

PSQL v13 SP1 Release Notes

General Release – January 2018

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Welcome to the General Release of PSQL v13 SP1.

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This document is included in your PSQL installation but may be updated after the release. Its latest version is always posted on the [Actian website](#).

Overview

Product Editions

This release includes the following editions, listed by operating system.

Windows and Nano Server

- PSQL Server
- PSQL Vx Server (except Nano Server)
- PSQL Workgroup (except Nano Server)
- PSQL Client
- PSQL Client Reporting Engine

Windows IoT Core

- PSQL Server

Linux

- PSQL Server
- PSQL Vx Server (except Raspbian)
- PSQL Client
- PSQL Client Access 32-bit (except Raspbian)

OS X and Mac OS

- PSQL Server
- PSQL Vx Server
- PSQL Client

Platforms Supported

This release has been successfully tested on the following operating systems, where appropriate in both their 32- and 64-bit editions. For more information about platform support, see *What's New in PSQL* and *Getting Started with PSQL*.

- Windows 10
- Windows Server 2012
- Windows 8.1
- Windows Small Business Server 2011
- Windows Server 2008 R2
- Windows Foundation Server 2008 R2
- Windows 7
- Windows 2016, including Nano Server
- Windows IoT Core for small devices, x86 or ARM32
- Linux Red Hat Enterprise, x86-64 and AArch64
- Raspbian, ARM32
- OS X 10.10 and 10.11, Mac OS 10.12

PSQL installation has been tested successfully with Docker for Windows.

PSQL Server on Windows Nano Server and IoT Core supports use of the PSQL SDKs for Btrieve, DTI, and ODBC. Throughout the PSQL documentation, all references to PSQL Server apply to installations on Windows Nano Server and IoT Core systems.

For PSQL Client Reporting Engine, use of PSQL Server on Linux as a storage server is not currently supported.

We recommend updating all operating systems to their latest service packs.

Product Authorization

PSQL comes with a trial key for evaluation installations. These trial keys have limits of 20 users for Server, 5 users for Workgroup, and Medium size (20 GB) for Vx Server.

If you are installing this release of PSQL, you are required to authorize the product, either at the time of installation or after installation using the License Administrator utility.

Authorizing on Windows

On Windows, product authorization is required for PSQL Server, Vx Server, and Workgroup. Product authorization can be performed during installation or using the license administrator utility after installation. Authorizing PSQL during installation requires an Internet connection. To authorize PSQL after installation, see the alternative authorization procedures outlined in *PSQL User's Guide*.

Note On Windows IoT Core x86 and ARM32, the following licensing features are not currently supported: Online authorization through a proxy server, offline authorization, product key repair, and command line use of `clilcadm -number`.

Authorizing on Linux

On Linux, product authorization is required for PSQL Server and Vx Server. Product authorization must be performed after installation using the license administrator utility. Authorizing PSQL v13 SP1 requires an Internet connection. To authorize after installation, see the alternative authorization procedures outlined in *PSQL User's Guide*.

Note On Linux Red Hat Enterprise AArch64 and Raspbian ARM32, the following licensing features are not currently supported: Online authorization through a proxy server, offline authorization, product key repair, and command line use of `clilcadm -number`.

Authorizing on OS X and Mac OS

On OS X and Mac OS, product authorization is required for PSQL Server and Vx Server. Product authorization must be performed after installation using the license administrator utility. Authorizing PSQL v13 SP1 requires an Internet connection. To authorize after installation, see the alternative authorization procedures outlined in *PSQL User's Guide*.

License Authorization Access Through Proxy Servers on Windows

We recommend that you use Windows Internet Explorer to configure proxy servers. If your proxy server was not configured using Internet Explorer, we recommend that you use Internet Explorer to configure it again. If you are unable to use Internet Explorer, then you can use the steps given here. These steps involve editing the Windows Registry.

Caution Editing the registry is an advanced procedure. If done improperly, the editing can cause your operating system not to start. If necessary, obtain the services of a qualified technician to do the editing. Actian Corporation does not accept responsibility for a damaged registry.

