Installation of Winisis on Windows 8 (64 bits) using Oracle Virtual Box

Ernesto Spinak – 15/07/2013

❖ **Introduction**

Winisis is a Windows application that uses program libraries for 16 and 32-bit systems, so it is not posible to execute the program directly in a 64-bit Windows environment. In order to make execution of the program possible it is necessary to install a **VM** (*Virtual Machin*e) in the 64-bit system. A **VM** is a software application which emulates a computer on which you can install a different operating system and allows you to run programs written for earlier versions of Windows, or for another operating system such as Linux.

In previous documents it has been explained how to install on Windows 7/64 systems, using in general the application Vmware Player, or the options "*Windows XP Mode with Virtual PC*" which is the recommendation for Windows 7/Professional, and for the version Home Premium the alternative *Windows Virtual PC only*. For these cases refer to the documents at:
http://www.abcdlive.com.ar/wiki/doku.php?id=manualesiis

In this document we will explain how to install a VM in Windows 8 using *Oracle Virtual Box*, because we consider it easier to use than Vmware Player (which functions correctly in all respects).

In the first place, we must state that the solution "*Windows XP Mode with Virtual PC"* from Microsoft is NOT available for Windows 8, and the recommended solution is to install Windows 7/32 as a VM on a Windows 8 host.

This means that:
- Before installing on your PC the program "*Oracle Virtual Box*" it is necessary to have a CD with the version Windows 7/32 and a valid licence number. It is recommended to write down this number and have it to hand.
- During the installation, you must register the name of the user that logged into the system, the name of the computer and the workgroup if you are networked. If you are not on a network the installer will assign by default WORKGROUP. To determine this information on a system with Windows 7, open the **Start** menu of your PC, right-click the "Computer" option, then select "Properties" and in the central panel of the window that opens these data will appear: Name of system, Workgroup. Write them down because you will need them.
- The complete installation of the application *Virtual Box Oracle* plus the installation of the Windows 7/32 operating system can take about an hour. If you do not have experience of installing operating systems from a CD we recommend that you seek help from someone.

❖ **Procedure for installing Oracle Virtual Box**

The procedure consists of two steps (1) install Oracle Virtual Box (or the VM) on your 64-bit system; (2) install Windows 7/32 on the newly created VM.

Link to the site for Oracle Virtual Box: https://www.virtualbox.org/wiki/Downloads

Selection of the version of **VirtualBox platform packages**
- *VirtualBox 4.2.16 for Windows hosts x86/amd64*
- Proceed to download into a temporary directory of your Windows 8 system
- Execute the installation procedure accepting the suggestions of the installation program.
- The installation creates an icon on your desktop "Oracle VM VirtualBox"
- Double click on the icon and proceed to create a virtual machine (**VM**)

figure	Explanation
1	In order to start the program, we select the icon "***new***" and start to create a VM, which we will call ***PCVirtual***, indicate the Type: Microsoft Windows, and Version Windows 7 (it can be any other 32-bit version for which you have a licence, including XP although Microsoft will no longer give support). At the end of each step click the button "Continue".
2	To determine what memory to assign, we recommend a minimum of 1GB if installing Windows 7, although for XP you can use 512M. This depends on the memory of the host (Windows 8, which assumes that you have a minimum of 4GB).

figure 1   *figure 2*

figure	Explanation
3	Allocation of Hard Disk: select the option *Create a virtual hard disk now*
4	File type for hard disk: select the default option

figure 3

figure 4

figure	Explanation
5	Storage method on the hard disk, select the option "*reserve dynamically*"
6	Location of the file and size: accept the recommendation of the installer. Then click the button "Create" and the procedure should complete successfully. You have a functioning VM.

figure 5

figure 6

Installation of the 32-bit Operating System

When you have created the VM (though without an operating system) you should install the 32-bits operating system of your choice. For the sake of example we will use Windows 7 32 bits.

Reboot the VM by clicking the right button on the menu for the name of the VM, in our case PCVirtual, and select "*Start*", as you see in the image on the right (figure 7).

As there is still no Operating System installed, look on the CD/DVD used when your computer system was installed for the first time.

Now you should install the version of Windows that you have available on an external support medium (ISO file or CD/DVD). The installation is a standard procedure, or solicit help from someone with experience.

Finally you will have the operating system running on the Oracle Virtual Box.
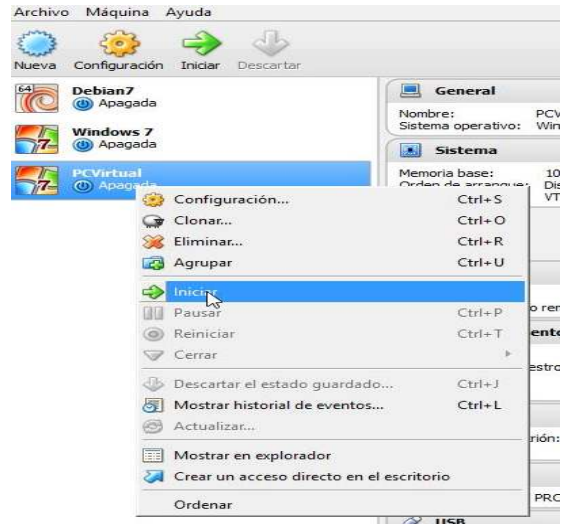
figure 7

figure 8

To initialize the VM, the initial Windows screen will appear with the user which was assigned at the time of installation, as you can see in the image on the left (figure 8).

