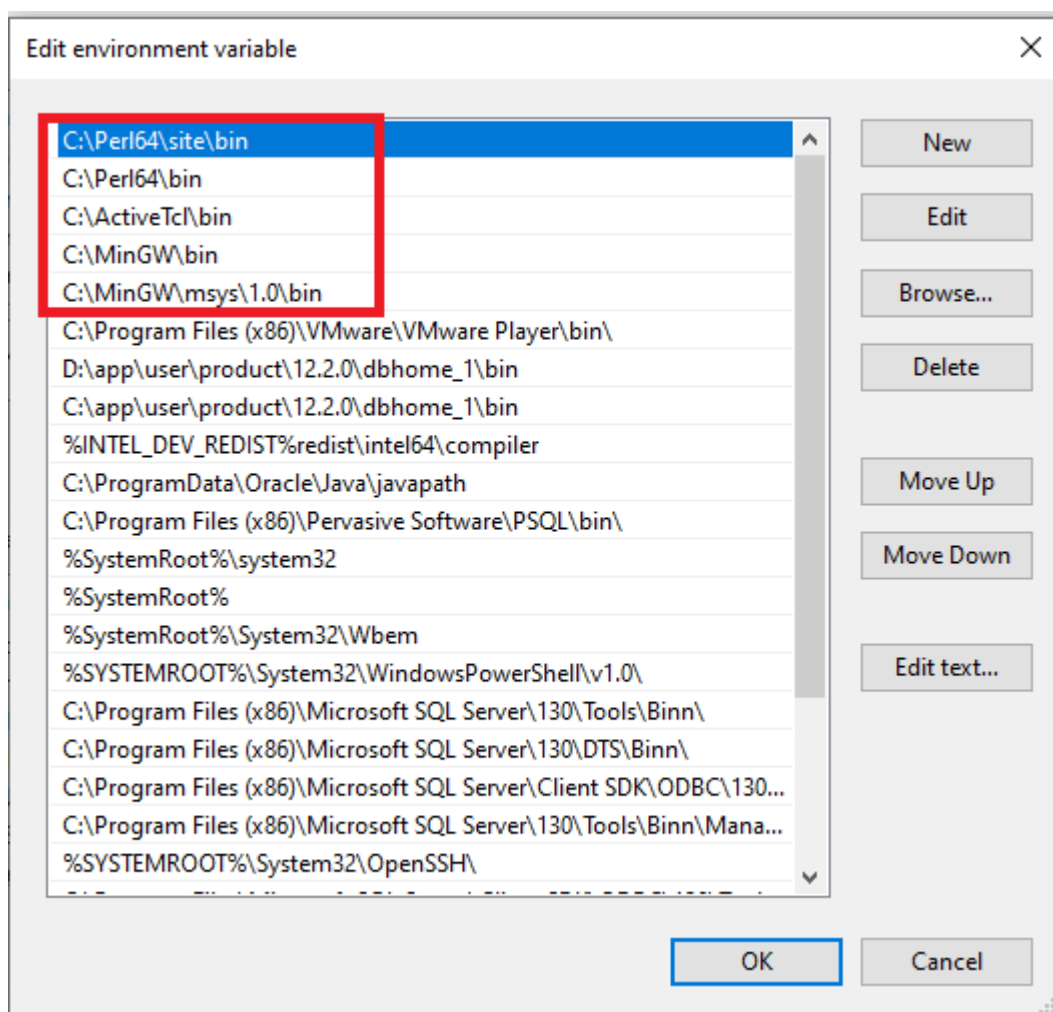


# PG INSA Build ToolChain



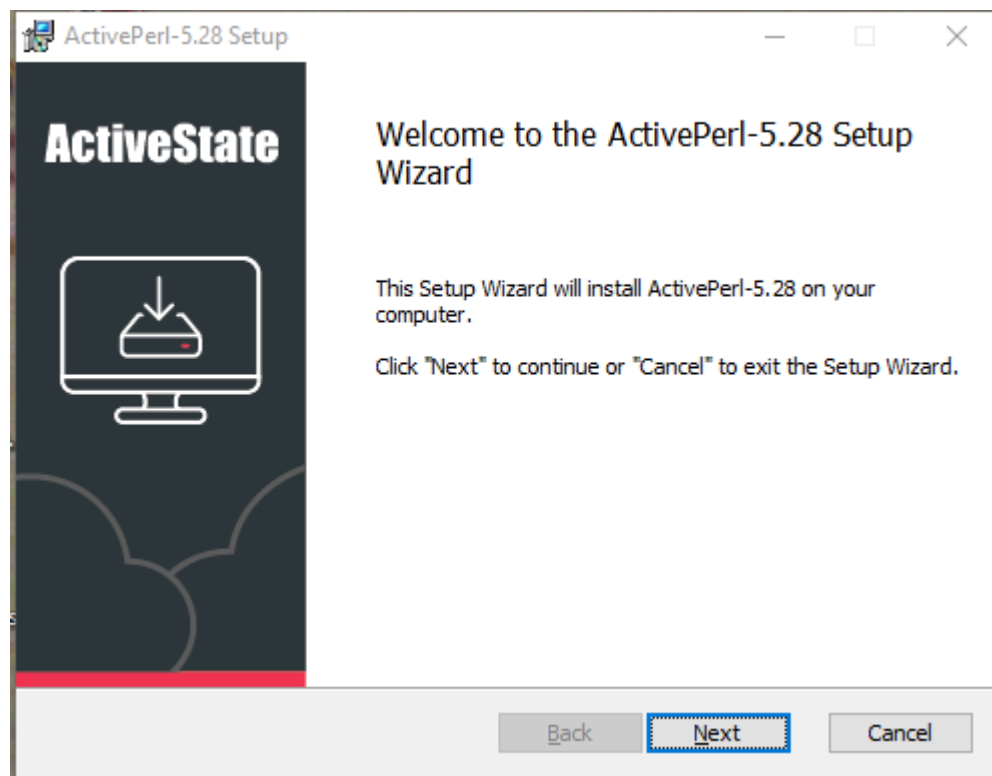
```
C:\Users\user>gcc --version
gcc (MinGW.org GCC-6.3.0-1) 6.3.0
Copyright (C) 2016 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