In a 64-bit Windows operating system, two keys in the Registry can store proxy server settings:

- HKEY_LOCAL_MACHINE\Software\Pervasive Software\ELS
- HKEY_LOCAL_MACHINE\Software\Wow6432Node\Pervasive Software\ELS

Depending on the PSQL edition (Server, Client, Vx Server, or Workgroup), the ELS proxy server settings can be created in either location. Licensing manager looks for its proxy server settings first in the HKEY_LOCAL_MACHINE\Software\Wow6432Node\Pervasive Software\ELS\ key. If it cannot locate them there, it looks in the HKEY_LOCAL_MACHINE\Software\Pervasive Software\ELS\ key.

If you are editing Registry settings for proxy servers, you first need to find the correct location.

- 1 Begin by looking for a Wow6432Node. If it exists, edit the proxy server Registry settings in the Pervasive Software\ELS\ key.
- 2 If you find no Wow6432Node, move to the Software directory and edit the proxy server Registry settings in the Pervasive Software\ELS\ key.
- 3 Modify the Windows Registry by adding the following to the Pervasive Software\ELS\ key:
 - String value proxy_host
 - DWORD (32-bit) value proxy_port

- String value proxy_userid
- String value proxy_passwd

Note PSQL requires only the proxy_host and proxy_port values. Depending on the configuration of your proxy server, you may also need to add proxy_userid and proxy_passwd.

4 Authorize PSQL using the License Administrator utility.

License Authorization Access Through Proxy Server on Linux, OS X, and Mac OS

On Linux, OS X, and Mac OS systems, to configure a proxy server to allow license authorization, you must edit the els.ini file. PSQL does not support any other method of configuring proxy access on these operating systems.

- 1 Locate els.ini. In a default installation, you can find it in /usr/local/psql/etc.
- 2 Manually edit els.ini to include the following:
 - proxy_host
 - proxy_port
 - proxy_userid
 - proxy_passwd

Note PSQL requires only the proxy_host and proxy_port values. Depending on the configuration of your proxy server, you may also need to add proxy_userid and proxy_passwd.

3 Authorize PSQL Vx Server using the License Administrator CLI utility.

Client Compatibility

On Windows and Linux, PSQL v13 Server and Workgroup support PSQL v12 Client or later, except for IoT Core and Raspbian, where only a PSQL v13 Client is supported.

For OS X and Mac OS servers, clients must be 13.00 or later.

Compatibility with AuditMaster, Backup Agent, or DataExchange

AuditMaster, Backup Agent, and DataExchange installed with earlier PSQL versions are not compatible with PSQL v13. When you are preparing to upgrade PSQL from an older version, you must first uninstall any existing installations of these products. Before removing them, we recommend that you capture their configuration settings to use in reinstalling and configuring new versions after upgrading.

New Features and Enhancements

See *What’s New in PSQL* for coverage of new and changed features in this release of PSQL. This document is included with the installed documentation and at the [Actian website](#) on the download page. The download version may be updated after the product release, so we recommend you refer to that version for the latest information.

Installing PSQL

This topic discusses installation of the product. Before reading further, be familiar with [Product Authorization](#).

Installation files are available for download from the [Actian website](#).

You must remove any previously installed prerelease version, such as a beta or release candidate from any edition, before installing a final General Availability (GA) release of PSQL.

If you have not installed the product before or are upgrading for the first time and want to read about installation in detail, see *Getting Started with PSQL*, available on the installation media or the [Actian website](#).

Installation comes in several types:

- [Installing PSQL on Windows](#)
- [Installing PSQL on Windows Nano Server and IoT Core](#)
- [Installing PSQL on Linux \(Red Hat\)](#)
- [Installing PSQL on Linux \(Raspbian\)](#)
- [Installing PSQL on OS X and Mac OS](#)

Installing PSQL on Windows

To start the installation, run the installer application (Install_*.exe) for the PSQL engine or client type that you want to install and follow the instructions displayed by the installer.

