Tech Tip #2: Status 161 and Checking License Usage

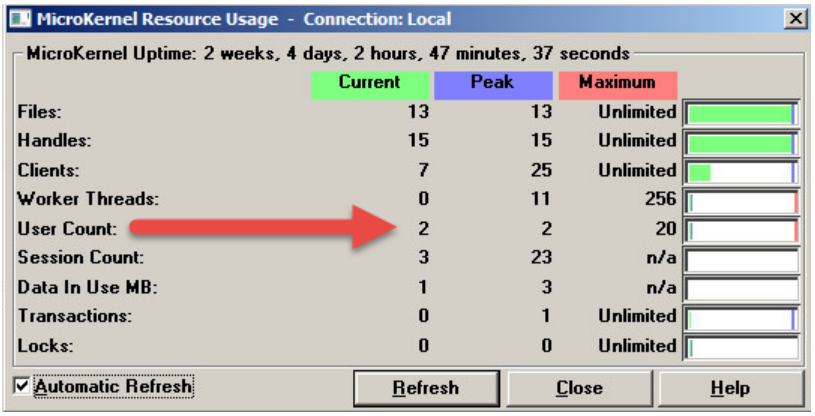
Overview: Verify license installation and usage, and use Monitor to find "dead" connections.

In our previous Tech Tip, we saw how to access the **PSQL Monitor** to get information about our database environment. Let's use this tool now to troubleshoot a real problem.

We'll start with an example where your users are getting a Status 161 back from their application. This is preventing anyone from logging on to the application. It should be noted that each application may display this error differently (and some may not display it properly at all), so the first thing to do is confirm that this is a true Status 161 error, and here's how:

Start the **PSQL Monitor** on the server. Or, if you are on a client workstation, open the **PSQL Monitor** and select *Options*/*Connect* to connect to the server first.

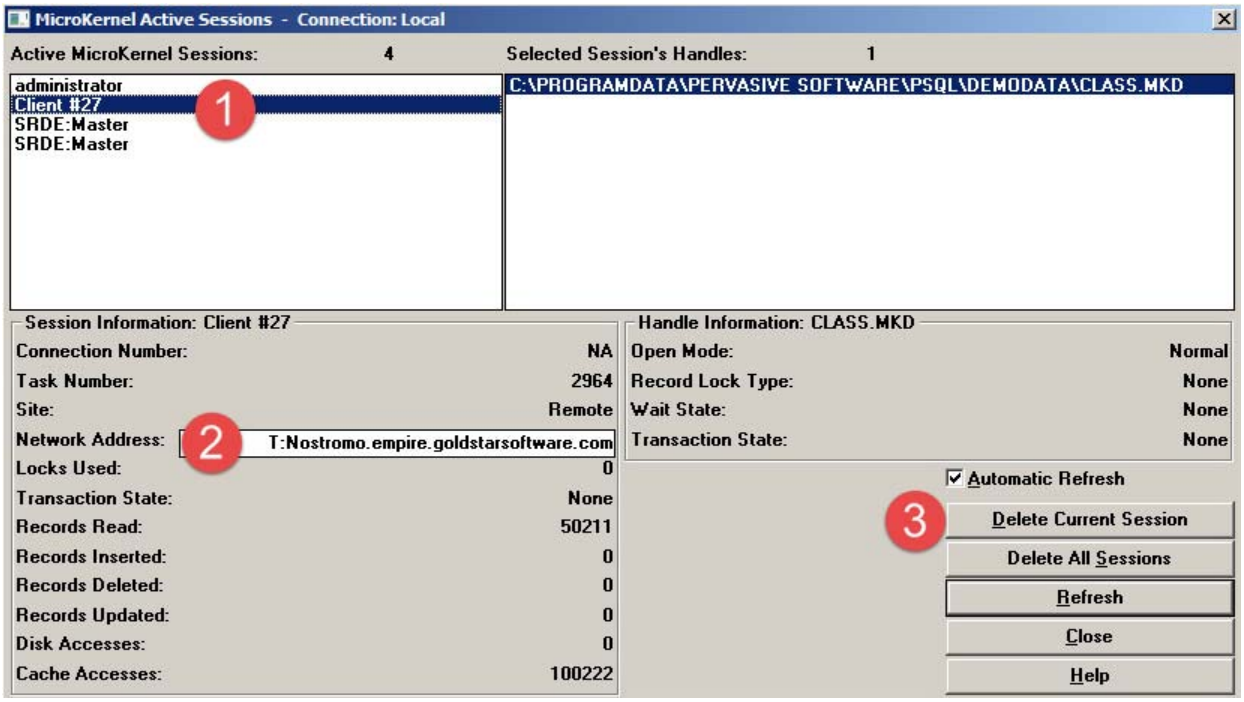
Open the *Microkernel*/*Resource Usage* menu item. You will see a screen like the following:



Notice the *Maximum* value in the *User Count* line. This should match your current license count. If it does not match, check your license in the *Pervasive License Administrator* first, as it may not have been applied correctly. [Note: if you see "N/A" for the User Count field, then you may have PSQL Vx Server instead, which tracks licenses by Session Count and Data In Use, instead.]

Note the value for *Current* and *Peak* User Count, too. In this example screen, the current value is nowhere close to the *Maximum* value, so this must not be a licensing problem with this server. It is possible that you are on the wrong server, or that the application is trying to open data files on the local computer without a proper engine licenses there.

If you DO see that the *Current* value is up near the *Maximum* value, then the next step is to go to the *Microkernel*/*Sessions* screen, which looks like this:



Click on each session description in the upper-left quadrant in turn (1). When you select each connection, a *Network Address* should be displayed in the lower-left quadrant (2). Write down each unique network address and repeat until you have seen all of the connections.

When done, the TOTAL number of unique *Network Address* values in your list should match your *Current User Count*, as reported in the *Resource Usage* screen in step 2.

While going through the list, you may find connections from users who have shut down their computer or have otherwise disconnected. These are known as “zombie connections”, because the server doesn’t know they are dead yet. If you find any of these, you can click on *Delete Current Session* (3) to terminate that connection, freeing up the session. When all sessions from a given network address are gone, the license will free up, too.

If you are constantly running into this problem, you can add more licenses to either a Workgroup Engine or a Server Engine by purchasing a User Count Increase license. Workgroup Engines can grow to up to 5 concurrent users in increments of 1 or 2, and Server Engines can grow to just about any size in increments of 6, 10, 20, or more. Contact Goldstar Software for pricing and availability of these licenses.

http://www.goldstarsoftware.com/prices11.asp