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PARAGON SYSTEM UPGRADE UTILITIES 2010 SUITE

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VIRTUALIZING SYSTEM FROM ITS BACKUP IMAGE

With our product you can virtualize your Windows (XP, Vista, or 7) based system directly from its backup image, providing it's been made with Paragon software.

Let's consider a number of situations when this functionality can be of great use:

- If your computer is under service but you need to work with your applications on some other computer;
- If you need to work with old applications you can't launch on your current PC.

But before you start, please make sure the following conditions are met:

1. You've got a backup image of your Windows.
2. Your hard disk has enough free space to store a virtual image of your Windows (depends on the system).
3. You've got one of the supported virtualization software (MS Virtual PC, VMware Workstation, or VMware Fusion). You can get MS Virtual PC for free if you've purchased Windows 7 Professional or higher and have got a CPU with the Intel-VT or AMD-V support). As for VMware - you can purchase it online or at a local software store.

If everything is OK, please consult our step-by-step guide that demonstrates the whole process for MS Virtual PC.



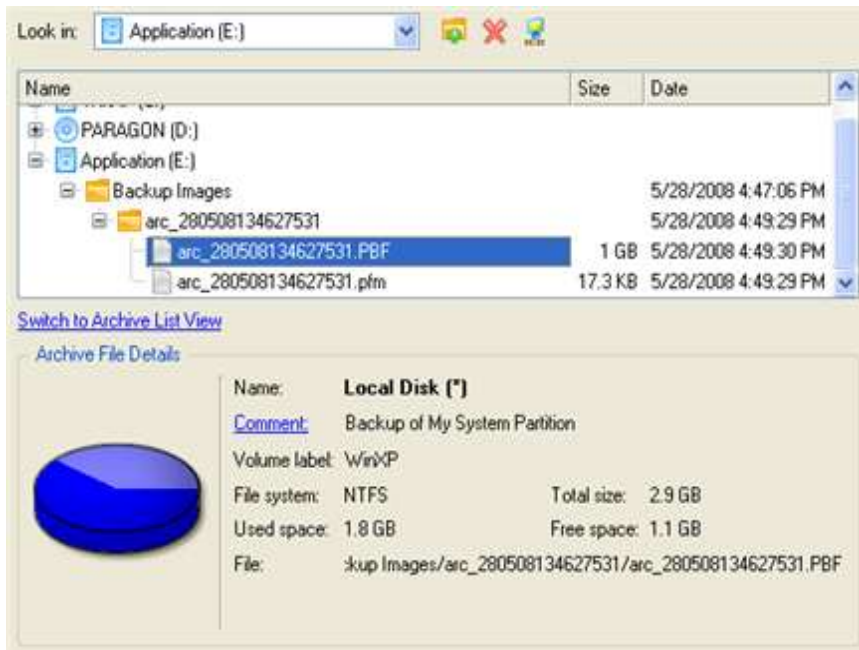
To know more about system virtualization and benefits it offers, please consult the "Smooth and Secure Migration to Windows 7" user guide. Moreover you can find there how to back up your system and data, prepare a bootable recovery environment based on WinPE 2.1 or Linux/DOS, etc.

CREATING A VIRTUAL DISK OUT OF YOUR WINDOWS BACKUP IMAGE

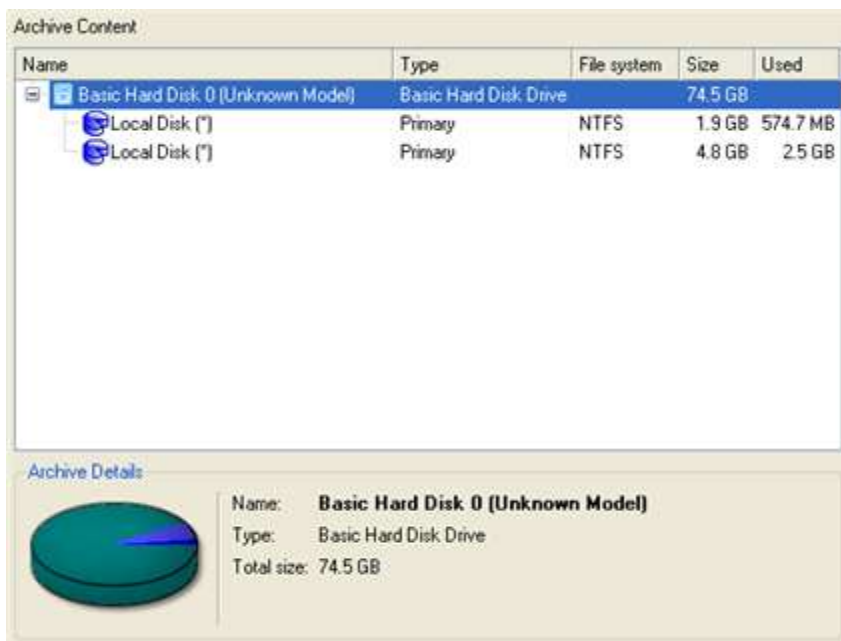
1. Launch the **P2V Restore Wizard**.