The PSQL installer automatically detects the bit architecture of the operating system and installs the right components. You do not have to choose the 32- or 64-bit installer application.

The following table describes PSQL installers on Windows operating systems.

PSQL v13 Installation Package (.exe)	Description
Install_PSQL_Server_Engine	Installs 32-bit engine on 32-bit operating system. Installs 64-bit engine on 64-bit operating system. Installs all client components.
Install_PSQL_Vx_Server	Installs 32-bit engine on 32-bit operating system. Installs 64-bit engine on 64-bit operating system. Installs all client components.
Install_PSQL_Workgroup_Engine	Installs 32-bit engine on both 32- and 64-bit operating systems. Installs all client components.
Install_PSQL_Client	Installs 32-bit components on 32-bit operating system. Installs both 32- and 64-bit components on 64-bit system.
Install_PSQL_Reporting_Engine	Installs 64-bit engine on 64-bit operating system. Installs all client components.

Important Notes about Installing on Windows

The following information applies when you install PSQL on Windows systems.

Subject	Discussion
Installation prerequisites	For installation to succeed, Windows systems require the following updates: <ul style="list-style-type: none">• Windows 7 or Server 2008 R2: Service Pack 1• Windows 8.1 or Server 2012 R2: Windows Update 3118401

Ecosystem product compatibility	AuditMaster, Backup Agent, and DataExchange installed with earlier PSQL versions are not compatible with PSQL v13 and must be uninstalled before upgrading to the new release. Before removing them, we recommend you capture their configuration settings to use in reinstalling and configuring their new versions after upgrading.
PSQL v11 and DataExchange v5.1 users upgrading to PSQL v13 and DataExchange v13	On PSQL v11 systems that also run DataExchange v5.1, a known issue in PSQL installers before 11.31 blocks attempts to upgrade from PSQL v11 to PSQL v13. Updating PSQL v11 to 11.31 before upgrading to PSQL v13 resolves the issue. DataExchange v5.1 is disabled on PSQL v13 until it is upgraded to DataExchange v13.
Windows firewall and client/server applications	PSQL installations add files to the firewall access list to enable client-server functionality. If the operating system security prompts you during installation of PSQL to unblock or allow communication with a PSQL component, select OK (yes).
Optionally disable restore points	<p>The total installation time can usually be reduced on Windows 7 and Windows 2008 R2 and later systems by disabling Windows System Restore. Alternatively, the installation can be made to skip the creation of a system restore point without actually disabling Windows System Restore by setting the property “MSIFASTINSTALL=1” on the command line. For example:</p> <pre>Install_PSQL_<InstallType>.exe /s /v" /!*v \\ "%temp%\PSQLv13_InstallLogFileName.log\" MSIFASTINSTALL=1"</pre>
Characters to avoid in installation path	Do not use the characters for pound (#), percent (%), or double backslash (\\, used to specify a UNC path) in installation paths for PSQL products if you plan to use PSQL Control Center or DDF Builder. These two utilities cannot run if the installation path contains these characters.
Modifying to run Workgroup Engine as an Application	If you install Workgroup Engine as service, then later decide you want to run it as an application, uninstall the engine, then reinstall it as an application.
Upgrading to run Client Cache Engine as a Service	If you install Client Cache Engine as an application, then later decide you want to run it as a service, uninstall the client, then reinstall it as a service.
Authorization and security	<p>You must have Administrator rights to install PSQL.</p> <p>Depending on the particular account, a local security policy called “Sharing and security model for local accounts” can adversely affect network logins. Be sure that this policy is set to Classic, which authenticates users as themselves.</p>
PATH location	If you are installing a downloaded version of PSQL, do not place the setup files in a location that is listed in the Path environment variables. This can cause issues with file copying during installation. Place the setup files in a location such as the Windows temp directory.

