Microsoft

Step-by-Step Guide to Install ora2pg on Linux & Windows

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Note: The detail provided in this document has been harvested as part of a customer engagement sponsored through the Azure Data Services Jumpstart Program.

This document is meant to be used as a Quick Installation Guide for enabling migration of schema & data from Oracle to Azure Database for PostgreSQL using ora2pg tool. Complete details on the tool can be found at http://ora2pg.darold.net/documentation.html. This document has steps to automate the installation of ora2pg tool using PowerShell for Windows and Bash for Linux Machine, respectively. This script is tested with Oracle 11.xx & 12.xx, please change the script for Oracle versions as needed.

Linux

Pre-Requisites for Linux: This script require RedHat/Centos 7 or later

Step 1

Download bash script installora2pg.sh from Data Migration Jumpstart GitHub Repository

Step 2

Run the script downloaded in step 1 as sudo or root. Make sure you have active internet connection and are running this script as root else the execution will stop.

This script when run will automatically does the following

- o Automatically perform yum update all and install necessary software using yum

- o Checks for libclntsh.so, if it finds it (from previously installed oracle client) then it will continue to the next step, if it can't find it, then it will check whether or not the instant client files (both sdk and basic are available) on the same directory as where this script is located, if those files are there, then it will continue to the next step else will stop and prompt to download from Oracle.com. Please place both(Oracle sdk and client) the zip files in same folder where the script resides.

- o Downloads and install automatically the latest version of dbd oracle from https://www.cpan.org/modules/by-module/DBD

- o It also checks whether or not pg_config is available (PostgreSQL client/server is available), if it is then it will automatically install dbd Pg from the above link, otherwise ora2pg will be installed without PostgreSQL library

- o Git clones the latest version of ora2pg from https://github.com/darold/ora2pg.git and installs and tests ora2pg installation without ora2pg.conf file.

```
-------------------------------------------------------------------------
Please read documentation at http://ora2pg.darold.net/ before asking for help
-------------------------------------------------------------------------
Now type: make && make install
Compiling ora2pg
cp lib/Ora2Pg.pm blib/lib/Ora2Pg.pm
cp lib/Ora2Pg/GEOM.pm blib/lib/Ora2Pg/GEOM.pm
cp lib/Ora2Pg/PLSQL.pm blib/lib/Ora2Pg/PLSQL.pm
cp lib/Ora2Pg/MySQL.pm blib/lib/Ora2Pg/MySQL.pm
cp scripts/ora2pg blib/script/ora2pg
/usr/bin/perl -MExtUtils::MY -e 'MY->fixin(shift)' -- blib/script/ora2pg
cp scripts/ora2pg_scanner blib/script/ora2pg_scanner
/usr/bin/perl -MExtUtils::MY -e 'MY->fixin(shift)' -- blib/script/ora2pg_scanner
Manifying blib/man3/ora2pg.3
Manifying blib/man3/ora2pg.3
Installing /usr/local/share/perl5/Ora2Pg.pm
Installing /usr/local/share/perl5/Ora2Pg/GEOM.pm
Installing /usr/local/share/perl5/Ora2Pg/PLSQL.pm
Installing /usr/local/share/perl5/Ora2Pg/MySQL.pm
Installing /usr/local/share/man/man3/ora2pg.3
Installing /usr/local/bin/ora2pg
Installing /usr/local/bin/ora2pg_scanner
Installing default configuration file (ora2pg.conf.dist) to /etc/ora2pg
Appending installation info to /usr/lib64/perl5/perllocal.pod

ora2pg has been compiled successfully

Removing ora2pg source directory
Removing DBD-Oracle-1.80 source directory and gz file

Checking whether ora2pg can be run successfully!!
Running ora2pg without parameter........

This ora2pg will depend on the following ORACLE_HOME directory: /usr/local/instantclient_12_2
This ora2pg is not linked to POSTGRES_HOME due to the unavailability of postgresql client/server package
You can install postgresql client/server package and re-run this installation at anytime...

ora2pg requires ora2pg.conf....
ora2pg has been installed successfully
```
- o