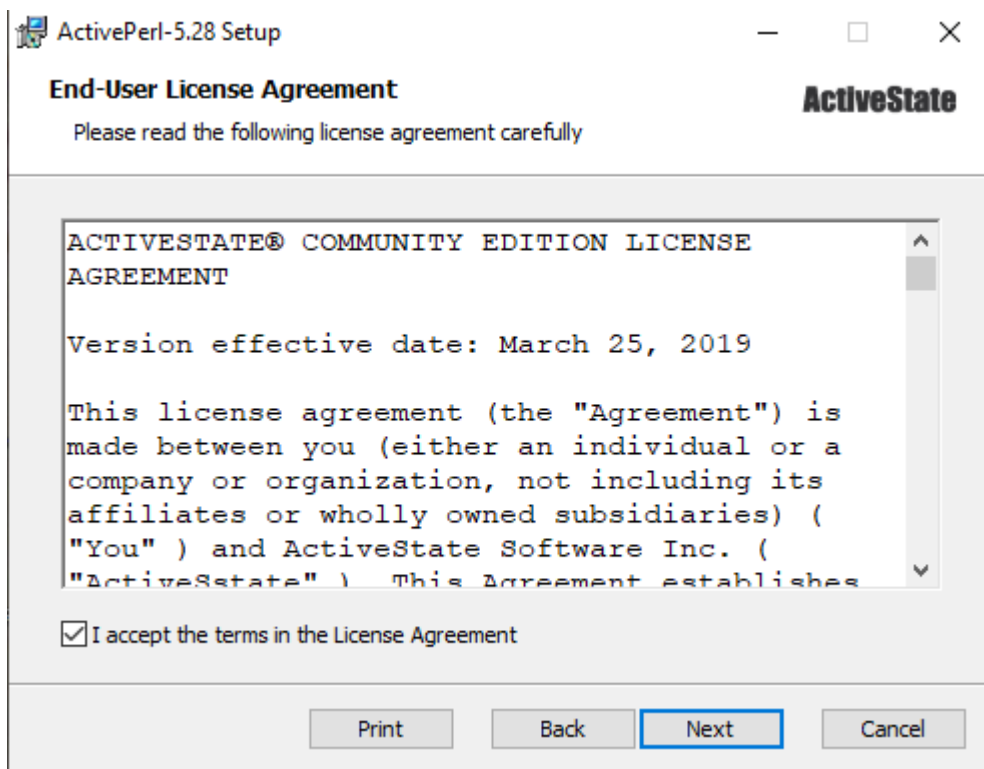
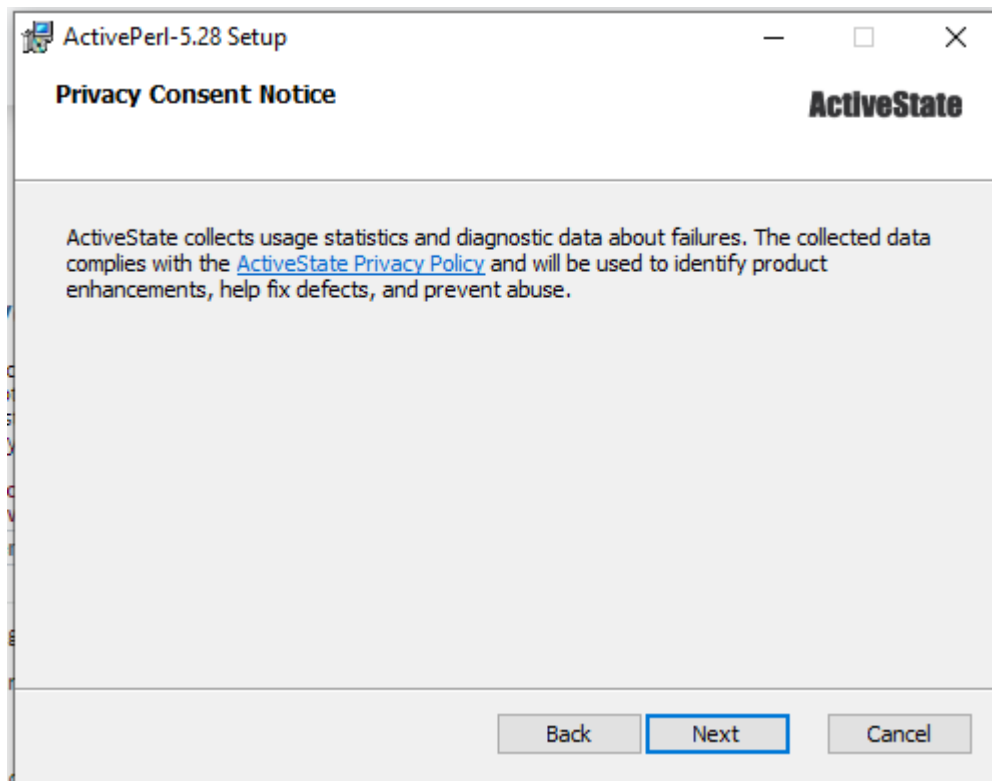
C:\Users\user>make --version
GNU Make 3.81
Copyright (C) 2006 Free Software Foundation, Inc.
This is free software; see the source for copying conditions.