Installing Silently on Windows

To install PSQL silently, run the PSQL installation using the quiet command line option /qn, as shown in this example:

```
Install_PSQL<InstallType>.exe /s /v"/qn /!*v \\ "%temp%\PSQLv13_InstallLogFileName.log\" "
```

This example creates an installation log file in the Windows temp directory.

Optionally, to authorize PSQL after the installation has completed, use the License Administrator command line tool clilcadm.exe:

```
"<PSQL_install_path>\bin\clilcadm.exe" -a <key>
```

Installing PSQL on Windows Nano Server and IoT Core

This release of PSQL has been tested on Windows Nano Server and IoT Core. For information about installing or upgrading to PSQL on these platforms, see *Getting Started with PSQL*.

Installation Packages

PSQL offers full Windows Nano Server and IoT Core and Nano Server client reporting engine and client installations as noted in the following table. A full installation includes the necessary engine and client files and utilities. A client installation provides only files needed to support a client, including utilities. The following table lists the installation packages. Microsoft PowerShell and the .zip archive format are used for the installation.

Windows Platform	PSQL Products Supported	.Zip Archive
Nano Server	Server, Client, Client Reporting Engine	Install-PSQL-Any-yy.yy-zzz.zzz-winuwp.x86_64.zip
Windows IoT Core, x86	Server	Install-Zen-Server-yy.yy-zzz.zzz-winuwp.x86.zip
Windows IoT Core, ARM32	Server	Install-Zen-Server-Any-yy.yy-zzz.zzz-winuwp.arm32.zip

¹ yy.yy-zzz.zzz represents the digits in the file name for the release and build numbers of the product.

Installing PSQL on Linux (Red Hat)

PSQL v13 SP1 has been tested on Red Hat Enterprise Linux 7. For information about installing or upgrading to PSQL v13 SP1 on Linux, see *Getting Started with PSQL*.

Installation Packages

PSQL offers full and client installations of both RPM and TAR Linux packages. A full installation includes the necessary engine and client files, utilities, and the complete user documentation. A client installation provides only files needed to support a client, including utilities and documentation. The following table lists the installation packages.

PSQL Package	Contains	Package Names ¹
Server 64-bit	Full installation of 64-bit engine, 64-bit client files, 64-bit utilities, documentation.	PSQL-linux-yy.yy-zzz.zzz.x86_64.rpm PSQL-linux-yy.yy-zzz.zzz.x86_64.tar.gz
Vx Server 64-bit	Full installation of 64-bit engine, 64-bit client files, 64-bit utilities, documentation.	PSQL-Vx-linux-yy.yy-zzz.zzz.x86_64.rpm PSQL-Vx-linux-yy.yy-zzz.zzz.x86_64.tar.gz
Client 64-bit	64-bit client files, 64-bit utilities, documentation.	PSQL-Client-linux-yy.yy-zzz.zzz.x86_64.rpm PSQL-Client-linux-yy.yy-zzz.zzz.x86_64.tar.gz

Client Access 32-bit

32-bit client files for compatibility with 32-bit applications on 64-bit Linux.
Installed after one of the other three packages.

PSQL-Client-Access-linux-yy.yy-zzz.zzz.x86_64.rpm
PSQL-Client-Access-linux-yy.yy-zzz.zzz.x86_64.tar.gz

Note: Glibc and stdc++ packages are prerequisites for the Client Access installation. Before installing Client Access, you can add these packages from the repository of your Linux distribution using a yum command:

`yum install glibc.i686
libstdc++.i686`

In LD_LIBRARY_PATH, add the /lib directory of the Client Access installation location so that your 32-bit application can find it. For example, /usr/local/psql/lib64:/usr/local/psql/lib.

¹ yy.yy-zzz.zzz represents the digits in the file name for the release and build numbers of the product.

Note To upgrade to PSQL v13 SP1 from a previous PSQL version on Linux, you must first uninstall the current version.

Installing PSQL on Linux (Raspbian)

This release of PSQL has been tested on Raspbian. For information about installing or upgrading to PSQL on this platform, see *Getting Started with PSQL*.

