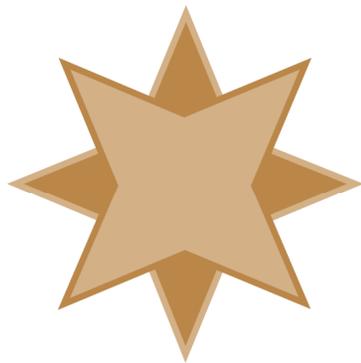


Determining Your PSQL Engine Version

A White Paper From



**GOLDSTAR
SOFTWARE**

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Determining Your PSQL Engine Version

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It is very common for people to know that they are using the Btrieve or Pervasive PSQL, or Actian Zen database engine, but to *not* know exactly which version they are using. Moreover, the list of related files is often a mystery, especially for older versions, and some users are simply without a clue as to what modules are part of the database and what are not.

This paper was created so that someone could locate the PSQL-related files on their workstation or server and determine the exact version, including user count, where appropriate.

NetWare Server Engines

With NetWare servers, it is possible to have any version of Btrieve from 5.x all the way through Pervasive PSQL v9. Many users see the version reported from BREQUEST and assume that this is their Btrieve version -- it just isn't so! You must query the server to determine exactly which version of BTRIEVE.NLM you have.

On older versions of NetWare, you can do this with the "MODULES" command, which lists all the loaded modules on the server. Then, watch for the BTRIEVE.NLM to scroll by. For NetWare 4.11 and above, you can use the command "MODULES BTR*" to list *only* those modules that start with "BTR", which will save some searching.

With the release of Pervasive.SQL 7, Pervasive Software started including the SQL engine "in the box" with the Btrieve engine. As a result, there are many more components in these releases. They also completed a split between the Btrieve component (BTRIEVE.NLM) and the MicroKernel Database Engine (NWMKDE.NLM). Because of this, if you find a version of BTRIEVE.NLM that is v7 or above, you must also check the version of the module NWMKDE.NLM. As mentioned above, you can find this quickly on newer operating systems with the command "MODULES NWMK*".

Btrieve 5.x

If you get a version of Btrieve that is 5.x, it may be hard to tell exactly which patch you have. You should check the version of the BTRIEVE.NLM file on the server for exact details, and contact Goldstar Software for help in identifying the exact release.

Btrieve 6.10

If you have Btrieve 6.10, it is also important to know the subrelease. Btrieve 6.10 supports DOS applications and Win16 applications (through the DOS hooks) only. You cannot run Win32 applications to this engine! Here's a list of releases from this version:

- 6.0 (in the NetWare SQL 3 box): May 1992
- 6.10a (in the NetWare 3.12 box, a very unstable release): Jan 1993
- 6.10c: (in the NetWare 4.01+ box, a very STABLE release!): Nov 1993

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- 6.10f: (in the NetWare 4.1x and NetWare 5.0 box, with 4 bug fixes from 6.10c): October 1994

Btrieve 6.15

With Btrieve 6.15, it is also important to note the subrelease, but they started using numbers instead of letters. It is interesting to note that the DOS requester started reporting itself as 6.16 throughout these releases, and eventually 7.00.xxx, but the engine was still 6.15. The following list shows the Btrieve 6.15 releases in order:

- 6.15.1 was released with SSQL 3.01 in 11/1994. First release of Btrieve.nlm v6.15.x (there was never a "plain" 6.15)
- 6.15.2 started the "Btrieve for NetWare" releases in 03/1995
- 6.15.525 patch update released in 06/1995
- 6.15.1208 patch update released in 12/1995
- 6.15.430 patch update released in 08/1996
- 6.15.431 patch update released in 09/1996 (only change was a fix to bad DOS requester from .430 release)
- 6.15.435 patch update released in 12/1996 (TCP/IP support for NT added via requester changes; no updates to Btrieve.NLM)
- 6.15.440 patch update released in 03/1997 (more requester updates; no engine change)
- 6.15.445 patch update released in 08/1997 (engine & requester updates)
- 6.15.451 patch update released in 03/1998 (engine updates) [GS Recommended Version!]

