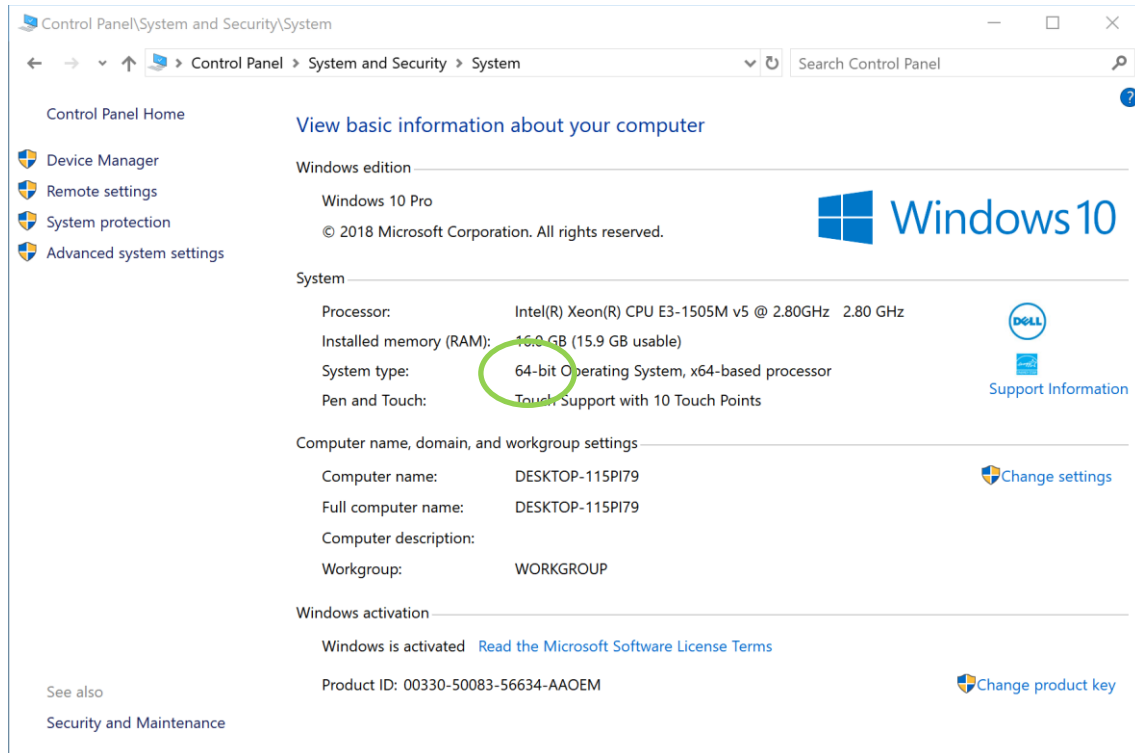


## Installing DES on Windows 10 with access to MS SQL Server

1. Check if your operating system is 64 or 32 bit in Start -> Control Panel -> System and Security:



2. Download the last version of DES from <http://des.sourceforge.net/html/download.html> for your architecture (in this example, 64 bit):

← → ↻ ⓘ No es seguro | des.sourceforge.net/html/download.html

- Home
- Download**
- > Download Previous Versions
- Manual
- Key Features
- Screenshots
- Release Notes
- Known Bugs
- License
- FAQ
- News
- Contact
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- Publications
- Facts
- Statistics

## Download

Datalog Educational System version 6.2 (released on January, 21st, 2019):

**Documentation:**

- [User Manual \(pdf\)](#) (Includes Release Notes)
- [Quick Installation Guide \(txt\)](#)
- [Release Notes \(txt\)](#)
- [Release Notes History \(pdf\)](#) (Only Previous versions)

**Executable Distribution (Includes documentation):**

Requires Java JRE 1.8	
	<a href="#">Windows with GUI</a> (recommended for Windows 10 32bit) Built with SICStus Prolog
	<a href="#">Windows with GUI</a> (recommended for Windows 10 64bit) Built with SICStus Prolog
	<a href="#">Windows with GUI</a> (32bit, Windows 10) Built with SWI-Prolog
	<a href="#">Windows with GUI</a> (64bit, Windows 10) Built with SWI-Prolog

This SICStus version is faster, but you can find that some external databases does not mix well because of types. Then, you could try the SWI-Prolog download instead (the last one in the figure).