2. Browse for the required backup image of your system. The section below (i.e. Archive File Details) will also display a short description of the selected image.



3. On the next page specify exactly what you need to virtualize, only the system partition or the entire hard disk (in case you have to do with a hard disk backup image).



When having to do with a hard disk backup image, it's pretty enough to select the system partition only to make your Windows start up in a virtual environment. However that doesn't guarantee all your applications will work, as they can be installed on the other partitions of the disk.

4. Choose your virtualization software vendor and a number of additional parameters, including.
- **Type of the virtual disk.** You can either create an IDE or a SCSI virtual disk (relevant for VMware only);
 - **Create a split disk.** You can choose whether to automatically cut the resulted virtual image to files of 2 GBs or not (available for VMware only);

- **Pre-allocate all disk space.** You can choose whether to pre-allocate all space of the future virtual disk, or do it dynamically;

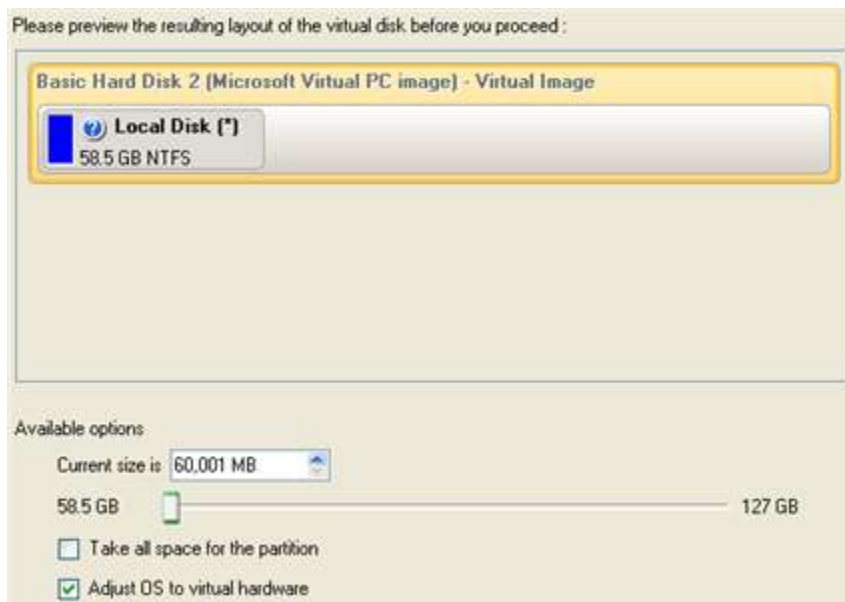


Not all vendors may be available to choose. If the capacity of the selected object exceeds the maximum capacity for a certain virtual disk, its vendor will be shadowed.