Pervasive.SQL 7

Depending on the Build number you find on NWMKDE.NLM, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.00.200 (FCS) Build 76, Feb 1998
- 7.00.300 (SP1) Build 91, Jun 1998
- 7.00.400 (SP2) Build 104, Sep 1998
- 7.00.500 (SP3) Build 112, Jan 1999
- 7.00.600 (SP4) Build 132, Apr 1999
- 7.00.700 (SP5) Build 152, Sep 1999
- 7.16.810 (SP6) Build 201, Sep 2001

To properly patch Pervasive.SQL 7, you must first patch to SP3, then to SP5, and then to SP6. You cannot go direct from SP2 to SP5, for example!

Pervasive.SQL 2000/Pervasive.SQL 2000i

Depending on the Build number you find on NWMKDE.NLM, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.50 (FCS) Build 146, Jun 1999
- 7.51 (SP1) Build 154, Sep 1999
- 7.80 (SP2) Build 192, Jun 2000 (This was a defective release! Do not use!)
- 7.82 (SP2a) Build 198, Aug 2000
- 7.90 (SP3) Build 230, Mar 2001 (Also called Pervasive.SQL 2000i)
- 7.94 (SP4) Build 251, Dec 2001

To properly patch Pervasive.SQL 2000, your best bet is to download the evaluation software for the current version and simply install it. It will detect the existing installation and archive the old pieces or it, as needed.

Pervasive.SQL V8

Depending on the Build number you find on NWMKDE.NLM, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 8.00 (FCS) Build 114, Dec 2002
- 8.10 (SP1) Build 117, Mar 2003
- 8.10 (SP1 HotFixes) Build xxx, Oct 2003
- 8.50 (Security Feature Pack) Build 189, Oct 2003
- 8.10/8.50 (Ecosystem HotFix II) Build xxx, March, 2004
- 8.60 (SP2) Build xxx, July 2004
- 8.70 (SP3) Build 014, August 2005

Pervasive PSQL v9

Depending on the Build number you find on NWMKDE.NLM, you can relate this directly back to the Pervasive PSQL v9 Service Pack Level. Note that Pervasive started releasing HotFixes in the v9.52 and v9.71 ranges, yet kept releasing them as the same download file names. As such, you may need to check to see which HotFix level you are running by checking the Build Number for these versions.

- 9.00 (FCS) April 2005
- 9.10 (SP1) June 2005
- 9.50 (SP2) April 2006
- 9.52+ (SP2+) After April 2006: Build number is important!
- 9.70 (SP3) November 2008
- 9.71+ (SP3+) After November 2008: Build number is important!

Pervasive PSQL Summit v10 and Newer

The Pervasive PSQL Summit v10 database engine was never released for Novell NetWare. As such, we know for sure that either you don't have a PSQLv10 engine, or you are not running it on NetWare! If you know that the files are stored on a NetWare server, then you are likely running a PSQLv10 Workgroup Engine on one of the clients as a Gateway. Refer to the Workgroup Engine information below.

Linux Server Engines

Linux users have it real easy, since the Linux engine is new with Pervasive.SQL 2000, so you already know that you do not have any older engines than this. However, there is still the question of the exact release. Luckily, the following command will query the Package Manager to determine which release you have installed:

```
$ rpm -qa | grep Pervasive
Pervasive.SQL-server-2000.SP3.225.001-RedHat60
```

If the command does not include a build number, then you have the original release of Pervasive.SQL 2000. Newer engines include the version number and build number directly in the installation file, so there's nothing more to check.

Windows Server Engines

There was no Btrieve 5.x or 6.10 for Windows Server -- the first release was Btrieve 6.15. The easiest way to determine the version of the database for an older engine on a Windows Server is to look to the Services applet on the control panel:

- "BTI Microkernel Engine" indicates Btrieve 6.15.
- "Btrieve v7.0 for Windows NT" indicates Pervasive.SQL 7.
- "Pervasive.SQL 2000 (Transactional)" indicates Pervasive.SQL 2000i.
- "Pervasive.SQL (Transactional)" indicates Pervasive.SQL V8 or higher.

Once you know the main version, you can find out the sub-release by checking the information below.

