

Tech Tip #1: Monitoring Your Engine

Overview: Access the PSQL Monitor to see what your engine is doing right now.

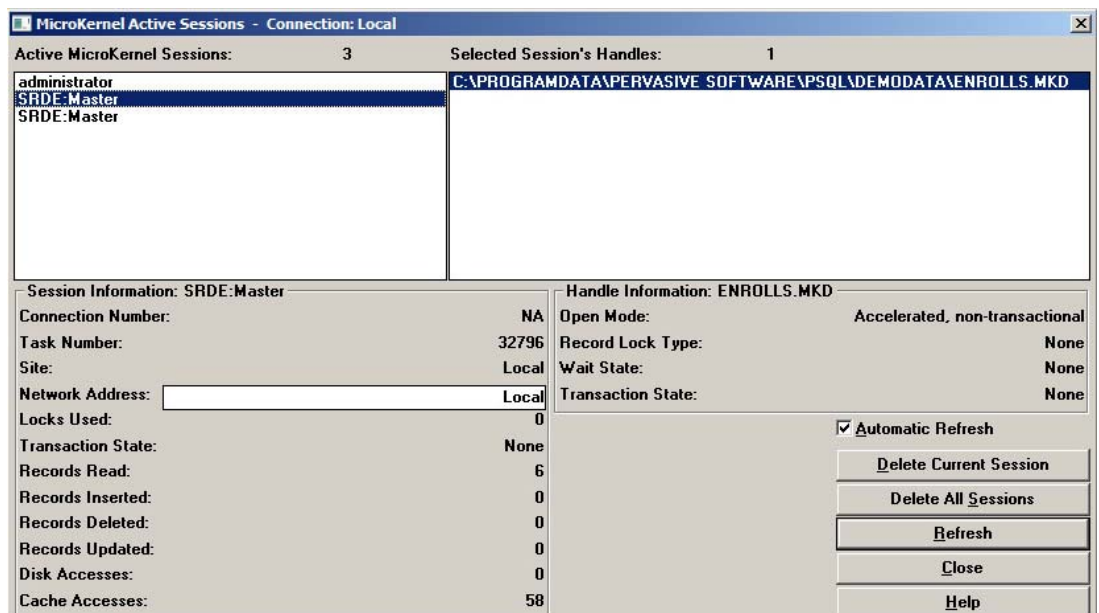
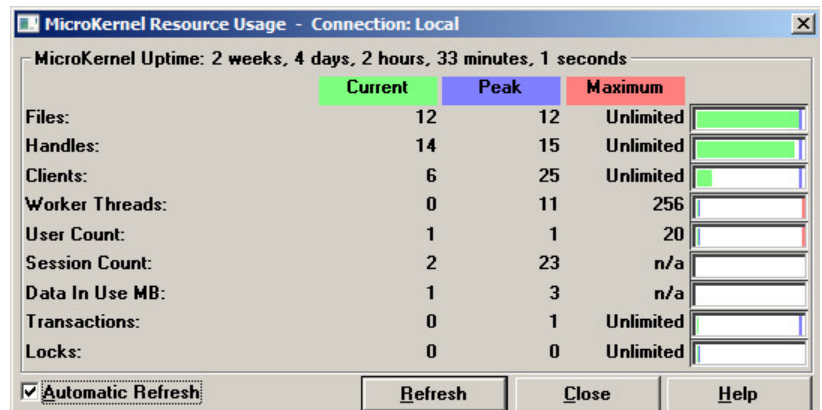
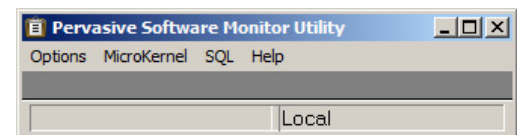
Welcome to the Tech Tip series! You are receiving this Email from Goldstar Software because you have expressed interest in the PSQL database engine by downloading a trial or upgrade. Goldstar Software is the only PSQL reseller dedicated to providing top-notch support, utilities, and training throughout all of North America! We have created this series of Emails to help you get the most out of your PSQL engine. Please don't just read these messages! Instead, you should actually perform the steps on your own system, as this will be the best way to remember how to do these things in the future. We promise – each tech tip will take you less than 5 minutes of your valuable time, and they may save you many times that over the lifetime of the engine. If you don't see a benefit, then feel free to unsubscribe at any time, using the link found at the end of each message.

In our first tip, we explore the **PSQL Monitor** utility, which provides a view inside your database engine to see who is using it and what they are doing. Let's start by launching the **PSQL**

Monitor, which you can either do from the **Pervasive Control Center's Tools** menu, or from the **Start/Programs** list in Windows.