Installation Packages

PSQL offers full and client installations of TAR Linux packages. A full installation includes the necessary engine and client files, utilities, and the complete user documentation. A client installation provides only files needed to support a client, including utilities and documentation. The following table lists the installation packages.

PSQL Package	Contains	Package Names ¹
Server	Full installation of engine, client files, utilities, documentation.	PSQL-linux-yy.yy-zzz.zzz.armhf.tar.gz
Client	Client files, Utilities, documentation	PSQL-Client-linux-yy.yy-zzz.zzz.armhf.tar.gz

¹ yy.yy-zzz.zzz represents the digits in the file name for the release and build numbers of the product.

Installing PSQL on OS X and Mac OS

PSQL v13 SP1 has been tested on OS X 10.9, 10.10, and 10.11 and on Mac OS 10.12. For information about installing or upgrading to PSQL v13 SP1 on these operating systems, see *Getting Started with PSQL*.

Installation Packages

PSQL offers full and client installations of both TAR and DMG packages on OS X and Mac OS. A full installation includes the necessary engine and client files, utilities, and the complete user documentation. A client installation provides only files needed

to support a client, including utilities and documentation. The following table lists the installation packages.

PSQL Package	Contains	Package Names ¹
Server 64-bit	Full installation of 64-bit engine, 64-bit client files, 64-bit utilities, documentation.	PSQL-macosx-yy.yy-zzz.zzz.x86_64.tar.gz PSQL-macosx-yy.yy-zzz.zzz.x86_64.dmg
Vx Server 64-bit	Full installation of 64-bit engine, 64-bit client files, 64-bit utilities, documentation.	PSQL-Vx-macosx-yy.yy-zzz.zzz.x86_64.tar.gz PSQL-Vx-macosx-yy.yy-zzz.zzz.x86_64.dmg
Client 64-bit	64-bit client files, 64-bit utilities, documentation.	PSQL-Client-macosx-yy.yy-zzz.zzz.x86_64.tar.gz PSQL-Client-macosx-yy.yy-zzz.zzz.x86_64.dmg

¹ yy.yy-zzz.zzz represents the digits in the file name for the release and build numbers of the product.

Note To upgrade to PSQL v13 SP1 from a previous PSQL version on OS X, you must first uninstall the current version.

Important Notes about Installing on OS X and Mac OS

The following information applies when you install PSQL on OS X and Mac OS systems. These notes all relate to access and authentication using the Samba implementation of the SMB/CIFS networking protocol. The instructions for configuring Samba on Linux also apply to OS X and Mac OS, but with the exceptions shown here.

Subject	Discussion
Samba version	Samba (SMB) file sharing is required for remote Btrieve-level file access. Set OS X native file sharing under System Preferences > Sharing or use an OS X-compatible Samba 3 package, such as SMBUp.
Authentication level	All three levels of authentication are supported on OS X and Mac OS. However, authentication through PVPIPE\$ is not supported on that operating system.
Samba configuration file location	If your Samba package installs the Samba configuration file in a location other than one in the following list, you must enter that path name in the Properties > Access settings for your server. <ul style="list-style-type: none">• /etc/samba/smb.conf• /etc/smb.conf• /usr/local/samba/lib/smb.conf• /usr/local/lib/smb.conf• /lib/smb.conf• /etc/samba.d/smb.conf• /opt/samba/lib/smb.conf• /usr/share/samba/smb.conf• /usr/local/share/samba/smb.conf• /home/samba/lib/smb.conf• /opt/local/etc/samba3/smb.conf (default location for Samba 3)

If you use OS X native file sharing, PSQL retrieves drive-sharing settings directly from the system. No smb.conf file is required. For more information, see the topic on native SMB file sharing in *Getting Started with PSQL*.

For more information, see Server Configuration Parameters in *Advanced Operations Guide*.

PVPIPE\$
PVPIPE\$ applies only to Linux. PSQL currently does not use this FIFO on OS X and Mac OS.