With Btrieve 6.15, sub-releases were denoted by numbers. You can locate the exact version by checking the dates and embedded version information from various files. The core engine module is called NTMKDE.DLL and is a good place to start. This file is normally located in C:\BTI\WINNT\BIN.

With the release of Pervasive.SQL 7, Pervasive Software started including the SQL engine "in the box" with the Btrieve engine. As a result, there are many more components in these releases. To verify your version, go to the C:\PVS\BIN folder, right-click on NTMKDE.DLL and go to the "Version" tab. The exact version (with subrelease information) should be shown there for you.

Starting with PSQLv10, the installation location for the engine has moved. You will be able to find it in one of these two locations:

- C:\Program Files\Pervasive Software\PSQL\BIN
- C:\Program Files (x86)\Pervasive Software\PSQL\BIN

The first location is used for 32-bit engines on 32-bit operating systems, or for 64-bit engines on 64-bit operating systems. If you are running a 64-bit engine, then the engine file that you want to check will be called W64NTMKDE.DLL. The second location is for 32-bit engines installed on 64-bit operating systems.

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Starting with PSQL v12, the installation location changed again. You will be able to find it in one of these two locations:

- C:\Program Files\Actian\PSQL\BIN
- C:\Program Files (x86)\Actian\PSQL\BIN

The first location is used for 32-bit engines on 32-bit operating systems, or for 64-bit engines on 64-bit operating systems. If you are running a 64-bit engine, then the engine file that you want to check will be called W64NTMKDE.DLL. The second location is for 32-bit engines installed on 64-bit operating systems, which is rarely used.

Starting with Zen v14, the installation location changed again. You will be able to find it in one of these two locations:

- C:\Program Files\Actian\Zen\BIN
- C:\Program Files (x86)\Actian\Zen\BIN

The first location is used for 32-bit engines on 32-bit operating systems, or for 64-bit engines on 64-bit operating systems. If you are running a 64-bit engine, then the engine file that you want to check will be called W64NTMKDE.DLL. The second location is for 32-bit engines installed on 64-bit operating systems, which is rarely used.

For newer engines, you may also wish to check the version of the SQL engine at the same time. The SQL engine's primary file is called W3ODBCEI.DLL, and will be located in one of the above locations as well.

Btrieve 6.15

The following list shows the Btrieve 6.15 for Windows NT Server releases in order:

- First release of 6.15 was in 05/1995.
- 6.15.1208 patch update released in 03/1996
- 6.15.430 patch update released in 08/1996
- 6.15.435 patch update released in 11/1996 (TCP/IP support for NT added via requester changes)
- 6.15.440 patch update released in 03/1997 (more requester updates; no engine change)
- 6.15.445 patch update released in 08/1997 (engine & requester updates)
- 6.15.451 patch update released in 03/1998 (engine updates) [GS Recommended Version!]

Pervasive.SQL 7

Depending on the Build number you find on NTMKDE.DLL, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.00.200 (FCS) Build 76, Feb 1998
- 7.00.300 (SP1) Build 91, Jun 1998
- 7.00.400 (SP2) Build 104, Sep 1998
- 7.00.500 (SP3) Build 112, Jan 1999
- 7.00.600 (SP4) Build 132, Apr 1999
- 7.00.700 (SP5) Build 152, Sep 1999

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- 7.16.810 (SP6) Build 201, Sep 2001

To properly patch Pervasive.SQL 7, you must first patch to SP3, then to SP5, and then to SP6. You cannot go direct from SP2 to SP5, for example!

Pervasive.SQL 2000/Pervasive.SQL 2000i

Depending on the Build number you find on NTMKDE.DLL, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.50 (FCS) Build 146, Jun 1999
- 7.51 (SP1) Build 154, Sep 1999
- 7.80 (SP2) Build 192, Jun 2000 (This was a defective release! Do not use!)
- 7.82 (SP2a) Build 198, Aug 2000
- 7.90 (SP3) Build 230, Mar 2001 (Also called Pervasive.SQL 2000i)
- 7.94 (SP4) Build 251, Dec 2001

To patch Pervasive.SQL 2000 properly, your best bet is to download the evaluation software for the current version and simply install it. It will detect the existing installation and archive the old pieces or it, as needed.

