X-Force Data Collector

Overview

- Whenever we have the situation that we want to fetch data from Wonder ware in that case we have to use X-Force Data Collector Application from AIMS package.
- Wonder ware itself creates SQL database Named "WWALMDB".
- X-Force Data Collector application will fetch data from one the view "**v_AlarmEventHistoryInternal2**" of WWALMDB database.

X-Force Data Collector Application can fetch data from mainly two type of source.

1. **ODBC**: For ODBC connection, Firstly we have to configure ODBC from windows ODBC configuration.

2. **OPC**: For OPC, Firstly user have to do DCOM configuration.

- As per license ODBC Channel Count Feature, User should be able to configure number of Channels from mentioned in license.

```
FEATURE AMS-CHANNEL-ODBC 15.25.04.0000 31-Dec-2019 2 \
        HOSTID=94-18-82-08-9C-26 MAC ISSUER=""SSM InfoTech Solutions"
        NOTICE="" |  | ""| SIGN="VCNMHEVTUY0BW/P7TDXHU/ZBWYQRYDRRPRK2
```

- Application should fetch data from ODBC/OPC as per configuration
- If data reading is enabled than application should read data from the source.
- If data printing is enabled than application should send data to the configured destination.

Pre-requisite

Before starting configuration of X-Force Data Collector, firstly we need to do two major configuration.

1) ODBC DSN Creation (if want to configure ODBC channel)

2) OPC DCOM Configuration (if want to configure OPC Channel)

3) Give Every One Rights to the folder where X-Force Data Collector application is installed. If user does not give sufficient privilege to the directory then application will exit automatically.

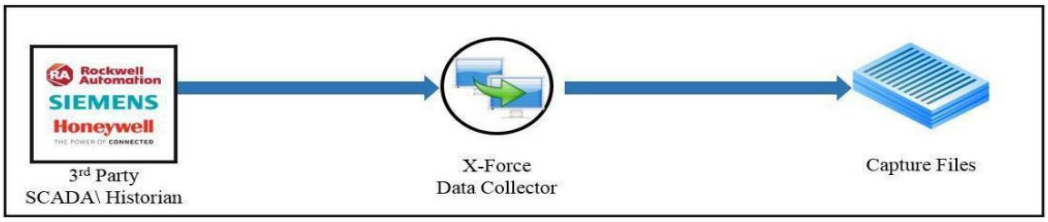
4) User have to Keep License file Named "ssmxforce.lic" in the root folder where application is installed. If there is not license file in the root folder or license file is not valid or expired

application should exit automatically.

5) License file should have feature named "AMS-CHANNEL-ODBC"

6) If any configuration is saved previously then application should load that configuration

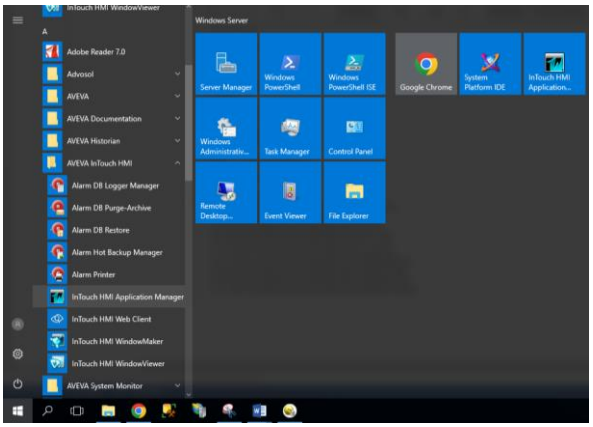
WWALMDB AVEVA InTouch HMI ODBC for AIMS



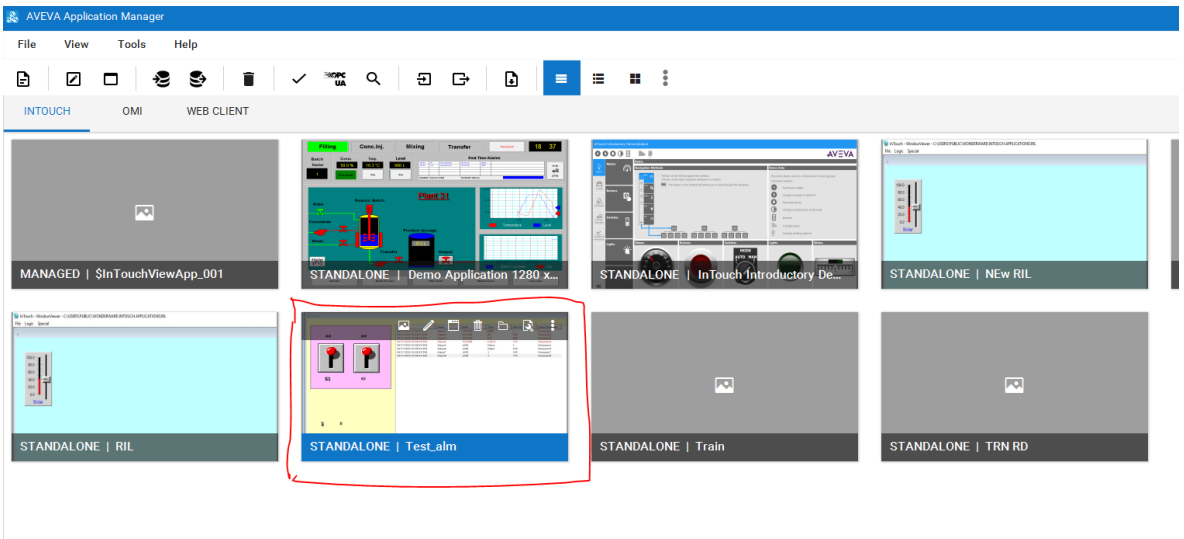
10.2.8.226	10.2.8.201	10.2.8.201

To Create WWALMDB, in 10.2.8.226 Start Alarms and Events from SCADA AVEVA InTouch HMI,