5. Depending on your choice the next page of the wizard enables to set the following parameters:

For a separate partition

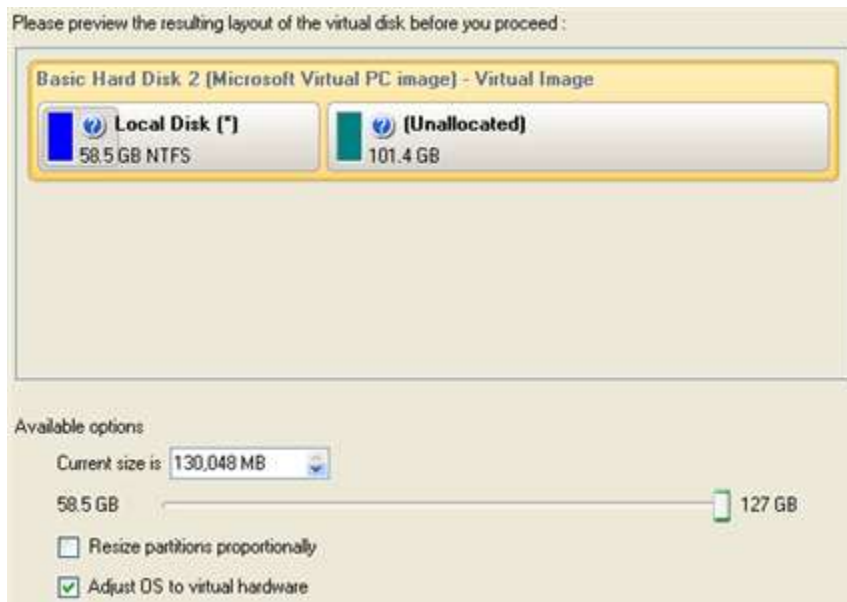
- **Size of the virtual disk.** By default the program offers to create a virtual disk exactly the size of the selected object, which you can upsize however. Please note, you can only increase size of the resulted virtual disk;
- **Take all space for the partition.** If you upsize the resulted virtual disk, you can choose whether to occupy the whole disk space by that partition or not;
- **Adjust OS to virtual hardware** to make sure the operating system will be bootable after the operation.



For a hard disk

- **Size of the virtual disk.** By default the program offers to create a virtual disk exactly the size of the selected object, which you can resize however.
- **Resize partitions proportionally.** If you upsize the resulted virtual disk, you can make the program proportionally change the size of partitions keeping their relative order intact.

- **Adjust OS to virtual hardware** to make sure the operating system will be bootable after the operation.



The maximum limit you can downsize the virtual disk is the capacity of its first partition.

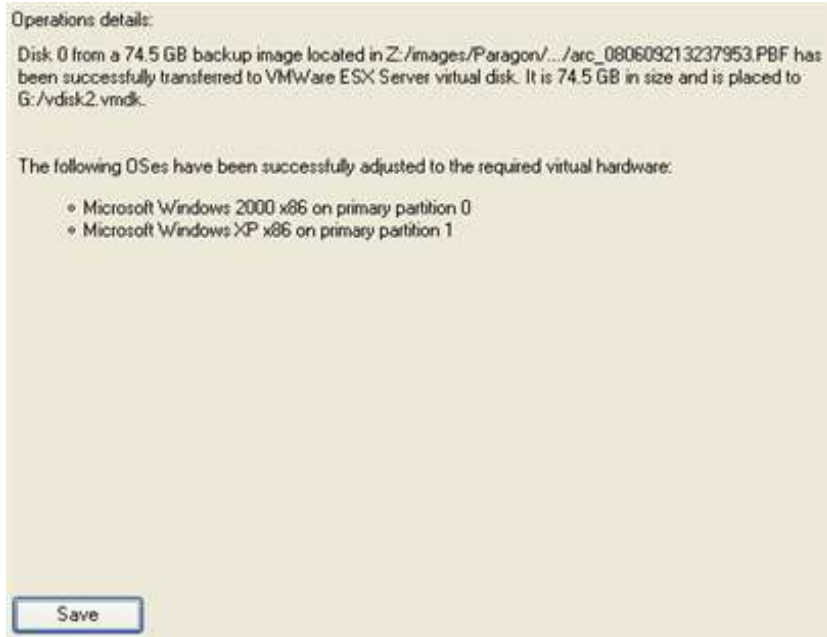
6. On the next page of the wizard set a file name for the resulted virtual disk and its location. Besides you can also provide a path to the integration package of your virtualization software (if necessary).

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It's strongly recommended to provide a path to VM Tools/Additions ISO image if you transfer Windows XP to a VMware SCSI disk, otherwise your system won't boot after the operation.