There is NO warranty; not even for MERCHANTABILITY or FITNESS FOR A
PARTICULAR PURPOSE.

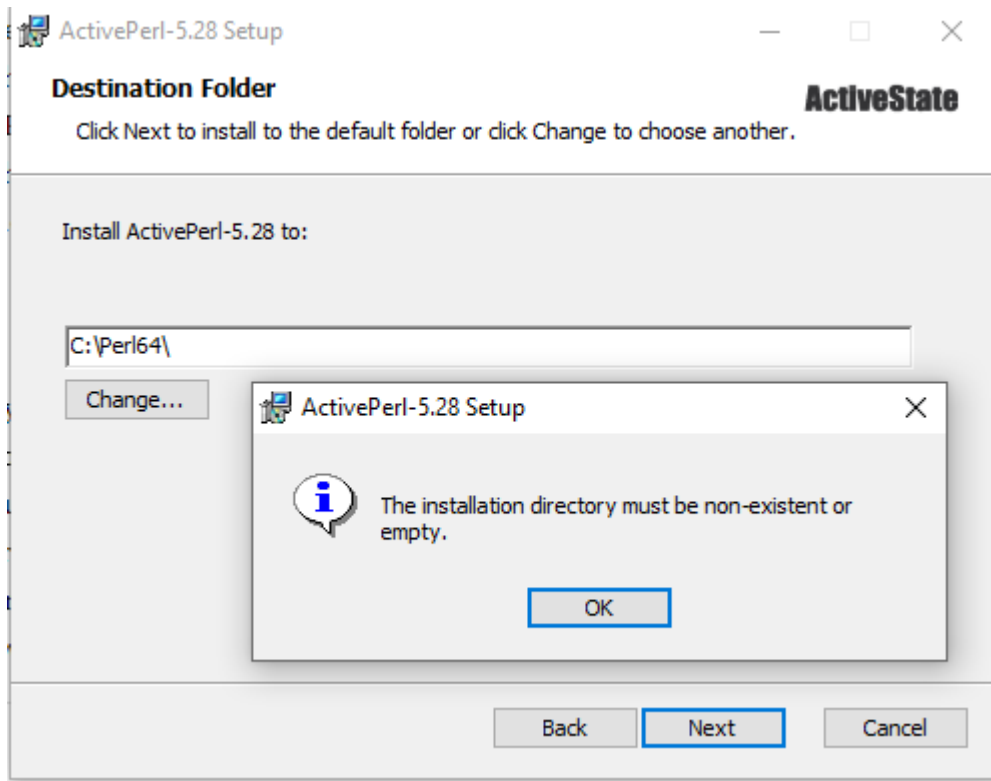
This program built for i686-pc-msys

C:\Users\user>flex --version
flex 2.5.35

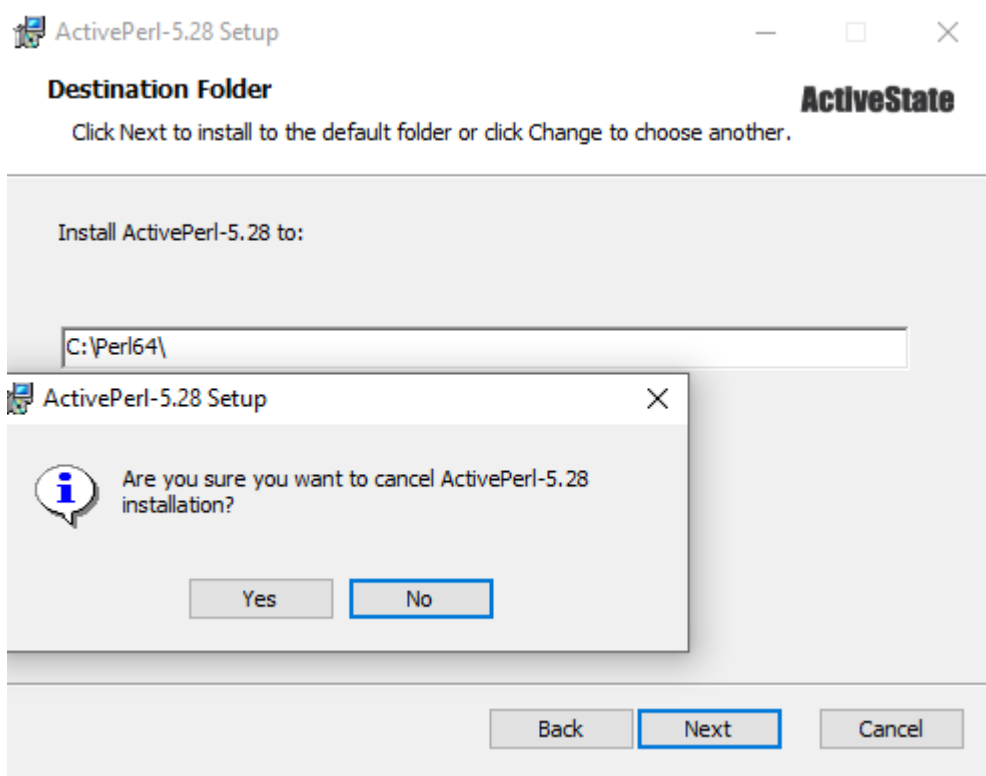
C:\Users\user>
```