Pervasive.SQL V8

Depending on the Build number you find on NTMKDE.DLL, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 8.00 (FCS) Build 114, Dec 2002
- 8.10 (SP1) Build 117, Mar 2003
- 8.10 (SP1 HotFixes) Build xxx, Oct 2003
- 8.50 (Security Feature Pack) Build 189, Oct 2003
- 8.10/8.50 (Ecosystem HotFix II) Build xxx, March, 2004
- 8.60 (SP2) Build xxx, July 2004
- 8.70 (SP3) Build 014, August 2005

Pervasive PSQL v9

Depending on the version number you find on NTMKDE.DLL, you can relate this directly back to the Pervasive PSQL v9 Service Pack Level. Note that Pervasive started releasing HotFixes in the v9.52 and v9.71 ranges, yet kept releasing them as the same download file names. As such, you may need to check to see which HotFix level you are running by checking the Build Number for these versions.9.00 (FCS) April 2005

- 9.00 (FCS) April 2005
- 9.10 (SP1) June 2005
- 9.50 (SP2) April 2006
- 9.52+ (SP2+) After April 2006: Build number is important!
- 9.70 (SP3) November 2008
- 9.71+ (SP3+) After November 2008: Build number is important!

Pervasive PSQL Summit v10

Depending on the version number you find on NTMKDE.DLL or W64NTMKDE.DLL, you can relate this directly back to the Pervasive PSQL Summit v10 Service Pack Level. Note that Pervasive started releasing HotFixes after several service packs. As such, you may need to check to see which HotFix level you are running by checking the Build Number for these versions.

- 10.00 (FCS) September 2007
- 10.01+ (FCS HotFixes) After September 2007
- 10.10 (SP1) June 2008
- 10.12+ (SP1 HotFixes) After June 2008: Build number is important!
- 10.13+ (SP1 HotFixes with ELS) After January 2009: Build number is important!
- 10.20 (SP2) August 2009
- 10.21+ (SP2 HotFixes) After August 2009: Build number is important!
- 10.30 (SP3) November 2009
- 10.31+ (SP3 HotFixes) After November 2009: Build number is important!

Pervasive PSQL v11

Depending on the version number you find on NTMKDE.DLL or W64NTMKDE.DLL, you can relate this directly back to the Pervasive PSQL v11 Service Pack or Update Level.

- 11.00 (FCS) September 2010
- 11.01+ (FCS Updates) After September 2010: Build number is important!
- 11.10 (SP1) July 2011
- 11.11 (SP1 Updates) After July 2011: Build number is important!
- 11.20 (SP2) March 2012
- 11.21 (SP2 Updates) After March 2012: Build number is important!
- 11.30 (SP3) January 2013
- 11.31 (SP3 Updates) After January 2013: Build number is important!

Action PSQL v12

Starting with PSQL v12, the location of the database engine has changed from the **Pervasive Software** folder to the **Action** folder. Depending on the version number you find on NTMKDE.DLL or W64NTMKDE.DLL, you can relate this directly back to the Action PSQL v12 Service Pack or Update Level.

- 12.00 (FCS) December 2014
- 12.01+ (FCS Updates) After January 2015: Build number is important!
- 12.10 (SP1) July 2016
- 12.11+ (SP1 Updates) After July 2016: Build number is important!

Action PSQL v13

Again, check the **Action** folder. Depending on the version number you find on NTMKDE.DLL or W64NTMKDE.DLL, you can relate this directly back to the Action Zen v13 Service Pack or Update Level.

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- 13.00 (FCS) June 2017
- 13.01+ (FCS Updates) After June 2017: Build number is important!
- 13.10 (SP1) December 2017
- 13.11+ (SP1 Updates) After December 2017: Build number is important!
- 13.20 (SP2) June 2018
- 13.21 (SP1 Update 1) February 2019: There was only one Update here!
- 13.30 (SP3, a.k.a. "R2") February 2019: We don't know WHY they wanted to call this "R2", but it is also Service Pack 3.
- 13.31+ (R2 Updates) After March 2019: Build number is important!

