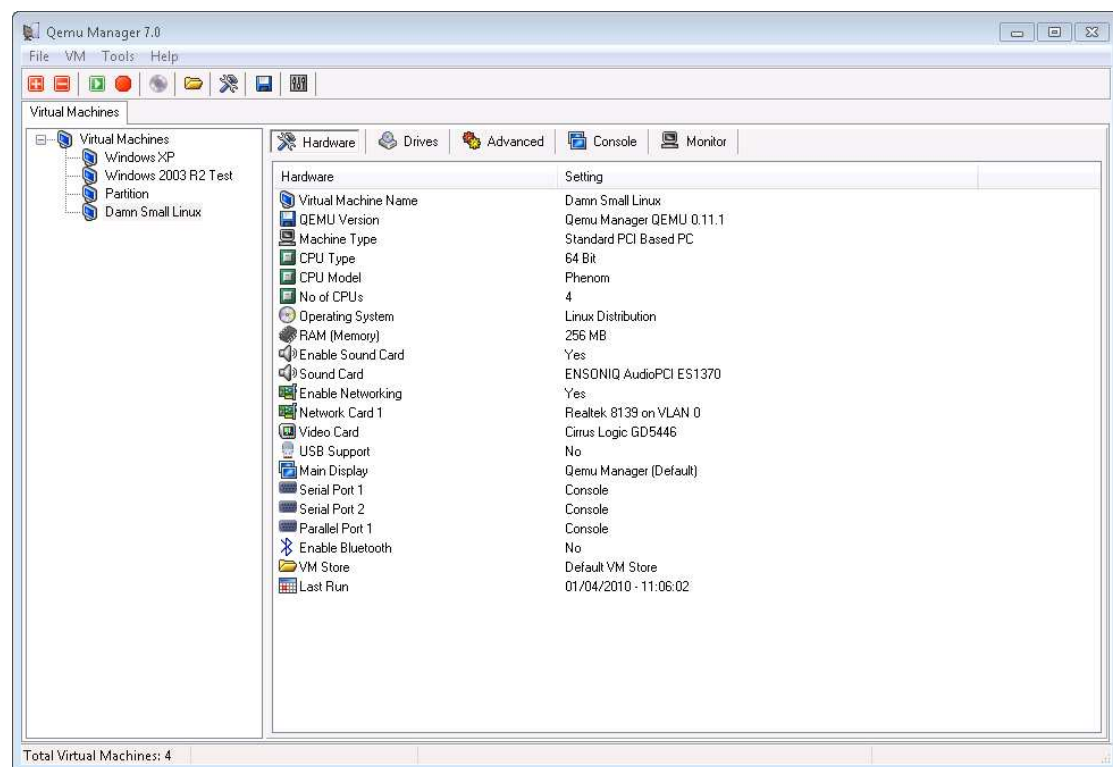
QEMU up to version 0.11x has support for the KQEMU accelerator driver. If you wish to enable this click the "Install & Enable KQEMU accelerator support" check box, and the KQEMU system driver will be installed.

## Install Qemu Manager Monitor Terminal Hex font to the local computer

This option will install the Qemu Manager QEMU Monitor font onto your computer; this allows the monitor tab output to be more readable.

When you are happy with your initial selections, click the "Save & Finish" button. If you do not wish to specify these options now click the "Cancel" button.

## Main Qemu Manager Window



The main window is separated into 4 parts:

### **Main Menu**

Here you can access configuration options, exit the program and get help on the program.

### **Main Toolbar**

Here you can control the program using shortcut buttons these consist of:



- Create new virtual machine. This button allows you to create a new virtual machine that can be launched with Qemu. (See Chapter 2)



- Delete a virtual machine. This button allows you to delete a created virtual machine.



- Run a virtual Machine. This button will allow you to launch a virtual machine. Simply click on the virtual machine you wish to run from the list below the toolbar.



- Terminate a virtual machine. This button will show a list of running virtual machines. You can select a virtual machine to terminate should it become unstable or cannot be terminated the correct way. (You should only use this function as a last resort as it may result in some data loss).



- Import Media – This button allows you to import media to use with Qemu, I.E. CD-ROM Disks & Floppy Disks. The Wizard will assist in creating image files to use with Qemu. (See Chapter 4)



- Manage VM Stores. VM Stores are folders on your hard disk which contains the Virtual Machine configuration files & disk images. Qemu Manager knows where to find these by looking within the VM Stores. You can create/edit/delete VM Stores using this button.



- Add/Remove Hardware. There are specific types of hardware that can be added/removed from your virtual machine - These are:

- Network Cards
- Serial Ports
- Parallel Ports

You can add and remove these by clicking this button or by right clicking within the "Hardware" list view.

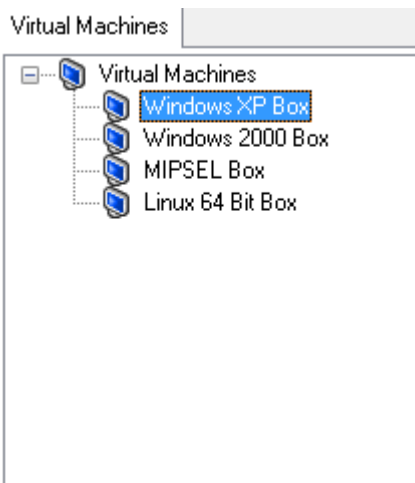


- QEMU Version control. You can use multiple editions of QEMU with Qemu Manager, you can configure these by clicking this button.



- Qemu Manager Options. You can configure specific Qemu Manager options by clicking this button.

### **Virtual Machine List**



The virtual machine list, located on the left hand side of the Qemu Manager lists all your created virtual machines. Beside each virtual machine is a blue or green icon.



- Indicates the virtual machine is not running.

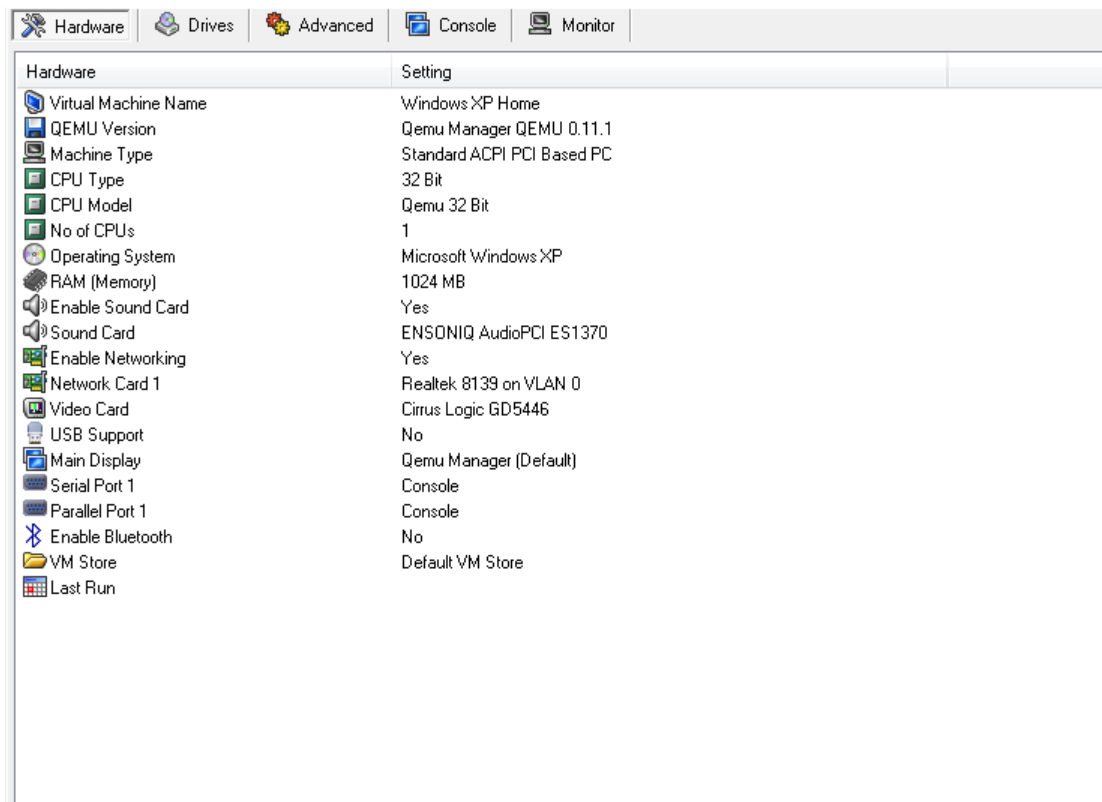


- Indicates a virtual machine is running.

To Manage a virtual machine simply click once on the virtual machine's name.

## **Main Configuration Window**

To modify an option simply Double Click on that option.



The main configuration window consists of 3 tabs:

Hardware – All hardware related items for your virtual machine.

Drives – All hard disk items, removable media & snapshots related to your virtual machine.

Advanced – Advanced configuration options for your virtual machine.

Console – If you run QEMU integrated with Qemu Manager, the output of QEMU will be displayed in this tab.

Monitor – If you run QEMU integrated with Qemu Manager, the monitor control is accessible by this tab.

## Chapter 2 – New Virtual Machine Wizard

You can create a new virtual machine quickly with Qemu Manager using the new virtual machine wizard. You can run this by clicking the relevant toolbar button.



First specify a name for your virtual machine. Currently all virtual machine names need to be unique.

Next specify the “VM Store” you wish to store the virtual machine configuration files and disk images to. (*See Chapter 3 for explanation*). At this point you can also create a new VM store.

Next specify what platform you want the virtual machine to behave as. The default is “Standard x86/x64 PC” when emulates a standard PC, as you may be aware QEMU emulates lots of different types of Machines/CPUS and you can fine tune this from the hardware tab after the machine has been created (*See Chapter 3 for explanation*)

Next If required select an operating system the machine will run or enter some manual text, this is optional.

Finally specify the version of QEMU you wish to run with Qemu Manager, the default is always displayed first.

When done click the “Next” button.

**New Virtual Machine Wizard**

Virtual Machine Settings  
Please specify the amount of memory, and hard disk type/size you require.

**Memory Size**  
Please specify the required amount of RAM memory for the virtual machine:

0MB 2940 MB. 256 MB

**Primary Virtual Hard Disk**

☒ Create New Virtual Disk Image.  
☐ Use an Existing Virtual Disk Image.  
☐ Do not use an Virtual Disk Image.

**New Virtual Disk Image**

Disk Image Size: 10000 MB. (10 GB)  
 Disk Image type: Qcow2 (Default QEMU Image Format)

☐ Encrypt Disk  
☐ Compress Disk

< Back Next > Cancel

Next specify the amount of RAM (Memory) your virtual machine requires you can use the slider and/or enter the value in the input box.

Next specify the Virtual machines primary hard disk – the options are:

Create new virtual disk – Allows you to create a new virtual hard disk, at this point you need to also specify the Size of the disk in Megabytes and the type of disk image you require. You can also specify whether you want to compress and/or encrypt the disk.

Use an existing virtual disk image

**Primary Virtual Hard Disk**

☐ Create New Virtual Disk Image.  
☒ Use an Existing Virtual Disk Image.  
☐ Do not use an Virtual Disk Image.

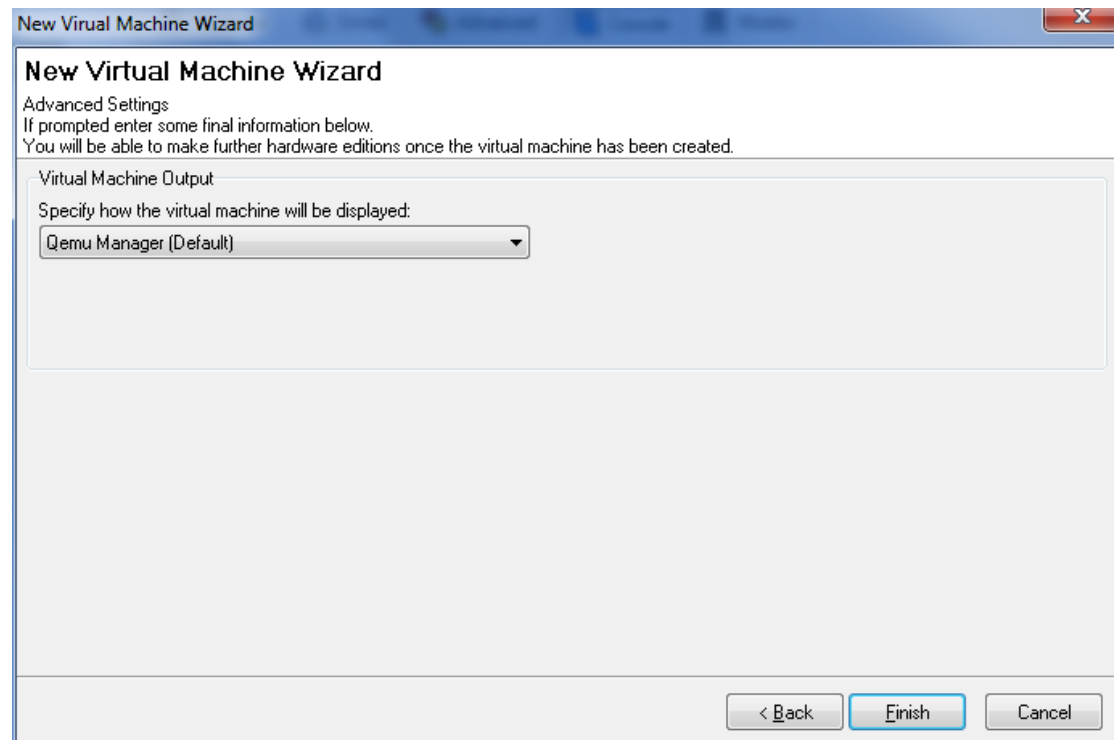
**Select Existing Virtual Disk Image**  
 Please specify the path to the Virtual Disk

...

You can then click the “..” browse button to locate the disk image you wish to use.

Do not use an Virtual Disk Image – No disk image will be allocated to the virtual machine.

When finished click the “Next” Button.



Finally select any advanced options you may like, Options will be dependant on the platform you have selected.

When finished click the “Finish” button.

That’s it! Your virtual machine will be created.