Source Code for PSQL unixODBC

In accordance with GNU General Public Licensing (GPL), on Linux, OS X, and Mac OS systems the source code for PSQL unixODBC functionality is redistributed in the /etc directory of the installation as psql-unixODBC-2.2.11.tar.gz.

JRE Components Included in Installation

On Windows 32-bit operating systems, the PSQL installation does not install the JRE components if an appropriate version of the JRE (1.7 or later) is already present for all users. On Windows 64-bit operating systems and on Linux, OS X, and Mac OS, the JRE components are always installed.

Installing Backup Agent

You can use Backup Agent v13 to upgrade from all previous versions of Backup Agent.

Backup Agent does not require a separate license when used with PSQL Server. It is included with PSQL Server for Windows. To use Backup Agent with PSQL Workgroup, you must have a separate license.

Backup Agent does not require a separate license when used with PSQL Server. It is included with PSQL v13 SP1 Server for Windows. To use Backup Agent with PSQL v13 SP1 Workgroup, you must have a separate license.

Windows

On Windows platforms, PSQL v13 SP1 provides two upgrade paths from older versions of Backup Agent. The following table compares the two upgrades.

Backup Agent	Upgrade Method
3.x	<p>The PSQL v13 SP1 installer warns that it is not compatible with Backup Agent 3.x, but it allows you to complete the PSQL v13 SP1 installation.</p> <p>After installing PSQL v13 SP1, you can upgrade to Backup Agent v13. Running the Backup Agent v13 installer automatically uninstalls Backup Agent 3.x and replaces it.</p>
2.x 1.x	<p>The PSQL installer informs you that the PSQL installation cannot run until you uninstall Backup Agent.</p> <p>Exit from the PSQL installer, uninstall Backup Agent, and then restart the PSQL installer.</p> <p>After PSQL installation is finished, you can install Backup Agent v13.</p>

Windows Nano Server and IoT Core

Backup Agent v13 is not currently supported.

Linux Red Hat

On Linux Red Hat, after installing PSQL v13 SP1 you must manually uninstall your existing version of Backup Agent and then manually install Backup Agent v13.

Linux Raspbian

Backup Agent v13 is not currently supported.

OS X and Mac OS

Backup Agent v13 is not currently supported.

Fixed Issues and Known Issues

The [Actian website](#) provides a history log for this release of PSQL that lists issues fixed and enhancements added since the previous release. You can also find a list of known issues.

Usage Notes

This topic discusses situations you might encounter using the product after installation.

For Windows

Subject	Discussion
Code page configuration on Windows IoT Core systems	<p>In the current release, the code page for a PSQL installation on Windows IoT Core defaults to Western European 1252. You can change the code page using PowerShell. For example, if you want to change the setting to Microsoft Windows 932 for Japanese systems, use the following command:</p> <pre>Set-ItemProperty -Path HKLM:\SYSTEM\CurrentControlSet\Control\Nls\CodePage -Name ACP -Value 932</pre>
Restore point errors in PSQL install log	<p>Failures pertaining to restore point can be ignored. Sometimes the Windows operating system fails to create a snapshot of the current disk (called a restore point) before allowing a new application installation. The restore point is not required. Uninstalling PSQL completely removes the PSQL product from the system.</p>
No right-click option to run as administrator on Windows 7 and later releases	<p>Right-clicking an application utility in the Windows Start menu does not offer a Run As Administrator option. This is a limitation of Windows Installer 3.1.</p> <p>If you want to run a PSQL utility in an elevated mode, you have several options:</p> <ul style="list-style-type: none">Run the utility from an elevated command prompt.Create your own desktop shortcut to the utility executable.Navigate to the utility executable with Windows Explorer.

Technical Support

You can obtain technical support from several online options at the [Actian website](#):

- Knowledge Base. Search hundreds of articles for answers and solutions others have found useful.

- Community Forums. Join a technical discussion or post a question to start a new one.
- PSQL Database Support. Open a service ticket, submit a defect, or purchase support.

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