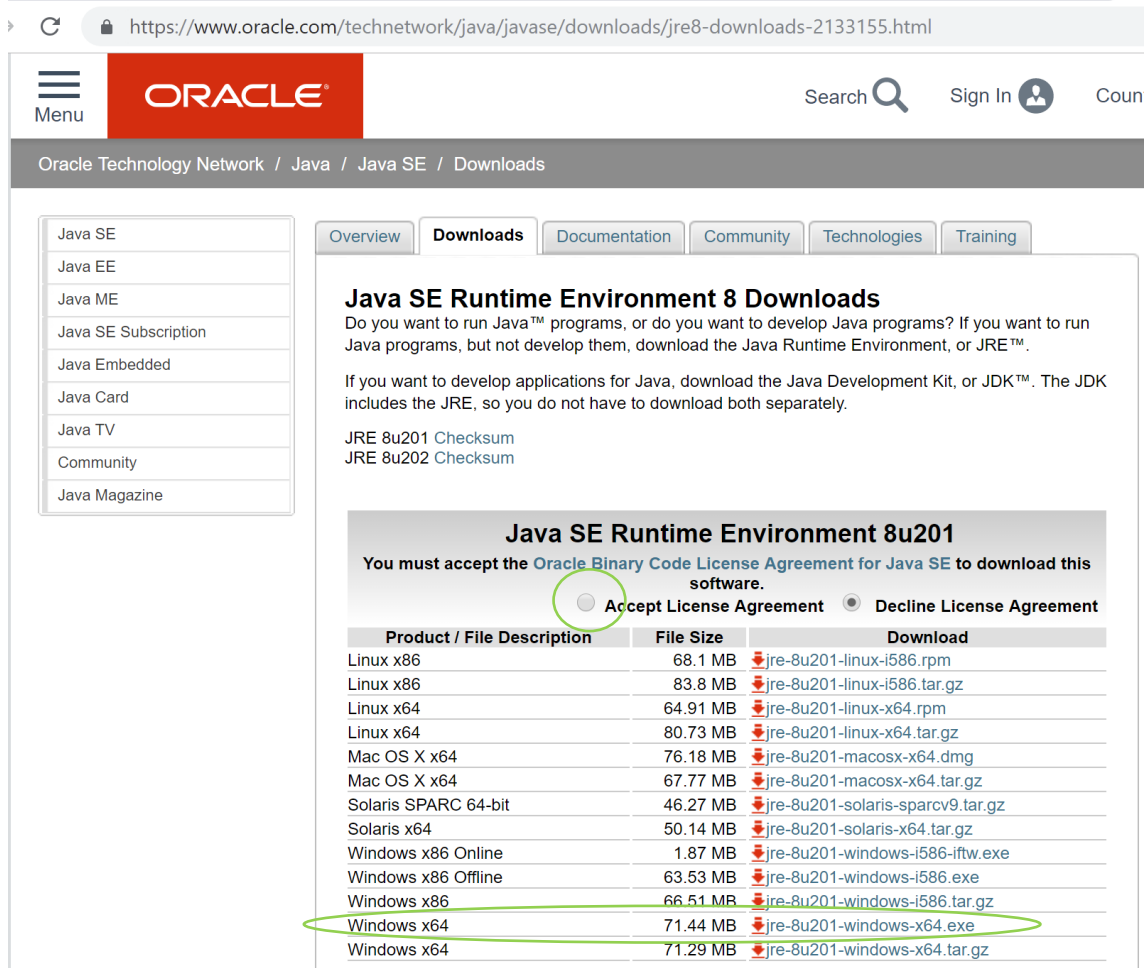
- Unzip the archive you just have downloaded in a folder of your choice. For example, in C:\des:

File Explorer view of C:\des:

Name	Date modified	Type
configuration	1/28/2019 10:08 AM	File folder
doc	1/28/2019 10:08 AM	File folder
examples	1/28/2019 10:08 AM	File folder
language	1/28/2019 10:08 AM	File folder
license	1/28/2019 10:08 AM	File folder
log	1/28/2019 10:08 AM	File folder
resources	1/28/2019 10:08 AM	File folder
des.cnf	1/21/2019 11:30 AM	CNF File
des.exe	1/21/2019 11:51 AM	Application
des_acide.jar	1/21/2019 11:30 AM	Executable Jar File
DES6.2.acideProject	1/21/2019 12:03 PM	ACIDEPROJECT File
MANIFEST.MF	1/21/2019 11:30 AM	MF File
vcruntime140.dll	1/21/2019 11:30 AM	Application extensi

In that folder you can find the file `des_acide.jar`. Double-click on it, and DES should start.