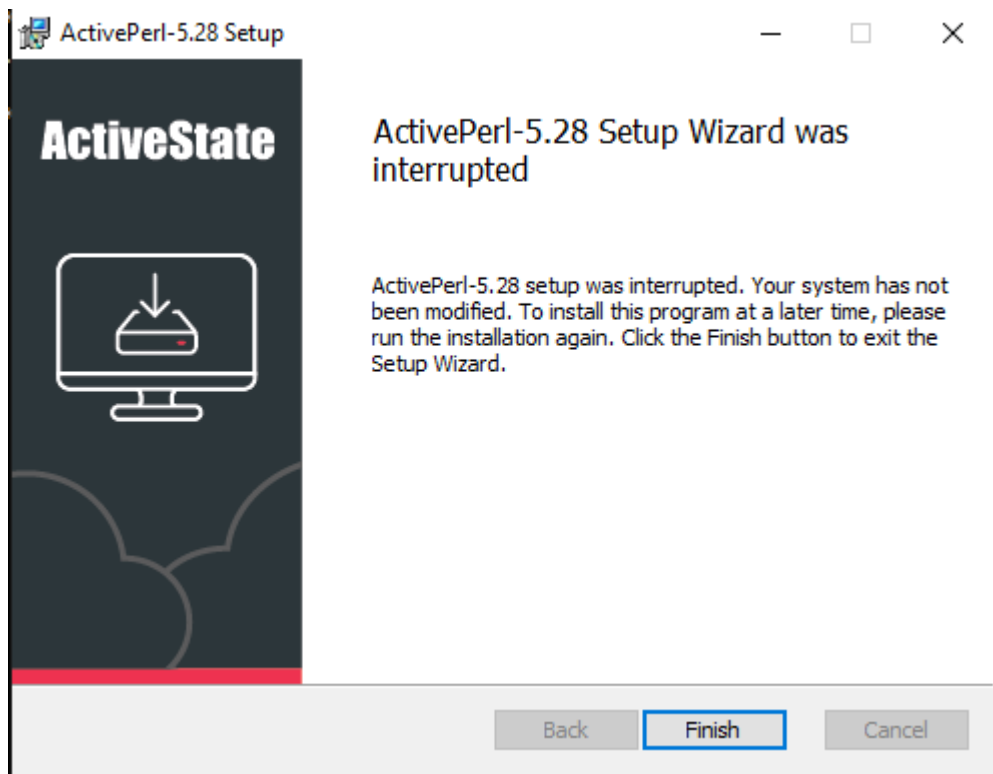






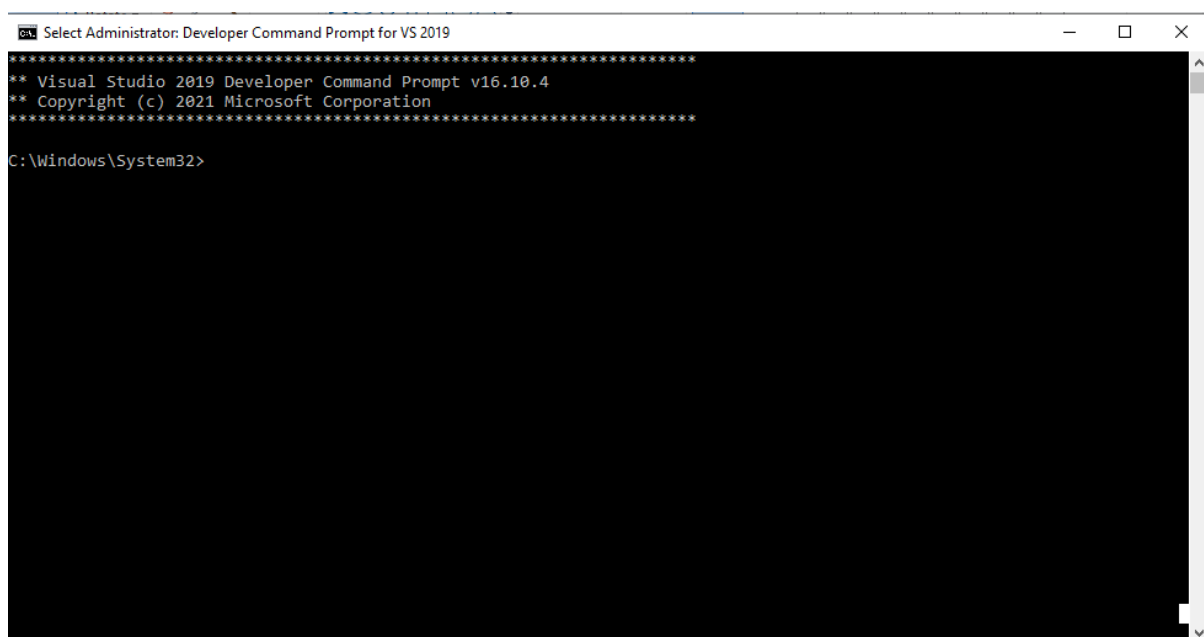
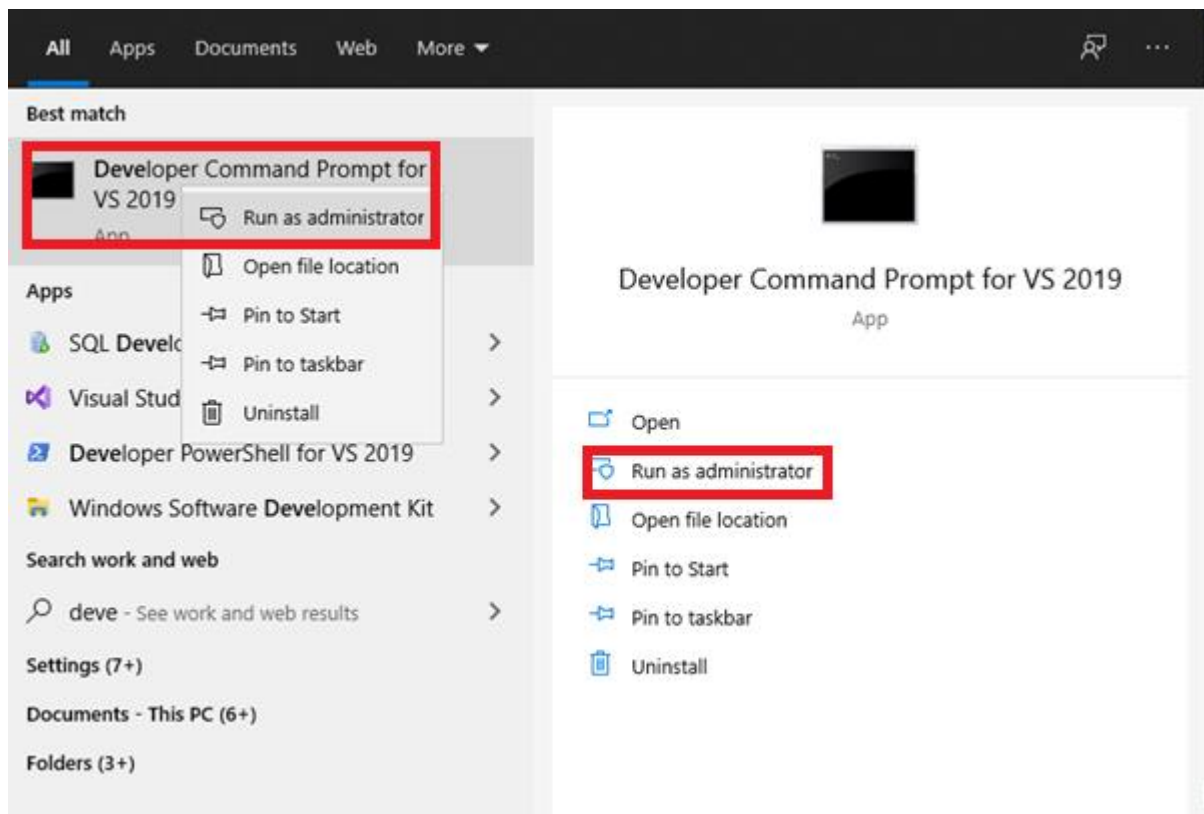
Perl is already installed.