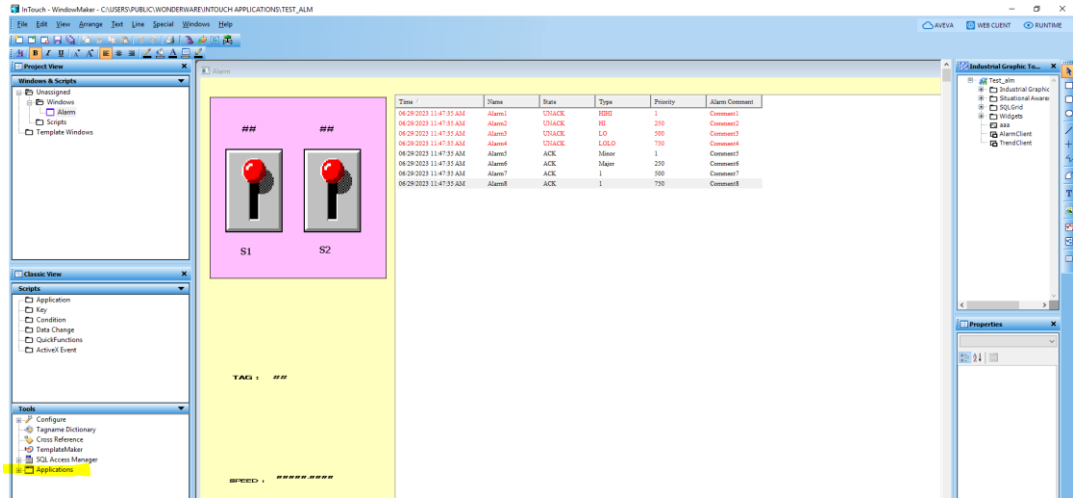
Open InTouch HMI Application Manager,



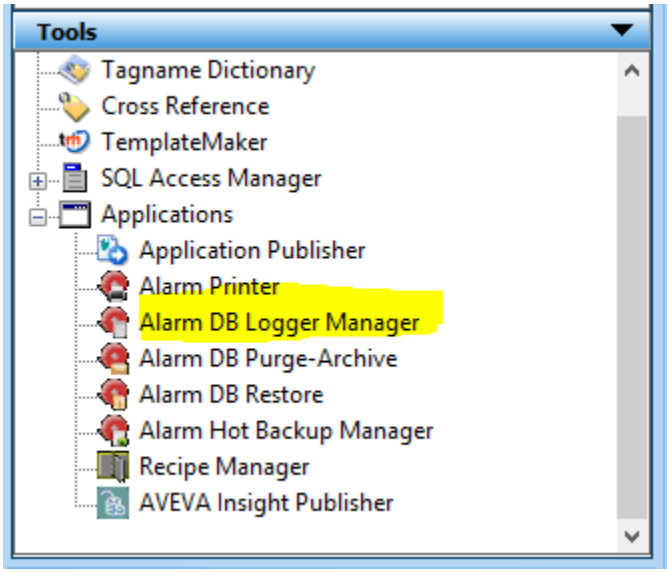
Double click on Test_alm



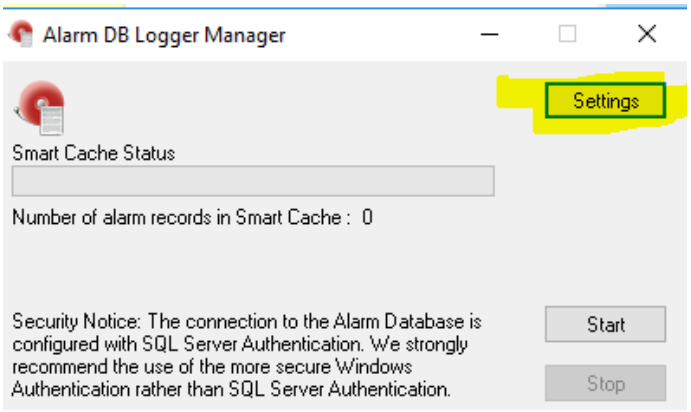
As Shown Below InTouch WindowMaker >> Expand Application



After Expand of Applications Double click on **Alarm DB Logger Manager**.