## **Chapter 3 – Hardware Tab**

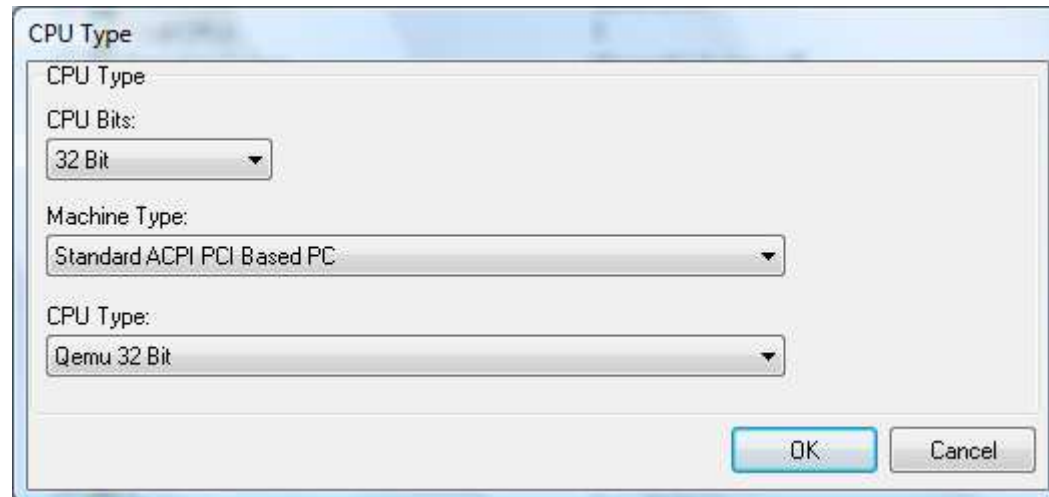
Below is an explanation of all the functions within the Hardware Tab.

Virtual Machine Name - The name of your Virtual Machine.

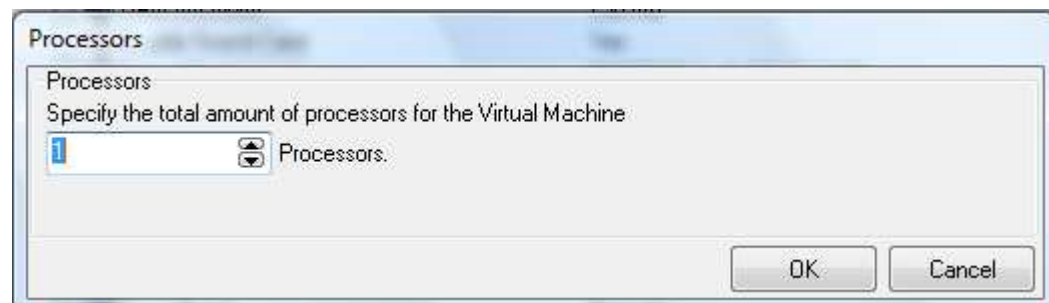
Machine Type – Indicates the type of virtual machine. Qemu supports a large array of machine types from PC based to MIPS based architectures.

CPU Type – Indicates whether the Virtual CPU is 32 bit or 64 bit.

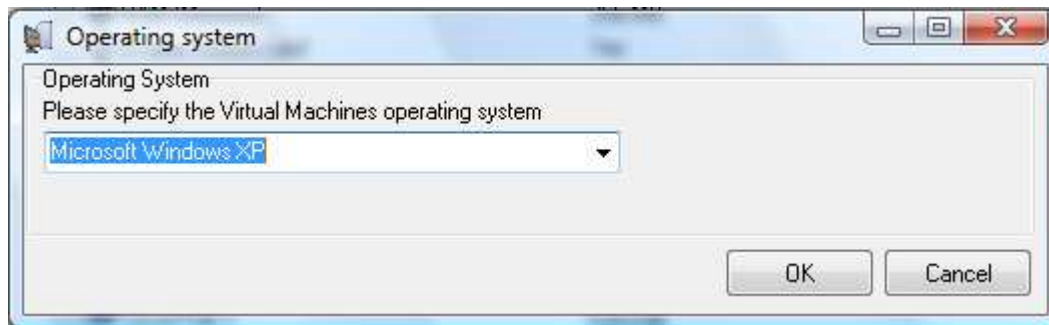
CPU Model – The type of CPU that the Virtual machine uses.



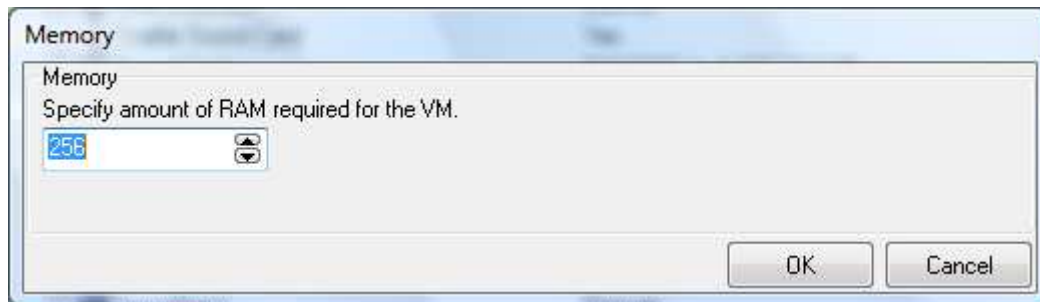
No of CPUS – The number of CPU'S the virtual machine will use.



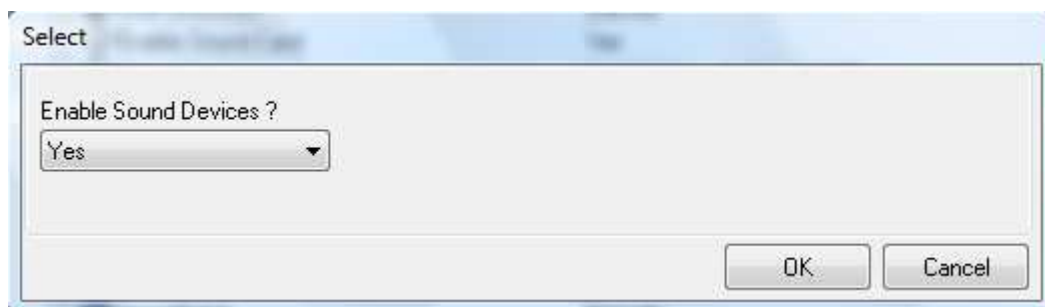
Operating System – The primary operating system the Virtual Machine is running on.



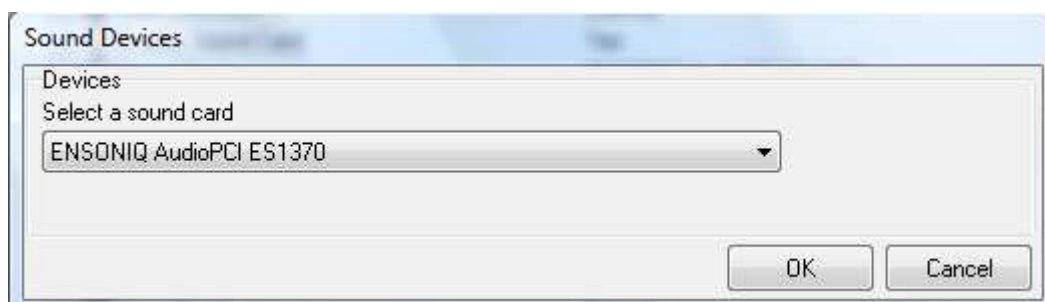
Ram (Memory) – The amount of RAM the virtual machine will use.



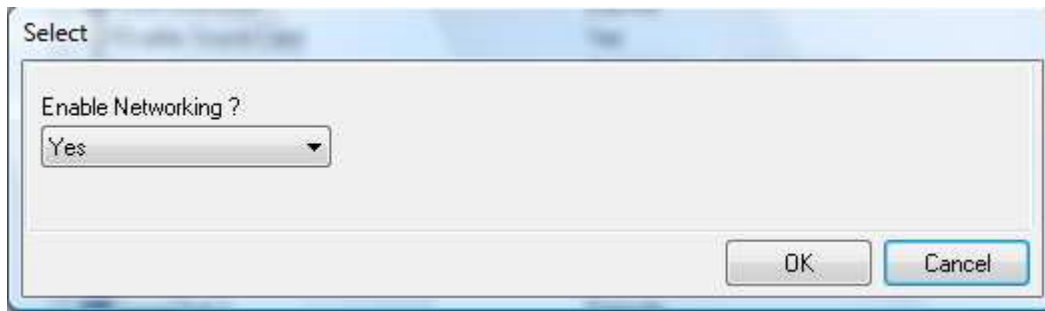
Enable Sound Card – Indicates whether you wish to enable a virtual Sound card in your Virtual Machine.



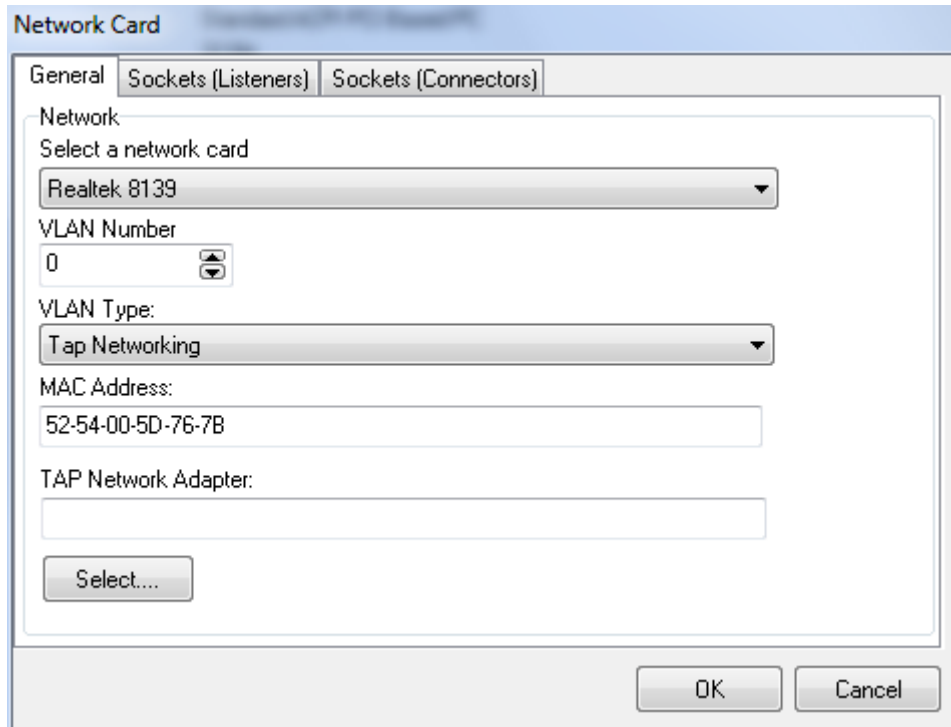
Sound Card – Qemu emulates many different sound cards, dependant of the hardware platform you have chosen, this option indicates which sound card the virtual machine is currently using.



Enable Networking – Indicates whether you wish to enable a virtual network card in your Virtual Machine.



### Network Card\_x



Qemu emulates many different network cards, dependant of the hardware platform you have chosen, this option indicates which network card the virtual machine is currently using. You can add multiple network cards to a virtual machine each time you add a card it will be shown as "Network Card x" x being the number of the card added.

There are a few options when configuring a network card – these are as follows:

Network Card – The model of network card you wish to use within your Virtual machine. There will be different models listed depending on the platform you are using.

VLAN No - The VLAN no you wish the card to use

VLAN Type – Next specify the VLAN type in the selection box.

MAC Address – By default Qemu Manager generates a unique MAC address when the virtual machine is created, you can change this here.

There are 2 different types of networking currently:

#### User mode networking

Firewall/DHCP Server -----Internet-----10.0.2.2  
|  
DNS Server (10.0.2.3)  
|  
SMB Server (10.0.2.4)

The guest will be given a DHCP IP address (10.0.2.15)

User networking is perfect for general internet access and general file sharing with the host, for example to access files on the host using a Windows guest, simply click "Start" select "Run" and type [\\10.0.2.2](http://10.0.2.2)

#### Tap Networking

In Windows, to use TAP networking you need to install the tap-win32 network driver. Included with Qemu Manager is a 32 bit version of the driver.

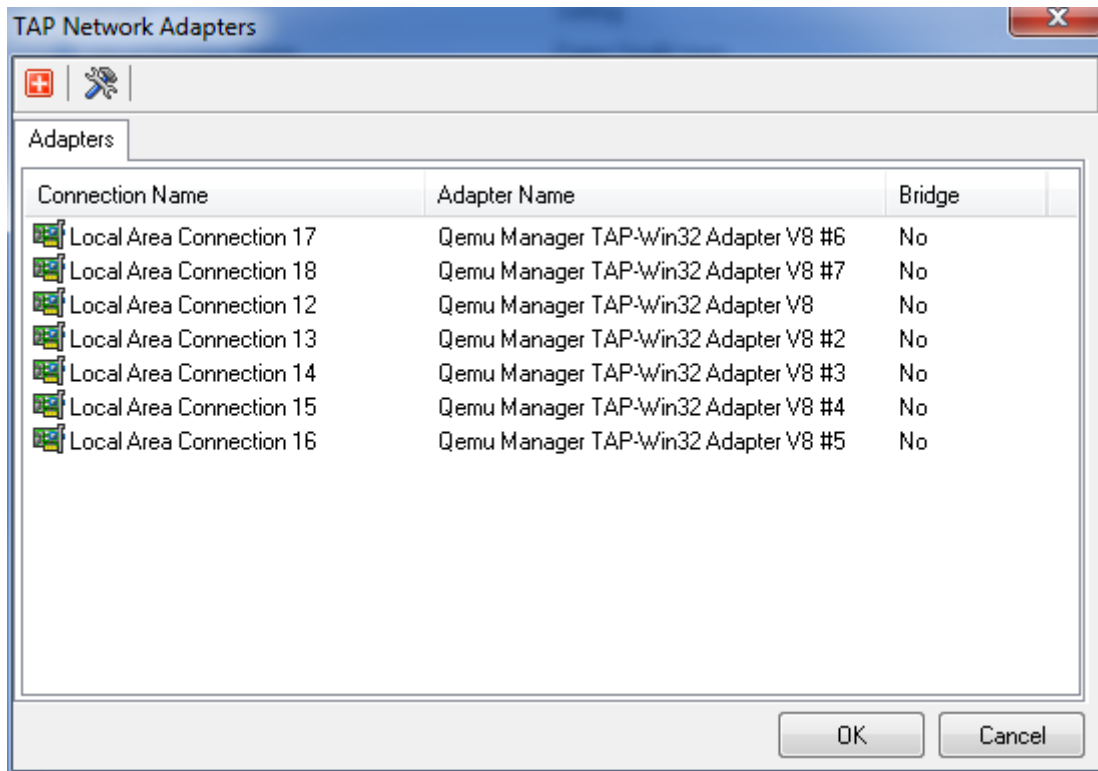
This is located in the \tapdriver\i386 folder, under the location you installed Qemu Manager.

If you wish to use a 64 Bit version of the driver you need to download the OpenVPN package. When installing openvpn you can specify just to install this driver.

<http://openvpn.net/index.php/downloads.html>

Using tap networking is like installing a physical network card into your virtual machine which is connected to your physical router, you can bridge the network connection with your hosts network card, thus giving full networking capabilities with your virtual machine and the outside world.

If you specify tap networking you will need to enter a TAP ID (the name of the network card on the host pc, by default this is installed as "Local Area Network Connection x)" it is recommended that you rename this. You can also select an installed TAP network card, by clicking the "Select" button.