**Solution:**

Start Developer Command Prompt for VS 2019



Administrator: Developer Command Prompt for VS 2019

```
C:\Windows\System32 D:  
D:\>cd D:\postgresql-13.3\src\tools\msvc  
D:\postgresql-13.3\src\tools\msvc>build.bat
```

Administrator: Developer Command Prompt for VS 2019

```
*****  
** Visual Studio 2019 Developer Command Prompt v16.10.4  
** Copyright (c) 2021 Microsoft Corporation  
*****  
  
C:\Windows\System32>D:  
  
D:\>cd D:\postgresql-13.3\src\tools\msvc  
  
D:\postgresql-13.3\src\tools\msvc>ls  
Install.pm          README              build.pl            ecpg_regression.proj  mkvcbuild.pl  pgflex.pl  
MSBuildProject.pm  Solution.pm         clean.bat          gendef.pl            pgbison.bat   vcregress.bat  
Mkvcbuild.pm       VSObjectFactory.pm config_default.pl  install.bat          pgbison.pl    vcregress.pl  
Project.pm         build.bat          dummylib           install.pl            pgflex.bat  
  
D:\postgresql-13.3\src\tools\msvc>build.bat  
Detected hardware platform: Win32  
Generating win32ver.rc for src/backend  
Generating win32ver.rc for src/timezone  
Generating win32ver.rc for src/backend/snowball  
Generating win32ver.rc for src/pl/plpgsql/src  
Generating win32ver.rc for src/interfaces/libpq  
Generating win32ver.rc for src/backend/replication/libpqwalreceiver  
Generating win32ver.rc for src/backend/replication/pgoutput  
Generating win32ver.rc for src/interfaces/ecpg/pgtypeslib  
Generating win32ver.rc for src/interfaces/ecpg/ecpglib  
Generating win32ver.rc for src/interfaces/ecpg/compatlib  
Generating win32ver.rc for src/interfaces/ecpg/preproc  
Generating win32ver.rc for src/interfaces/ecpg/test  
Generating win32ver.rc for src/test/isolation  
Generating win32ver.rc for src/bin/initdb  
Generating win32ver.rc for src/bin/pgbench
```

```
Administrator: Developer Command Prompt for VS 2019 - build.bat
Files contrib/cube/cubescan.l
Files contrib/cube/cubeparse.y
Generating win32ver.rc for contrib/dblink
Generating win32ver.rc for contrib/dict_int
Generating win32ver.rc for contrib/dict_xsyn
Generating win32ver.rc for contrib/earthdistance
Generating win32ver.rc for contrib/file_fdw
Generating win32ver.rc for contrib/fuzzystmatch
Generating win32ver.rc for contrib/hstore
Generating win32ver.rc for contrib/intarray
Generating win32ver.rc for contrib/isn
Generating win32ver.rc for contrib/lo
Generating win32ver.rc for contrib/ltree
Generating win32ver.rc for contrib/oid2name
Generating win32ver.rc for contrib/pageinspect
Generating win32ver.rc for contrib/passwordcheck
Generating win32ver.rc for contrib/pgrowlocks
Generating win32ver.rc for contrib/pgstattuple
Generating win32ver.rc for contrib/pg_buffercache
Generating win32ver.rc for contrib/pg_freespacemap
Generating win32ver.rc for contrib/pg_prewarm
Generating win32ver.rc for contrib/pg_standby
Generating win32ver.rc for contrib/pg_stat_statements
Generating win32ver.rc for contrib/pg_trgm
Generating win32ver.rc for contrib/pg_visibility
Generating win32ver.rc for contrib/postgres_fdw
Generating win32ver.rc for contrib/seg
Files contrib/seg/segscan.l
Files contrib/seg/segparse.y
```

```
Administrator: Developer Command Prompt for VS 2019 - build.bat
rc/include /Isrc/include/port/win32 /Isrc/include/port/win32_msvc /Isrc/backend /Zi /nologo /W3 /WX- /diagnostics:col
umn /Ox /Oy- /D WIN32 /D _WINDOWS /D __WINDOWS__ /D __WIN32__ /D WIN32_STACK_RLIMIT=4194304 /D _CRT_SECURE_NO_DEPRECA
TE /D _CRT_NONSTDC_NO_DEPRECATED /D BUILDING_DLL /D _MBCS /GF /Gm- /EHsc /MD /GS /fp:precise /Zc:wchar_t /Zc:forScope
/Zc:inline /Fo".\release\postgres\src_backend_replication_logical_relation.obj" /Fd".\Release\postgres\vc142.pdb" /ex
ternal:W3 /Gd /TC /wd4018 /wd4244 /wd4273 /wd4102 /wd4090 /wd4267 /analyze- /FC /errorReport:queue /MP src/backend/re
plication_logical/relation.c
C:\Program Files (x86)\Microsoft Visual Studio\2019\Community\VC\Tools\MSVC\14.29.30037\bin\HostX86\x86\CL.exe /c /Is
rc/include /Isrc/include/port/win32 /Isrc/include/port/win32_msvc /Isrc/backend /Zi /nologo /W3 /WX- /diagnostics:col
umn /Ox /Oy- /D WIN32 /D _WINDOWS /D __WINDOWS__ /D __WIN32__ /D WIN32_STACK_RLIMIT=4194304 /D _CRT_SECURE_NO_DEPRECA
TE /D _CRT_NONSTDC_NO_DEPRECATED /D BUILDING_DLL /D _MBCS /GF /Gm- /EHsc /MD /GS /fp:precise /Zc:wchar_t /Zc:forScope
/Zc:inline /Fo".\release\postgres\src_port_pqsignal.obj" /Fd".\Release\postgres\vc142.pdb" /external:W3 /Gd /TC /wd40
18 /wd4244 /wd4273 /wd4102 /wd4090 /wd4267 /analyze- /FC /errorReport:queue /MP src/port/pqsignal.c
pqsignal.c
C:\Program Files (x86)\Microsoft Visual Studio\2019\Community\VC\Tools\MSVC\14.29.30037\bin\HostX86\x86\CL.exe /c /Is
rc/include /Isrc/include/port/win32 /Isrc/include/port/win32_msvc /Isrc/backend /Zi /nologo /W3 /WX- /diagnostics:col
umn /Ox /Oy- /D WIN32 /D _WINDOWS /D __WINDOWS__ /D __WIN32__ /D WIN32_STACK_RLIMIT=4194304 /D _CRT_SECURE_NO_DEPRECA
TE /D _CRT_NONSTDC_NO_DEPRECATED /D BUILDING_DLL /D _MBCS /GF /Gm- /EHsc /MD /GS /fp:precise /Zc:wchar_t /Zc:forScope
/Zc:inline /Fo".\release\postgres\src_port_system.obj" /Fd".\Release\postgres\vc142.pdb" /external:W3 /Gd /TC /wd4018
/wd4244 /wd4273 /wd4102 /wd4090 /wd4267 /analyze- /FC /errorReport:queue /MP src/port/system.c
system.c
ResourceCompile:
C:\Program Files (x86)\Windows Kits\10\bin\10.0.19041.0\x86\rc.exe /l"0x0409" /Isrc/include /nologo /fo".\Release\pos
tgres\win32ver.res" src/backend/win32ver.rc
PreLinkEvent:
Generate DEF file
perl src\tools\msvc\gendef.pl Release\postgres Win32
:VCEnd
Generating POSTGRES.DEF from directory Release\postgres, platform Win32
```



```
Administrator: Developer Command Prompt for VS 2019
C:\Program Files (x86)\Windows Kits\10\bin\10.0.19041.0\x86\rc.exe /I"0x0409" /Isrc\include /nologo /fo".\Release\pg_regress\win32ver.res" src/test/regress/win32ver.rc
Link:
C:\Program Files (x86)\Microsoft Visual Studio\2019\Community\VC\Tools\MSVC\14.29.30037\bin\HostX86\x86\link.exe /ERR
ORREPORT:QUEUE /OUT:".Release\pg_regress\pg_regress.exe" /INCREMENTAL:NO /NOLOGO ws2_32.lib Release\libpgcommon\libp
gcommon.lib Release\libpgport\libpgport.lib kernel32.lib user32.lib gdi32.lib winspool.lib comdlg32.lib advapi32.lib
shell32.lib ole32.lib oleaut32.lib uuid.lib odbc32.lib odbccp32.lib /NODEFAULTLIB:libc /MANIFEST /MANIFESTUAC:"level=
'asInvoker' uiAccess='false'" /manifest:embed /DEBUG /PDB:".Release\pg_regress\pg_regress.pdb" /SUBSYSTEM:CONSOLE /S
TACK:"4194304" /TLBID:1 /DYNAMICBASE:NO /NXCOMPAT /IMPLIB:".Release\pg_regress\pg_regress.lib" /MACHINE:X86 .\Releas
e\pg_regress\win32ver.res
.\Release\pg_regress\pg_regress.obj
.\Release\pg_regress\pg_regress_main.obj
"D:\postgresql-13.3\Release\libpgcommon\libpgcommon.lib"
"D:\postgresql-13.3\Release\libpgport\libpgport.lib"
pg_regress.vcxproj -> D:\postgresql-13.3\Release\pg_regress\pg_regress.exe
FinalizeBuildStatus:
  Deleting file ".Release\pg_regress\pg_regress.tlog\unsuccessfulbuild".
  Touching ".Release\pg_regress\pg_regress.tlog\pg_regress.lastbuildstate".
Done Building Project "D:\postgresql-13.3\pg_regress.vcxproj" (default targets).
Done Building Project "D:\postgresql-13.3\pgsql.sln" (default targets).

Build succeeded.
    0 Warning(s)
    0 Error(s)

Time Elapsed 00:24:20.59
D:\postgresql-13.3\src\tools\msvc>
```