7. The wizard will provide a detailed report on successful accomplishment of the operation. You can save it by clicking the appropriate button.

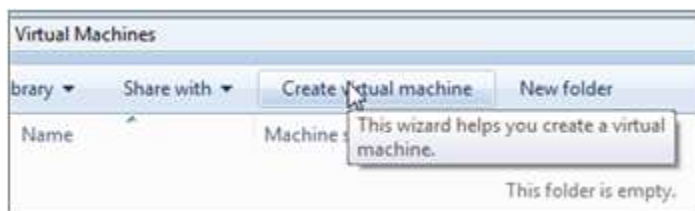


CREATING A NEW VIRTUAL MACHINE WITH THE PREVIOUSLY CREATED VIRTUAL DISK

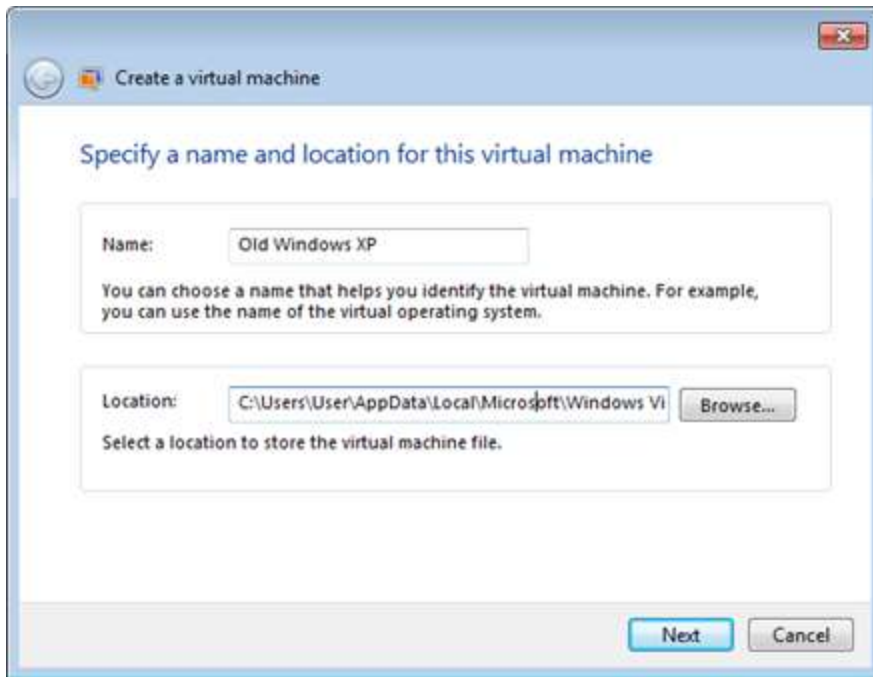
1. Click **Start**, and then select **Windows Virtual PC**.



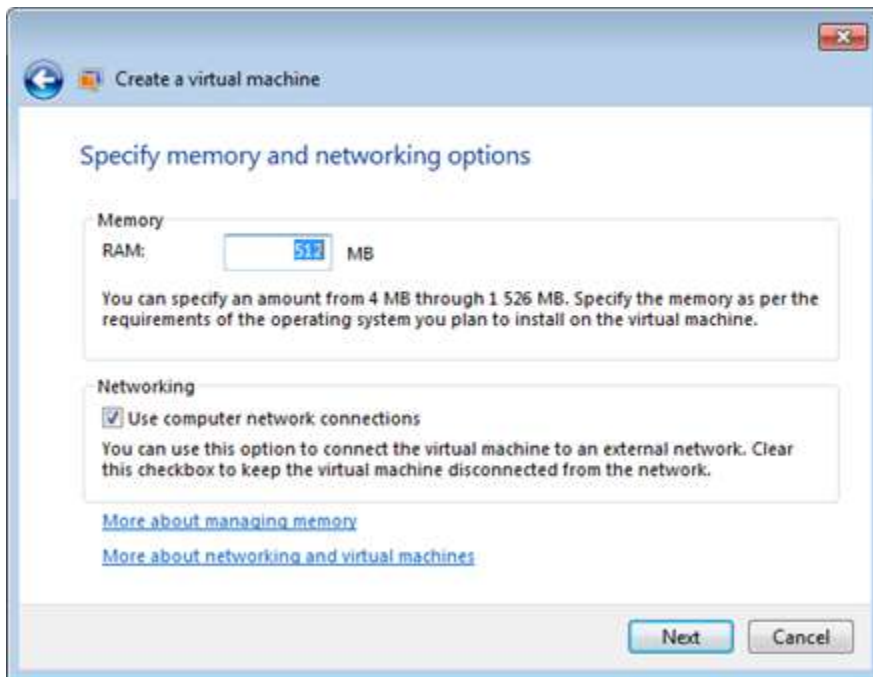
2. Click **Create virtual machine**.