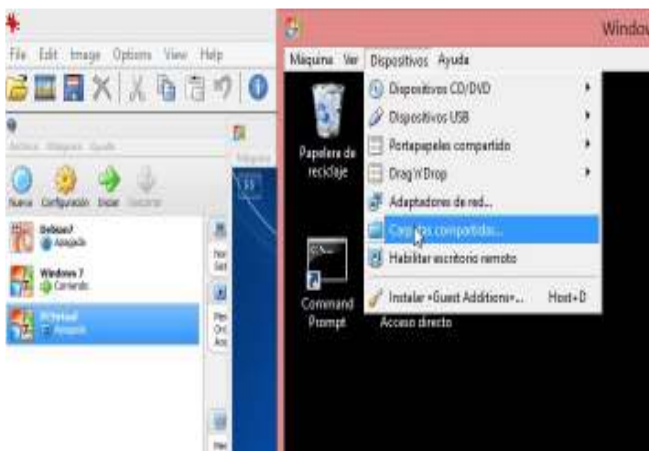From this moment you can parameterize Windows in the way you find most convenient.

figure 9

Before proceding to install applications, we must say which folder on the system HOST (Windows 8) will be shared by the VM.

Click on the option *Devices* on the top bar, and then *Shared Folders*, as is shown in the image on the left (figure 9).

NOTE: Oracle VBox allows the folder on the host to be made shareable from within the VM; it is not necessary to assign this attribute from the external machine (host).

For example, we have the installer winsis15_3b.exe in the directory `c:\temp` of the Windows 8 machine, and from there we will copy to the VM, mapping that folder from the VM. Select the options of `c:\temp` as "*Automount*" and "*Make permanent*" (figures 10 and 11 below).
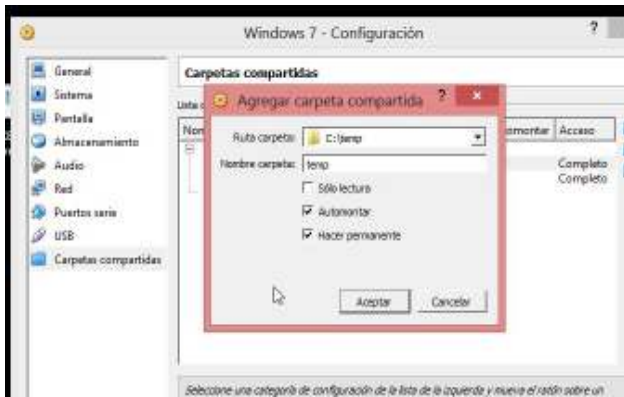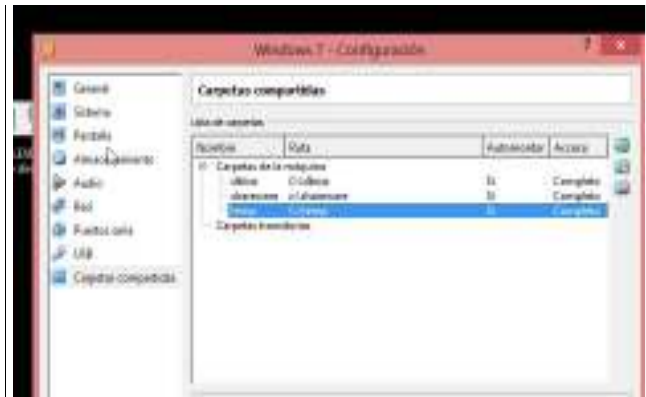

| figure 10 | figure 11 |

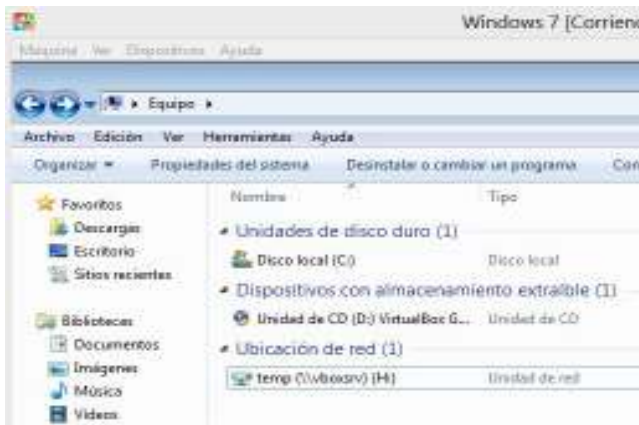To make the "shared" attribute effective, you need to restart the VM.

figura 13

Now you have Access to the folder `c:\temp` of the host as if it were another drive (in the same way as on a LAN), as you can see in the image on the left (figure 12).