One of the important screens to check out is the *Microkernel/Resource Usage* screen. This dialog shows us what the engine is doing right now, as well as how much it has done at a "peak" time since the engine was last started. If all users are out of the system, the *Current* column should show 0's, and your system can be easily backed up with any file backup utility. If users are in your system, then you'll quickly see how many files are open, how many database sessions, how big the open data files are, whether there

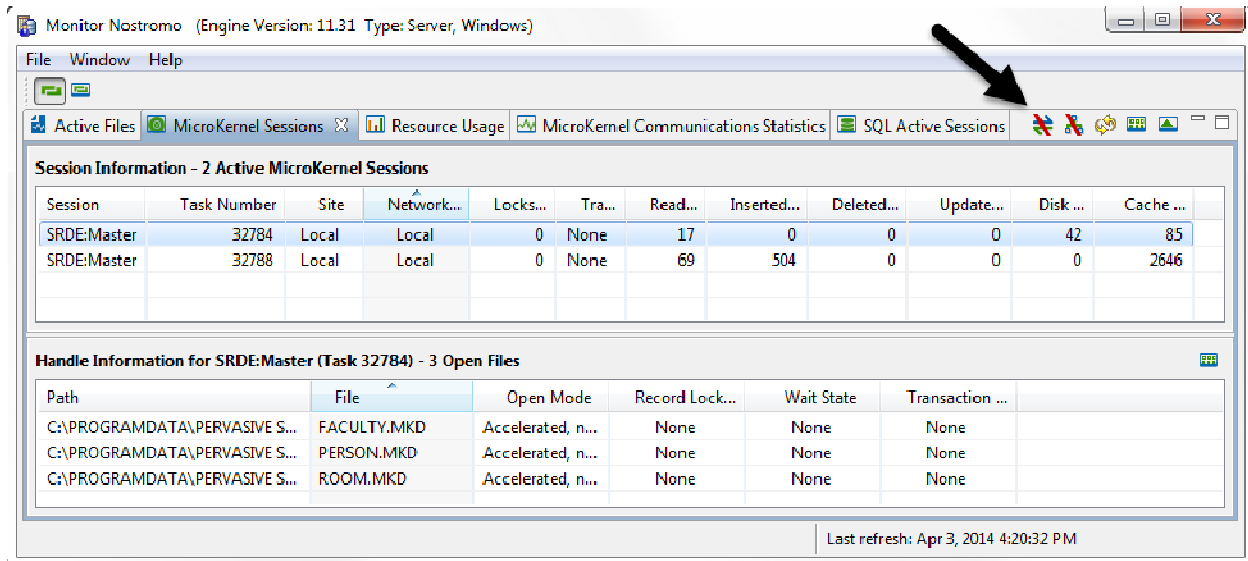
are any open transactions or record locks, and more. (We'll use this screen again in our next Tech Tip.)



Another useful thing is the *Microkernel/Active Sessions* screen. This dialog shows you (for each connected database session that you highlight in the upper left corner) the files that this connection has open (upper right corner) as well as record counts for reads, inserts, updates and deletes (lower left corner). The *Disk Accesses* and *Cache Accesses* fields show you how efficient your system is – you should strive for a Cache:Disk ratio of 1000:1 ratio or better, on average.

If you find a user connection that got “stuck” because the application crashed, you can use the *Delete Current Session* button on the lower right side to delete the currently-highlighted session, thus closing those files and freeing up the resources.

If you have PSQL v11.30 or above, then you can use the new **Server Monitor**, available by right-clicking the server name inside the **Pervasive Control Center**. This new utility provides much of the same information, but in a sizeable window that can also be sorted by any column.



Monitor Nostromo (Engine Version: 11.31 Type: Server, Windows)

File Window Help

Active Files MicroKernel Sessions Resource Usage MicroKernel Communications Statistics SQL Active Sessions

Session Information - 2 Active MicroKernel Sessions

Session	Task Number	Site	Network...	Locks...	Tra...	Read...	Inserted...	Deleted...	Update...	Disk...	Cache...
SRDE:Master	32784	Local	Local	0	None	17	0	0	0	42	85
SRDE:Master	32788	Local	Local	0	None	69	504	0	0	0	2646

Handle Information for SRDE:Master (Task 32784) - 3 Open Files

Path	File	Open Mode	Record Lock...	Wait State	Transaction ...
C:\PROGRAMDATA\PERVASIVE S...	FACULTY.MKD	Accelerated, n...	None	None	None
C:\PROGRAMDATA\PERVASIVE S...	PERSON.MKD	Accelerated, n...	None	None	None
C:\PROGRAMDATA\PERVASIVE S...	ROOM.MKD	Accelerated, n...	None	None	None

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Note that the *Delete Current Session* button (indicated by the arrow) is smaller, but still available.

If you ever need to monitor data from a command line (or batch file), then Actian also provides the **BMON** utility, which uses Java and a configuration file to extract the data to a command prompt. Goldstar Software also provides the **PSConfig** utility, which does the same thing using command line switches, but it works with any PSQL database version back to Pervasive.SQL 2000i. **PSConfig** also has many handy features that allow you to disconnect user connections by IP address, by user name, by files open, by locks held, and more. Get more information from our web site at this link:

<http://www.goldstarsoftware.com/psconfig.asp>