## Checking Your Zen/PSQL Engine Installation

A White Paper From



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Our customers often ask us how they can confirm that their new database engine is working correctly. This question arises because the Actian Zen (formerly Actian PSQL, formerly Pervasive PSQL) database engine is designed to be an embedded engine -- that is, it is designed to work behind the scenes and not be seen by the user. Since you can't see it, you may wonder if you are leveraging the benefits of your database engine.

Another reason for this type of test is when you are using an application with poor error handling. Every database application needs to make database calls to access the data. When the call is successful, the Zen/PSQL Client components send back a Status Code 0 to indicate "Success". When a call fails, the Status Code is returned as a non-zero value, which can be used to troubleshoot the problem further. Sadly, many applications either fail to display this status code, or they hide it within some other error message, making it all but impossible to figure out what has gone wrong.

Luckily, there are some built-in tools that will tell you what is happening. Let's take a look at some good options in the rest of this paper.

## Confirming User Access with the Monitor Tool

The simplest way to verify that you are using the database engine as expected is to look at the Monitor tool on the computer hosting the database engine. For a client/server environment, this will be the server itself, but it could be your local workstation for a standalone Workgroup Engine. On the database server, start up the **Monitor** utility, either from the Windows Start Menu or from the Control Center's *Tools* menu.

If you have PSQL v11 or older, you will see the old Monitor screen:

🖸 Perv	vasive Softv	vare	Monitor Utility	
<u>O</u> ptions	<u>M</u> icroKernel	<u>S</u> QL	<u>H</u> elp	
			Local	

If you do not have direct access to the server console, such as when running NetWare, Linux, or a Windows system located in a remote location, you can still use this test. After launching the Monitor tool, select the *Options/Connect* menu item. After specifying the server name and an administrative username and password, Monitor will connect to the server.

If you have v12 or newer, you'll see a newer screen that shows you the Server Engines currently registered with the Control Center like this:

Select Server
Select the server to monitor
Endeavor
🗄 Deathstar2
You can add a new server with the <u>New Server Wizard</u> .
OK Cancel

Select the server to which you want to connect (or use the *New Server Wizard* to add a new one now) and you should obtain access to the same data. As indicated above, if you are connecting to a remote engine, then you will be prompted for administrative login credentials before being able to continue.

From this window, select *Microkernel/Active Users* or *Active Sessions* screen on v11, and you should see a screen similar to the following:

MicroKernel Active Users		Connection: Local		
Active MicroKernel Users: 1 Se		elected User's Handles: 1		
Bill		ATA\PERSON.MKD		
User Information: Bill	<	- Handle Information: PEI		
Connection Number:	NA		Normal	
	1912	Open Mode:		
Task Number:		Record Lock Type:	None	
Site:	Local	Wait State:	None	
Network Address:	NA	Transaction State:	None	
Locks Used:	0			
Transaction State:	None		[]	
Records Read:	0	✓ Automatic Refresh	<u>R</u> efresh	
Records Inserted:	0	Delete Current User	Close	
Records Deleted:	0	Delete Cultent Oser	<u>rinze</u>	
Records Updated:	0	Delete All <u>U</u> sers	<u>H</u> elp	
Disk Accesses:	2			
Cache Accesses:	2			

The user showing up in the top-left quadrant indicates that this user is connecting to the database engine properly.

The new **Monitor** screen looks different, but all of the same information will be there:

Konitor Endeavor (Engine Version: 14.20 Type: Enterprise Server, Windows)							
File Window Hel	р						
-							
🛃 Active Files 🔯	MicroKernel Sessions	🛛 🔟 Resource U:	sage 🐼 MicroKe	rnel Communicatio	ns Statistics 🔳 S	QL Active Sessions	
Session Information	on - 1 Active MicroKer	nel Session					
Session	Connection Numb	Task Number	Site	Network Addr	Locks Used	Transaction St	Read
bill	n/a	0	Local	Local	0	None	

Now, simply launch your application on each workstation and verify that each user shows up on this screen once they open up the database files. If you have users successfully launching the application, but they are NOT on this screen, then you may have old workstation-side components, such as Btrieve 6.15 or a standalone Workgroup Engine.

## Checking via Function Executor

The **Function Executor** utility can also be used to actively check for proper access, or to obtain a true Status Code coming back from the database environment in the event of a problem. First, start the Function Executor from the Windows Start Menu or from the Control Center's *Tools* menu. Then, select *File*, *Open* from the menu to get to the *Open Btrieve File* dialog box.

Open Btrieve File	
Eilename	▼ <u>Browse</u>
Owner Name	Mode <u>Normal</u> (0) Accelerated (-1)
Client [D   Sharing     □ Use   ☑ Auto     TO   ○     ○   Single Engine (-32)     ○   Multi Engine (-64)	C     Bead-Only     (-2)       C     ⊻erify     (-3)       C     Exclusive     (-4)
<u>O</u> pen Cancel <u>H</u> elp	

If you know the exact path that the application is attempting to use, enter that into the *Filename* box and click *Open*. If you are not sure, try using the *Browse* button to look for one of your database files to open. (If you're not sure which file or extension to try, check with your application developer.)

If you really don't know which one to try, or if you think you might have a rights issue with your existing database, then you can try to access the PERSON.MKD file within the DEMODATA database. Depending on your exact version, this file has moved around a bit. Assuming that you have done a standard/default installation, then this file can be found here:

- PSQL v9 and older: C:\PVSW\DEMODATA
- PSQL v10-11: C:\ProgramData\Pervasive Software\PSQL\DEMODATA

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- PSQL v12-13: C:\ProgramData\Actian\PSQL\DEMODATA
- Zen v14: C:\ProgramData\Actian\Zen\DEMODATA

Note that in these cases, the C: drive is the default location *on the server*! If you are running this test from a workstation, then you may not be able to access that location without setting up a share, and then your location (as seen from the client) will differ.

In some cases, you may be able to shortcut this by using a Btrieve Uniform Resource Indicator (URI) to open the file. While you'll have to type this in, it should talk to ANY server that has been set up normally with the Demodata database:

• V8 and Above: btrv://servername/Demodata?dbfile=person.mkd

If you are using the URI, be sure to use your own server name in the location indicated.

In any event, if you are able to successfully open a file, it will look something ike this:

Pervasive Function Executor	
File Get Get Ext Step Updates View Tools Window Help	)
▶   ●	Etep (Physical) C Get (Logical)  ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
6000   60 00 00 00 00 00 00 00 00	Qp Code: 15 ♀ Execute STAT (15) ▼ DataLen 160

If not, then you will get an error message of some kind, as the following sample screen shows:

Btrie	ve Error 🛛 🔀
B	Btrieve Error on operation B_OPEN (0) Btrieve status 12 "The MicroKernel cannot find the specified file."
🔽 Sh	on file c:\pvsw\demodata\perso.mkd

Information Provided By **Goldstar Software Inc.** <u>http://www.goldstarsoftware.com</u> This error message, and specifically the numeric error code, will tell us how to troubleshoot the problem. Be sure to have this handy when you call for support, or check the "Status Codes & Messages" online help document for more information.

If you still can't get it to work, <u>contact Goldstar Software</u> and let us work with you to help!