Administrator: Developer Command Prompt for VS 2019

```
D:\postgresql-13.3\src\tools\msvc>vcregress check_
```

Administrator: Developer Command Prompt for VS 2019 - vcregress check

```
D:\postgresql-13.3\src\tools\msvc>vcregress check
Setting up temp install
```

```
Installing version 13 for release in D:/postgresql-13.3/tmp_install
Copying build output files.....
```

```

rangefuncs          ... ok          1660 ms
prepare             ... ok          1570 ms
conversion           ... ok          1469 ms
truncate            ... ok          2207 ms
alter_table         ... ok          2977 ms
sequence            ... ok           985 ms
polymorphism         ... ok          1082 ms
rowtypes            ... ok          1357 ms
returning            ... ok          1242 ms
largeobject          ... ok          1238 ms
with                 ... ok           823 ms
xml                  ... ok           823 ms
parallel group (9 tests):
partition_join       ... ok          3455 ms
partition_prune      ... ok          7783 ms
reloptions           ... ok          1276 ms
hash_part            ... ok          1054 ms
indexing             ... ok          2157 ms
partition_aggregate  ... ok          3947 ms
partition_info       ... ok          1674 ms
tuplesort            ... ok          4302 ms
explain              ... ok           984 ms
test event_trigger   ... ok           287 ms
test fast_default    ... ok           392 ms
test stats           ... ok           277 ms
===== shutting down postmaster =====
===== removing temporary instance =====
```

```
=====
All 201 tests passed.
=====
```

```
D:\postgresql-13.3\src\tools\msvc>
```

Administrator: Developer Command Prompt for VS 2019

```
D:\postgresql-13.3\src\tools\msvc>vcregress contribcheck
```

Administrator: Developer Command Prompt for VS 2019 - vcregress contribcheck

```
D:\postgresql-13.3\src\tools\msvc>vcregress contribcheck
=====
Checking adminpack
D:/postgresql-13.3/Release/pg_regress/pg_regress --bindir=D:/postgresql-13.3/Release/psql --dbname=contrib_regression adminpack
(using postmaster on localhost, default port)
===== dropping database "contrib_regression" =====
password for user user:
psql: error: FATAL: password authentication failed for user "user"
command failed: "D:/postgresql-13.3/Release/psql/psql" -X -c "DROP DATABASE IF EXISTS \"contrib_regression\" \"postgres\""
=====
Checking amcheck
D:/postgresql-13.3/Release/pg_regress/pg_regress --bindir=D:/postgresql-13.3/Release/psql --dbname=contrib_regression check check_btree
(using postmaster on localhost, default port)
===== dropping database "contrib_regression" =====
password for user user:
```

