**pgAdmin4 Web Installation Procedure**

**Windows Server 2016:**

* I recommend installing a text editor other than notepad prior to following this guide. You will also need a program that can decompress tar.gz files. I recommend 7-zip.

Part 1 – Software Installation:

* Download Apache 2.4.25 x86 built with VC9 from (<http://www.apachehaus.com/cgi-bin/download.plx>). You must use the x86 VC9 version for compatibility with mod\_wsgi and Python 2.7.
* Download the windows binary of mod\_wsgi 4.4.12 from (<https://github.com/GrahamDumpleton/mod_wsgi/releases/tag/4.4.12>)
* Download Python 2.7.13 from (<https://www.python.org/downloads/>). Ensure that you download the x86 version.
* Download the MSVC++ compiler for Python here (https://www.microsoft.com/en-us/download/confirmation.aspx?id=44266)
* Install python-2.7.13.msi, selecting the option to add python to your system path
* Install VCForPython27.msi
* Extract the contents of httpd-2.4.25-x64-r1.zip to a temporary folder. Copy the Apache24 folder it contains to the root of the C:\ drive
* At this point, the root of the C:\ drive should contain folders called Apache24 and python27

Part 2 – Configuring pgAdmin4

* Open a command prompt a navigate to C:\
* Run “pip install virtualenvwrapper”. Note – if this command results in an error, try running “pip install pbr” first. (This workaround was required on Azure, but not AWS).
* Run “virtualenv pgAdmin4”
* Navigate to C:\pgAdmin4\Scripts in the command prompt
* Run “activate”
* Next, we will install the pgAdmin4 Python Wheel. Various versions can be found here (<https://www.pgadmin.org/download/pgadmin-4-python-wheel/)>. This guide uses v1.5, and will provide the direct URL for this version in the next command.
* Run “pip install <https://ftp.postgresql.org/pub/pgadmin/pgadmin4/v1.5/pip/pgadmin4-1.5-py2.py3-none-any.whl>”
* Navigate to C:\pgAdmin4\Lib\site-packages\pgadmin4
* Make a copy of config.py and rename it config\_local.py
* Open config\_local.py in a text editor
* Find the block

|  |
| --- |
| if IS\_WIN:  # Use the short path on windows  DATA\_DIR = os.path.realpath(  os.path.join(fs\_short\_path(env('APPDATA')), u"pgAdmin")  )  else:  DATA\_DIR = os.path.realpath(os.path.expanduser(u'~/.pgadmin/')) |

* Delete this block, and in its place enter the line “DATA\_DIR = 'C:\pgAdmin4\storage'” Close and save the file.
* Run “python setup.py” in the command prompt
* Enter an email address and password when prompted. This will create the initial administrator account.
* In the C:\pgAdmin4\Lib\site-packages\pgadmin4 folder, open pgAdmin4.wsgi in a text editor
* Under import sys, add the lines “activate\_this = 'C:/pgAdmin4/Scripts /activate\_this.py'” and “execfile(activate\_this, dict(\_\_file\_\_=activate\_this))”
* Save and close pgAdmin4.wsgi

Part 3 – Running pgAdmin4 via Apache and mod\_wsgi

* Extract the mod\_wsgi-windows-4.4.12.tar.gz file, and navigate to mod\_wsgi-windows-4.4.12.tar\mod\_wsgi-windows-4.4.12\Apache24-win32-VC9\modules
* Rename mod\_wsgi-py27-VC9.so to mod\_wsgi.so and copy it to C:\Apache24\modules
* Navigate to C:\Apache24\conf and open httpd.conf in a text editor
* There should be a section with many LoadModule statements. At the end of these, add the line “LoadModule wsgi\_module modules/mod\_wsgi.so”
* Find the line “DocumentRoot "${SRVROOT}/htdocs"” and replace it with “DocumentRoot "C:\pgAdmin4\Lib\site-packages\pgadmin4"”
* Then, delete the entire block immediately below, starting with “<Directory "${SRVROOT}/htdocs”>” and ending with “</Directory>”
* Then, below the DocumentRoot line, paste the following block:

|  |
| --- |
| <VirtualHost \*>  ServerName pgadmin.example.com  WSGIScriptAlias / "C:\pgAdmin4\Lib\site-packages\pgadmin4\pgAdmin4.wsgi"  <Directory "C:\pgAdmin4\Lib\site-packages\pgadmin4">  Require all granted  </Directory>  </VirtualHost> |

* Save and close httpd.conf
* Open a command prompt, and navigate to C:\apache24\bin
* Run “httpd”
* Open a web browser, and navigate to <http://127.0.0.1>
* pgAdmin should load

Part 4 – Additional Apache Configuration and Notes

* Close the web browser, and press control-c in the command prompt to close apache
* Run “httpd -k install”
* Run “httpd -k start”
* Now Apache is running as an autostart service in windows
* Open the start menu, and type firewall. Then, select the Windows Firewall with Advanced Security option.
* Click inbound rules, then new rule
* Select port, click next
* Enter 80 in specific local ports, click next, leaving TCP selected
* Click next until you reach enter name, and enter apache, then click finish
* Note – To connect to Postgres instances running on different machines, the pg\_hba.conf file must be configured correctly on the server
* For example, the line “hostssl all all 10.0.0.5/32 md5” allows ssl connections from valid users from the ip 10.0.0.5 to connect to any database
* Additionally, the correct listen address must be set in postgresql.conf by modifying the line

**Ubuntu Server 16.04:**

Part 1 – Software Installation:

* Run “sudo apt install apache2 python-pip virtualenvwrapper libapache2-mod-wsgi build-essential” to install Apache web server, Python, pip and mod\_wsgi
* Run “wget <http://oscg-downloads.s3.amazonaws.com/packages/postgresql-9.6.3-1-x64-bigsql.deb>” to download the BigSQL Postgres installer
* Run “sudo dpkg-i postgresql-9.6.3-1-x64-bigsql.deb”, then “sudo apt install -f” to install PostgreSQL
* Run “sudo /opt/postgresql/pgc init pg96” to initialize PostgreSQL. Follow the on screen prompts to create the postgres user account

Part 2 – Configuring pgAdmin4

* Navigate to /opt
* Run “sudo mkdir pgadmin4”, then “sudo chown <uname>:<uname> ./pgadmin4”, where <uname> is the name of the current user
* Run “virtualenv pgAdmin4”
* Navigate to /opt/pgadmin4/bin
* Run “source ./activate”
* Next, we will install the pgAdmin4 Python Wheel. Various versions can be found here (<https://www.pgadmin.org/download/pgadmin-4-python-wheel/)>. This guide uses v1.5, and will provide the direct URL for this version in the next command.
* Run “pip install <https://ftp.postgresql.org/pub/pgadmin/pgadmin4/v1.5/pip/pgadmin4-1.5-py2.py3-none-any.whl>”
* Navigate to /opt/pgAdmin4/lib/site-packages/pgadmin4
* Make a copy of config.py and rename it config\_local.py
* Open config\_local.py in a text editor
* Find the block

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* Then, delete the entire block immediately below, starting with “<Directory "${SRVROOT}/htdocs”>” and ending with “</Directory>”
* Then, below the DocumentRoot line, paste the following block:

|  |
| --- |
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* Save and close httpd.conf
* Open a command prompt, and navigate to C:\apache24\bin
* Run “httpd”
* Open a web browser, and navigate to <http://127.0.0.1>
* pgAdmin should load

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* Close the web browser, and press control-c in the command prompt to close apache
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