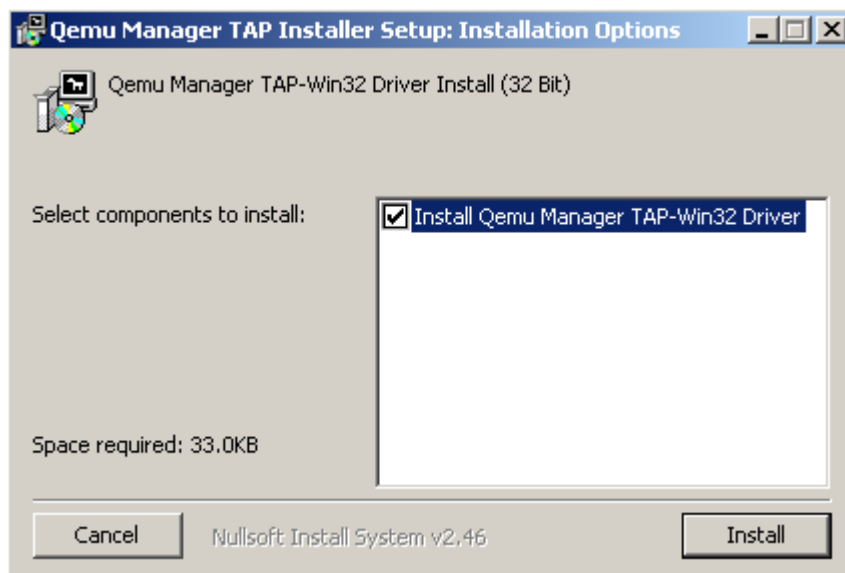
A list of installed TAP network cards is shown, select the card/bridge you wish to use and click the "OK" button.

You can also install a TAP network card by clicking the "Add" button.



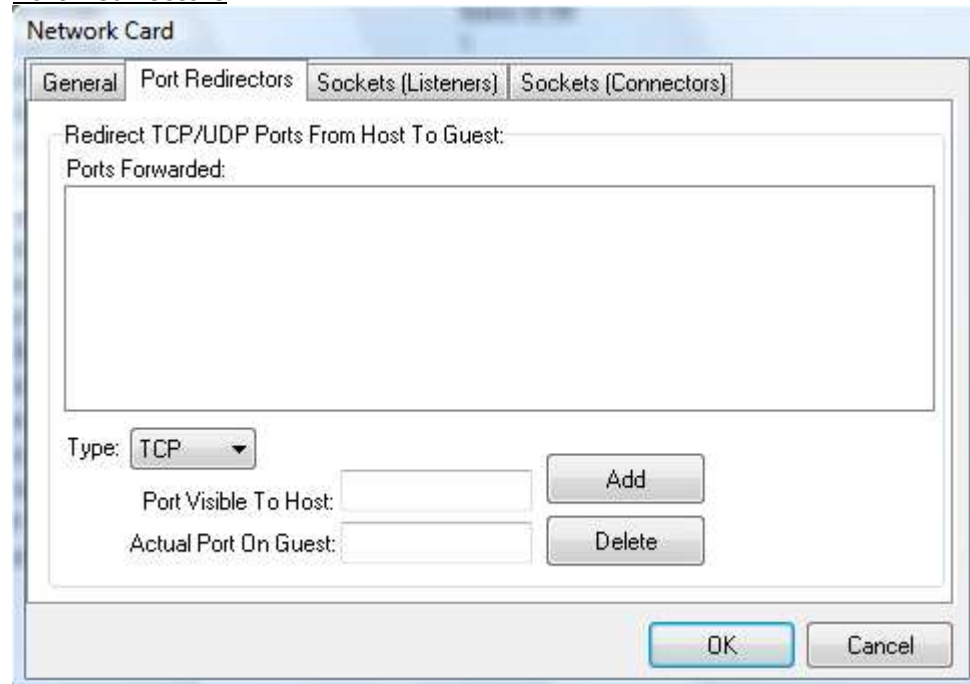
**NOTE: Qemu Manager can only install the 32 bit TAP-Win32 driver automatically.**

The Tap Driver Installer will then appear:



Once the installer is complete you will be able to select the newly installed TAP-Win32 network card.

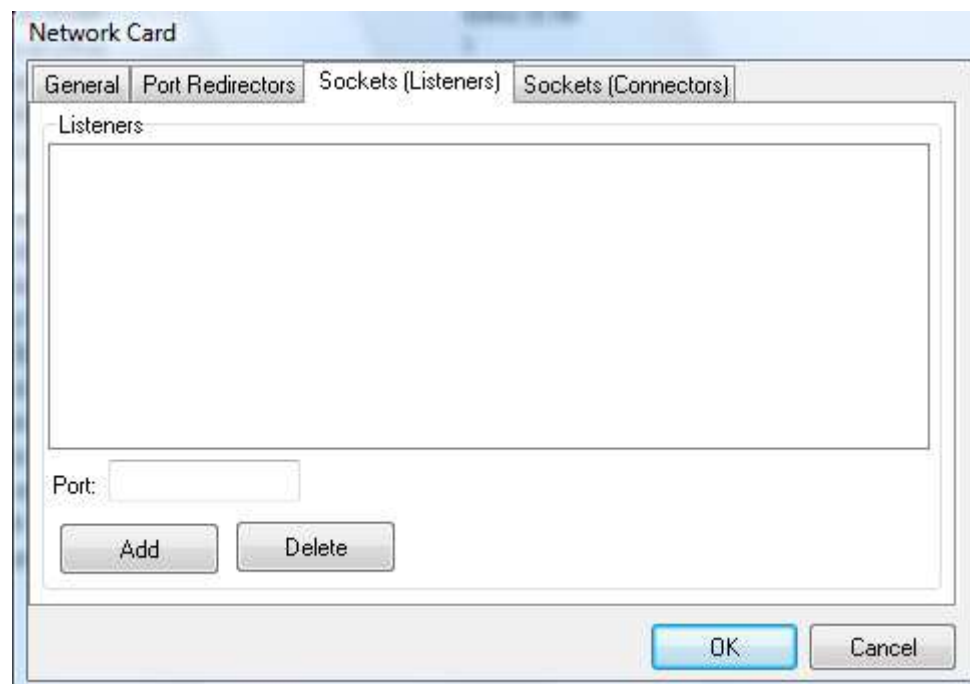
## Port Redirectors



Port redirectors are available on "User Networking" only.

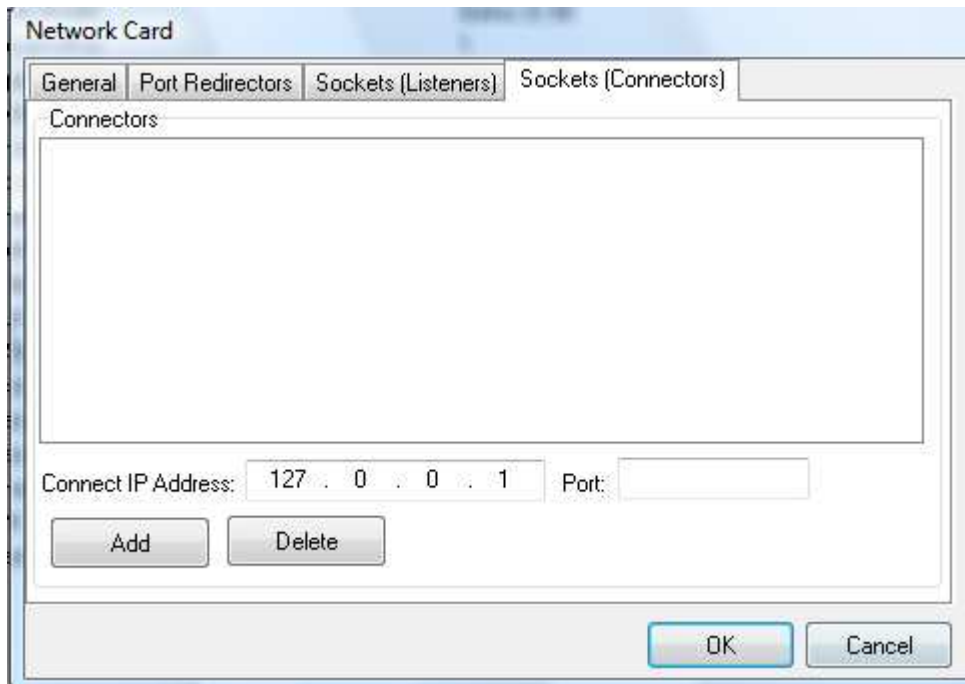
They allow you to redirect incoming TCP and UDP connections from the host port xxx to the Guest port xxx

## Sockets (Listeners)



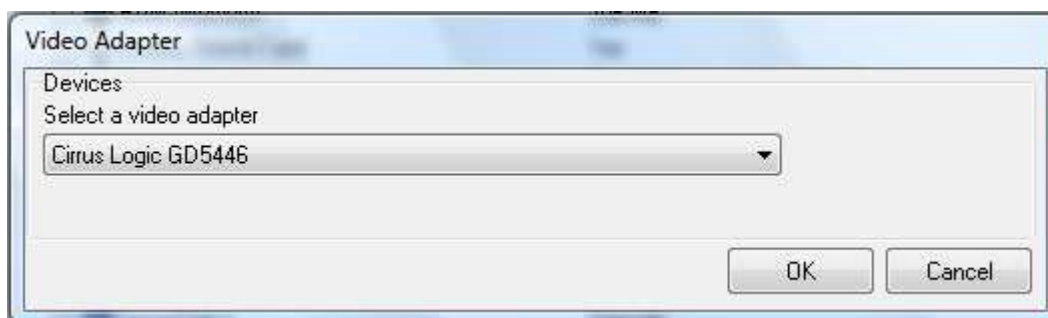
Connects the VLAN x to another QEMU virtual machine using a TCP socket. Qemu will wait for an incoming connection on the port specified.

## Sockets (Connectors)



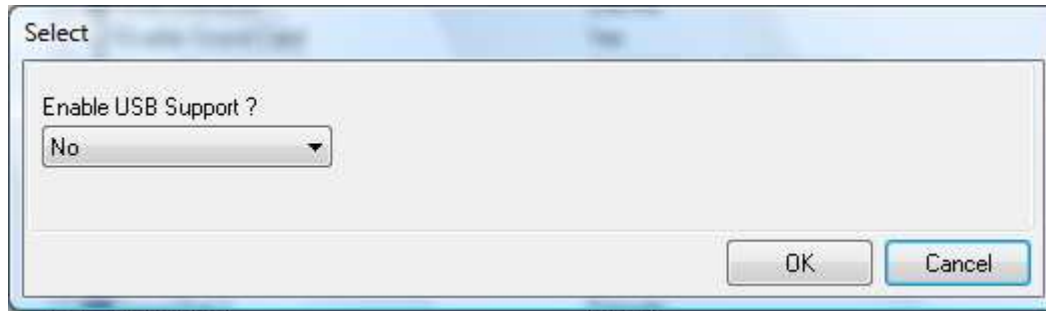
Connects the VLAN x to another QEMU virtual machine using a TCP socket which is configured with a (Listener) socket.

#### Video Card



Qemu emulates many different video cards, dependant of the hardware platform you have chosen, this option indicates which video card the virtual machine is currently using.

## USB Support



This option indicates whether you wish to enable USB support in your Virtual Machine.

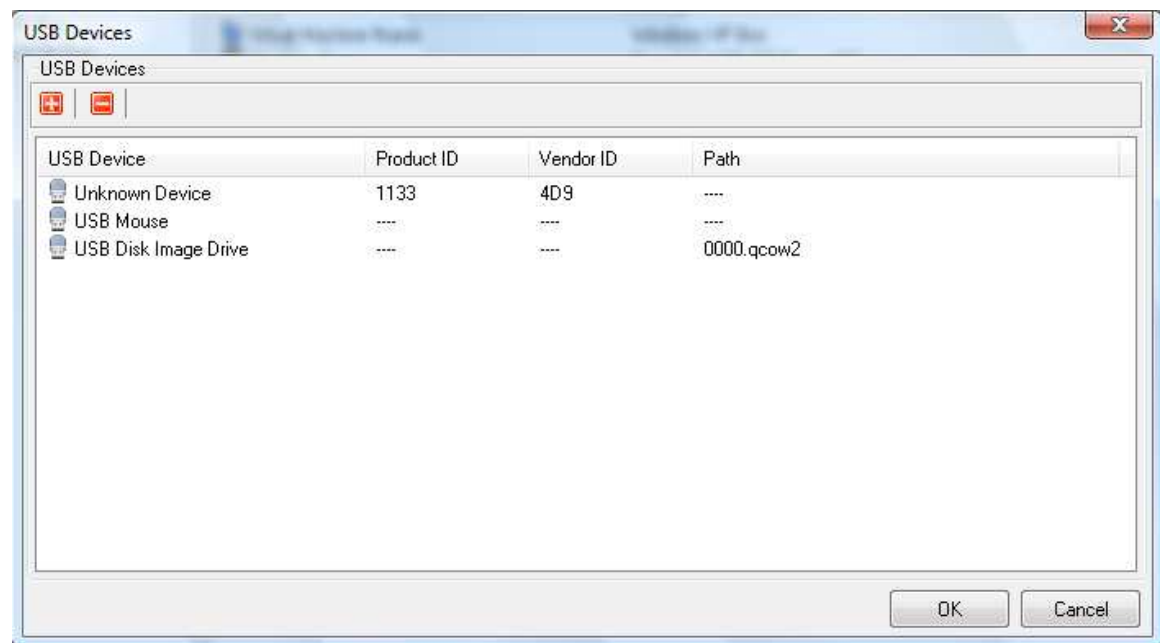
Note: Windows USB support is experimental and not fully complete; it uses a linux library called libusb-win32 which has been ported from linux to windows. To get host USB device support in your guest machines, you will need to install the LIBUSB-WIN32 Filter. This should be done with caution as there are known problems with this library and Windows Vista.

You can still use USB support without the library this will give you the following:

- USB Hard Disk Image support
- USB Mouse Support
- USB Keyboard Support



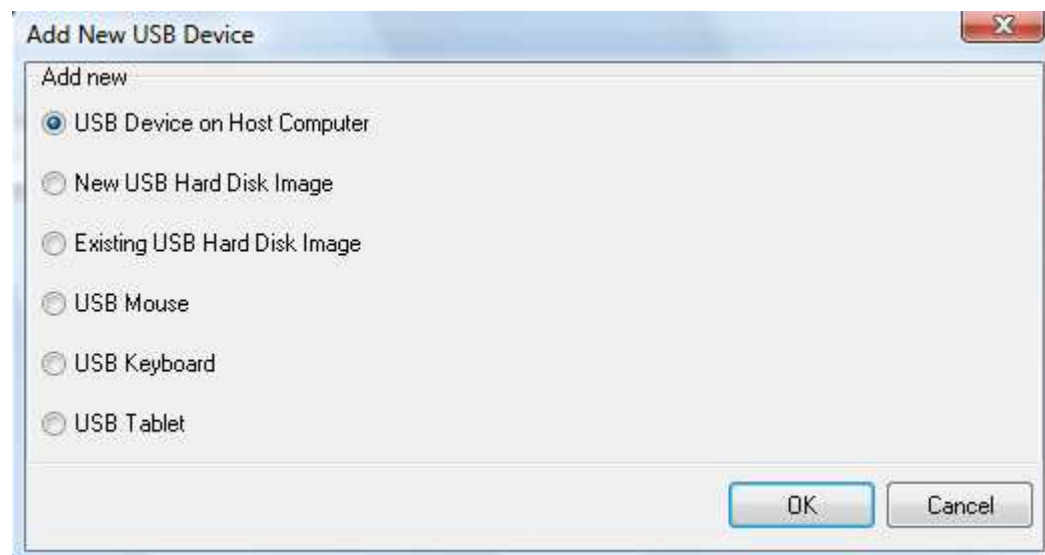
## USB Devices



This item is only shown if USB support is enabled.  
It displays the number of USB devices currently "Plugged in" to your virtual machine.

