

Using SunType Classified and Synaptic Subscription/Circulation and A/R Software with Windows 7

The Classified Group has tested our SunType Classified System software and the programs formerly sold by Synaptic Micro Solutions Co-op that we support, and they do run perfectly well on 32-bit Windows 7. Here's what you need to know:

Windows 7 Version Requirements – 64-bit vs. 32-bit

If you want or need to buy a new computer to run SunType, Synaptic, or many other legacy programs, it will nearly certainly be equipped with Windows 7. Many of these machines come out of the box running 64-bit versions of Windows 7. Our programs, and many others, *do not work directly with 64-bit Windows*. Be sure to read the following section on Hardware Virtualization before settling on an approach to this issue.

The 64-bit version of Windows, which was available starting with Windows XP, does not support the standard NTVDM virtual DOS machine. That hasn't mattered much until recently, when manufacturers started pre-installing the 64-bit version instead of 32-bit. Ironically, even though 64-bit hardware is readily available, very little software requires, or is even available, in 64-bit versions.

So far, our experience with some manufacturers, including Dell, has been that they will send you a copy of 32-bit Windows to be installed on a new machine if you contact them. Unfortunately, this does mean that you'll need to wipe out the factory installation with the 32-bit version installation.

If you are buying a machine, we recommend that you specify that you want 32-bit Windows *before you buy the machine*. We know of one case, at least, where Best Buy suggested returning the machine, but calling Dell directly took care of the problem.

Our suggestion is that you consider buying your new machines from your local business system dealer or directly from manufacturers like Dell or HP. Avoid the big box stores like Best Buy and the like unless you're looking for machines that are better suited to playing games and multi-media rather than business use.

Hardware Virtualization – Software Solution to the 64-bit Problem

Virtualization is the process of creating an artificial computer using software running on an actual physical computer. Those familiar with Macintoshes probably remember the various Soft PC and Soft Windows incarnations that preceded the Intel-based Macintoshes. They could be slow, cranky and quirky in their implementation, so weren't really that practical.

Current generations of hardware and software have allowed major improvements in performance and stability of virtual machines. From our testing, virtualization can be used to solve the 64-bit compatibility problem without fundamentally altering the original software installation and setup.

There are several options that support virtual PCs, depending upon the host configuration. Microsoft itself offers a virtual XP setup for Windows 7, but it wasn't tested at the outset because it required specific hardware virtualization-enabled processors. That requirement has been dropped, and it's likely that the SunType/Synaptic programs will run successfully using the Microsoft solution.

In our testing, we used the Sun Virtual Box which is available from Oracle/Sun. It comes in a Personal/Evaluation version at no charge, as well as an Enterprise version at \$50 per user. Many SunType users will probably qualify for the free license, at least at first.

Basically, the Sun Virtual Box allows you to create up to eight virtual machines per host running a variety of Guest operating systems on Windows PCs, Mac OSX, Linux, OS-2 and Solaris hardware hosts. Guest operating systems include DOS, most versions of Windows, and several others. For our purposes, we are talking about XP and 32-bit Vista and Windows 7 for the Guest systems.

Our main test system is an HP7800 with a Quad-Core 8300 processor (which does not include hardware virtualization), 2 GB of memory and a large SATA hard drive.

On our test system, we have run SunType and Synaptic software using virtual machines running Windows XP Pro and Windows 7 32-bit, while the host machine (the real one) is running Windows 7 64-bit. We used the virtual machine to access SunType software running on a separate server.

At this point, we still recommend installation of 32-bit Windows as the best solution for most users. The virtualization approach amounts to having 2 machines on the desk instead of just one, with separate updates, anti-virus, licenses, etc. Given the lack of compelling 64-bit software, it really doesn't make that much sense.

Just remember that there are so many options, network-wise, that you or your network support group need to talk to us as part of the planning process.

Pervasive SQL Requirements

For those of you using Pervasive SQL Workgroup or Server installations to run legacy Btrieve programs, here is what you need to know. If you are still using the old %btrieve /e+command in starting the programs, we strongly recommend that you install Pervasive SQL for its benefits in speed, reliability and integration into the Windows environment.

Pervasive has certified its version 10.3.1 to be compliant with Windows 7. For the most part, this requirement mostly impacts the SQL (%relational+) part of the program that *our programs do not use or need*. We have determined that it is physically possible to integrate Windows 7 workstations into older versions of Pervasive SQL systems for the purpose of running our software.

If you are installing a whole new system, or replacing all of your workstations with Windows 7, it will probably make sense for you to upgrade the entire Pervasive SQL system to version 10.3+.

There are two parts to a Pervasive-based system:

1. The %server+ is the machine that actually holds the files and does the actual updating of the files. Depending upon the network, the %server+ can be a network file server or it can be one of the workstations designated to store the files. There are several kinds of Pervasive software that may be running on the server machine, but you will have to call if you have questions specific to your system.
2. The other part of the Pervasive system is the %client+, which is a machine running special software that allows it to communicate with the %server+ in order to do the actual work. If the server is also a workstation, it will be running both %client+ and %server+ software.

The key to using Windows 7 is that the workstation must be used with the 10.3+ *client*, regardless of what version is running on the server. Pervasive has always allowed client software to access older versions of the software server, but older client software cannot be used with a newer server engine.

The licensing implications of this situation are unclear, to us, at least. Pervasive SQL workgroup and server versions are licensed according to the number of users to be supported by the server

software. Pervasive does not sell client software as a separate product, but the 10.3+ client software is available as a separate download on the Pervasive website if you have or establish an account there. It's not a small download, either . it's about 70Mb. We have not asked Pervasive for their position on this topic, but we suspect that they'd say that you can't use the client without a license for that version.

Our suggestion is that you acquire a single-seat Workgroup license for each Windows 7 machine if you're only buying one or two. They can be had from provantage.com for about \$40. You can buy workgroups up to five users per server engine, and you can also buy single-user license increases for the second and subsequent machines.

Again, remember that there are *so many options*, network-wise, that you or your network support group need to talk to us as *part of the planning process*.

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