Action Zen v14

Although there was a name change, the base folder is still Action, but the next level has been renamed from PSQL to Zen. Depending on the version number you find on NTMKDE.DLL (32-bit) or W64NTMKDE.DLL (64-bit), you can relate this directly back to the Action Zen v14 Service Pack or Update Level.

- 14.00 (FCS) August 2019
- 14.01+ (FCS Updates) After November 2019: Build number is important!
- 14.10 (SP1) February 2020
- 14.11+ (SP1 Updates) After June 2020: Build number is important!
- 14.20 (SP2) December 2020
- 14.21+ (SP2 Updates) After May 2021: Build number is important!

Action Zen v15

Like with v14, the applications are stored in the C:\Program Files\Action\Zen\Bin folder. Depending on the version number you find on NTMKDE.DLL (32-bit) or W64NTMKDE.DLL (64-bit), you can relate this directly back to the Action Zen v15 Service Pack or Update Level.

- 15.00 (FCS) August 2021
- 15.01+ (FCS Updates) After December 2021: Build number is important!
- 15.10 (SP1) June 2022
- 15.11+ (SP1 Updates) After July 2022: Build number is important!
- 15.20 (SP2) April 2023
- 15.21+ (SP2 Updates) After May 2023: Build number is important!

OS/2 Server Engines

There was a brief time where Pervasive Software supported an OS/2 database engine. The first engines were available for Btrieve 6.15, and a later version (actually, a predecessor to Pervasive.SQL 7) was available for a short time and called Btrieve v6.30 for Warp Server. This was in 1996, and as we all know, IBM lost the "Battle of the Operating Systems", so the OS/2 stuff is mostly just a footnote in history now.

DOS Workstation Engines

Btrieve for DOS was a very simply database. The earlier versions were compiled in a

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single file, called BTRIEVE.EXE. Running this program gave you a header screen with the exact database version. This helps you identify all of the older Btrieve 4.x and 5.x engines.

For Btrieve 6.15, there were several sub-releases:

- 6.15 First release in 07/1994
- 6.15.1 patch update released in 10/1994
- 6.15.321 patch update released in 03/1995 (also released in SSQL for DOS v3.01)
- 6.15.525 patch update released in 06/1995
- 6.15.925 patch update released in 10/1995
- 6.15.430 patch update released in 03/1997 [GS Recommended Version!]

There is no Pervasive.SQL engine for DOS.

Windows (16-bit) Workstation Engines

There were two versions of Btrieve for Windows, supporting 16-bit applications, Btrieve 5.x and Btrieve 6.15.

Btrieve 5.x

The core interface module for Btrieve 5.x was called WBTRCALL.DLL, and some of these versions, usually those 50K+ in size and dated prior to 1993, are the Btrieve 5.x workstation engine.

Btrieve 6.15

Starting with Btrieve 6.15, the new engine module was called WBTR32.EXE. Like with the Windows NT server engines, you can locate this file and determine which version you have:

- First release of 6.15 in 05/1994 (first product release after the spin-off from Novell!)
- 6.15.1 patch update released in 09/1994 (6.15.1 also released with SSQL for Windows 3.01 in 8/94)
- 6.15.2 patch update released in 11/1994
- 6.15.306 patch update released in 03/1995
- 6.15.525 patch update released in 06/1995
- 6.15.824 patch update released in 08/1995
- 6.15.925 patch update released in 10/1995
- 6.15.430 patch update released in 03/1997

Other files related to 16-bit Btrieve requesters and engines include:

- WBTRCALL.DLL
- WBTRVRES.DLL
- WBTICOMM.DLL

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- WBTRLOCL.DLL

There is no 16-bit Windows engine of Pervasive.SQL.

Windows (32-bit) Workstation or Workgroup Engines

In the 32-bit world, the first database engine was Btrieve 6.15, but newer engines for Pervasive.SQL and above exist as well!