Administrator: Developer Command Prompt for VS 2019 - install.bat C:\PostgreSQL13

```
D:\postgresql-13.3\src\tools\msvc>install.bat C:\PostgreSQL13
Installing version 13 for release in C:\PostgreSQL13
Copying build output files.....
```

C:\ Administrator: Developer Command Prompt for VS 2019

```
D:\postgresql-13.3\src\tools\msvc install.bat C:\PostgreSQL13
Installing version 13 for release in C:\PostgreSQL13
Copying build output files.....
Copying config files.....
Copying Import libraries...
Copying contrib data files.....
.....
Copying Public headers.....
Copying Libpq headers..
Copying Libpq internal headers..
Copying Internal headers...
Copying Server headers...
Copying Grammar header.
.....
Copying PL/pgSQL header.
30 File(s) copied
1 File(s) copied
142 File(s) copied
35 File(s) copied
33 File(s) copied
1 File(s) copied
56 File(s) copied
10 File(s) copied
2 File(s) copied
3 File(s) copied
13 File(s) copied
14 File(s) copied
2 File(s) copied
20 File(s) copied
27 File(s) copied
22 File(s) copied
1 File(s) copied
```

```

26 File(s) copied
27 File(s) copied
22 File(s) copied
4 File(s) copied
40 File(s) copied
2 File(s) copied
11 File(s) copied
5 File(s) copied
20 File(s) copied
7 File(s) copied
43 File(s) copied
2 File(s) copied
55 File(s) copied
8 File(s) copied
7 File(s) copied
88 File(s) copied
Copying ECPG headers.....
Copying ECPG informix headers...
Copying timezone names.....
Copying timezone sets...
Copying BKI files.
Copying SQL files..
Copying Information schema data.
Copying Error code data.
Generating timezone files...
Generating tsearch script.....
Copying Stopword files.....
Copying Dictionaries sample files.....
Copying PL Extension files..
Installation complete.
D:\postgresql-13.3\src\tools\msvc>install.bat C:\PostgreSQL13