If not, most likely, either Java is not installed or a wrong version is found. If so, download Oracle Java JRE 1.8 from <https://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html> (check the radio button for the license agreement):



Oracle Technology Network / Java / Java SE / Downloads

Overview Downloads Documentation Community Technologies Training

### Java SE Runtime Environment 8 Downloads

Do you want to run Java™ programs, or do you want to develop Java programs? If you want to run Java programs, but not develop them, download the Java Runtime Environment, or JRE™.

If you want to develop applications for Java, download the Java Development Kit, or JDK™. The JDK includes the JRE, so you do not have to download both separately.

JRE 8u201 [Checksum](#)  
JRE 8u202 [Checksum](#)

#### Java SE Runtime Environment 8u201

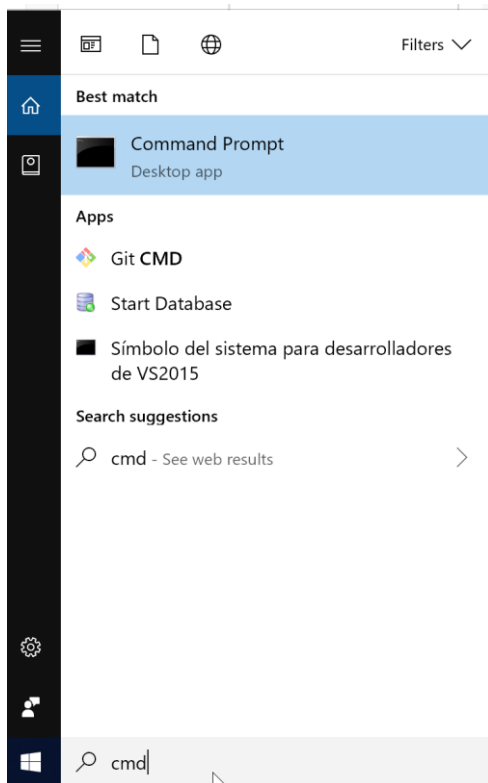
You must accept the [Oracle Binary Code License Agreement for Java SE](#) to download this software.

☒ Accept License Agreement ☐ Decline License Agreement

Product / File Description	File Size	Download
Linux x86	68.1 MB	<a href="#">jre-8u201-linux-i586.rpm</a>
Linux x86	83.8 MB	<a href="#">jre-8u201-linux-i586.tar.gz</a>
Linux x64	64.91 MB	<a href="#">jre-8u201-linux-x64.rpm</a>
Linux x64	80.73 MB	<a href="#">jre-8u201-linux-x64.tar.gz</a>
Mac OS X x64	76.18 MB	<a href="#">jre-8u201-macosx-x64.dmg</a>
Mac OS X x64	67.77 MB	<a href="#">jre-8u201-macosx-x64.tar.gz</a>
Solaris SPARC 64-bit	46.27 MB	<a href="#">jre-8u201-solaris-sparcv9.tar.gz</a>
Solaris x64	50.14 MB	<a href="#">jre-8u201-solaris-x64.tar.gz</a>
Windows x86 Online	1.87 MB	<a href="#">jre-8u201-windows-i586-iftw.exe</a>
Windows x86 Offline	63.53 MB	<a href="#">jre-8u201-windows-i586.exe</a>
Windows x86	66.51 MB	<a href="#">jre-8u201-windows-i586.tar.gz</a>
Windows x64	71.44 MB	<a href="#">jre-8u201-windows-x64.exe</a>
Windows x64	71.29 MB	<a href="#">jre-8u201-windows-x64.tar.gz</a>

By default, Java is installed at `C:\Program Files (x86)\Common Files\Oracle\Java\javapath`.

