

## APLNext DataBase Interface Tool for Microsoft SQL Server – with LocalDB

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This is a quick response, simply to prove that this tool can use LocalDB contrary to the conclusion stated at , <http://forum.apl2000.com/viewtopic.php?f=21&t=849#p3331>, namely,

*“The attached document indicates why the current (as of 05/09/2012) version of the APLNext Database Interface Tools for SQL Server **cannot access the 'localdb' instance** of the Microsoft SQL Express 2012 database software.”*

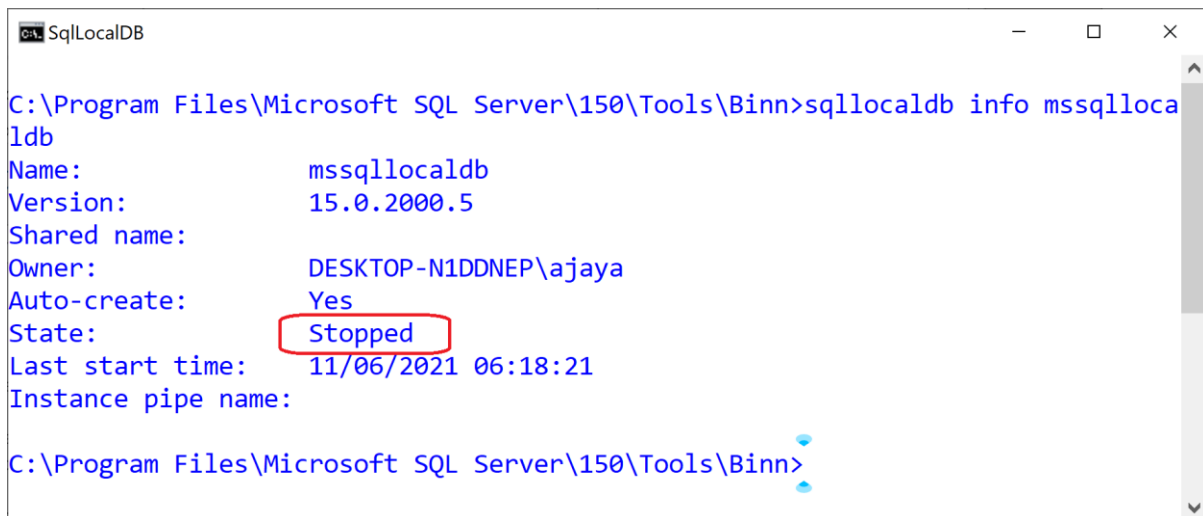
This suggests that there is some inherent limitation on LocalDB: that is definitely not the case. As far as I know, LocalDB has restricted concurrency and database size and in other respects, it is the same as other versions. Indeed, LocalDB applications migrate seamlessly to commercial versions of SQL Server.

LocalDB is like an embedded database that must be installed on the same computer as the application that uses it. There is no server and its state can be on (Running) or off (Stopped). Hence, it is impossible to specify the value of Data Source in the connection string.

However, you can use the LocalDB's **Instance pipe name** as the Data Source. Alas, the **Instance pipe name** is volatile: it does not exist when LocalDB is off and on switching it on, the **Instance pipe name** is determined dynamically. In other words, **Instance pipe name** is not a static value.

Therefore, in order to use LocalDB with this tool, you need to determine the **Instance pipe name** in real time. The screenshots below demonstrate the steps.

First, determine the state of the instance of LocalDB you want to use: it can be on or off.



```
C:\Program Files\Microsoft SQL Server\150\Tools\Binn>sqllocaldb info mssqllocaldb
Name:                mssqllocaldb
Version:             15.0.2000.5
Shared name:
Owner:               DESKTOP-N1DDNEP\ajaya
Auto-create:         Yes
State:               Stopped
Last start time:     11/06/2021 06:18:21
Instance pipe name:

C:\Program Files\Microsoft SQL Server\150\Tools\Binn>
```

Second, Start the instance of LocalDB if it is off – my current instance at this point is off, that is, it has stopped. Therefore I need to start it.



```
C:\Program Files\Microsoft SQL Server\150\Tools\Binn>sqllocaldb start mssqllocaldb
LocalDB instance "mssqllocaldb" started.
C:\Program Files\Microsoft SQL Server\150\Tools\Binn>
```

Now, if I repeat the first step, I get a different response.