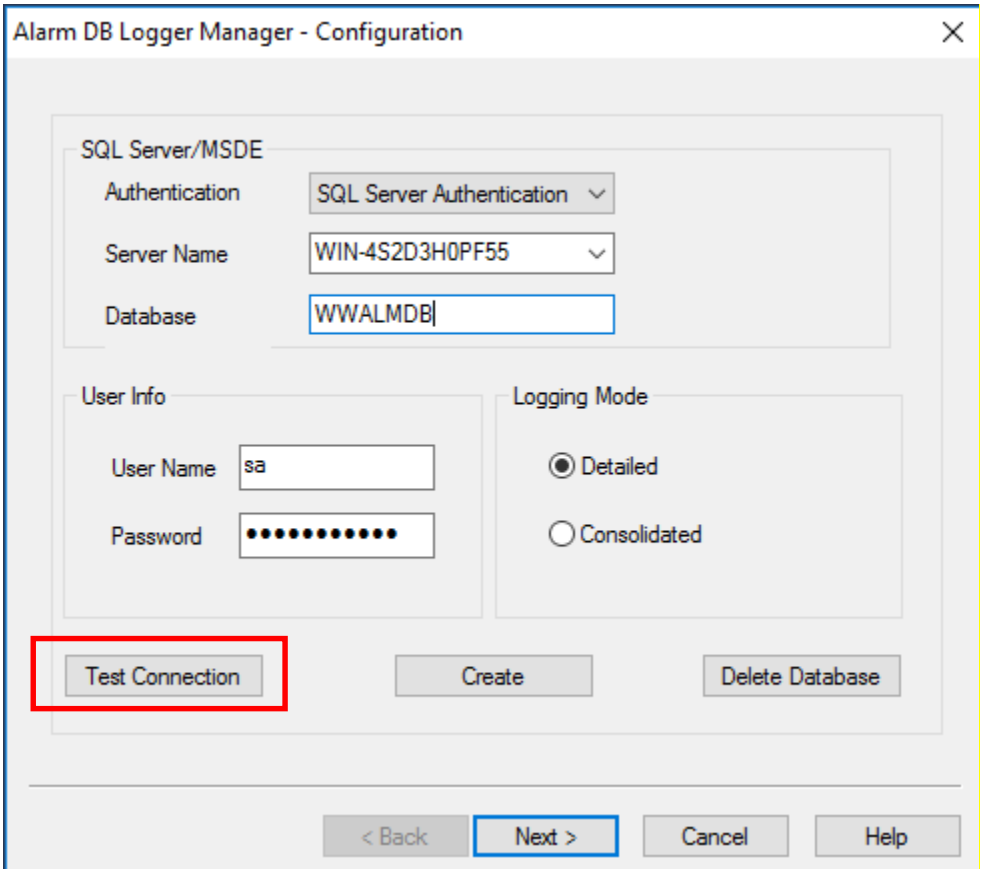
Click on **Settings**



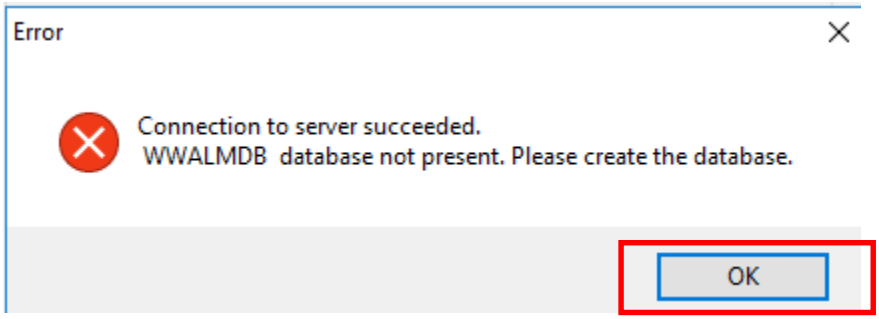
Write Server Name and Database Name: **WWALMDB**