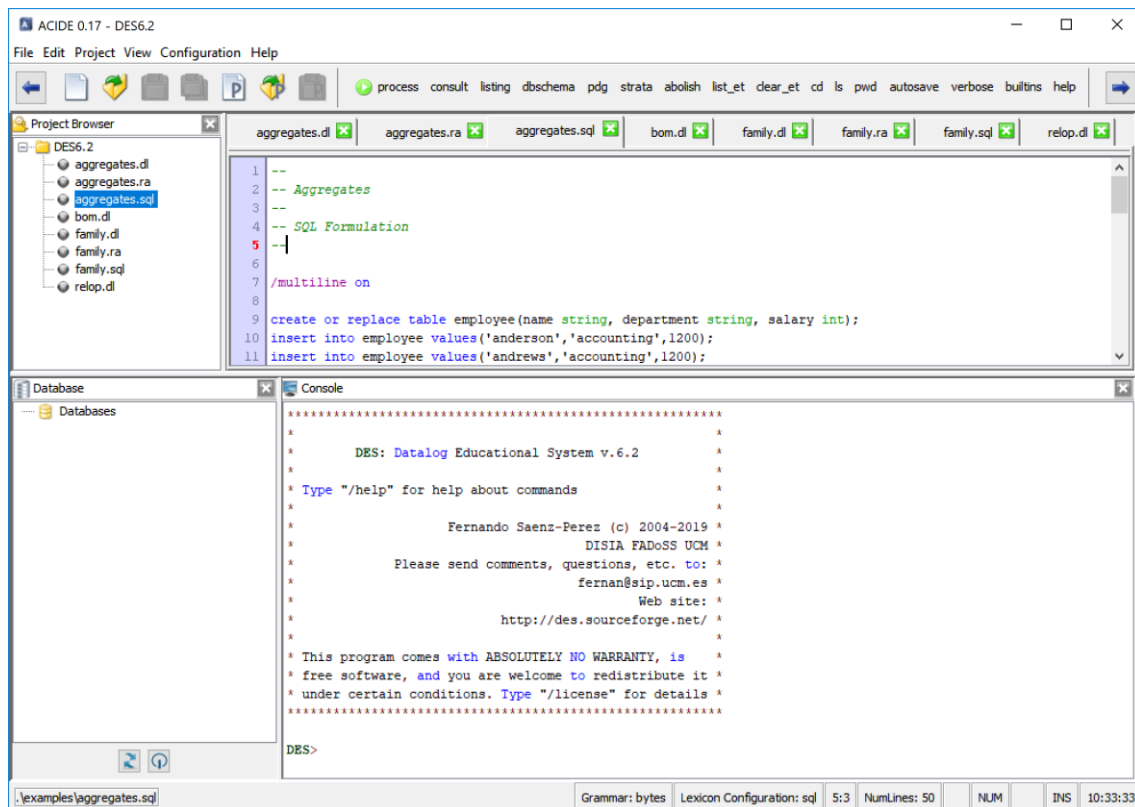
Double click again in `des_acide.jar`. If it insists on not executing then, from a command terminal (type `cmd` in Start):



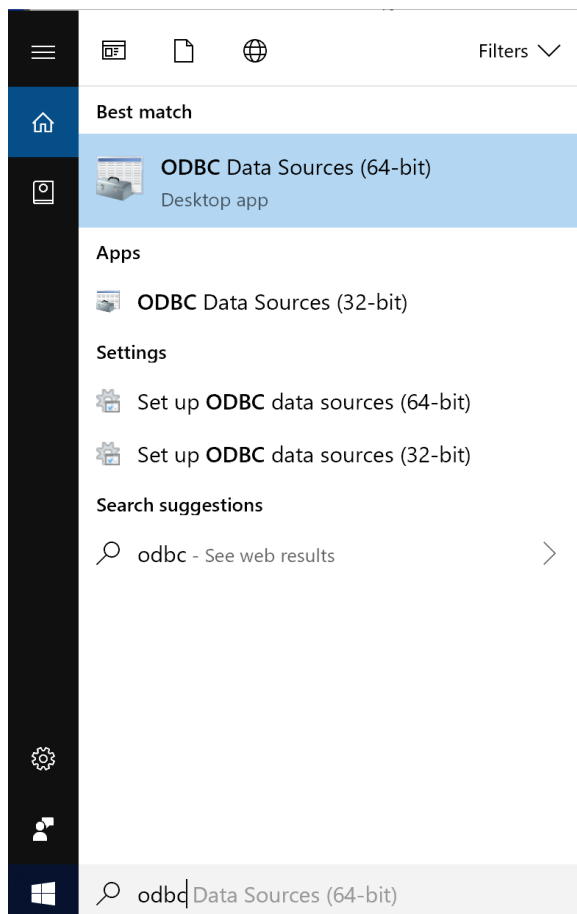
Type the following:

```
Command Prompt - java -jar des_acide.jar  
Microsoft Windows [Version 10.0.17134.523]  
(c) 2018 Microsoft Corporation. All rights reserved.  
  
C:\Users\fernan>cd \des  
  
C:\des>java -jar des_acide.jar  
_
```