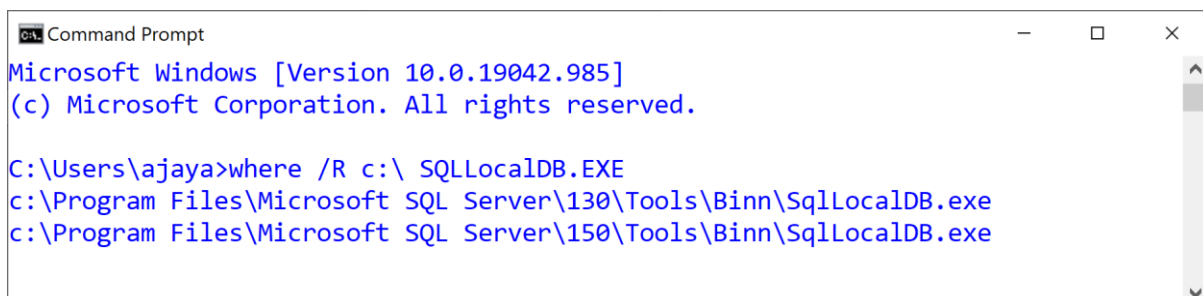


```
C:\Program Files\Microsoft SQL Server\150\Tools\Binn>sqllocaldb info mssqllocaldb
Name:                mssqllocaldb
Version:             15.0.2000.5
Shared name:
Owner:               DESKTOP-N1DDNEP\ajaya
Auto-create:         Yes
State:               Running
Last start time:     11/06/2021 06:41:55
Instance pipe name:  np:\\.\pipe\LOCALDB#269B6EFB\tsql\query
C:\Program Files\Microsoft SQL Server\150\Tools\Binn>
```

The vital piece of information I need is the **Instance pipe name**.

I can use the **Instance pipe name** with this tool. On the downside, I need to determine this **every** time I make a connection and this requires a little cunning to do programmatically.

SQLLocalDB.Exe is the utility that provides feedback on the state of LocalDB and its properties. Depending on the version of LocalDB you are using, the location of SQLLocalDB may be different on your computer, Use this Command Prompt command to find the location of your copy.



```
Microsoft Windows [Version 10.0.19042.985]
(c) Microsoft Corporation. All rights reserved.

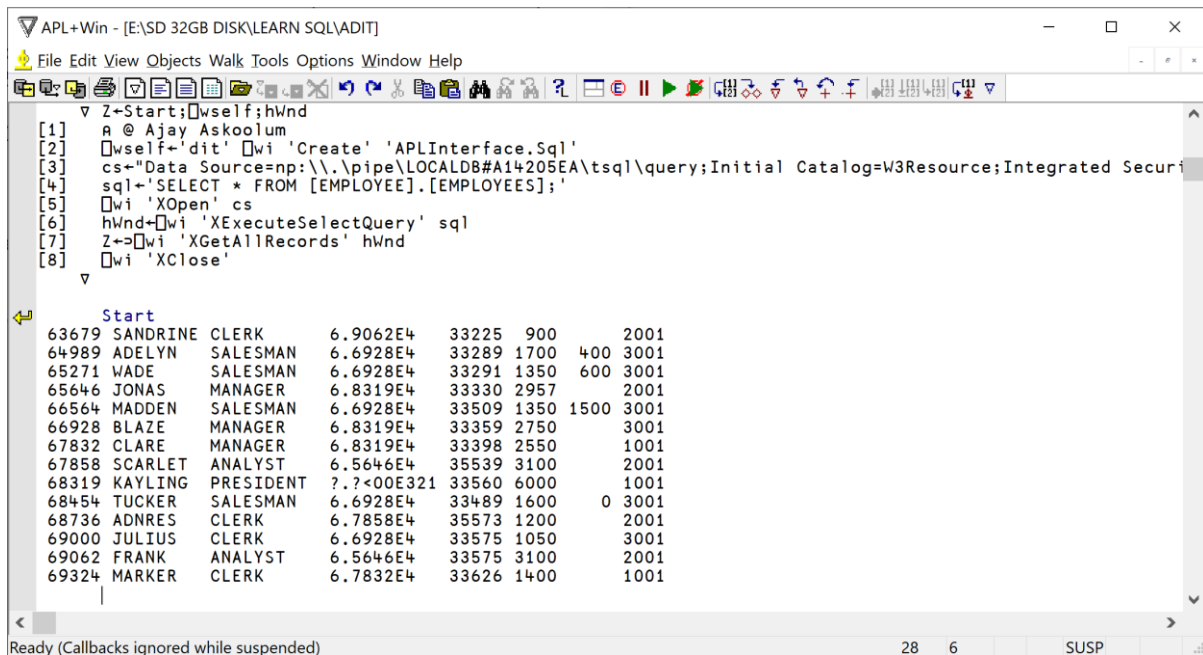
C:\Users\ajaya>where /R c:\ SQLLocalDB.EXE
c:\Program Files\Microsoft SQL Server\130\Tools\Binn\SqlLocalDB.exe
c:\Program Files\Microsoft SQL Server\150\Tools\Binn\SqlLocalDB.exe
```