Write User Name and Password of SQL Server

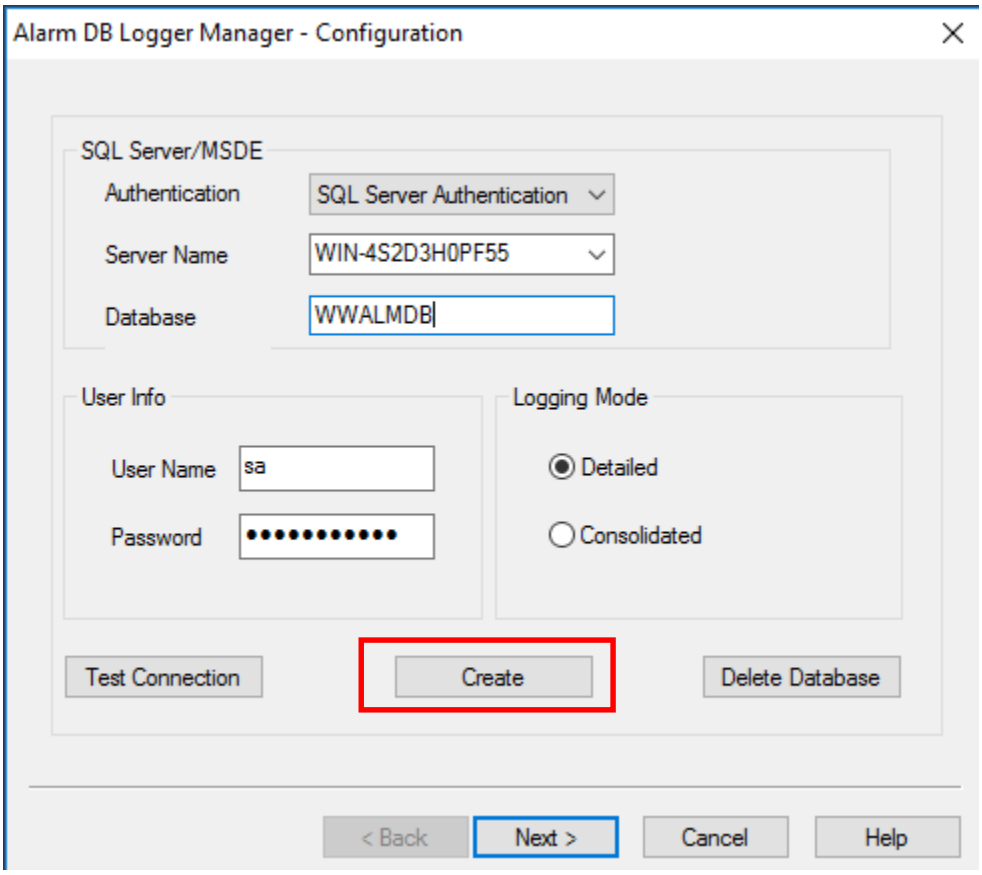
Click on Test Connection



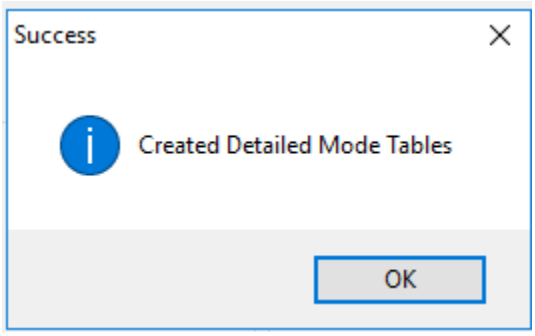
After That Click on **OK**



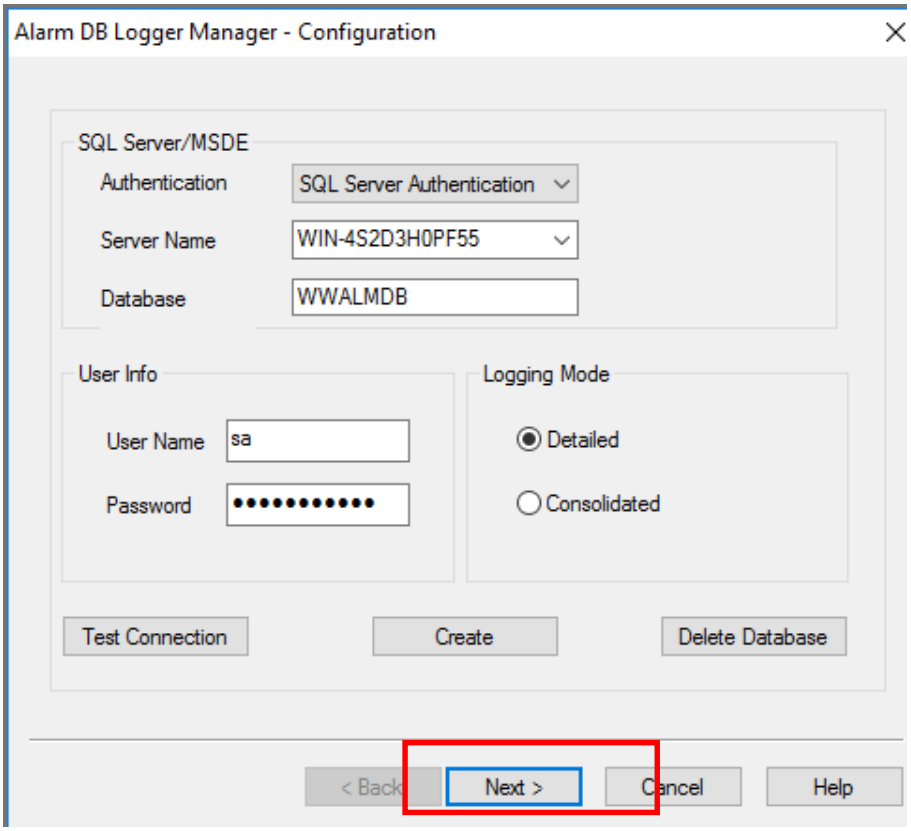
Click on **Create**



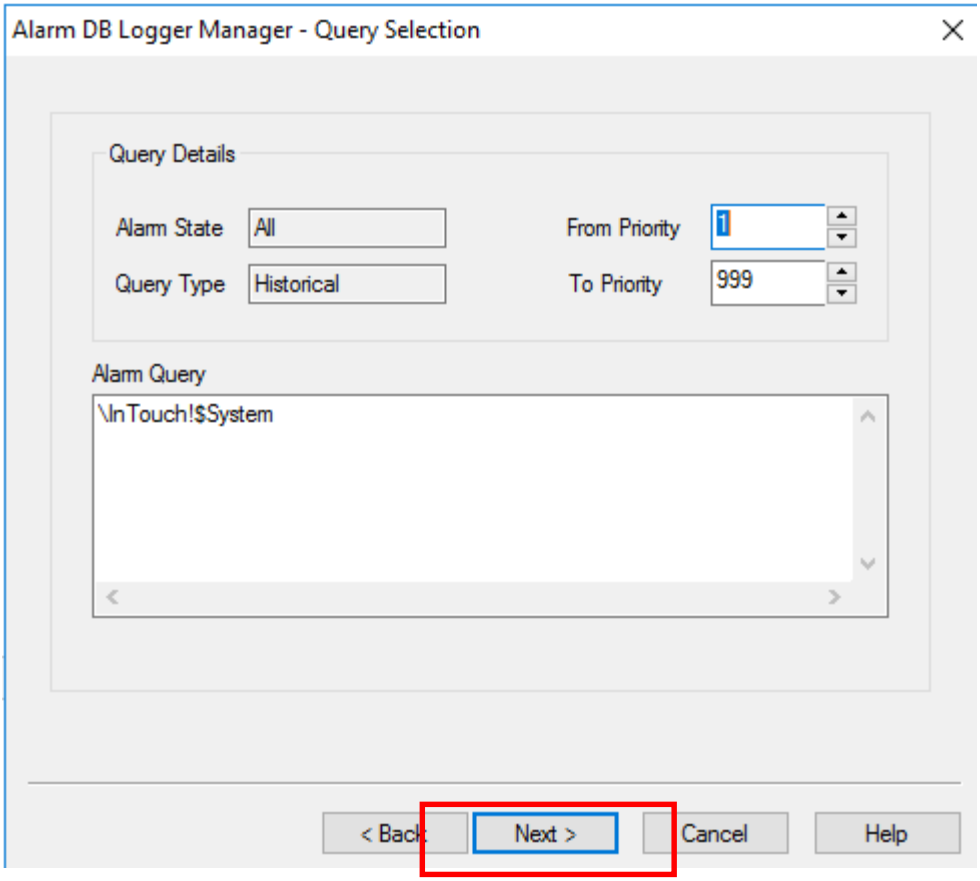
Click on **OK.**



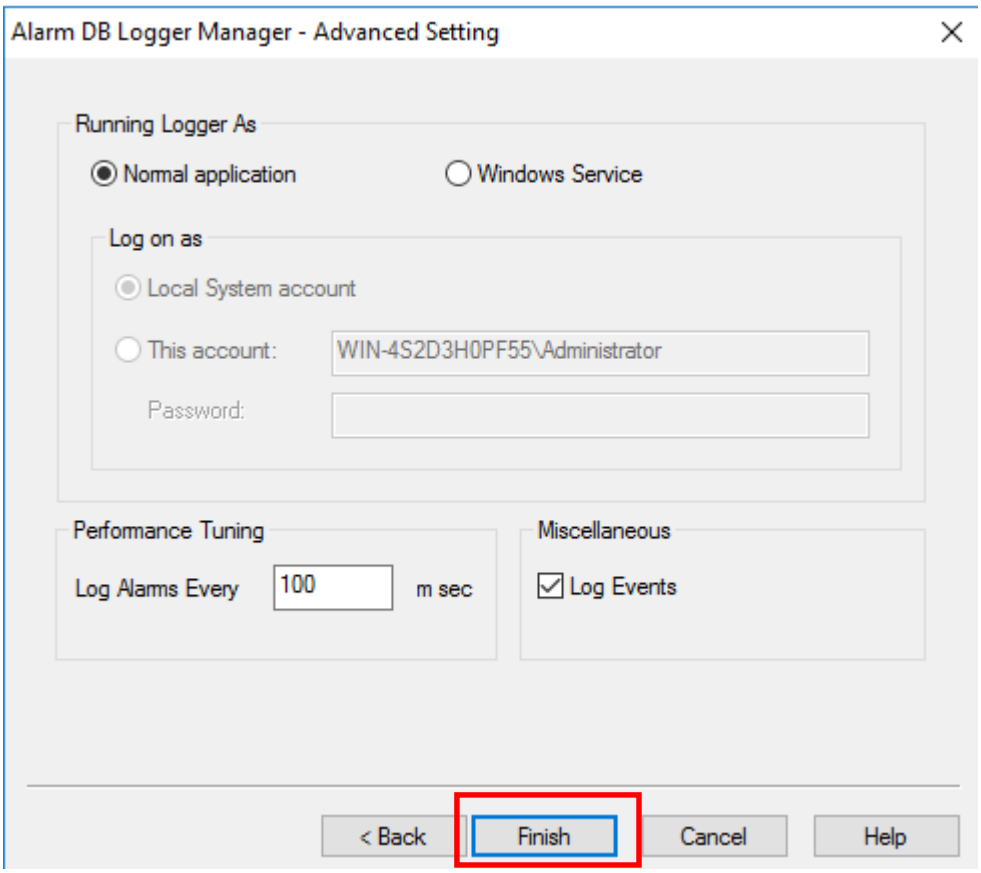