The letter `H:` is assigned because the system assigns the first letter available.

If you wish you can change the mapping to another letter in the usual way, but then you will need to restart the VM for it to take effect.
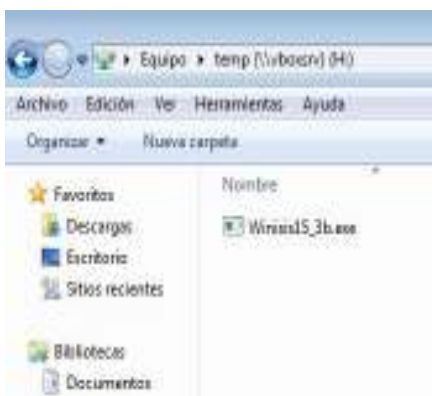

figura 13

Installation of Winisis on the VM

- Go to `H:` and copy the installation file (.exe) into any local directory of the VM
- Proceed to run the installation program of Winisis, in the conventional way.
- Hint: copy the .dll files which are found in the directory c:\winisis\CTL3D into the directory c:\winisis
- On the Desktop of the VM create a shortcut to Winisis, click the right button, select *Properties*, and in *Advanced Options* check the option *Run in separate memory space.*

At this point you have a default installation of Winisis, with the bases CDS y THES in the folder `\winisis\data.`

In this way we have the basic installation on our own self-contained VM. Suppose that we need something more advanced. For example, that the databases are in a shared directory on a

network, with Access also for other users. These users may be on the LAN, either 32 or 64 bits, or accessing our Windows 8 system on a *peer-to-peer* connection.

As an example, let us suppose that the databases are on our 64-bits host machine, but we want to give Access to these from 32-bits and 64-bits machines, in this case our Windows 8. Note that for the ISIS databases (.mst/.xrf files, inverted files, etc) it does not matter whether the system is 32 or 64 bits. It is transparent to CISIS.
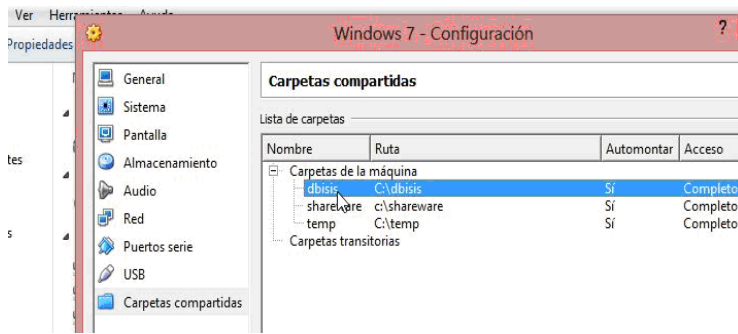

figure 14

We go to create on the Win 8 host a directory `c:\dbisis` and copy all the ISIS databases.

This directory will be mapped from the VM with the name `E:` After the mapping the VM must be restarted for it to take effect.

Then we copy our databases from \winisis\data to `E:\`

The next step is to create the `<dbn>.par` files for the databases that point to the directories where they live (the same as has always been needed for access over a LAN). Now the databases are on the host machine (in this case our own Windows 8), as seen in figures 15 and 16 below.
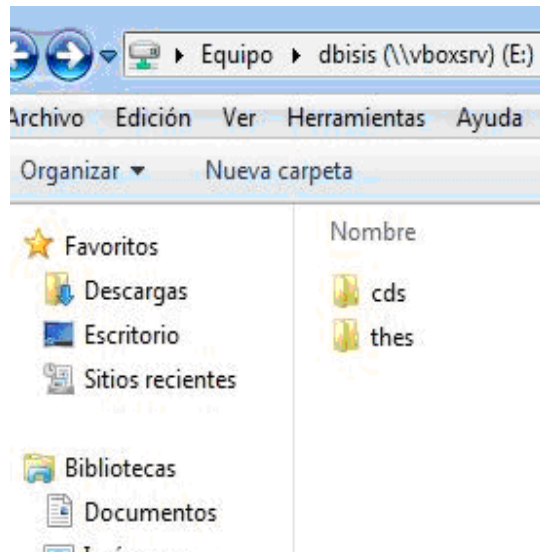

figure 15

figure 16

If you want to have databases on an a LAN external to your Windows 8 machine, you must configure the Windows of your VM to have access to a network. In this case you need to have defined a workgroup, assign the IP on the network, etc, which is a common task for an IT profesional, but does not depend at all on Winisis.

Note:
Remember that the host and the VM act as TWO separate machines. When you are typing or moving the mouse in one, it is not live in the other and vice versa. On entering Win 7 you are encapsulated in its environment, and to get the mouse out you must press the key `[Right Alt]`. You can toggle full screen or reduced screen with the keys `[Right Alt] + [Enter]` alternately.

❖ AcknowledgementS