## Why are all computers shown with a Printers folder even if printer sharing is disabled?

devblogs.microsoft.com/oldnewthing/20081226-00

December 26, 2008



When you visited a computer on the network by typing \\computername into the address bar, Explorer showed you a Printers folder if the computer had printer sharing enabled. But starting in Windows Vista, the Printers folder is shown regardless of whether the remote computer is sharing any printers. Why did this change?

Communicating with the remote computer to ask it about its printers simply took too long. The <code>IShellFolder::EnumObjects</code> method returns an enumerator that produces a list of items in the folder. Think of it as the shell namespace version of <code>FindFirstFile</code>. When the <code>IEnumIDList::Next</code> method is called, it must produce the next item in the folder or return a code that means <code>Sorry</code>, no more items. There is no return code that means <code>Hey</code>, deciding on the next item is going to take a while, so maybe you should go do something else for a while and check back later when <code>I finally</code> have an answer for you. After all, <code>FindNextFile</code> doesn't have such a return code either. It returns the next file or says <code>No more files</code>. (Yes, there are also other errors that can be returned, but they aren't important here.)

Now, Explorer does the enumeration of folder contents on a background thread, so the UI remains responsive while all this querying is going on to determine whether or not to show the Printers folder, but a responsive UI is scant consolation if it's a responsive *Please Wait* message. If you went to a remote computer, the folder would show a flashlight while the background thread did its thing, and then two minutes later (or sometimes longer), it finally would show you what it found. That's two minutes of your life you can't get back. (I predict people will use that one sentence as an excuse to go off-topic.)

As I've quipped before, the fastest code is the code that never runs. Instead of trying to figure out whether a remote computer is sharing any printers with you, just show a Printers folder icon. Users who are interested in seeing the printers can double-click the Printers folder icon, and then they won't be too surprised to find that they have to wait a while for the remote computer to respond with its list of printers. Which might be empty.

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