Click on **Next.**



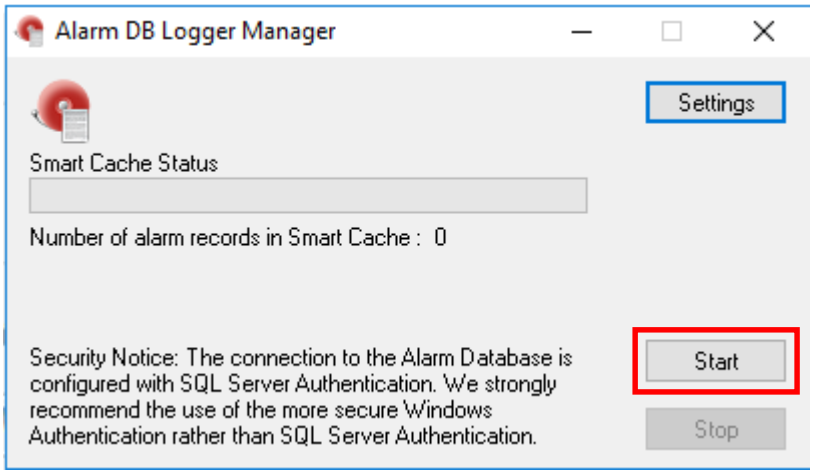
Click on **Next.**



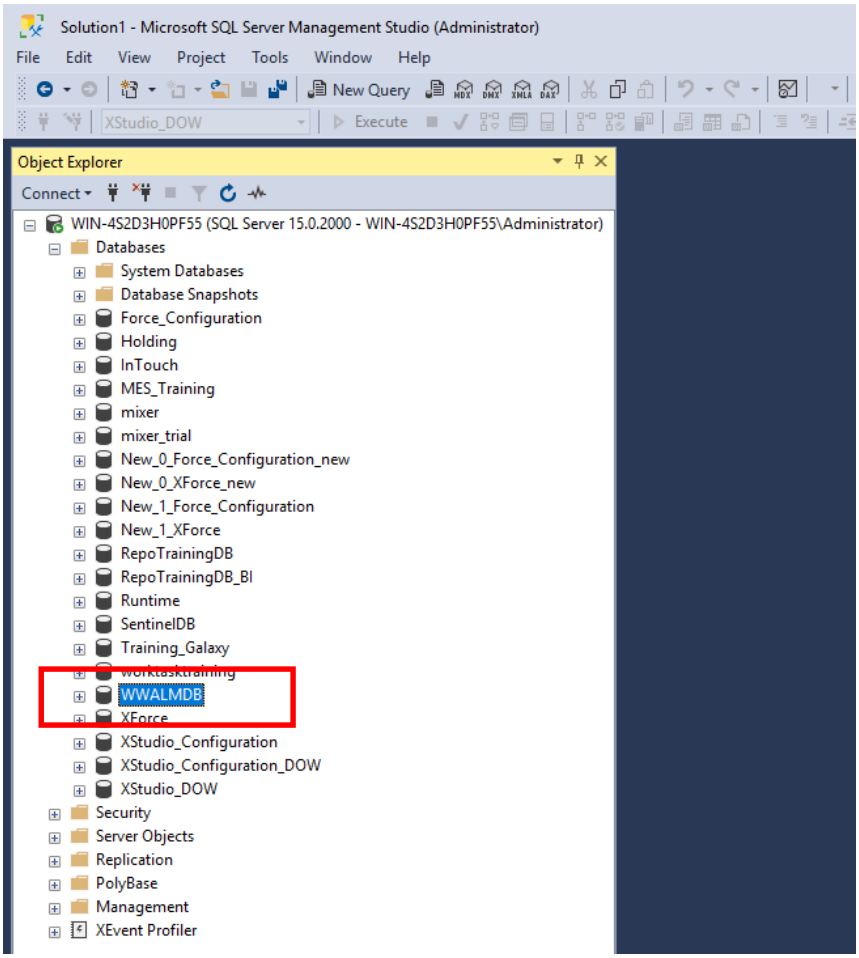
Click on **Finish**



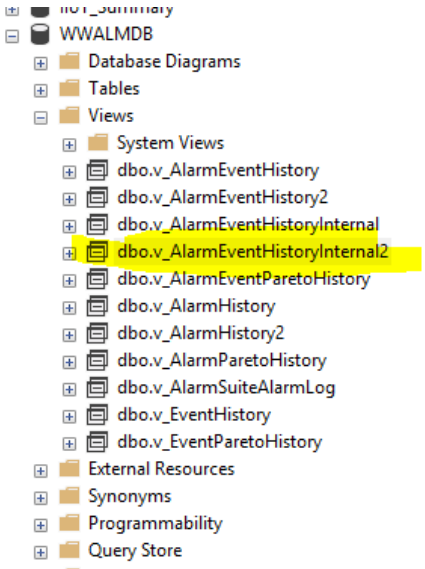
Click On **Start**



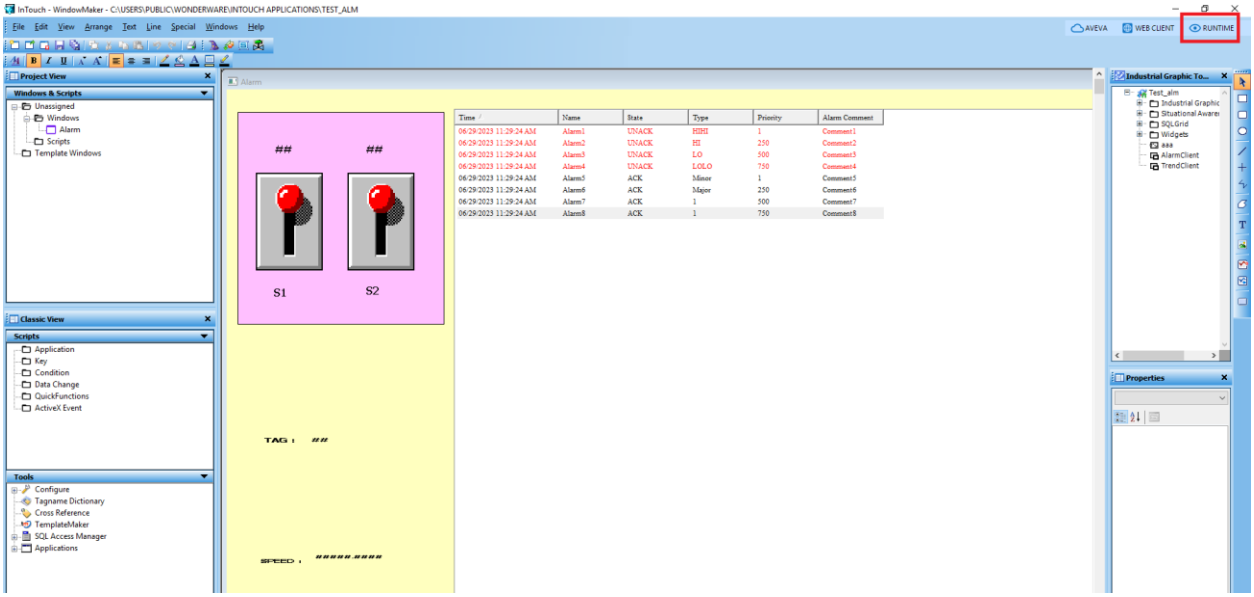
Open SQL Server to check database WWALMDB Created on Not.