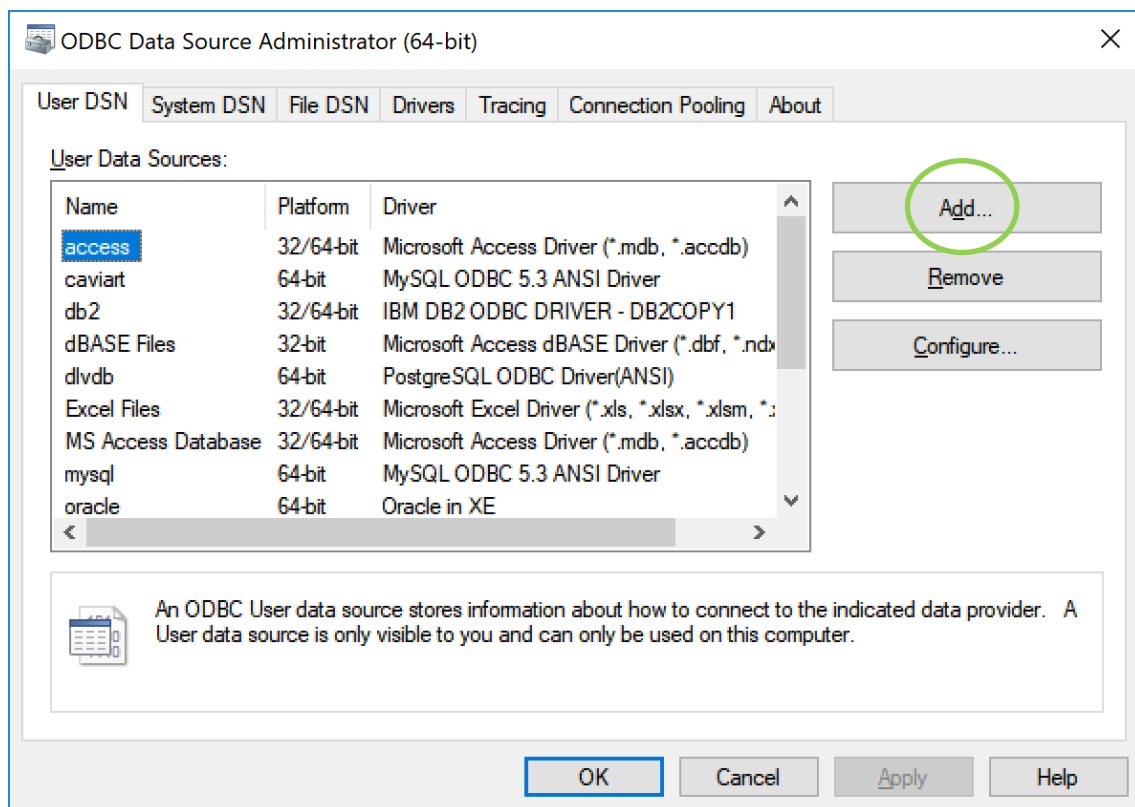
which should start DES with the ACIDE GUI:



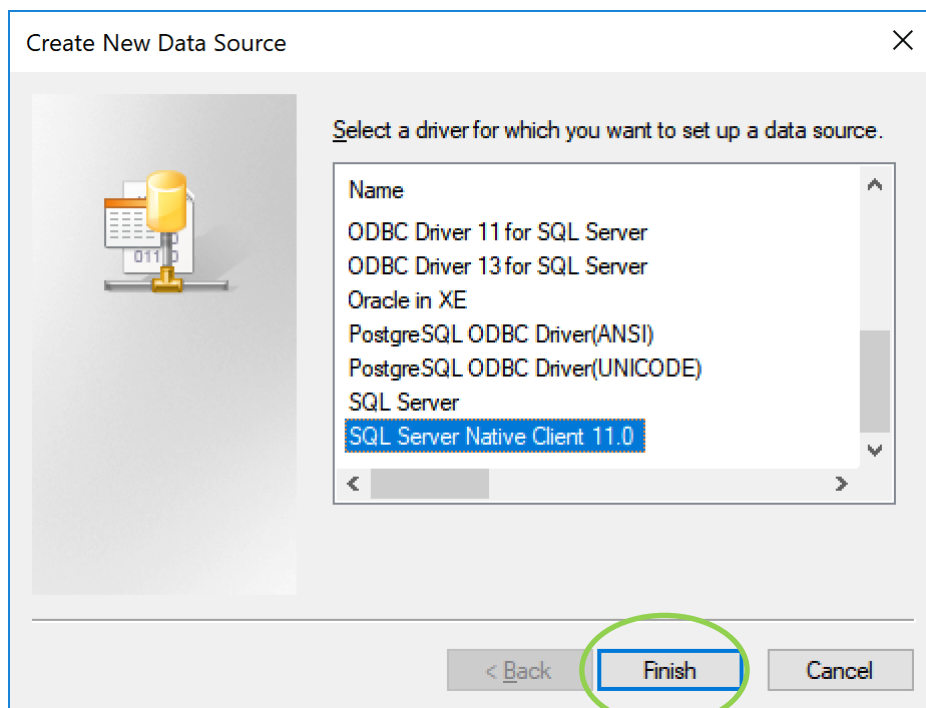
4. Create an ODBC connection to the external database (SQL Server, in this example) with:



which opens the following dialog box, where you must click on "Add":



Select the "SQL Server Native Client 11.0" driver as follows and click "Finish":



Fill the required text boxes, select your SQL Server instance (you may need to add "\SQLEXPRESS" at the end) from the last drop-down box, and click "Finish":

Create a New Data Source to SQL Server

This wizard will help you create an ODBC data source that you can use to connect to SQL Server.

What name do you want to use to refer to the data source?

Name:

How do you want to describe the data source?

Description:

Which SQL Server do you want to connect to?

Server:

You can test the connection right now:

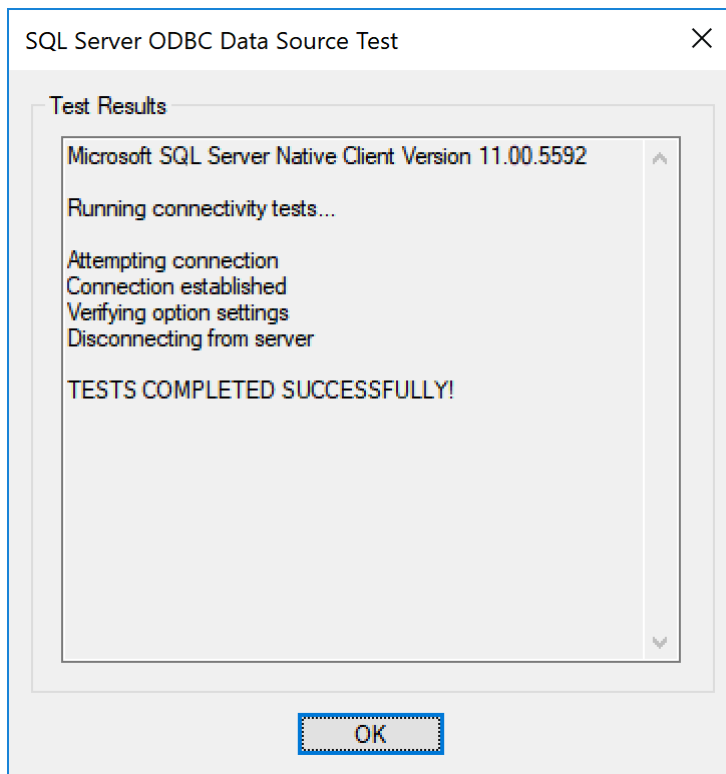
ODBC Microsoft SQL Server Setup

A new ODBC data source will be created with the following configuration:

Microsoft SQL Server Native Client Version 11.00.5592

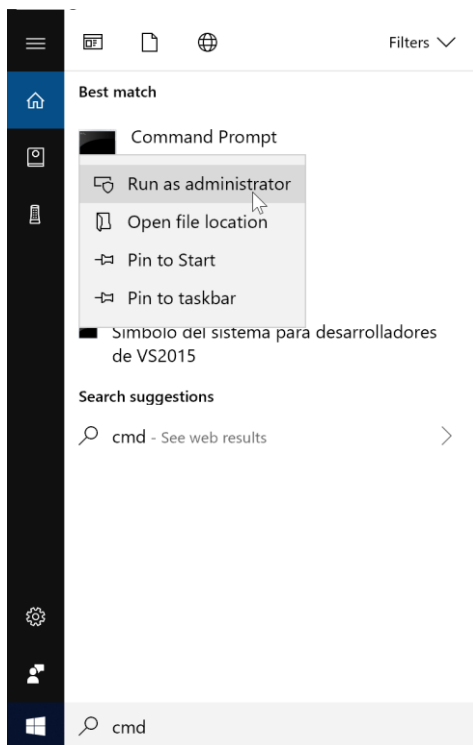
Data Source Name: sql\_server  
Data Source Description: My SQL Server connection  
Server: DESKTOP-115PI79\SQLEXPRESS  
Use Integrated Security: Yes  
Database: (Default)  
Language: (Default)  
Data Encryption: No  
Trust Server Certificate: No  
Multiple Active Result Sets(MARS): No  
Translate Character Data: Yes  
Log Long Running Queries: No  
Log Driver Statistics: No  
Use Regional Settings: No  
Use ANSI Quoted Identifiers: Yes  
Use ANSI Null, Paddings and Warnings: Yes

which should be ok:



Click "OK" as many times as needed in the different dialogs to eventually close the "ODBC Data Source Administrator".

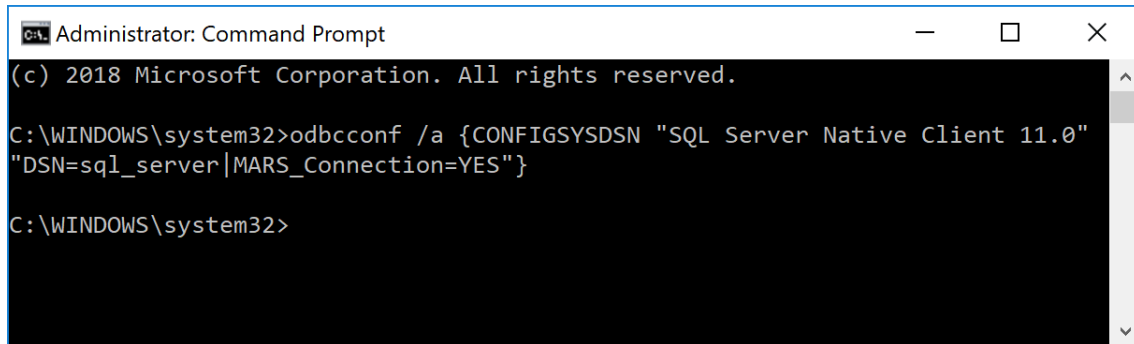
It seems that this ODBC administrator does not allow you to enable MARS (Multiple Active Result Sets), which is required to operate with SQL Server from DES. To enable it, start a command terminal as administrator:



Then, type **in a single line**:

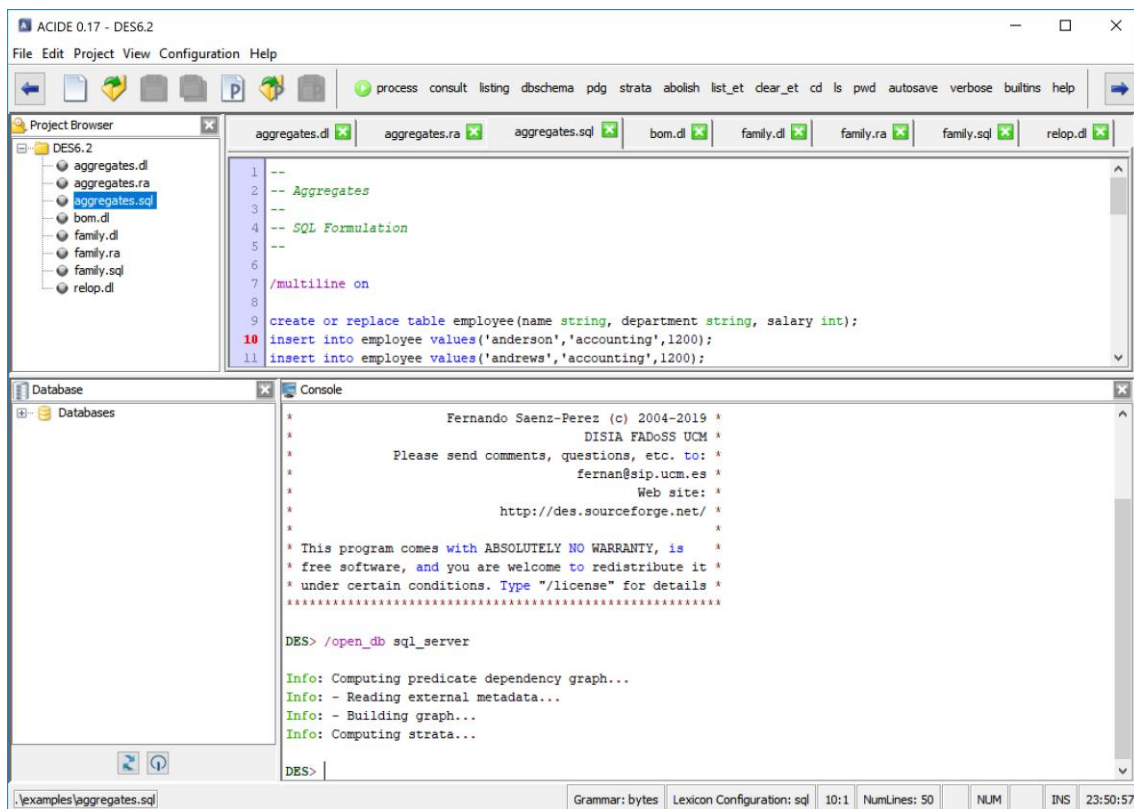


```
odbcconf /a {CONFIGSYSDSN "SQL Server Native Client 11.0"  
"DSN=sql_server|MARS_Connection=YES"}
```



```
Administrator: Command Prompt  
(c) 2018 Microsoft Corporation. All rights reserved.  
C:\WINDOWS\system32>odbcconf /a {CONFIGSYSDSN "SQL Server Native Client 11.0"  
"DSN=sql_server|MARS_Connection=YES"}  
C:\WINDOWS\system32>
```

Finally, you should be able to play with DES connected to SQL Server!



```
ACIDE 0.17 - DES6.2  
File Edit Project View Configuration Help  
process consult listing dbschema pdg strata abolish list_et clear_et cd ls pwd autosave verbose builtins help  
Project Browser  
DES6.2  
aggregates.dl  
aggregates.ra  
aggregates.sql  
bom.dl  
family.dl  
family.ra  
family.sql  
relop.dl  
aggregates.dl aggregates.ra aggregates.sql bom.dl family.dl family.ra family.sql relop.dl  
1 --  
2 -- Aggregates  
3 --  
4 -- SQL Formulation  
5 --  
6 --  
7 /multiline on  
8  
9 create or replace table employee(name string, department string, salary int);  
10 insert into employee values('anderson','accounting',1200);  
11 insert into employee values('andrews','accounting',1200);  
Database  
Databases  
Console  
Fernando Saenz-Perez (c) 2004-2019 *  
DISIA FADoSS UCM *  
Please send comments, questions, etc. to: *  
fernan@sip.ucm.es *  
Web site: *  
http://des.sourceforge.net/ *  
* This program comes with ABSOLUTELY NO WARRANTY, is *  
* free software, and you are welcome to redistribute it *  
* under certain conditions. Type "/license" for details *  
*****  
DES> /open_db sql_server  
Info: Computing predicate dependency graph...  
Info: - Reading external metadata...  
Info: - Building graph...  
Info: Computing strata...  
DES>  
Grammar: bytes Lexicon Configuration: sql 10:1 NumLines: 50 NUM INS 23:50:57
```