VST Installation and Management Strategies

Hi all,

I often see a lot of strange advice regarding installations of VST instruments to work with Finale. For instance, this information (straight from the Finale knowledgebase) is not really the ideal way of setting up Kontakt 4 to work in Finale:

SNIP
Close Finale. Copy the Kontakt4.dll file from the following folder:

Windows XP: C:\Program Files\Native Instruments\Kontakt 4\VSTPlugins
Windows Vista/7 C:\Programs\Native Instruments\Kontakt 4\VSTPlugins

Paste the Kontakt4.dll file to the following folder:

Windows XP: C:\Documents and Settings\All Users\Application Data*\MakeMusic\Finale 201x\VST Support
Windows Vista/7: C:\ProgramData*\MakeMusic\Finale 201x\VST Support
SNIP

So.. what's wrong with doing that procedure?

First, it's good to look at what makes up a VST Instrument (VSTi). There are normally 3 things:
- The VSTi DLL File - this is used by the host program (Finale or some other notation program or DAW) to interface with the VSTi
- The Support Files - help files, documentation, other DLL libraries, etc used by the VST instrument
- The Samples - these are the actual sound files, normally located on a different drive for best performance

When you install Kontakt for instance, it asks you for locations for all three components. The support files should generally be installed into the recommended folder unless there is some good reason to do otherwise. The bundled freebie samples should generally be placed on another drive to ensure adequate performance. If you accept the default location for the VSTi DLL file, it will most likely get placed in the location that MakeMusic refers to. You can then copy it to Finale's VSTPlugins directory and all is well.

Now, with this picture, what happens if an update for Kontakt comes out? The updater tells you there is a new patch for Kontakt, and you choose Yes to install it. Now your Kontakt is all up to date. However, what Kontakt does not know is that you had manually copied the VST DLL file into the Finale VST folder. It doesn't know that file exists, therefore it won't get updated.

You could simply then go and copy the updated DLL file into the Finale folder to overwrite the old one, but then you have to do this manually every time there is an update - for Kontakt, there are updates several times a year. If you use multiple VST instruments and effects, and there are updates for more than one, and you use not only Finale but some DAW like Cubase or Reaper, then you will need to copy these DLL files to two different locations (the VST path for Reaper and the VST path for Finale) every single time there is an update.

Complicating matters further is the fact that 64-bit systems are becoming more prevalent, and since Finale is a 32-bit application, it will fail to load a 64-bit VST plugin (giving a validation error). Often the 64-bit plugins have the same file names as the 32-bit plugins, which confuses things if you do a search for it and find more than one file with the same name (which are in fact different).

To avoid many of these problems, this is my suggested setup/procedure:

Step 1: Create a shared location for VST plugins which will be used by all your DAWs and notation programs

On 32-bit Windows versions, create a folder for VST instrument (and effects) plugins:

C:\Program Files\Common Files\VSTPlugins

On 64-bit Windows versions, create two folders for VST instrument (and effects) plugins:

C:\Program Files\Common Files\VSTPlugins
C:\Program Files (x86)\Common Files\VSTPlugins
(the first is for 64-bit VST plugins, the second is for 32-bit VST plugins)

The choice of the Common Files path is based on Microsoft recommendations to use this folder to store components that are used by multiple applications. Since VST instruments and effects are used by multiple applications, this perfectly fits the description.

Step 2: Install your VST Plugins

When you are installing a VST plugin that is 32-bit only, make sure you change the path that it

will place the VST DLL file during the installation process:

If your Windows version is 32-bit, set the path to: C:\Program Files\Common Files\VSTPlugins
If your Windows version is 64-bit, set the path to: C:\Program Files (x86)\Common Files\VSTPlugins

When you are installing a VST plugin that is both 32-bit and 64-bit, set the VST DLL install paths as follows:

If your Windows version is 32-bit, you should get prompted for only one path (32-bit VST DLL), set it to: C:\Program Files\Common Files\VSTPlugins
If your Windows version is 64-bit, you should get prompted for TWO PATHS (where it should place the 32-bit VST DLL and where it should place the 64-bit DLL). Those two locations are the ones you made before:
64-bit VST DLL location: C:\Program Files\Common Files\VSTPlugins
32-bit VST DLL location: C:\Program Files (x86)\Common Files\VSTPlugins

Now, once you have done this, your applications will automatically place future updates into those same directories - if a patch comes out for Kontakt, it will get updated in the correct directory. All of your VST instruments will have their DLL files in these directories, so you will only have one location to add into your programs.

Step 3: Add your VST Plugins path into Finale and your other notation programs/DAWs

All notation programs and DAWs that I have seen (including Finale) allow you to specify additional VST DLL paths to search for VST instruments and effects.

In Finale, go into MIDI/Audio->Device Setup->Manage VST Plug-ins

On the bottom, you will see a plug-in directories pane with Add and Remove button to Add/Remove plug-in directories. Go ahead and add the 32-bit plugins directory (since Finale is a 32-bit VST host, it cannot use 64-bit plugins):

If your Windows version is 32-bit, browse to and select: C:\Program Files\Common Files\VSTPlugins
If your Windows version is 64-bit, browse to and select: C:\Program Files (x86)\Common Files\VSTPlugins

In your other DAW/Notation programs, follow a similar procedure:

In a 64-bit DAW/Notation program, add "C:\Program Files\Common Files\VSTPlugins" to the list of paths to search for VST DLL files in the DAW/notation software VST preferences. (NOTE: If your 64-bit DAW also has a "bridge" allowing it to use some 32-bit plugins, you may also want to add your "C:\Program Files (x86)\Common Files\VSTPlugins" directory here to allow you to use any 32-bit only plugins)
In a 32-bit DAW/Notation program on a 64-bit Windows system, add "C:\Program Files (x86)\Common Files\VSTPlugins" to the list of paths to search for DLL files in the DAW/notation software VST preferences.
In a 32-bit DAW/Notation program on a 32-bit Windows system, add "C:\Program Files\Common Files\VSTPlugins" to the list of paths to search for VST DLL files in the DAW/notation software VST preferences.

Now, all of your DAWs and notation programs are using these common directories to find plug-ins.

When you install a new plugin and tell it to install into the correct location as per step 2, it will be available in all your notation programs and DAW's without having to copy the files elsewhere. When these plugins auto-update, they will update everywhere without requiring additional copying of files.

There are only three minor disadvantages of this approach:
- Some programs do not let you to add additional VST DLL paths to the search list - this is somewhat rare but can happen.
- Software upgrades normally use new preference files and will require that you manually re-add the VST paths (ex. going from Finale 2010 to Finale 2011 might require that you re-add the VST path into the search list in Finale 2011)
- Some VST's with badly written installers on 64-bit Windows systems (IIRC, Garritan Aria is one of these) will force you to install the 32-bit and 64-bit DLL files to a single path, in violation of Microsoft's requirements. This is also fairly rare, and if you use one or more of these samplers, you will need to manually re-locate the 32-bit or 64-bit DLL to the correct path after install and after any subsequent updates.

All in all, I do suggest using my approach, or something similar. Unless you have a program that doesn't let you use more than one VST DLL path, it will save you time and effort, especially if you use more than one VST instrument/effect and more than one notation program/DAW.

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September, 2011