Expand WWALMDB to see the View

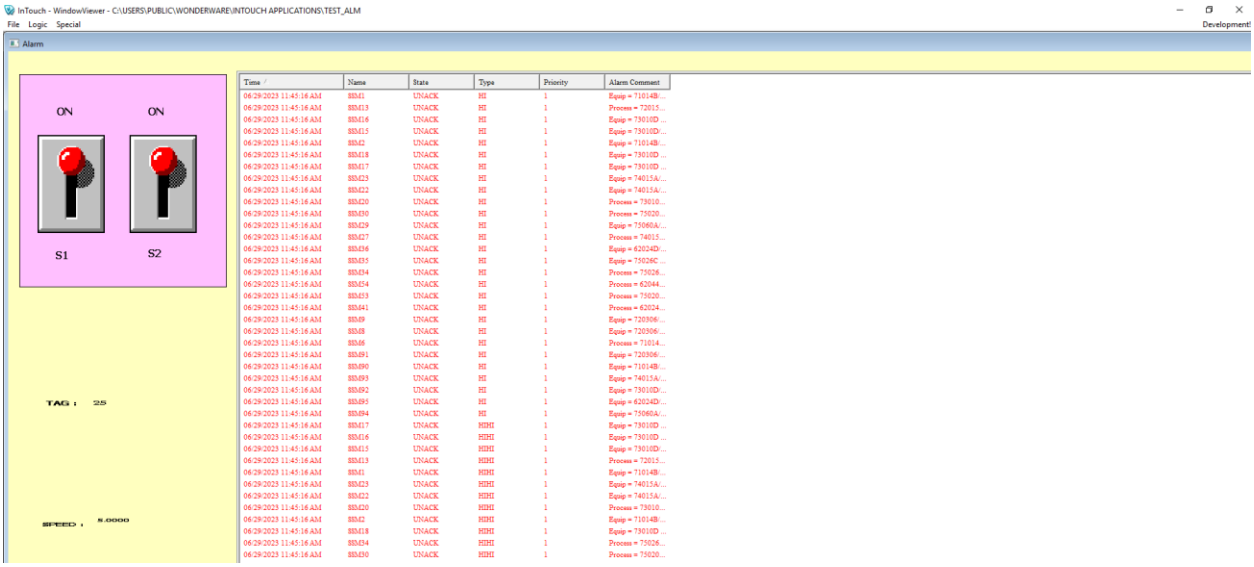


Now, Click on **RUNTIME**



Start the alarms.

After Starting the Alarms the generated alarms dump in SQL server Database Name WWALMDB

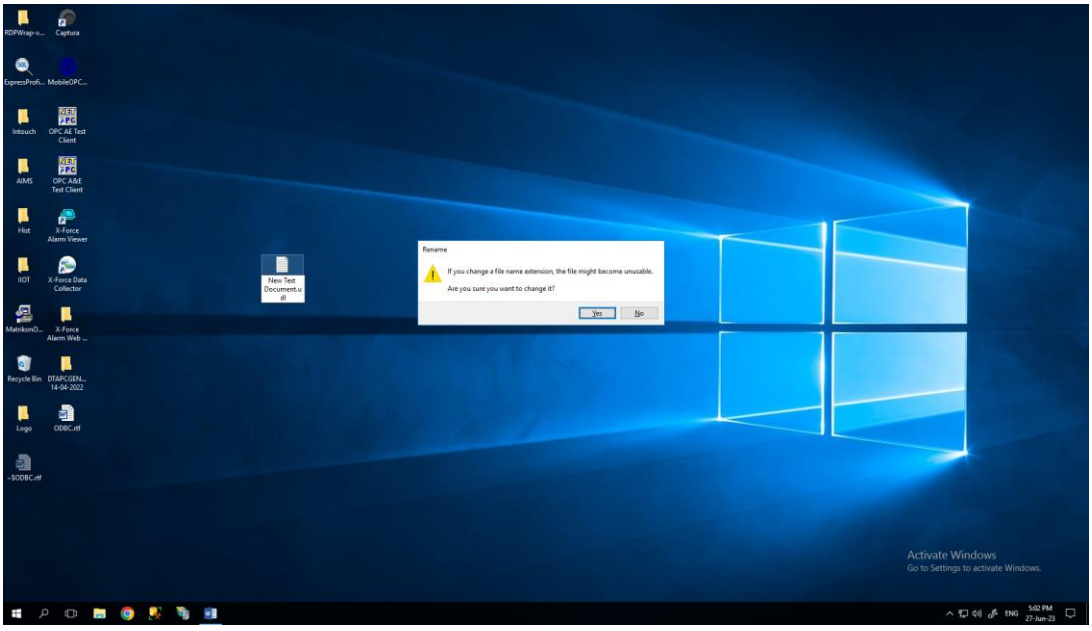


Now, we need ODBC data from user.