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*APLNext Database Interface Tool for Microsoft SQL Server*  
*Ajay Askoolum*

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Here's the proof.



The screenshot shows the APL+Win application window with the title bar 'APL+Win - [E:\SD 32GB DISK\LEARN SQL\ADIT]'. The menu bar includes 'File Edit View Objects Walk Tools Options Window Help'. The toolbar contains various icons for file operations, editing, and execution. The main window displays a script with the following lines:

```
[1] Z←Start;⎵wself;hWnd
[2] A @ Ajay Askoolum
[3] ⎵wself←'dit' ⎵wi 'Create' 'APLInterface.Sql'
[4] cs←'Data Source=np:\\.\pipe\LOCALDB#\A14205EA\tsql\query;Initial Catalog=W3Resource;Integrated Security=SSPI;'
[5] sql←'SELECT * FROM [EMPLOYEE].[EMPLOYEES];'
[6] ⎵wi 'XOpen' cs
[7] hWnd←⎵wi 'XExecuteSelectQuery' sql
[8] Z→⎵wi 'XGetAllRecords' hWnd
[9] ⎵wi 'XClose'
```

Below the script, a table of data is displayed, starting with a 'Start' label. The table has 7 columns and 20 rows of data:

Start						
63679	SANDRINE	CLERK	6.9062E4	33225	900	2001
64989	ADELYN	SALESMAN	6.6928E4	33289	1700	400 3001
65271	WADE	SALESMAN	6.6928E4	33291	1350	600 3001
65646	JONAS	MANAGER	6.8319E4	33330	2957	2001
66564	MADDEN	SALESMAN	6.6928E4	33509	1350	1500 3001
66928	BLAZE	MANAGER	6.8319E4	33359	2750	3001
67832	CLARE	MANAGER	6.8319E4	33398	2550	1001
67858	SCARLET	ANALYST	6.5646E4	35539	3100	2001
68319	KAYLING	PRESIDENT	?.?<00E321	33560	6000	1001
68454	TUCKER	SALESMAN	6.6928E4	33489	1600	0 3001
68736	ADNRES	CLERK	6.7858E4	35573	1200	2001
69000	JULIUS	CLERK	6.6928E4	33575	1050	3001
69062	FRANK	ANALYST	6.5646E4	33575	3100	2001
69324	MARKER	CLERK	6.7832E4	33626	1400	1001

The status bar at the bottom shows 'Ready (Callbacks ignored while suspended)' on the left, and '28 6 SUSP' on the right.

This is the same result as on page 10 of the PDF I have attached to the thread at <http://forum.apl2000.com/viewtopic.php?f=21&t=1333#p5683>. In that document, you will find further details on using the LocalDB management executable SQLLocalDB,.EXE.

Note: Either the guide at <http://forum.apl2000.com/download/file.php?id=551> is out of date **OR** Sonia sent me another version of the file.. For instance, it shows that the class name is **APLNext.SqlClient** but it is, in fact, **APLInterface.Sql**.