```

Administrator: Developer Command Prompt for VS 2019

```

D:\postgresql-13.3\src\tools\msvc>vcregress installcheck
(using postmaster on localhost, default port)
===== dropping database "regression" =====
Password for user user:
psql: error: FATAL: password authentication failed for user "user"
command failed: "../../../Release/psql/psql" -X -c "DROP DATABASE IF EXISTS \"regression\" \"postgres"

D:\postgresql-13.3\src\tools\msvc>vcregress installcheck
(using postmaster on localhost, default port)
===== dropping database "regression" =====
Password for user user:
psql: error: FATAL: password authentication failed for user "user"
command failed: "../../../Release/psql/psql" -X -c "DROP DATABASE IF EXISTS \"regression\" \"postgres"

D:\postgresql-13.3\src\tools\msvc>vcregress installcheck
(using postmaster on localhost, default port)
===== dropping database "regression" =====
Password for user user:
psql: error: FATAL: password authentication failed for user "user"
command failed: "../../../Release/psql/psql" -X -c "DROP DATABASE IF EXISTS \"regression\" \"postgres"

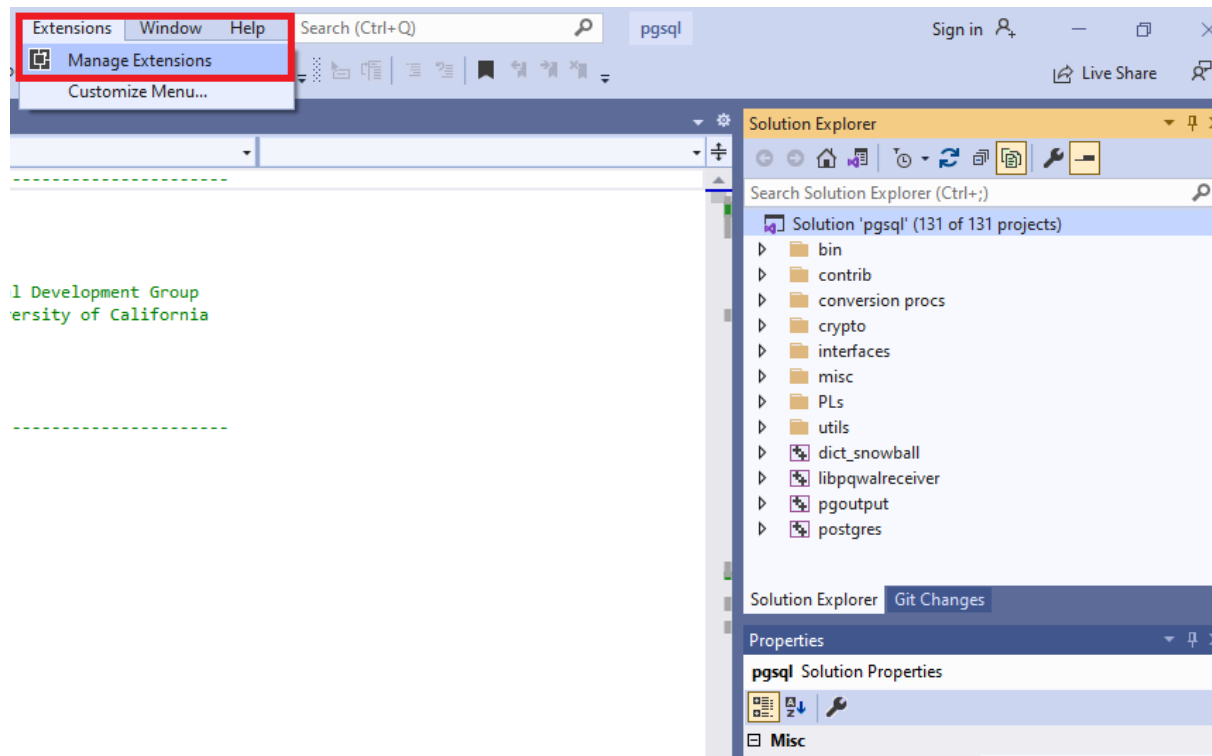
D:\postgresql-13.3\src\tools\msvc>

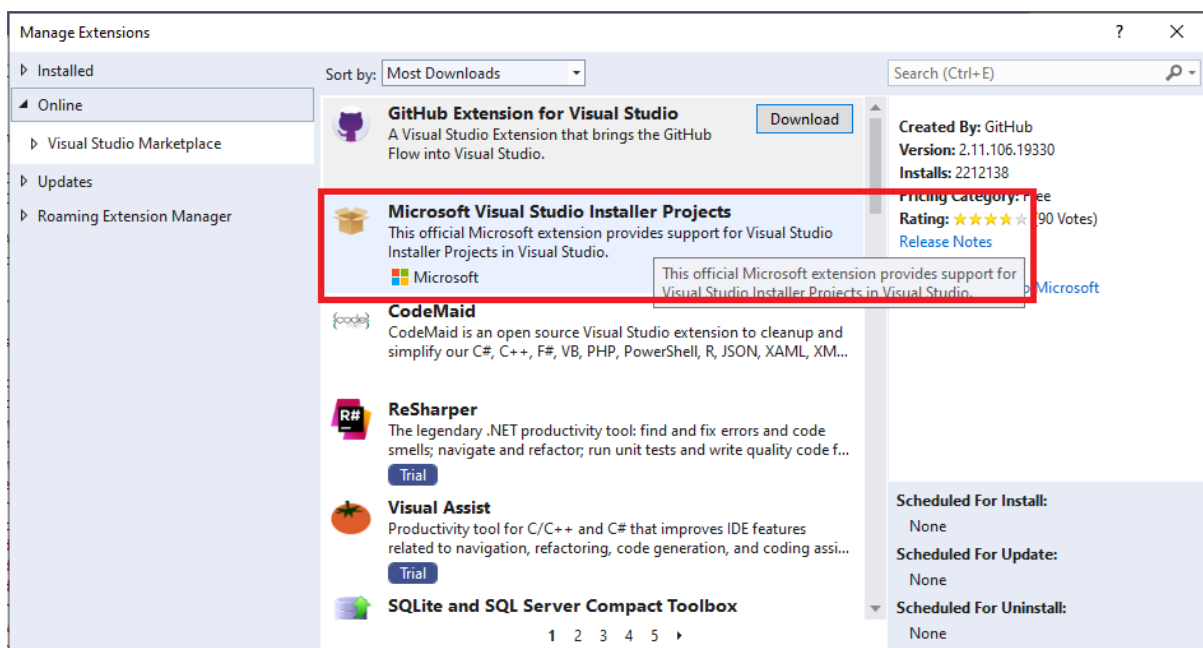
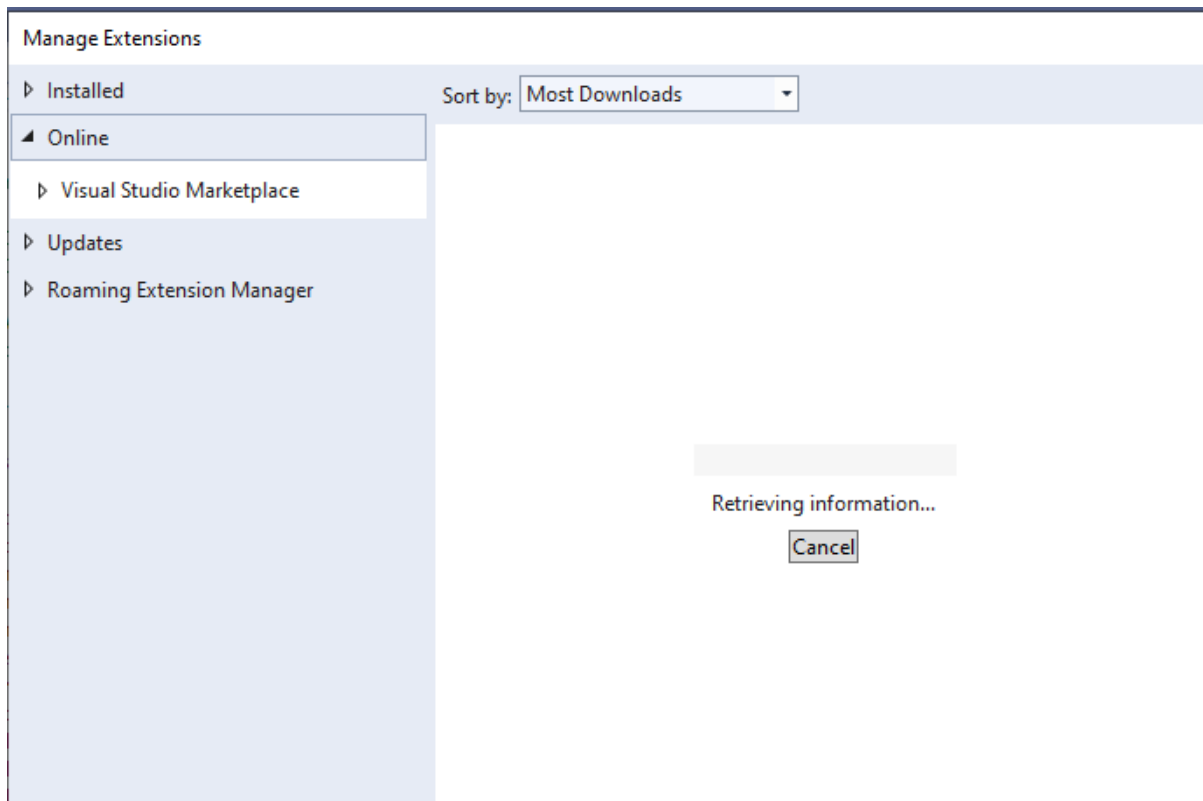
```

Administrator: Developer Command Prompt for VS 2019

```
D:\postgresql-13.3\src\tools\msvc>perl mkvcbuild.pl
Warning: no config.pl found, using default.
Detected hardware platform: Win32
Files src/bin/pgbench/exprscan.l
Files src/bin/pgbench/exprparse.y
Files src/bin/psql/psqlscanlash.l
Files contrib/cube/cubescan.l
Files contrib/cube/cubeparse.y
Files contrib/seg/segscan.l
Files contrib/seg/segparse.y
Generating configuration headers...

D:\postgresql-13.3\src\tools\msvc>
```





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