Btrieve 6.15

Btrieve 6.15's engine is W32MKDE.EXE. Locate this file to determine which version you have:

- First release of 6.15 in 10/1995
- 6.15.430 patch update released in 3/1997
- 6.15.451 patch update NEVER released (engine updates)

Other files related to 32-bit Btrieve requesters and engines include:

- WBTRV32.DLL
- W32MKRC.DLL
- W32BTICM.DLL
- W32NR.DLL
- W16NR.DLL
- WBTRTHNK.DLL

Pervasive.SQL 7

Depending on the Build number you find on W3DBSMGR.EXE, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.00.200 (FCS) Build 76, Feb 1998
- 7.00.300 (SP1) Build 91, Jun 1998
- 7.00.400 (SP2) Build 104, Sep 1998
- 7.00.500 (SP3) Build 112, Jan 1999
- 7.00.600 (SP4) Build 132, Apr 1999
- 7.00.700 (SP5) Build 152, Sep 1999
- 7.16.810 (SP6) Build 201, Sep 2001

To properly patch Pervasive.SQL 7, you must first patch to SP3, then to SP5, and then to SP6. You cannot go direct from SP2 to SP5, for example!

Pervasive.SQL 2000/Pervasive.SQL 2000i

Depending on the Build number you find on W3DBSMGR.EXE, you can relate this directly back to the Pervasive.SQL Service Pack Level:

- 7.50 (FCS) Build 146, Jun 1999
- 7.51 (SP1) Build 154, Sep 1999

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- 7.80 (SP2) Build 192, Jun 2000 (This was a defective release! Do not use!)
- 7.82 (SP2a) Build 198, Aug 2000
- 7.90 (SP3) Build 230, Mar 2001 (Also called Pervasive.SQL 2000i)
- 7.94 (SP4) Build 251, Dec 2001

To properly patch Pervasive.SQL 2000, your best bet is to download the evaluation software for the current version and simply install it. It will detect the existing installation and archive the old pieces or it, as needed.

Pervasive.SQL V8

Check the C:\PVS\BIN folder for the versions of these files: W3DBSMGR.EXE, W3MKDE.DLL, and W3ODBCEI.DLL.

- 8.00 (FCS) Build 114, Dec 2002
- 8.10 (SP1) Build 117, Mar 2003
- 8.10 (SP1 HotFixes) Build xxx, Oct 2003
- 8.50 (Security Feature Pack) Build 189, Oct 2003
- 8.10/8.50 (Ecosystem HotFix II) Build xxx, March, 2004
- 8.60 (SP2) Build xxx, July 2004
- 8.70 (SP3) Build 014, August 2005

Pervasive PSQL v9

Check the C:\PVS\BIN folder for the versions of these files: W3DBSMGR.EXE, W3MKDE.DLL, and W3ODBCEI.DLL. Note that Pervasive started releasing HotFixes in the v9.52 and v9.71 ranges, yet kept releasing them as the same download file names. As such, you may need to check to see which HotFix level you are running by checking the Build Number for these versions.

- 9.00 (FCS) April 2005
- 9.10 (SP1) June 2005
- 9.50 (SP2) April 2006
- 9.52+ (SP2+) After April 2006: Build number is important!
- 9.70 (SP3) November 2008
- 9.71+ (SP3+) After November 2008: Build number is important!

Pervasive PSQL Summit v10

Check the C:\Program Files\Pervasive Software\PSQL\BIN folder for the versions of these files: W3DBSMGR.EXE, W3MKDE.DLL, and W3ODBCEI.DLL. Note that Pervasive started releasing HotFixes after several service packs. As such, you may need to check to see which HotFix level you are running by checking the Build Number for these versions.

- 10.00 (FCS) September 2007
- 10.01+ (FCS HotFixes) After September 2007
- 10.10 (SP1) June 2008
- 10.12+ (SP1 HotFixes) After June 2008: Build number is important!

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- 10.13+ (SP1 HotFixes with ELS) After January 2009: Build number is important!
- 10.20 (SP2) August 2009
- 10.21+ (SP2 HotFixes) After August 2009: Build number is important!
- 10.30 (SP3) November 2009
- 10.31+ (SP3 HotFixes) After November 2009: Build number is important!