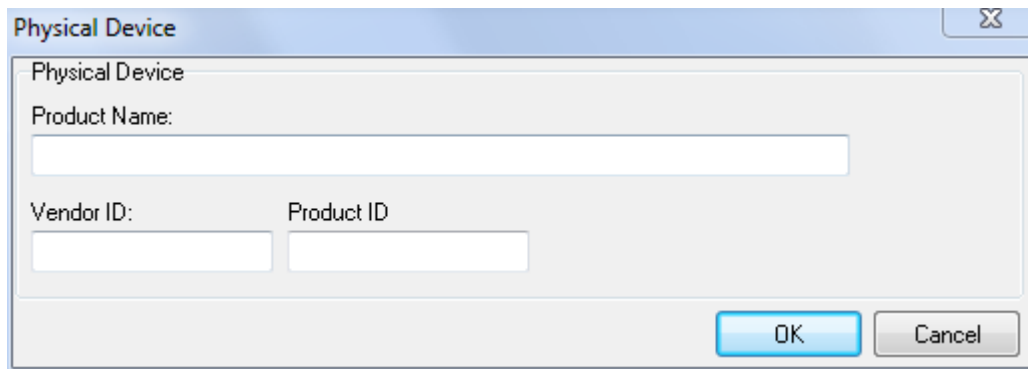
To add new USB devices click the  button.

To remove a USB device click the  button.



Next you can select which type of USB device you wish to add.

## USB Device on Host Computer



Enter a name for the USB device along with it's Vendor ID and Product ID.

## New USB Hard Disk Image

This option allows you to create a new hard disk image to use as a USB hard disk within the virtual machine.

## Existing USB Hard Disk Image

This option allows you to use an existing hard disk image as a USB hard disk within the Virtual Machine.

## USB Mouse

This option allows QEMU to simulate a USB Mouse instead of the Standard PS2 mouse within the Virtual Machine.

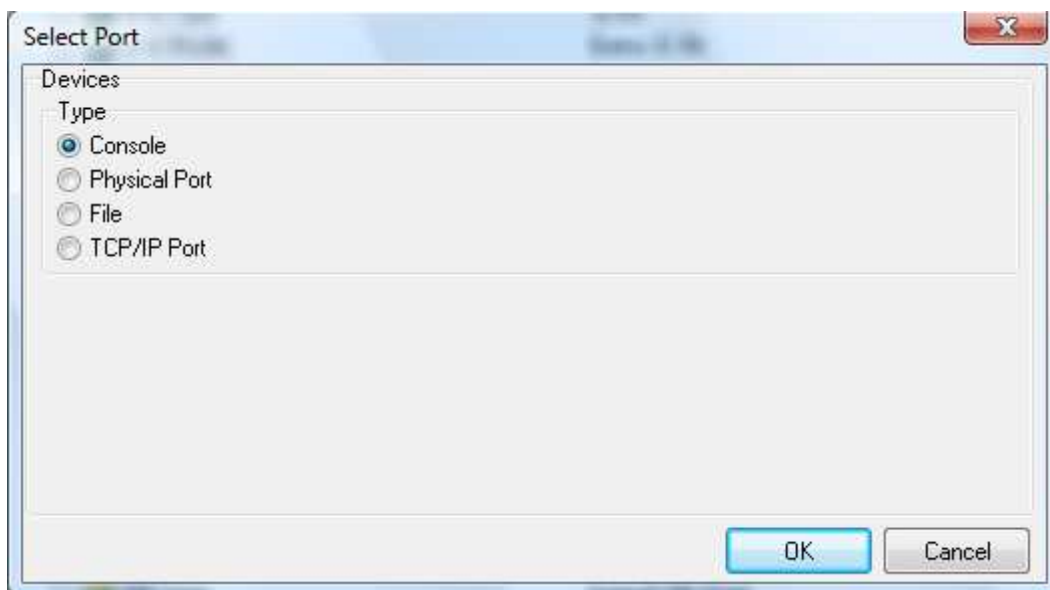
## USB Keyboard

This option allows QEMU to simulate a USB Keyboard instead of the Standard PS2 keyboard within the virtual machine.

## USB Tablet

This option allows QEMU to simulate a USB tablet device within the Virtual Machine.

## Serial Port x



You can add up to 4 virtual Serial ports on a Virtual Machine, each time you add a port it will be shown as "Serial Port x" x being the number of the port added.

### Types of serial ports

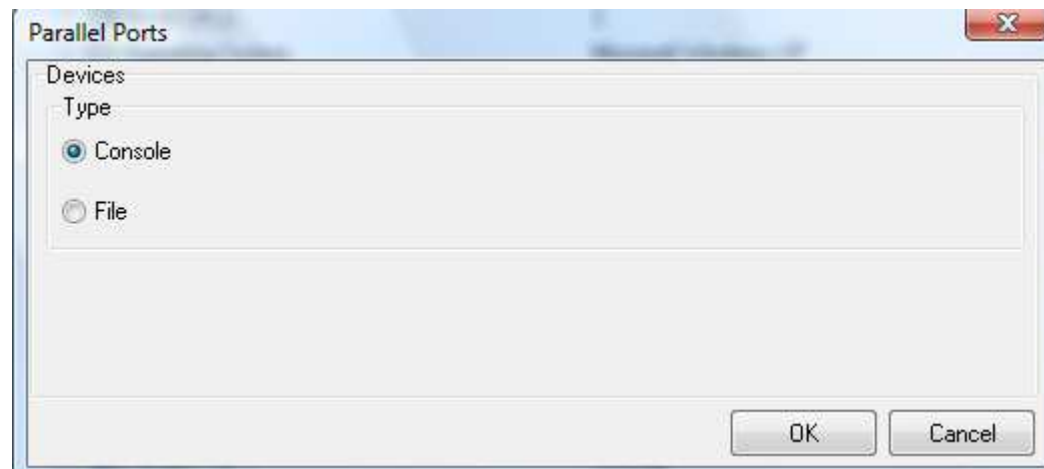
Console – all serial port data will be sent to the QEMU console you can view this by pressing CTRL+ALT+3. Depending on how many serial ports you have created will indicate which number after CTRL+ALT.

Physical Port – Allows you to redirect serial port data to a physical serial port on your computer.

File – Allows you to redirect serial port data to a file on your computer

TCP/IP Port – Allows you to redirect serial port data to a TCP/IP port, you can use a terminal emulator or telnet client to receive the data.

### Parallel Port x

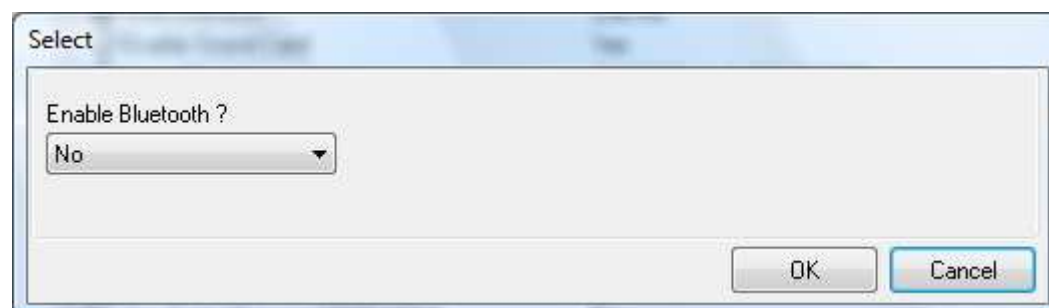


You can add up to 2 virtual Parallel ports on a Virtual Machine, each time you add a port it will be shown as "Parallel Port x" x being the number of the port added.

Console – all parallel port data will be sent to the QEMU console you can view this by pressing CTRL+ALT+4. Depending on how many parallel ports you have created will indicate which number after CTRL+ALT.

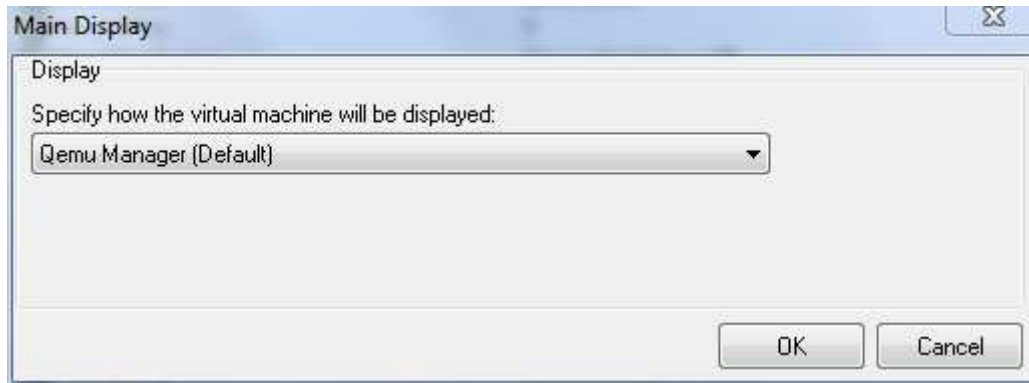
File – Allows you to redirect parallel port data to a file on your computer

### Enable Bluetooth®



By selecting this option you can specify if you want Bluetooth® support within your Virtual Machine. This is a new QEMU option. If you select this option you also have the option of enabling a Bluetooth® Keyboard.

### Main Display



Depending of the version of QEMU you are using, there are several ways you can display the output QEMU generates when ran.

The options are:

Qemu Manager (Default) - Selecting this option will embed the output from QEMU within the "Console" Tab.

QEMU Window – Selecting this option will generate a standard QEMU Window.

VNC Client – Selecting this option will allow you to connect to QEMU via a VNC Client.

Full Screen Display – Selecting this option will display QEMU in full screen mode.

### VM Store

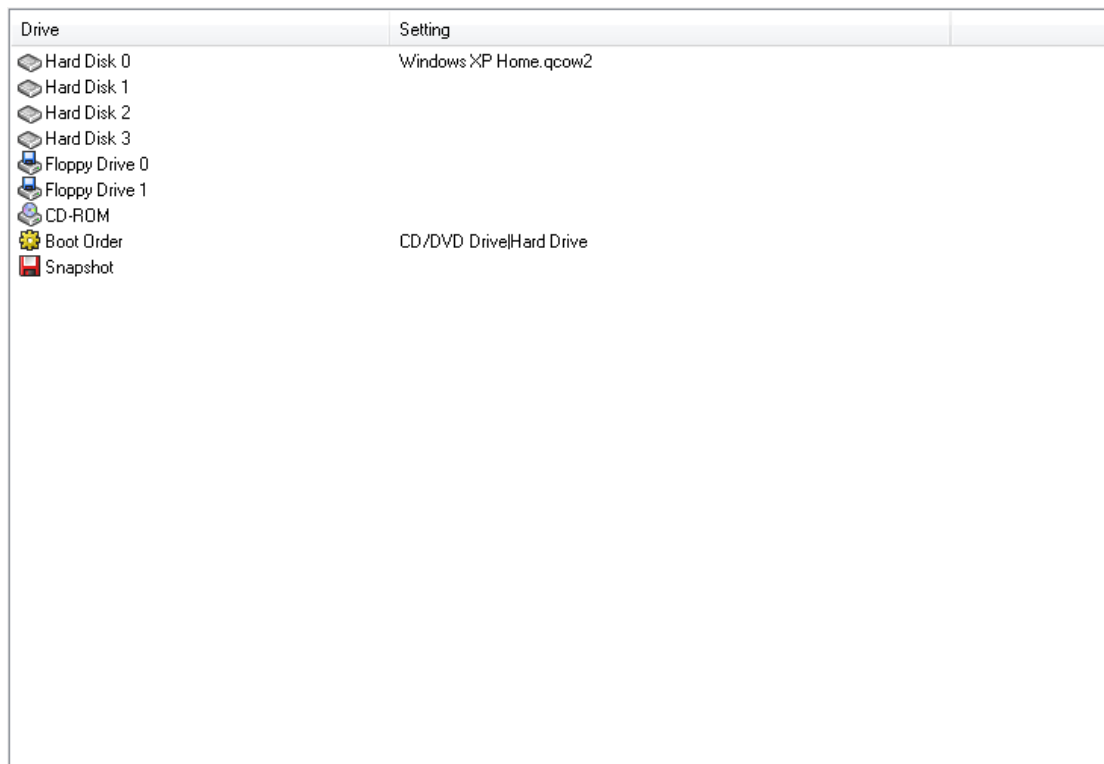
The name of the VM Store your virtual machine configuration file and disk images are kept. If you double click this option you will be taken to that folder.

### Last Run

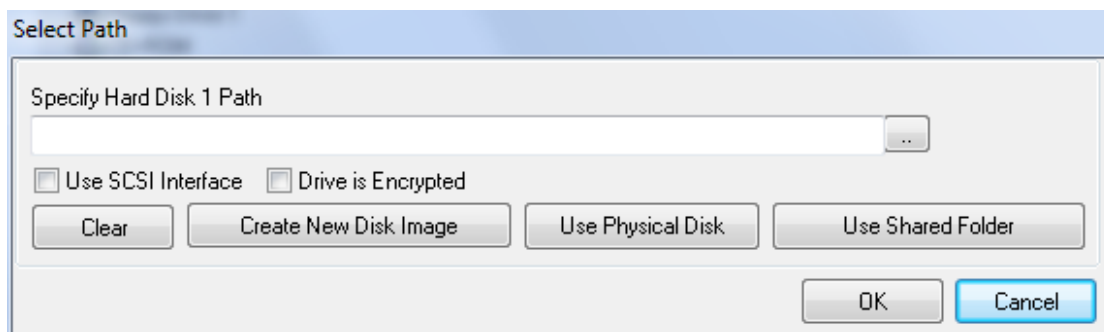
The date and time the virtual machine was last run.

## **Chapter 4 – Drives**


To modify an option simply Double Click on the option.