Please note that this script file has also been tested on docker base centos 7

Windows

Pre-Requisites for Windows: This script have been tested on windows 10 64bit

Step 1

Download PowerShell script installora2pg.ps1 from Data Migration Jumpstart GitHub Repository

Step 2

Run the PowerShell script downloaded in step 1 with admin privilege

This script when run will automatically does the following

- o Checks internet connection, exit out if no internet connection

- o Automatically checks the latest version and install strawberry perl msi file from http://strawberryperl.com/ and removes the downloaded installer file

```
Administrator: Windows PowerShell
Browsing http://strawberryperl.com/
Getting version of strawberry-perl...
Latest version is 5.30.0.1
Will be downloading perl from http://strawberryperl.com/download/5.30.0.1/strawberry-perl-5.30.0.1-64bit.msi
Downloading perl installer from http://strawberryperl.com/download/5.30.0.1/strawberry-perl-5.30.0.1-64bit.msi ..
Downloaded 107064681 bytes
Installing perl ...
msiexec /i C:\Users\          \AppData\Local\Temp\perl.msi /quiet /qn
Verifying perl install ...
 perl --version

This is perl 5, version 30, subversion 0 (v5.30.0) built for MSWin32-x64-multi-thread

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Perl may be copied only under the terms of either the Artistic License or the
GNU General Public License, which may be found in the Perl 5 source kit.

Complete documentation for Perl, including FAQ lists, should be found on
this system using "man perl" or "perldoc perl".  If you have access to the
Internet, point your browser at http://www.perl.org/, the Perl Home Page.

Removing perl installer ...
perl install complete.
```

- o Automatically checks for oracle client installation, if not found then checks whether 2 instant Oracle client files(zip or extracted) are available on the same directory as where this script is located, if those files are available in zip, then this script will extract to files to c:\instantclient_12_2. Refer to screenshots below for messages from PowerShell Scripts

```
Searching oci.dll from Directory C:\instantclient_12_2...
Found OCI.dll in C:\instantclient_12_2\oci.dll
```

```
Searching oci.dll from Directory C:\instantclient_12_2...
Oracle client and SDK are required...
Please download base Instantclient from:
https://download.oracle.com/otn/nt/instantclient/122010/instantclient-basic-windows.x64-12.2.0.1.0.zip
and
https://download.oracle.com/otn/nt/instantclient/122010/instantclient-sdk-windows.x64-12.2.0.1.0.zip
Please download the 2 files and extract both to C:\instantclient_12_2
or put those 2 files in zip format at the same location of this script.
........Press any key to exit...........
```

- o Automatically gets the portable github and install it to c:\github from https://github.com/git-for-windows/git/releases/download/v2.23.0.windows.1/PortableGit-2.23.0-64-bit.7z.exe

- o Automatically installs 2 perllib DBD::Oracle and DBD::Pg using cpan

- o Git clones the latest ora2pg from https://github.com/darold/ora2pg.git and Installs ora2pg. Incase ora2pg already exists, you will see below error message.

```
Checking whether ora2pg has been installed...
ora2pg is currently existing.. in order to upgrade it, please delete ora2pg.bat under strawberryperl bin directory..
```

Note: Once the installation is done, please make sure to set PATH=%%PATH%% & c:\instantclient_12_2

References

http://ora2pg.darold.net/documentation.html

http://strawberryperl.com/

https://www.oracle.com/technetwork/database/enterprise-edition/downloads/index.html

https://www.cpan.org/modules/by-module/DBD

Data Migration Jumpstart GitHub Repository

Feedback and suggestions

If you have feedback or suggestions for improving this data migration asset, please contact the Data Migration Jumpstart Team (askdmjfordmtools@microsoft.com). Thanks for your support!

Note: For additional information about migrating various source databases to Azure, see the Azure Database Migration Guide.