3. Give a name to the new machine and modify the default location (if necessary);



- Specify an amount of RAM to allocate (512 MBs for Windows XP is recommended) and choose whether you need the network support or not by marking the appropriate checkbox.

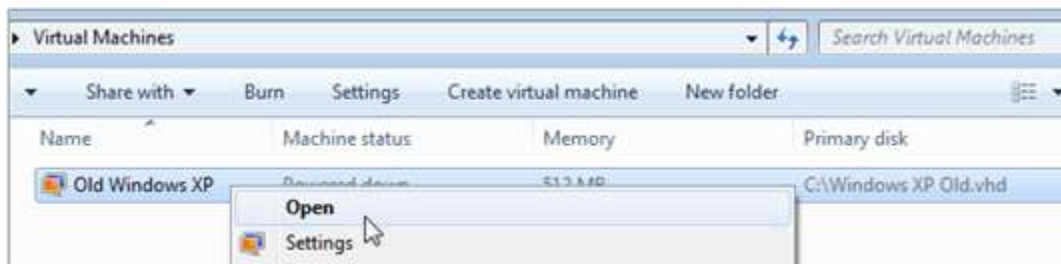


To know more on the subject, please click the links on this page.

- Select **Use an existing virtual hard disk**, then browse for the previously created virtual disk or manually type in a full path to it. Click **Create** to complete the operation.



6. Right click on the newly created virtual machine and then select **Open** to start up your Windows in a virtual environment.



To know how to create a new virtual machine as well as connect a virtual disk in VMware Workstation, please consult the “Smooth Migration to Windows 7” user guide.

KNOWN ISSUES FOR P2V SCENARIOS

1. You should install integration services (e.g. VMware Tools) on the virtual system yourself. We only guarantee its smooth startup.
2. At the startup a virtual machine (e.g. VMware Workstation) might notify you that the used virtual disks are of old format and require update. You can update your disks, since this procedure involves change of a version only, nothing else. This is done on purpose not to lose compatibility with the older versions of VMware.
3. After transferring Microsoft Vista and later versions to a virtual disk, you will need to re-activate license of the system. It's normal behavior as these systems keep tracking any change of hardware. Re-activation is legally justified in this case, as you transfer your system to another PC.

4. If you prefer to create a SCSI HDD when converting to a virtual disk of VMware Workstation or VMware ESX Server, we pick a driver for the HDD controller just the way VMware does, i.e. according to the found OS:
 - Windows 2000/Windows XP – Buslogic;
 - Windows 2003 (all editions including WinXP x64) and later versions – LSI Logic.

Thus if you will then connect the created virtual disk to a virtual machine with another type of the adapter, the system won't start up. Please use our P2P Adjust Wizard to install the required driver.

5. If you convert a partition/hard disk with Windows XP to a SCSI virtual disk of VMware Workstation or VMware ESX, it's required to add the VMware SCSI driver from outside, since Windows XP doesn't have it. To do that we try to find an installed version of VMware Workstation on your computer to extract the necessary driver. If failed to find, we will ask you to provide a path to the VMware Tools ISO image.
6. We can smoothly convert a hard disk with several operating systems. But according to [Issue 4](#), when converting to a SCSI virtual disk of VMware Workstation or VMware ESX Server, for different versions of OS, different controller drivers will be installed. VMware however cannot emulate different hardware for each operating system of one virtual machine. To tackle this issue, please use our P2P Adjust Wizard to install the LSI Logic driver under Windows 2000/Windows XP, then select the LSI SCSI controller for your virtual machine.