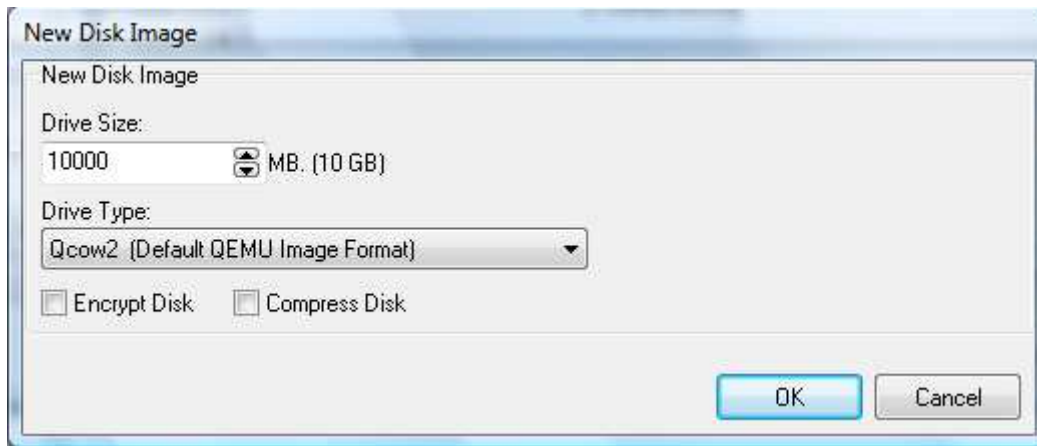
### **Hard Disks**



You can have 4 Virtual Hard Disks in your virtual machine. There are a few ways you can do this.

By Path – Click the  button and then select the virtual hard disk file you wish to use.

Create New Disk Image – click this button to create a new virtual hard disk.



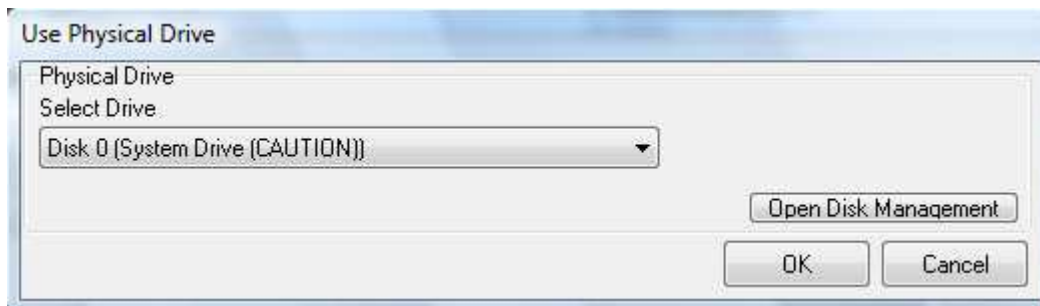
Now you can specify:

- The size of the disk in Megabytes.
- The drive type.
- Whether you wish to encrypt the disk. (QCOW2 Format Only)
- Whether you wish to compress the disk. (QCOW2 Format Only)

When finished click the OK button. You will then be prompted to save the virtual hard disk.

(Note: Qemu Manager will open the VM store folder for the virtual machine if you save the disk image in this folder no path information will be included in the filename. This allows for true mobility of Qemu Manager and the virtual machine. If you are using Qemu Manager on a USB pen stick or hard disk you should ALWAYS store the image in the VM Store of the virtual machine, otherwise save the file in any location.

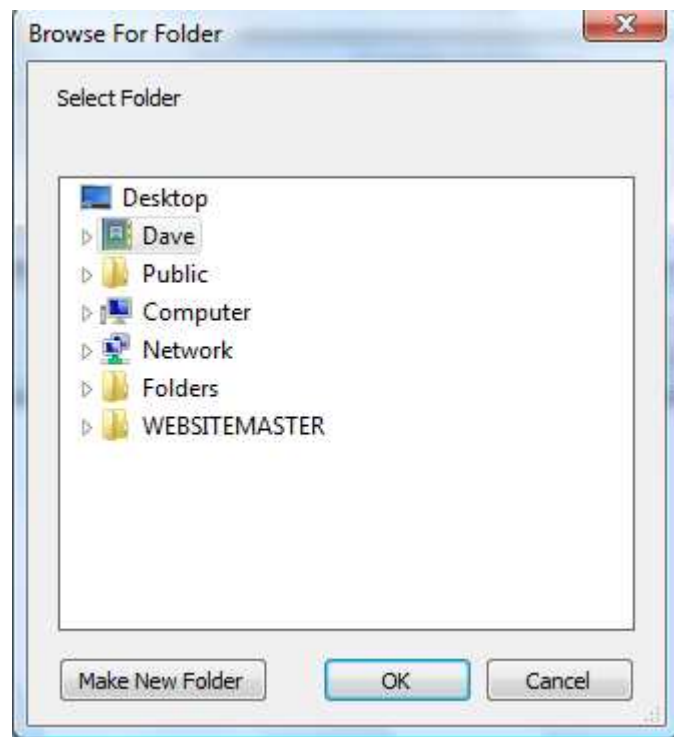
#### Use physical disk



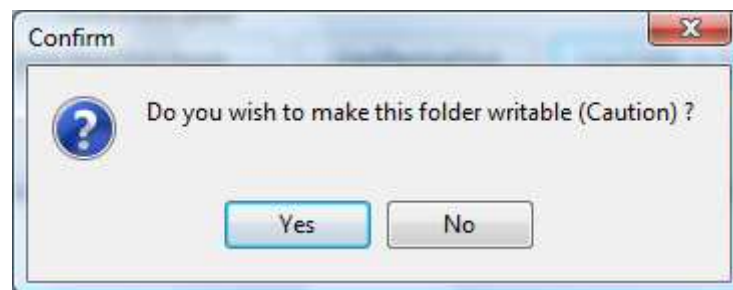
Select the physical disk you wish to use from the selection box. To view what drives are available click the "Open Disk Management" button to view.

**CAUTION DO NOT USE DISK 0**

## Use Shared Folder

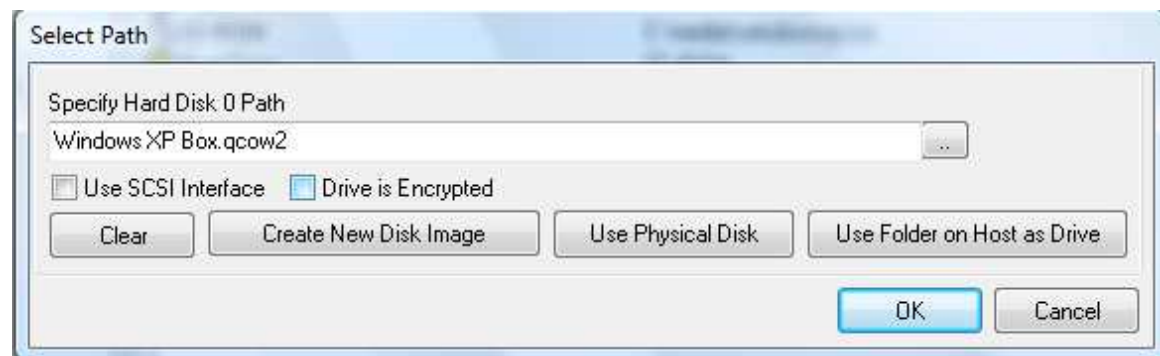


You can use a shared folder on the host computer as a hard disk drive on the guest. To do this select the folder you wish to use.



You will then be asked whether you wish the folder to be made writable by the guest. I believe at the time of writing this is experimental.

## Other Virtual Hard Disk Options



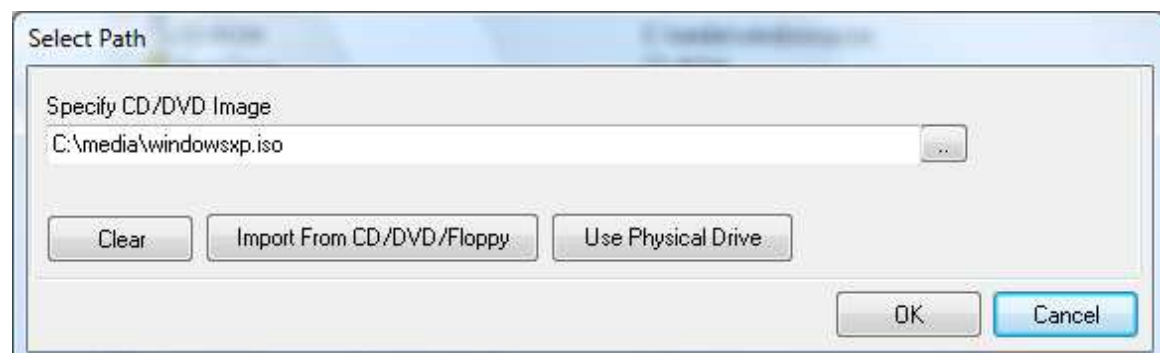
Use SCSI Interface – On Virtual Machine boot up QEMU will use a SCSI interface instead of the standard IDE interface to power up the Virtual Hard Disk. Qemu Manager will automatically allocate the correct BUS number for the hard disk. To date I have not personally had much of a success rate with this option.

Drive is Encrypted – This option is checked if you have created a Virtual hard disk with encryption. If you are using a pre-created encrypted disk you can also select this option. Qemu Manager stores this information to pass over to the Qemu Manager client, to process the password upon launch, as currently Qemu 0.10.2 has a fault with entering the password.


Clear – Clears all information to ensure no details are used during QEMU launch.

## **Removable Media**

You can use a CD-ROM ISO image or physical CD-ROM drive on the host to install operating systems on your Virtual machines. You can also use up to 2 virtual floppy disk drives within the Virtual Machine Also.

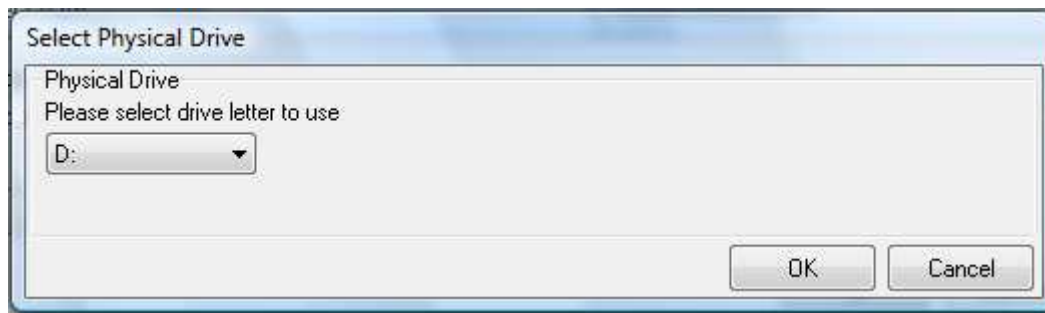


You can specify removable media:

By Path – Click the  button and then select the virtual hard disk file you wish to use.

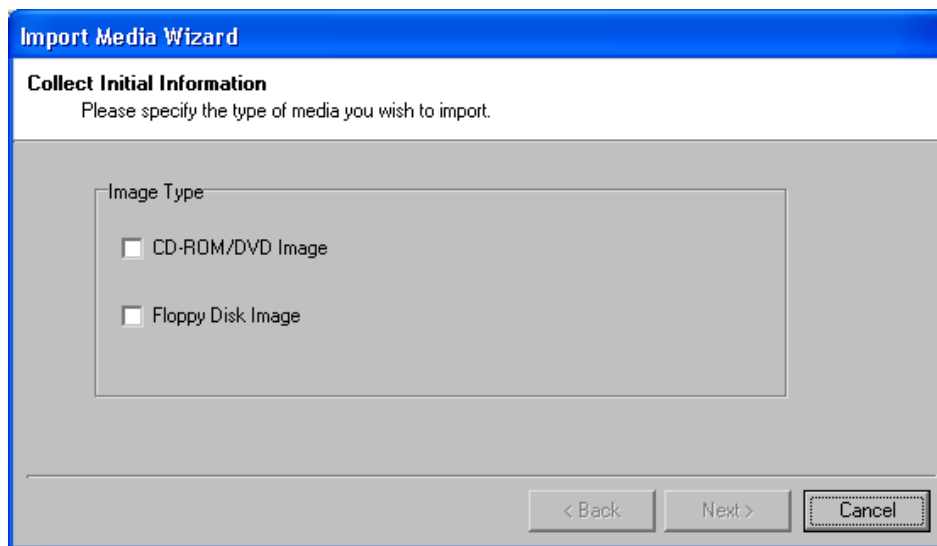


## Use Physical Drive



Simply select the drive letter you wish to use within your guest and click ok.

Import from CD/DVD/Floppy – using this option you can import physical media into files to use with your virtual machine.



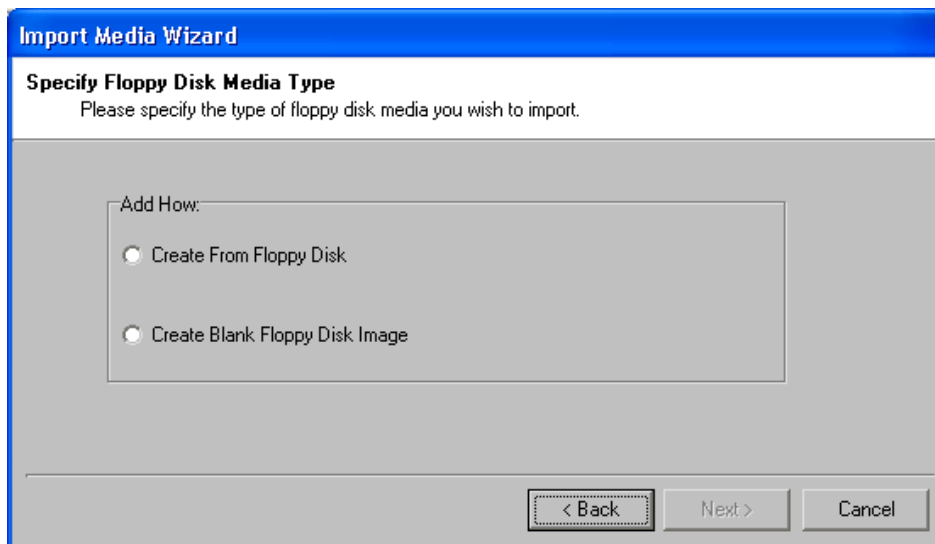
You will then be asked to specify which type of media you wish to import.

CD-ROM/DVD Image – Selecting this option will allow you to create a disk image of a cd-rom/dvd that is currently inserted into your cd/dvd rom drive.

Floppy Disk Image – Selecting this option will allow you to create a disk image of a floppy disk that is currently inserted into your floppy disk drive.

When you have made your selection click the Next button.