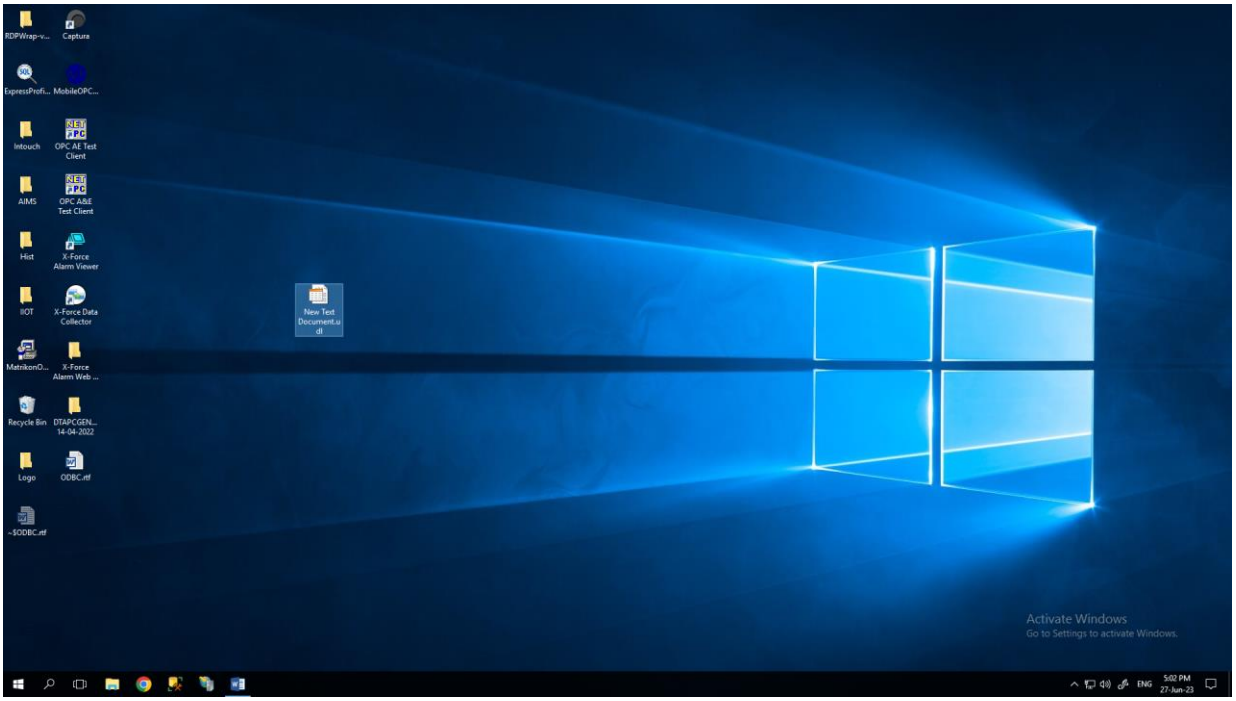
First, Check connectivity where we received ODBC Data and for that right click on desktop and create new text file and rename its extension to .UDL

[Note: In 10.2.8.201 Check Connectivity for 10.2.8.226 database name – WWALMDB]

Click On Yes

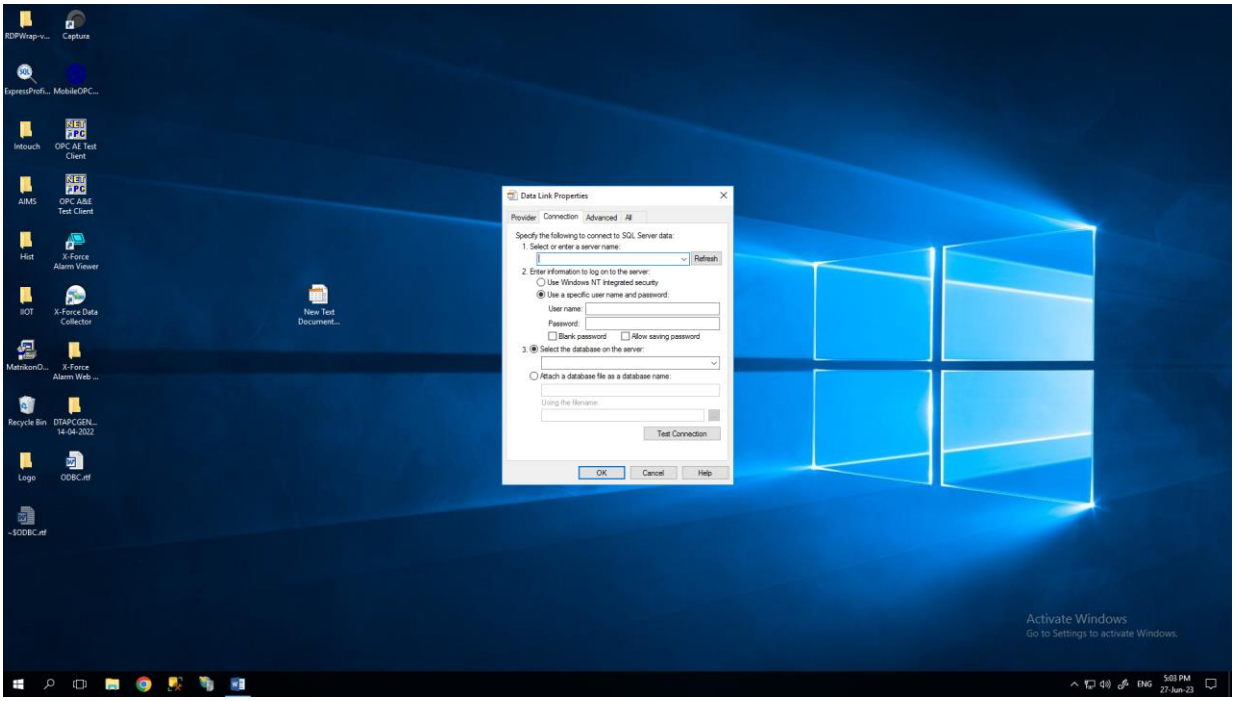


.UDL File Created, after that Click on it.

