# Configuration to link Clever Access 2.0 with SQL Server

## A: Create SQL Database and table in SQL Server

- 1. Open Microsoft SQL Server Management Studio.
- 2. Create a new database.

In "Microsoft SQL Server Management Studio" go to "Databases". On the "Databases" folder, press the right mouse button and select "New Database". In the "Database name" field enter the name "AttnInfo" and press "OK".

Select a page	<b>T</b>					
👂 General	L Script - 😯 Help					
<ul> <li>Øptions</li> <li>Filegroups</li> </ul>	Database name:		AttnInfo			
	Owner:		<default></default>			
	🔽 Use full-text in	ndexing				
	Database files:					
	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth / Maxsize	
	Attninfo	ROWS	PRIMARY	5	By 1 MB, Unlimited	
	Attninfo_log	LOG	Not Applicable	1	By 10 percent, Unlimited	1
Connection						
Server:						
Connection:						
sa						
View connection properties						
-						
Progress						
Ready	<					>
40.00				Add	Remove	3
					OK	ancel

A new database with the assigned name will be created.



3. Create the Table

Locate yourself on the "AttnInfo" Database. Press right button and select "New Query" ("New Query" in Spanish), in the blank window enter the following sentence:

CREATE TABLE [dbo].[AttnInfo]( [EmpCode][varchar](50) NULL, [EntryDate][date] NULL, [EntryTime][time](7) NULL, [Updateflag][int] NULL, [DeviceID][varchar](50) NULL ) ON [PRIMARY]

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Then press the "Execute" button.

Verify that the result of the command is "Command completed succesfully"

Verify that the Table was created correctly in the "AttnInfo" database, by expanding "Tables".



Verify that the "dbo.AttnInfo" table is created, otherwise press "refresh" button. It should appear. If not, means the table is not created. So Please, follow the steps once again.

## **B: Create ODBC DSN**

1. In 64-bit OS please go to path "C:\Windows\SysWOW64" and open "odbcad32.exe". In 32-bit OS please go to path "C:\Windows\System32" and open "odbcad32.exe".

			Application Tools	SysWOW64			
	Share	View	Manage				
	→ This PC → Local Disk (C:) → Windows → SysWOW64 →						
:55	^	Name	^ مەرىيە	Date modified Type Size			
		🔊 odbc	32.dll	12/04/2018 05:04 DLL File 602 KB			
ds	- 	🚔 odbca	ad32.exe	12/04/2018 05:04 Application 71 KB			

2. Go to "System DSN" and press "Add" button.

ODBC Data Source Administrator (32-bit)	×
User DSN System DSN File DSN Drivers Tracing Connection Pooling Abo	ut
System Data Sources:	2
Name Platform Driver	A <u>d</u> d
	<u>R</u> emove
	<u>C</u> onfigure
An ODBC System data source stores information about how to connect t A System data source is visible to all users on this machine, including NT	o the indicated data provider. *services.
OK Cancel	Apply Help

#### 3. Select SQL Native press "Finish" button.

Create New Data Source		×
	Select a driver for which you want to set up a data sour Name Microsoft Paradox Driver (*.db ) Microsoft Paradox-Treiber (*.db ) Microsoft Text Driver (*.bt; *.csv)	ce. \ ^ 1 1 1
	Microsoft Text-Treiber (*.txt; *.csv) ODBC Driver 11 for SQL Server	1
-	SQL Server SQL Server Native Client 11.0	
_	< >>	-
	< <u>B</u> ack Finish Cano	:el

 In the new window, enter the text "Attninfo" in the "Name" field. In the "Server" combo select the SQL server where the database that we created in step A is located.

Note: If the server does not appear, it is probably because the SQL search service is not enabled. Enable it to show the SQL server.



5. In the next window select the option "With SQL Server Authentication ..." Check the box "Connect with SQL Server to get ..."

In the field "Login ID" enter the user eg: sa In the field "Password" enter the password of the selected user and press "Next"

Create a New Data Sou	rce to SQL Server	x
	How should SQL Server verify the authenticity of the login ID?	
SQL Server 2012	C With Integrated Windows authentication.	_
	With SQL Server authentication using a login ID and password entered by the user.	
	Login ID: sa	
	Password:	
	< Back Next > Cancel Help	

6. In the next window select the database "AttnInfo" and press "Next"

Create a New Data Sour	rce to SQL Server	2
4	Change the default database to:	
	Attninfo	-
SQL Server 2012	Mirror server:	
	l SPN for mirror server (Optional):	
	Attach database filename:	
	I ✓ Use ANSI quoted identifiers. ✓ Use ANSI nulls, paddings and warnings	
	Application intent:	
	READWRITE	•
	Multi-subnet failover.	
	< Back Next > Cancel	Help

7. In the next window just press the "Finish" button



8. Finally, press the "Test" button and verify that it is successful





Close ODBC by simply pressing "OK".

# C: Modify configuration file to link with ODBC

Go to the "Clever Access 2.0" installation directory and open the file "Clever Access 2.0.exe.config" with text editor.

In the string "<add key =" ODBC2 " Change the sentence as indicated below: <add key="ODBC2" value="true\*\$\*DSN= Attninfo;Uid=sa;Pwd=<password of sa>\*\$\*yyyy-MM-dd\*\$\*insert into AttnInfo(Empcode,EntryDate,EntryTime,DeviceID) values('@empcode@','@logdate@','@logtime@','@deviceid@');" />

Save it and close it.

<u>Restart CleverAccess2.0 Program if it is already running. Pl. note the changes will take effect</u> <u>only after the restart.</u>

### D: Test

- 1. Download punch data in Clever Access 2.0 Software.
- 2. Go to the database "AttnInfo" in SQL Server, press the right button and select "New Query".

In the blank field, enter the following sentence:

Select \* FROM [Attninfo].[dbo].[Attninfo]

It will show all newly downloaded punch data in the table.



If no data found, Pl. refer Troubleshoot section below.

# E: Troubleshoot

Go to Clever Access 2.0 installation path.

Under the "Log" directory search current date directory (yyyy-MM-dd) formatted name e.g. 2019-06-10.

#### Check ODBC.log is present?

				Log > 2019-06-10
^	Name	Date modified	Туре	Size
	DeActivedMember.log	10/06/2019 10:42	Text Document	1 KB
	ex.log	10/06/2019 11:07	Text Document	10 KB
	Notification.log	10/06/2019 11:56	Text Document	1 KB
	DDBC.log	10/06/2019 11:07	Text Document	1 KB
	SockServer.log	10/06/2019 11:56	Text Document	1 KB
e				

If not, means

- 1. Changes done in CleverAccess 2.0 Software Configuration file is not in effect. Pl. restart CleverAccess 2.0 Software and test it again.
- 2. Punch data is not downloaded after restart is done. So please, try download some data and check once again.
- 3. Please check section "**B: Create ODBC DSN**" Please, ensure driver selection should be "SQL Native Client" and compatible with 32-bit.

If "ODBC.log" is found, Open it and check for the message written over there. If no error message, Please check "ex.log" file.

Please verify the setting according to the messages available in both files.

Sometimes Date and Time format is creating problem. So need to change Date and Time format (Regional Settings in Windows OS) according to the error message found in "ODBC.log".