## **Creating A Floppy Disk Image**



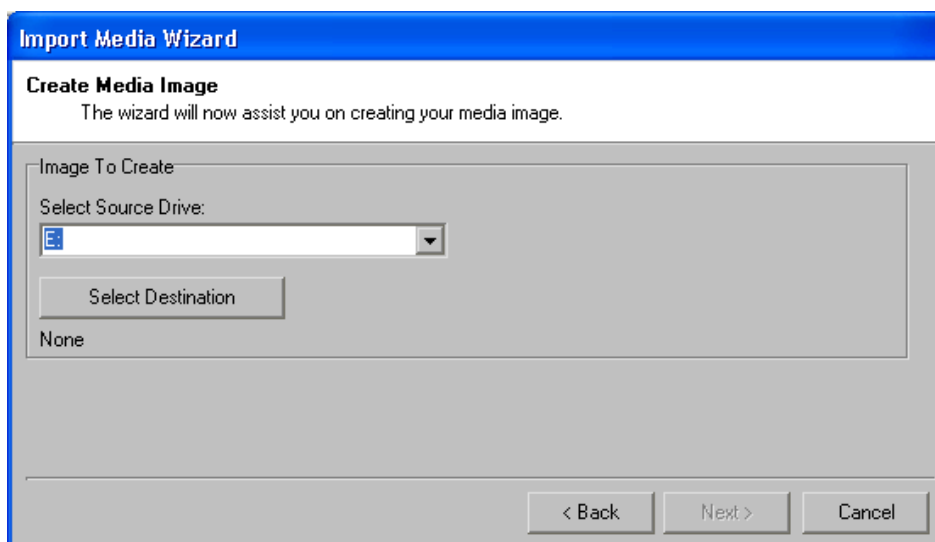
The following wizard screen is shown only if you are creating a floppy disk image. There are 2 different ways you can create floppy disk images.

Create From Floppy Disk – By selecting this option Qemu Manager will transfer the contents of a Floppy disk into a disk image.

Create Blank Floppy Disk Image – By selecting this option Qemu Manager will create a blank floppy disk image for you. This is useful for creating a recovery disk etc..

Once you have made your selection click the Next Button.

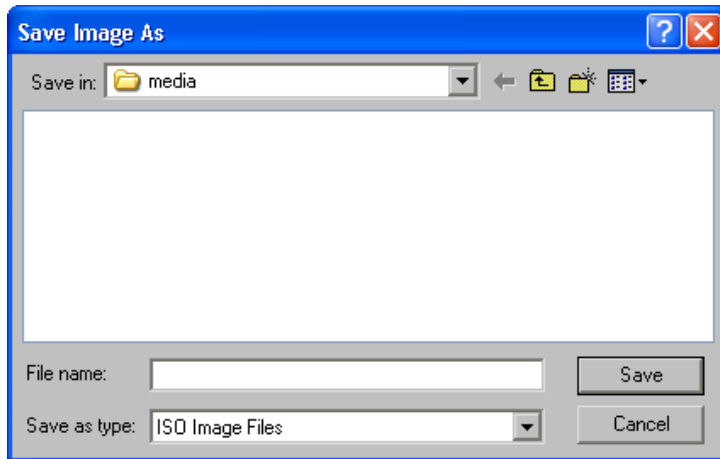
The next wizard screens are identical whether you are creating a floppy disk image or cd-rom image.



Next you must specify the source drive that the image will be created from.

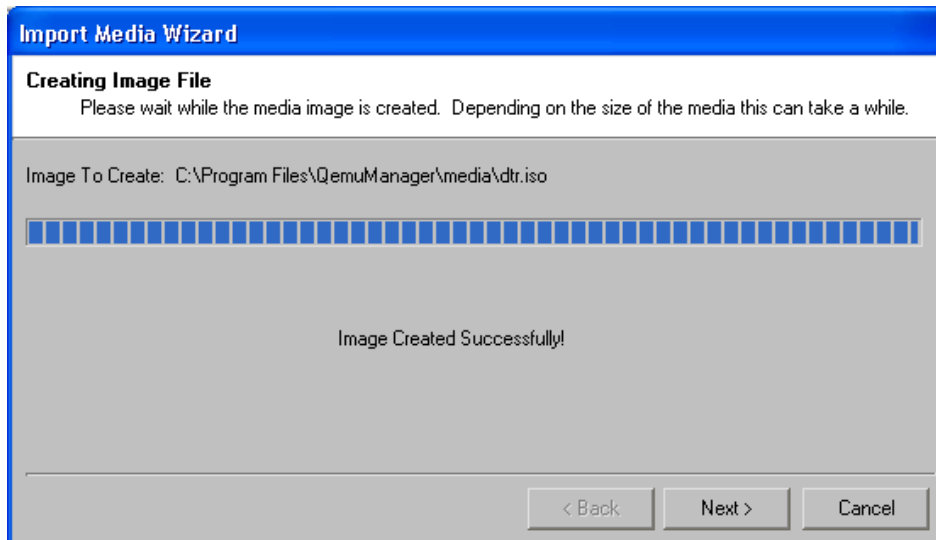
If you are creating a cd-rom/dvd image select the drive letter of your cd/dvd rom drive. If you are creating a floppy disk image select the floppy disk drive letter that the floppy disk is inserted.

Next you need to specify the destination of the image file, you can do this by clicking the "Select Destination" button.



You will then be prompted to enter a filename for the image. When done click the Save Button.

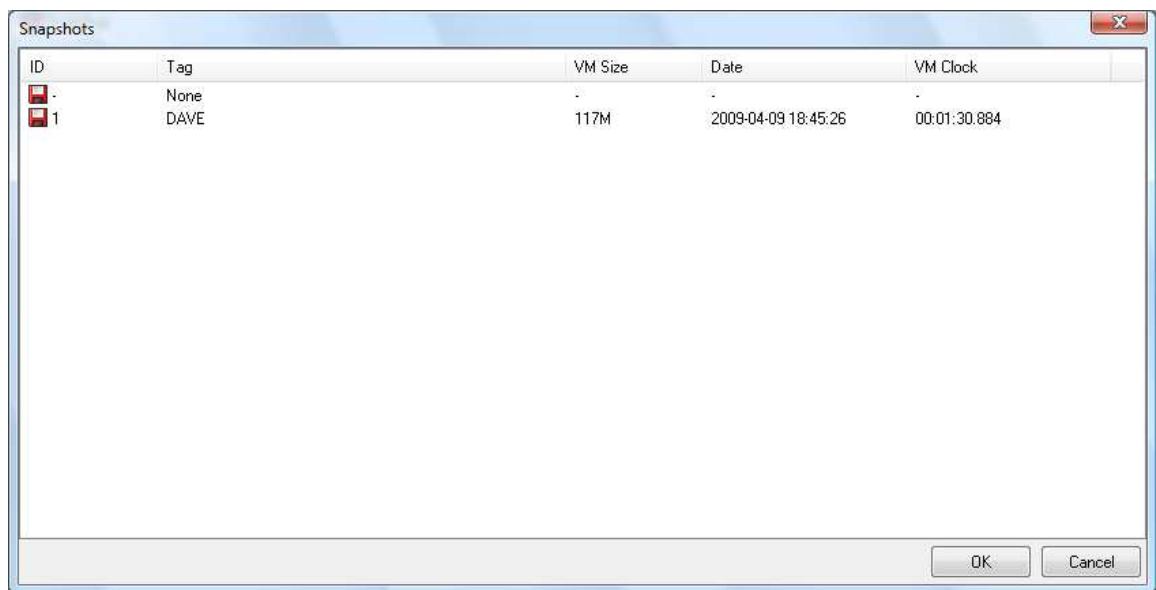
When you have finished making all the selections click the Next button.



The image file will then be created. When finished click the Next Button.

## **Snapshots**

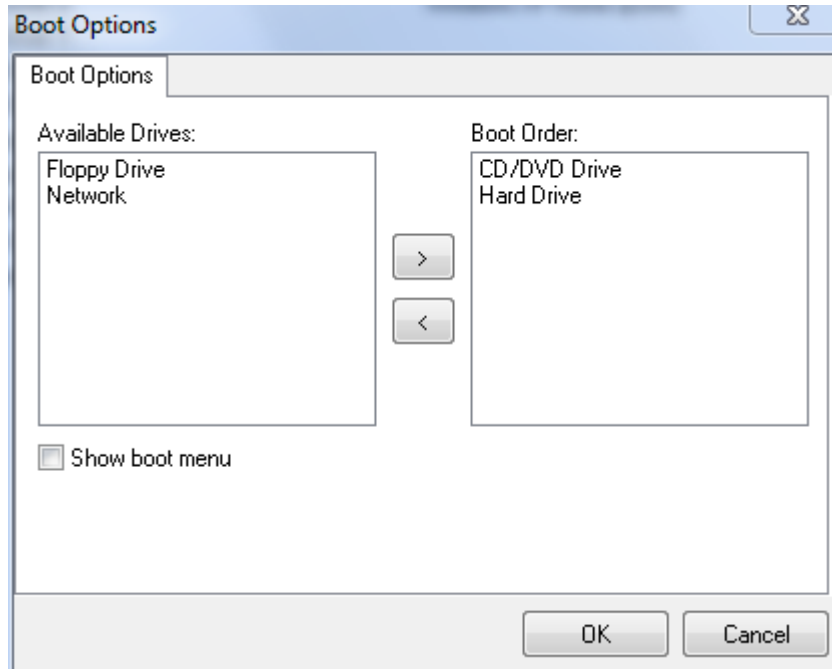
If required you can Launch your virtual machine with a previously created snapshot.



Just select the snapshot you wish to use and click OK.
























## **Boot Options**

If you are using QEMU 0.11x or higher, you can specify the boot order of your virtual machine.



You can also select to view the boot menu upon start up.

## Chapter 5 – Advanced Tab

Advanced	Setting
 Qemu Executable	qemu.exe
 CPU Affinity	Disabled
 Kernel Image	
 Initial Ram Disk Image (initrd)	
 Kernel command line append	
 BIOS Filename	Default
 Sound Library	Direct Sound
 Close VM When Rebooted	No
 Enable SDL output	No
 QEMU Window Title	{VM NAME}
 Do Not Start CPU on Startup	No
 Use Local Time	Yes
 Specify Start Date & Time of VM	Now
 Enable WIN2K Hack	No
 Enable ACPI HAL Time Drift Hack	No
 Disable Boot Signature Checking	No
 Disable HPET	No
 Disable ACPI Support	No
 Do Not Apply Changes to VM Session	No
 Qemu Process Priority (CAUTION)	Normal
 Run VM In Debug Mode	No
 Additional QEMU Parameters	
 Use Additional QEMU Parameters Only	No

There are a lot of advanced features to the QEMU program. Most users will probably not need to use these features.

I will cover the most important features below, to read up on all the features, please refer to the QEMU documentation.

### Qemu Executable

This read only value display's the current QEMU executable the Virtual Machine is using.

### Kernel Image

Allows you to specify a bzImage file to use as a kernel image. Note some platforms REQUIRE you to specify this.

### Initial Ram Disk Image (initrd)

Allows you to specify a file as an initial ram disk. . Note some platforms REQUIRE you to specify this.

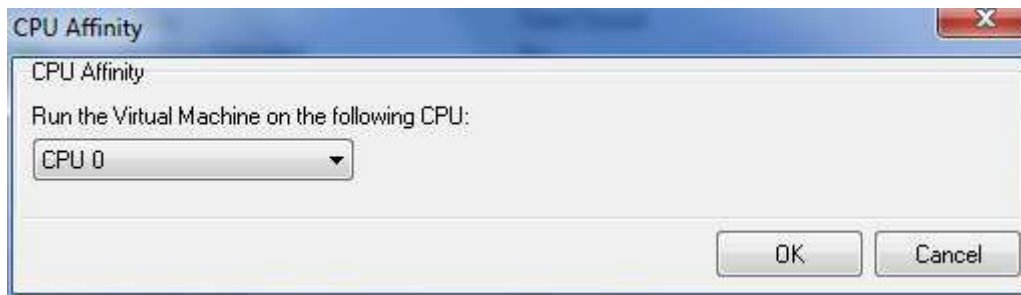
### Kernel command line append

Allows you to specify the kernel command line.

### Bios Filename

By default this SHOULD NOT be changed. But if you do wish to use a different bios with QEMU you can specify this here. NOTE: to ensure this works correctly you should place the bios file within the qemu directory.

### CPU Affinity

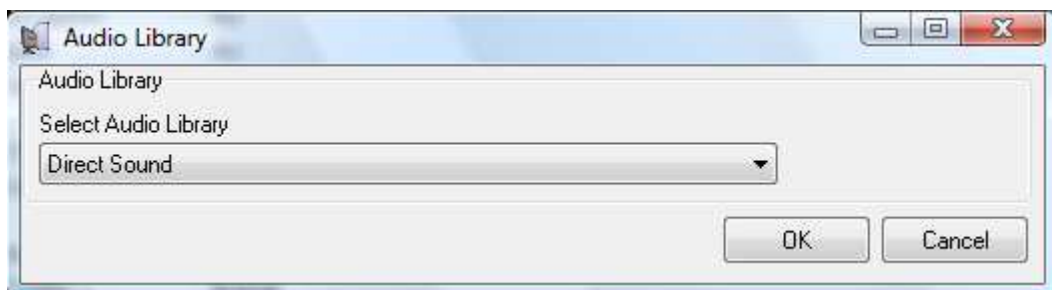


Qemu manager now supports multiple CPU systems. You can now specify which CPU you wish QEMU to run on when launched.

### Disable ACPI Support

Disable ACPI (Advanced Configuration and Power Interface) support. Use it if your guest OS complains about ACPI problems (PC target machine only).

### Sound Library



QEMU supports different sound libraries. You can specify which one you wish to use here. Note: if FMODEM is selected you must have a version of QEMU with FMODEM support compiled in.

### Close VM when rebooted

When a virtual machine is rebooted you can select this option to close it instead of restarting. This is useful for installations which require media changes.

### Enable SDL output

Ensure QEMU uses the SDL library for graphics.

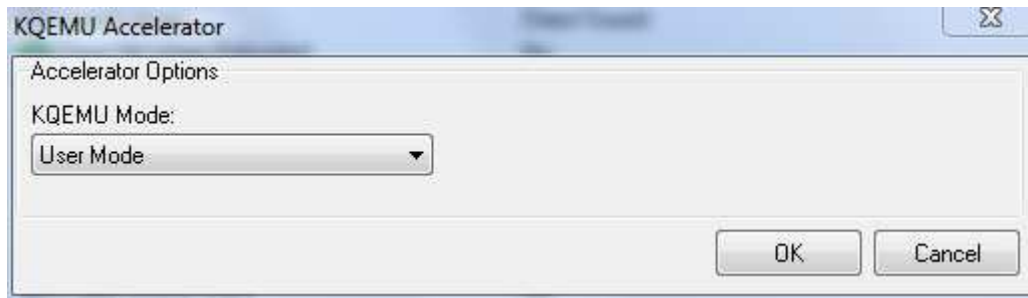
### QEMU Window Title

Allows you to show text at the top of the QEMU window when the virtual machine is launched. By default it is set to {VM NAME} this will display the name of the virtual machine.

### Do not start CPU on startup

When set, qemu will not start the CPU at startup. You can use the "c" command on the QEMU monitor to start it.