Pervasive PSQL v11

Check the C:\Program Files\Pervasive Software\PSQL\BIN folder for the versions of W3MKDE.DLL or W3ODBCEI.DLL, then you can relate this directly back to the Pervasive PSQL v11 Service Pack or Update Level.

- 11.00 (FCS) September 2010
- 11.01+ (FCS Updates) After September 2010: Build number is important!
- 11.10 (SP1) July 2011
- 11.11 (SP1 Updates) After July 2011: Build number is important!
- 11.20 (SP2) March 2012
- 11.21 (SP2 Updates) After March 2012: Build number is important!
- 11.30 (SP3) January 2013
- 11.31 (SP3 Updates) After January 2013: Build number is important!

Action PSQL v12

Check the C:\Program Files\Action\PSQL\BIN (or C:\Program Files (x86)\Action\PSQL\BIN on a 64-bit OS) folder for the versions of W3MKDE.DLL or W3ODBCEI.DLL, and you can relate this directly back to the Action PSQL v12 Service Pack or Update Level.

- 12.00 (FCS) December 2014
- 12.01+ (FCS Updates) After January 2015: Build number is important!
- 12.10 (SP1) July 2016
- 12.11+ (SP1 Updates) After July 2016: Build number is important!

Action PSQL v13

Check the C:\Program Files\Action\PSQL\BIN (or C:\Program Files (x86)\Action\PSQL\BIN on a 64-bit OS) folder for the versions of W3MKDE.DLL or W3ODBCEI.DLL, and you can relate this directly back to the Action PSQL v13 Service Pack or Update Level.

- 13.00 (FCS) June 2017
- 13.01+ (FCS Updates) After June 2017: Build number is important!
- 13.10 (SP1) December 2017
- 13.11+ (SP1 Updates) After December 2017: Build number is important!
- 13.20 (SP2) June 2018
- 13.21 (SP1 Update 1) February 2019: There was only one Update here!
- 13.30 (SP3, a.k.a. "R2") February 2019: We don't know WHY they wanted to call this "R2", but it is also Service Pack 3.
- 13.31+ (R2 Updates) After March 2019: Build number is important!

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Action Zen v14

Check the folder C:\Program Files\Action\Zen\Bin (for 32-bit operating systems) or C:\Program Files (x86)\Action\Zen\Bin (on a 64-bit OS) for the versions of the files W3MKDE.DLL or W3ODBCEI.DLL, and you can relate this directly back to the Action Zen v14 Service Pack or Update Level.

- 14.00 (FCS) August 2019
- 14.01+ (FCS Updates) After November 2019: Build number is important!
- 14.10 (SP1) February 2020
- 14.11+ (SP1 Updates) After June 2020: Build number is important!
- 14.20 (SP2) December 2020
- 14.21+ (SP2 Updates) After May 2021: Build number is important!

Action Zen v15

Check the folder C:\Program Files\Action\Zen\Bin (for 32-bit operating systems) or C:\Program Files (x86)\Action\Zen\Bin (on a 64-bit OS) for the versions of the files W3MKDE.DLL or W3ODBCEI.DLL, and you can relate this directly back to the Action Zen v15 Service Pack or Update Level.

- 15.00 (FCS) August 2021
- 15.01+ (FCS Updates) After December 2021: Build number is important!
- 15.10 (SP1) June 2022
- 15.11+ (SP1 Updates) After July 2022: Build number is important!
- 15.20 (SP2) April 2023
- 15.21+ (SP2 Updates) After May 2023: Build number is important!

Developer Builds

If you ever find a build number (the part after the minor version number) with a value of 999, then you must be aware that this is a special "Developer Build" for your engine component. It indicates that you likely reported a problem to Pervasive and were provided with a temporary fix for your issue. Done correctly, you would remove the Developer Build file BEFORE your next patch. Failure to do this would mean that the engine patch will fail, and that you are likely running a "hybrid" version with this old component (because the build number is reported as newer than all officially-released versions).

If you get into this situation, the best way out is to remove your PSQL engine and then reinstall the latest installation media and patch kit.

If you've tried & still can't figure it out, [contact Goldstar Software](#) and let us work with you to help!