### KQEMU



#### Disabled

If this option is selected the KQEMU accelerator will be disabled.

#### FULL acceleration

If this option is selected full KQEMU acceleration is used, this can be known to cause some issues.

#### User Mode

If this option is selected just user mode KQEMU acceleration will be used.

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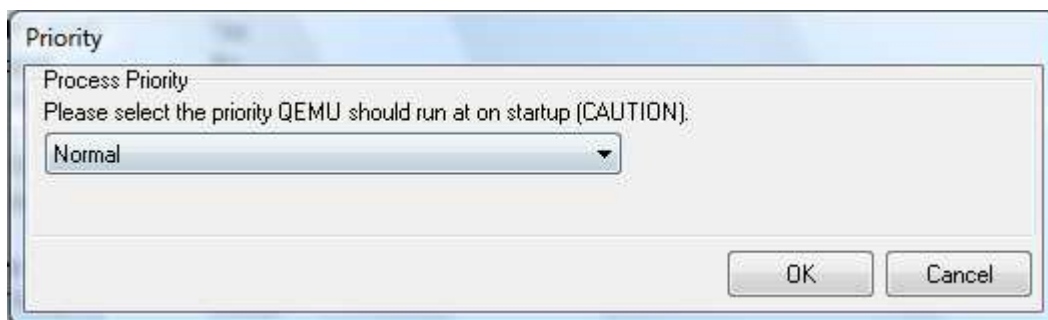
#### Enable WIN2K Hack

If this option is ticked QEMU will be launched with the Windows 2000 Installation workaround, Once you have Installed Windows 2000 you MUST remove this option.

#### Do Not Apply Changes to VM Session

This will stop any changes been saved to the hard disk image during a guest session

#### Qemu Process Priority



When you launch QEMU via Qemu Manager, you can specify the priority of the launched QEMU Process. If a particular Qemu Session is running too fast or too slow on your machine or if a session is taking too much of your CPU time or if you want a session to take more of your computing power then you can change the priority the Qemu Session runs at.

There are currently 4 different priorities:

Idle  
Normal  
High  
Realtime

For most users the default NORMAL will be sufficient.

**WARNING – REALTIME is a higher priority than most of the operating system tasks themselves launching QEMU with this priority could cause all sorts of problems with your PC!**

#### Run VM in Debug mode

This feature is extremely useful for debugging a problematic virtual machine, as it collates all feedback from QEMU in a separate console window, giving you feedback to the cause of any issues you may be having. (Note: this cannot be used alongside the Qemu Manager Client).

#### Additional QEMU Parameters

Allows you to specify further QEMU commands to launch QEMU with. This is useful if a newer version of QEMU is released before Qemu Manager is updated and/or to allow you to use QEMU features currently not included within Qemu Manager.

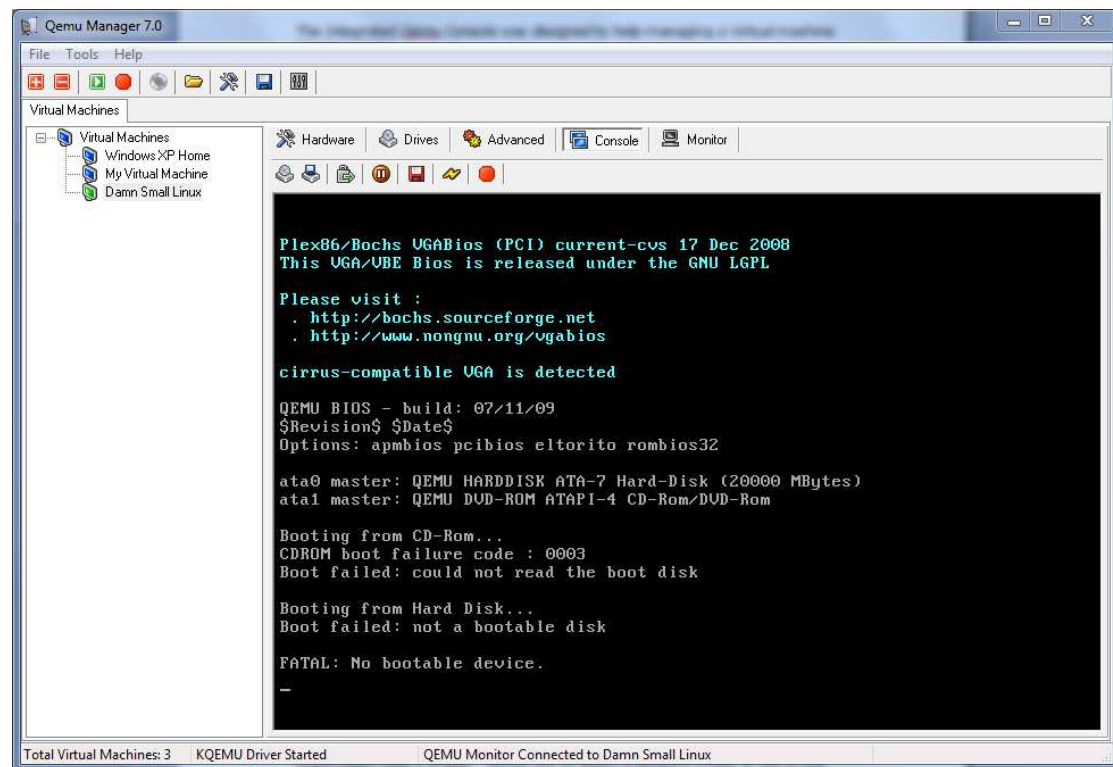
#### Use Additional QEMU Parameters Only

If this option is selected all data in "Additional QEMU Parameters" will only be used to launch QEMU, all other VM settings will be ignored.



## Chapter 6 – Integrated QEMU Console

The Integrated Qemu Console was designed to help managing a Virtual machine session easier.



This is achieved by embedding the QEMU window inside a panel within the Qemu Manager Client window. (achieved by the `-hwnv` command line option, specially compiled in the release of QEMU distributed with Qemu Manager). You can see the Qemu Source Code modification by downloading the Qemu Manager source code.

The QEMU Monitor is then sent via a TCP connection of which the client connects to, allowing Qemu Manager to “do its magic”.

### The Toolbar



- CD/DVD Drive - This option allows you to manage CD/DVD media you are using with the current virtual machine session.

Eject CD/DVD media from drive - This options removes any CD/DVD media from the Virtual CD/DVD drive.

Load CD/DVD Disk Image - Allows you to select a different ISO media image to use in the Virtual CD/DVD Drive.

Load CD/DVD Disk Image & Restart VM - Allows you to select a different ISO media image to use in the Virtual CD/DVD Drive. The virtual machine will then reset itself (as if the power button was held in or the reset button was pushed), This is ideal for operating system installations.

Use Physical CD/DVD Drive – Allows you to assign a physical cd/dvd drive on the host as the Guests virtual cd/dvd drive.



- Floppy Disk Drive – This option allows you to manage floppy disk media you are using with the current virtual machine session.

Eject Floppy Disk 0 Media from drive - This options removes any floppy disk media from the Virtual floppy disk drive 0.

Eject Floppy Disk 1 Media from drive - This options removes any floppy disk media from the Virtual floppy disk drive 1.

Load Floppy Disk 0 Image - Allows you to select a different image to use in the Virtual Floppy disk Drive 0

Load Floppy Disk 1 Image - Allows you to select a different image to use in the Virtual Floppy disk Drive 1

Load Floppy Disk 0 Image & Restart VM - Allows you to select a different image to use in the Virtual Floppy Disk Drive 0. The virtual machine will then reset itself (as if the power button was held in or the reset button was pushed), This is ideal for operating system installations.

Use Physical Floppy Disk Drive as Floppy Drive 0 – Allows you to assign a physical Floppy Disk drive on the host as the Guests virtual Floppy disk Drive 0.



- Send Ctrl+ALT+DELETE to guest. – This option allows you to send a CTRL+ALT+DELETE key sequence to the guest without physically pressing the keys.



- Pause the Virtual Machine. To restart it again press the  button.



- Snapshots – Allows you to manage virtual machine snapshots.

Create snapshot – Creates a new snapshot, you will need to specify a name for the snapshot.

Load snapshot – Return back to a previously created snapshot.

Delete snapshot – This is for information only, It is recommended you use the QEMU Monitor using (DELVM <NAME>).

**NOTE: SNAPSHOTS ONLY WORK WITH QCOW2 DISK IMAGES**



Shutdown/Reset Options – Allows you to manage the state of the Virtual Machine session.

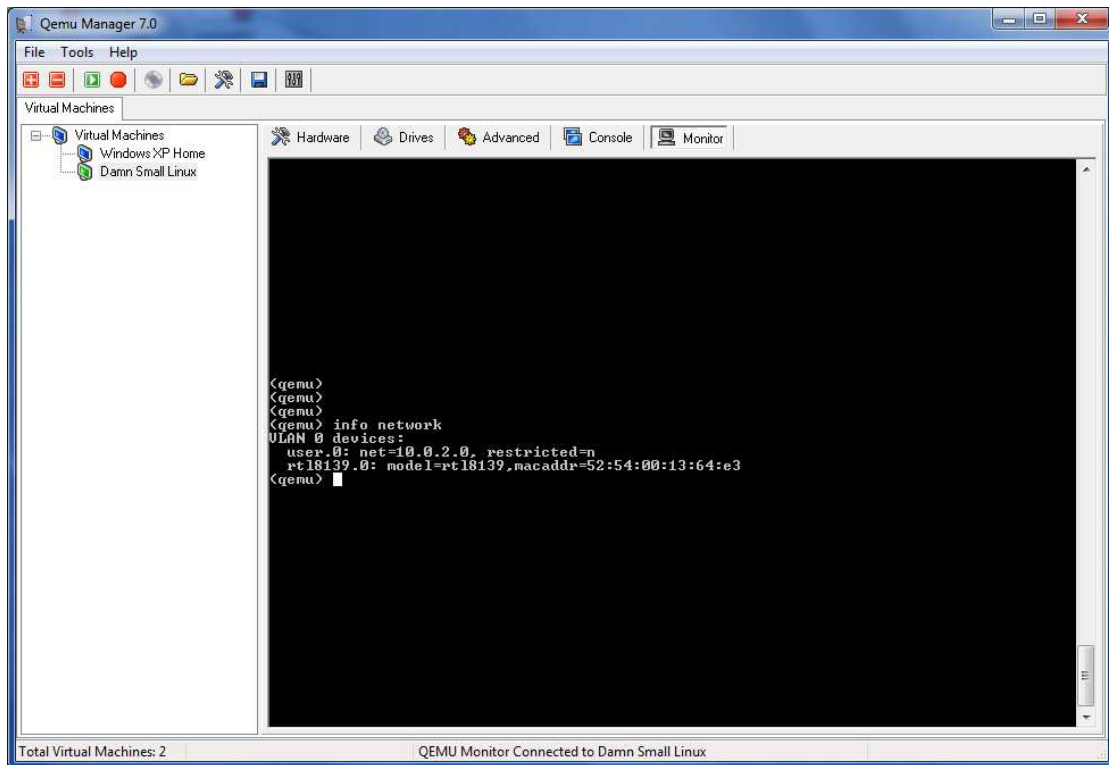
Reset virtual machine – Resets the virtual machine, a bit like pressing the Reset button on a physical machine.

Power down virtual machine – Sends a shutdown event to the virtual machine, this function depends on the running OS.



Quit QEMU Session – This function sends a ('quit') message to QEMU.

## QEMU Monitor



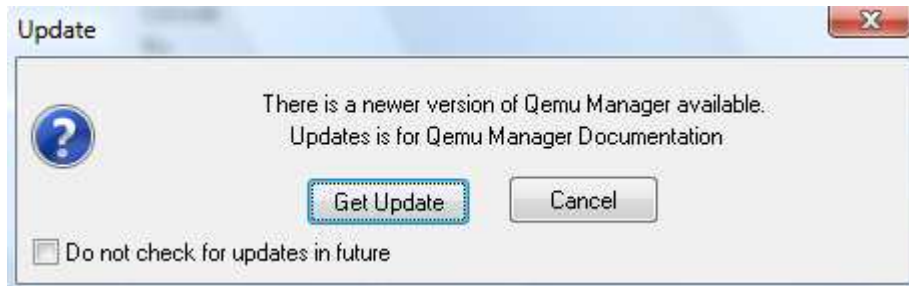
Because Qemu Manager uses the monitor via a TCP connection the usual CTRL+ALT+2 key function does not work, to workaround this I have created a console tab.

This window also provides a “workaround” for the current issue in QEMU at the time of writing with Encrypted disks.

## **Chapter 7. Updates**

As from version 6.0, Qemu Manager has a new improved update engine. As I now feel the foundations have been laid with the program, I plan on performing simple updates to the program moving forward, instead of requiring a new install each time it's released.

When you start Qemu Manager, it will check to see if a new version is available if so you will receive a prompt.



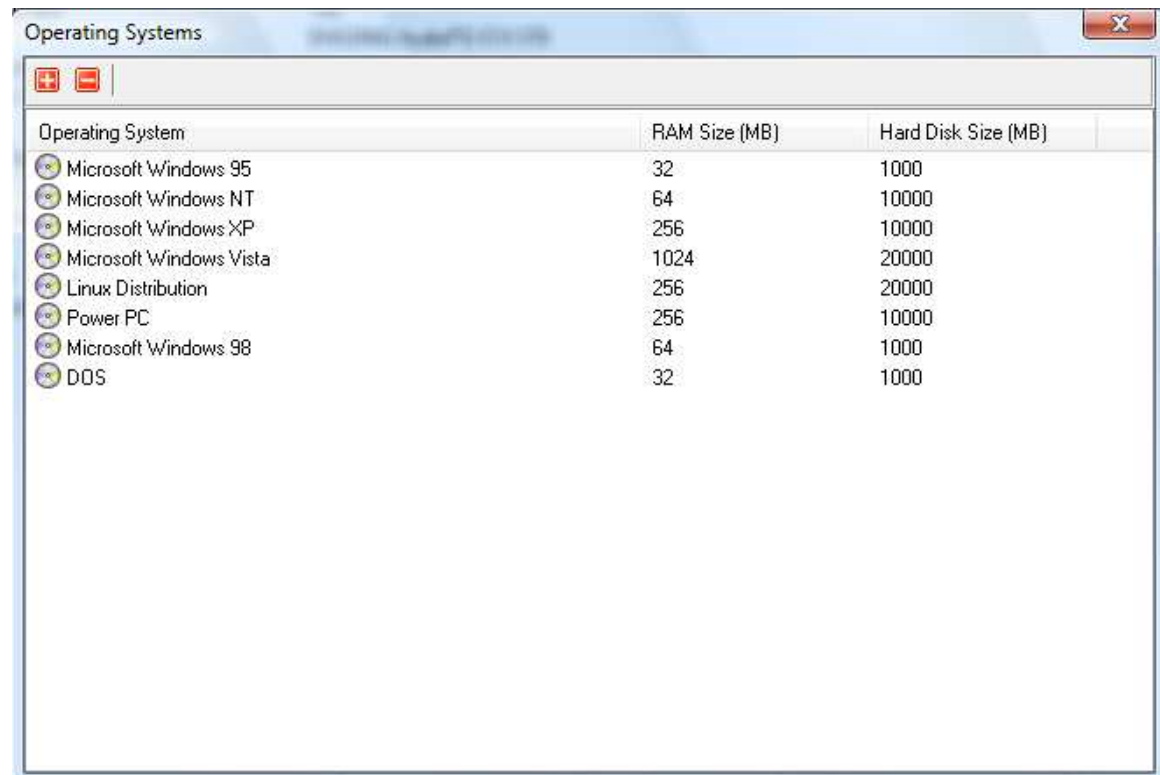
At this point you can click "Get update" or cancel. You can also specify not to receive any more notifications for updates by clicking "Do not check for updates in future"

Depending on the type of update "Get Update" will either prompt you to download an update file or take you to the main Qemu Manager website.


If you disable update checks, you can always click the "Help" menu at the top of the Qemu Manager window and select "check for updates".

## **Chapter 8. Configure Operating System Defaults**

Operating system defaults can be found by clicking the "Options" menu from the menu bar at the top of the main Qemu Manager window and then selection "operating system defaults".



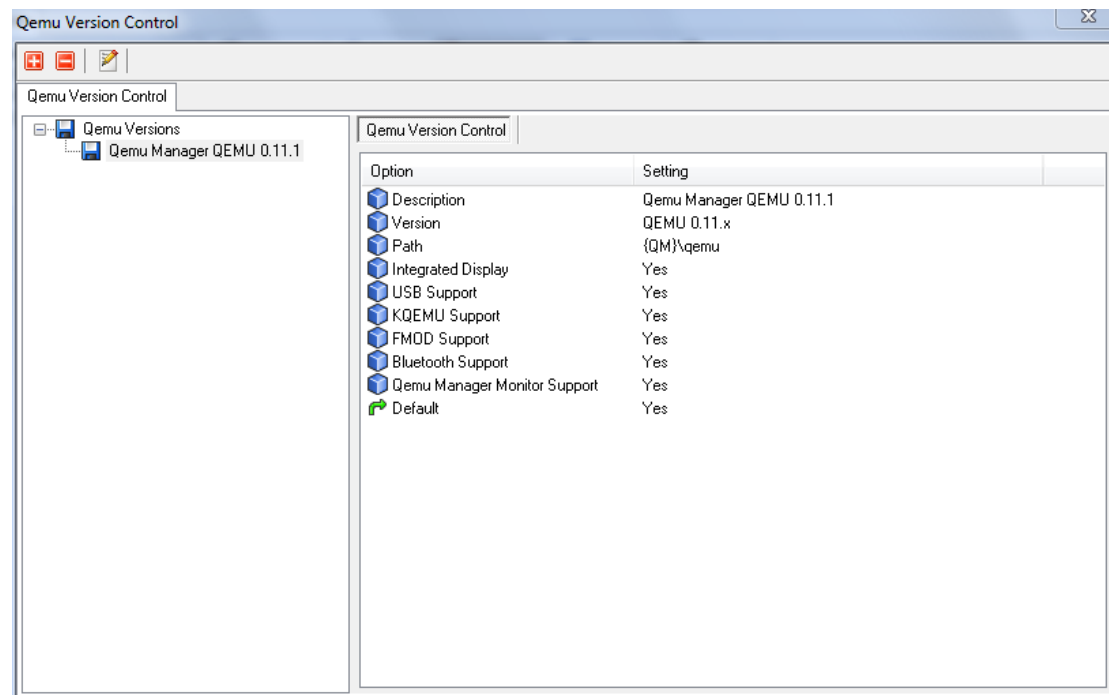
You can configure default settings for the Operating System list used in Qemu Manager. When using the New Virtual Machine Wizard you can select an operating system, when you do Qemu Manager automatically adjusts the wizard settings to match those specified.

To add a new operating system default, click the add button 

To delete an existing operating system default, click the delete button. 

## Chapter 9. Configuring QEMU Versions

You can specify multiple versions of QEMU to use with Qemu Manager, enabling/disabling specific features of Qemu Manager.



Qemu Manager is bundled with QEMU 0.11.1 as this edition still has support for the KQEMU accelerator driver.

You can specify specific Qemu Manager features based on the version of QEMU you are using, these features are:

Version – The edition of QEMU you will wish to use. Qemu Manager supports versions of QEMU down to 0.10x. There are currently 3 options:

QEMU 0.12 and above  
QEMU 0.11x  
QEMU 0.10x

Path – The location of the version of QEMU you wish to use.

Integrated Display – If enabled QEMU will be embedded to the “Console” tab in Qemu Manager.

USB Support – If enabled Qemu Manager will allow you to configure USB Support.


KQEMU Support – If enabled Qemu Manager will provide support for the KQEMU accelerator driver, (note: this is unavailable for QEMU version 0.12xxx and above).

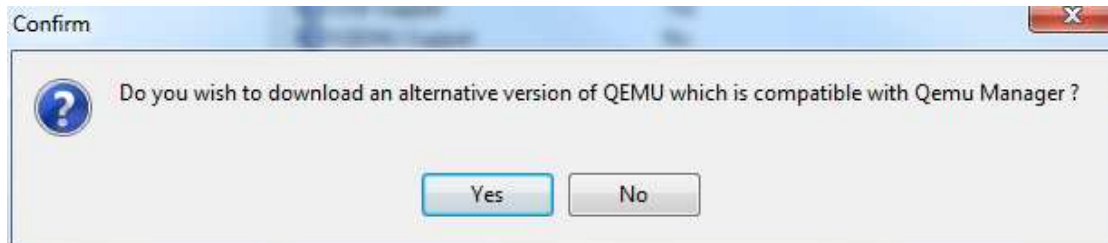
FMOD Support – If enabled Qemu Manager will provide support for the FMOD sound system. The version of QEMU bundled with Qemu Manager does not provide FMOD support, due to licensing restrictions.

Bluetooth Support – If enabled Qemu Manager will provide support for Bluetooth.

Qemu Manager Monitor Support – If enabled Qemu Manager will provide integrated monitor support when used in conjunction with the “Integrated Display” option. (NOTE: You can use the integrated display function without the monitor function).

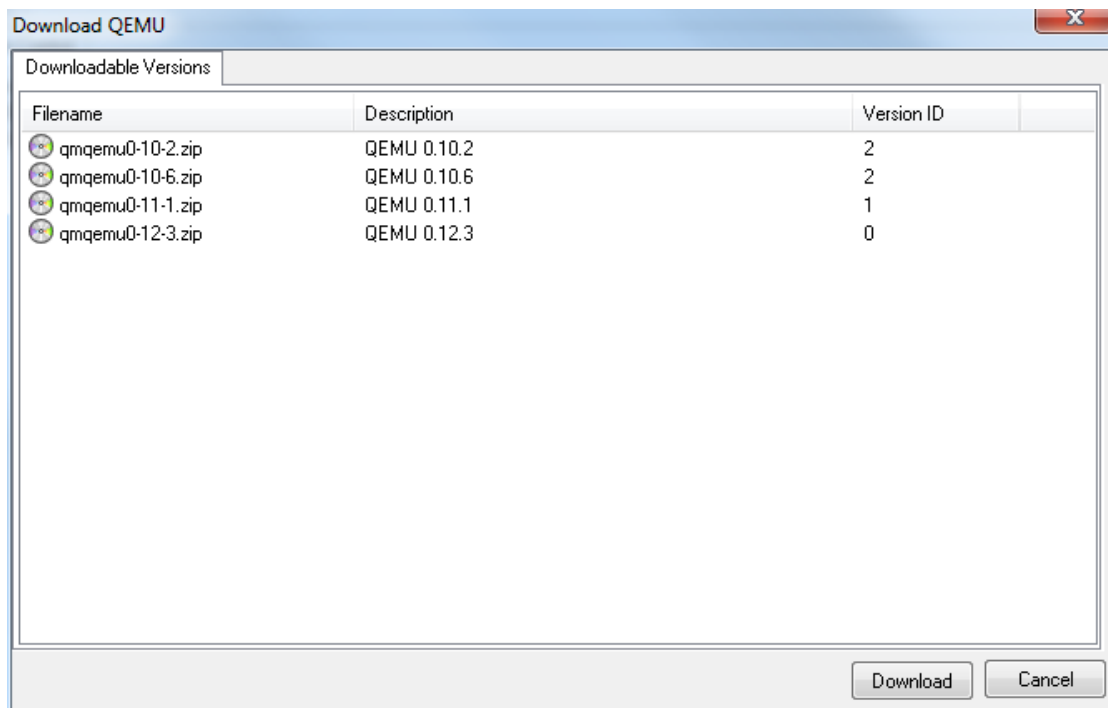
Default – If enabled this will be the default version displayed when creating a new virtual machine.

To create a new QEMU version definition click the New Button 



You will then be asked whether you wish to install another QEMU version from the Qemu Manager download site. These special editions of QEMU are designed to work with Qemu Manager.

If you wish to download a QEMU Version click “Yes” otherwise click “No” to specify the details manually.



If you select yes you will be prompted with a list of downloadable QEMU Versions. Select the version you require and click the “Download” button.

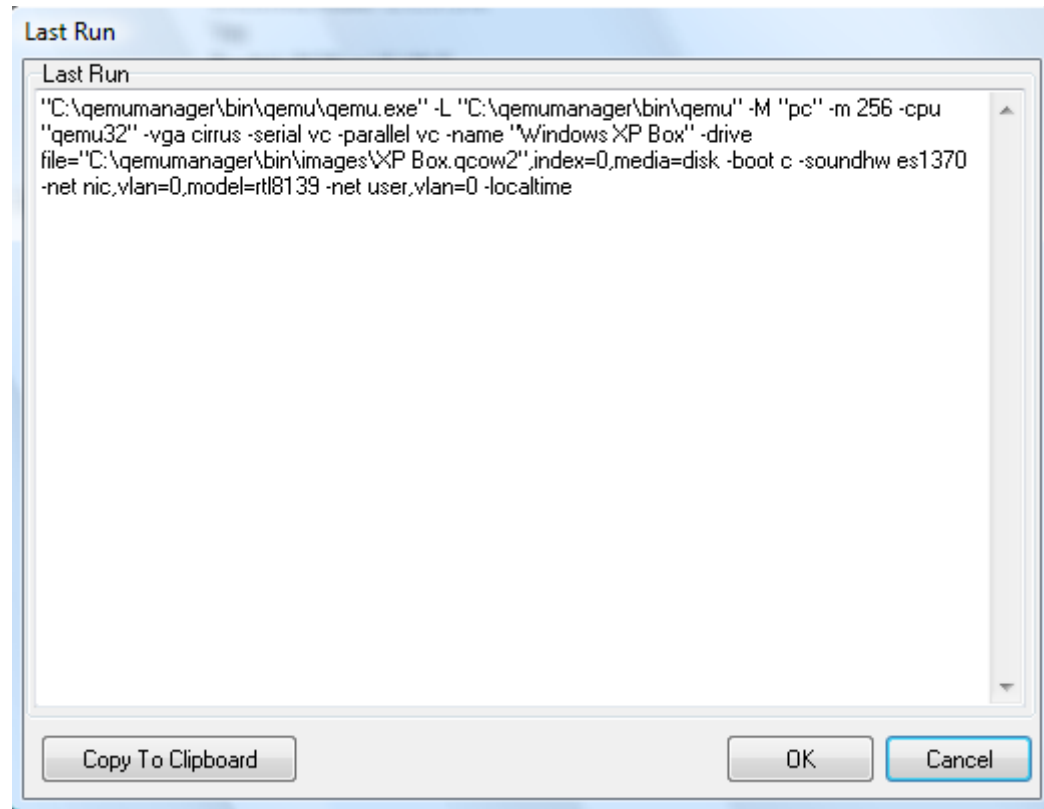
Qemu Manager will then proceed in installing the QEMU Version you selected.

## **Chapter 10. Misc Settings**

Qemu Manager also has the following other features, all these features can be found by clicking the "Options" menu from the menu bar at the top of the main Qemu Manager window.

Install KQEMU Accelerator – This option allows you to install the kernel mode QEMU accelerator. You can also uninstall it by selecting the uninstall option below it.

Show Last Run Command



This window allows you to view the last executed virtual machine command line text. This is useful for debugging, or learning more about QEMU yourself, you can copy the text to the clipboard by clicking the relevant button.

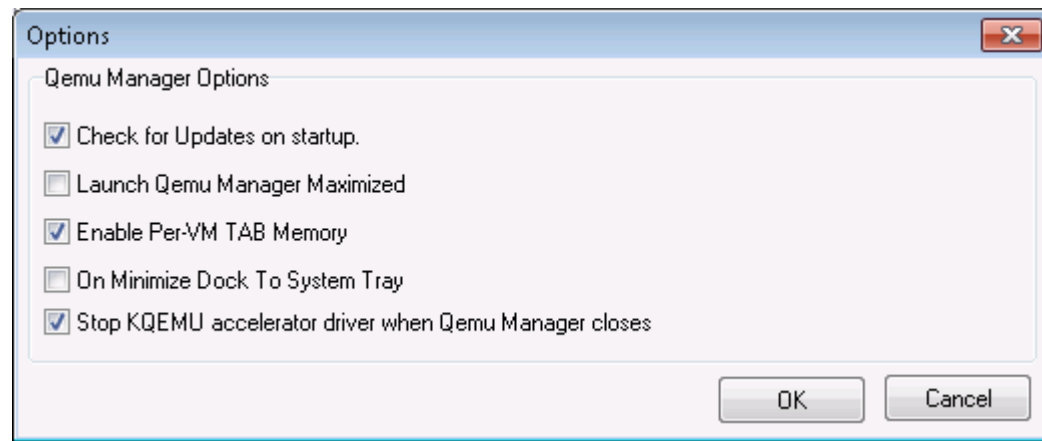
Create New Virtual Disk – This option allows you to create a new virtual disk and save it in the location of your choice.

Browse Default Media Image Folder – This option will display the default media store folder.

Stop ALL accelerator drivers on Qemu Manager Close – This option will ensure the KQEMU driver is stopped when Qemu Manager closes.



## Qemu Manager Options



### Check for updates on startup

This option will allow Qemu Manager to check for updates when it's started.

### Launch Qemu Manager Maximized

Selecting this option will maximize the Qemu Manager window, when the program is started.

### Enable Per-VM TAB Memory

Qemu Manager contains 5 Main Tabs at the top of the main window (Depending on the options you have selected).

Qemu Manager can remember what tab you was last using before moving to another virtual machine. If you require this option tick this box.

### On Minimize Dock to System Tray

Selecting this option will place Qemu Manager on the system tray when you minimize the main window.

### Stop KQEMU accelerator driver when Qemu Manager closes

Selecting this option will stop the KQEMU accelerator driver when Qemu Manager is closed.