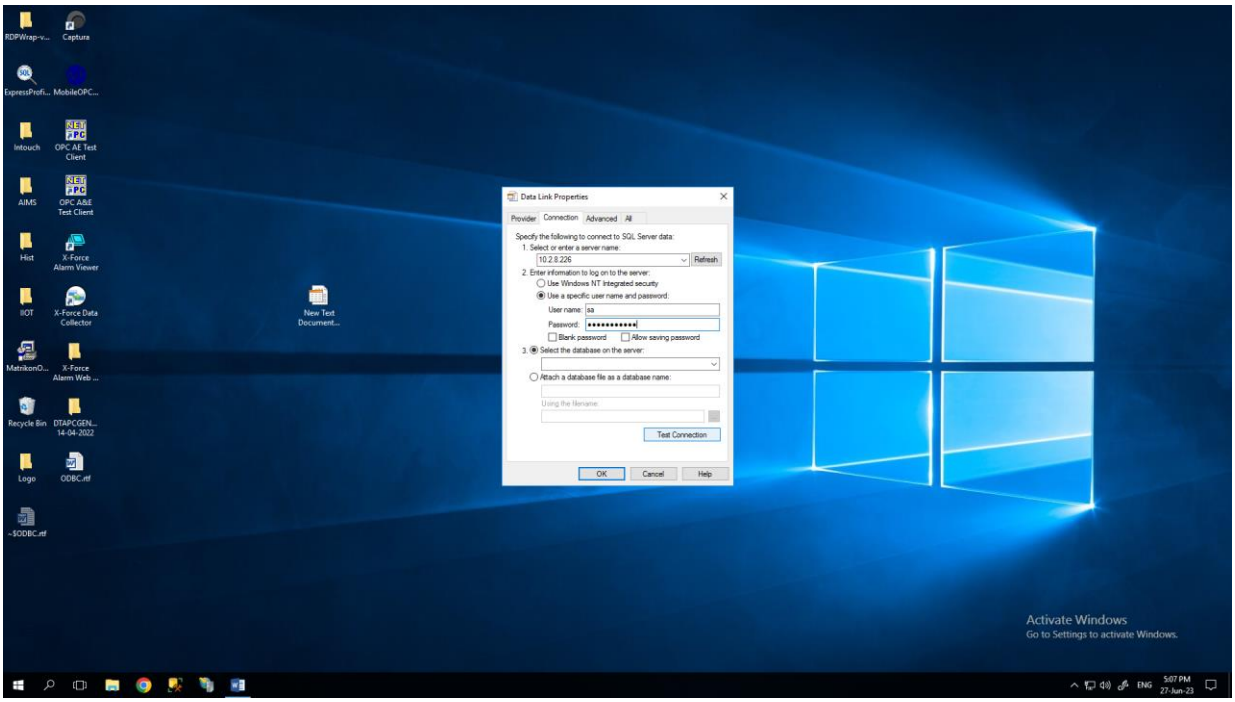


Enter details

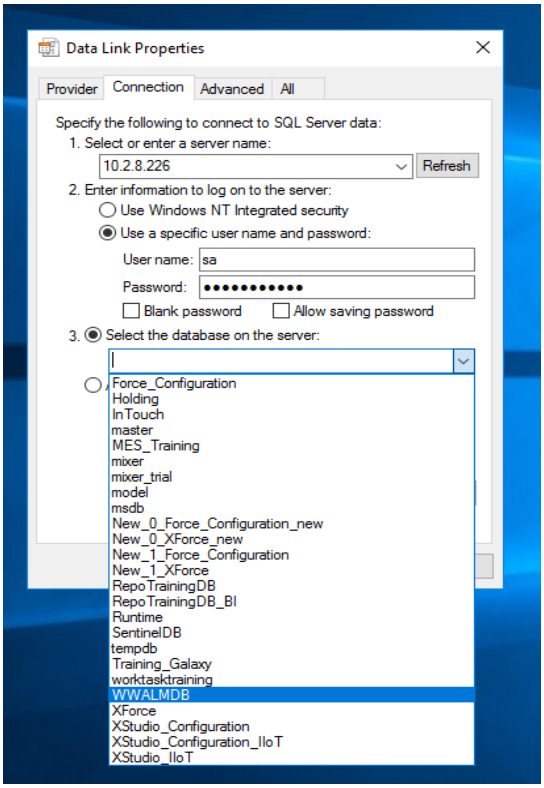
a. Server name or IP (Where we need to capture ODBC data)
b. Enter user name and password either windows authentication password or SQL Database username and Password.

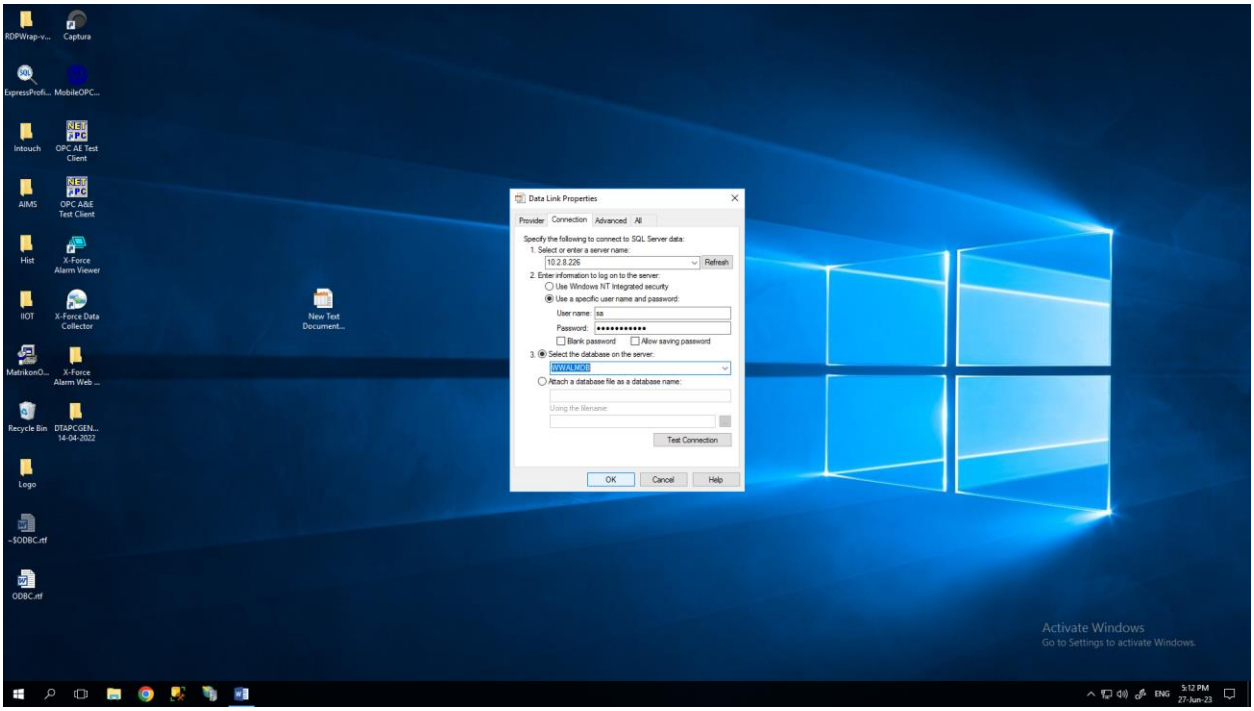


Click on Test Connection.

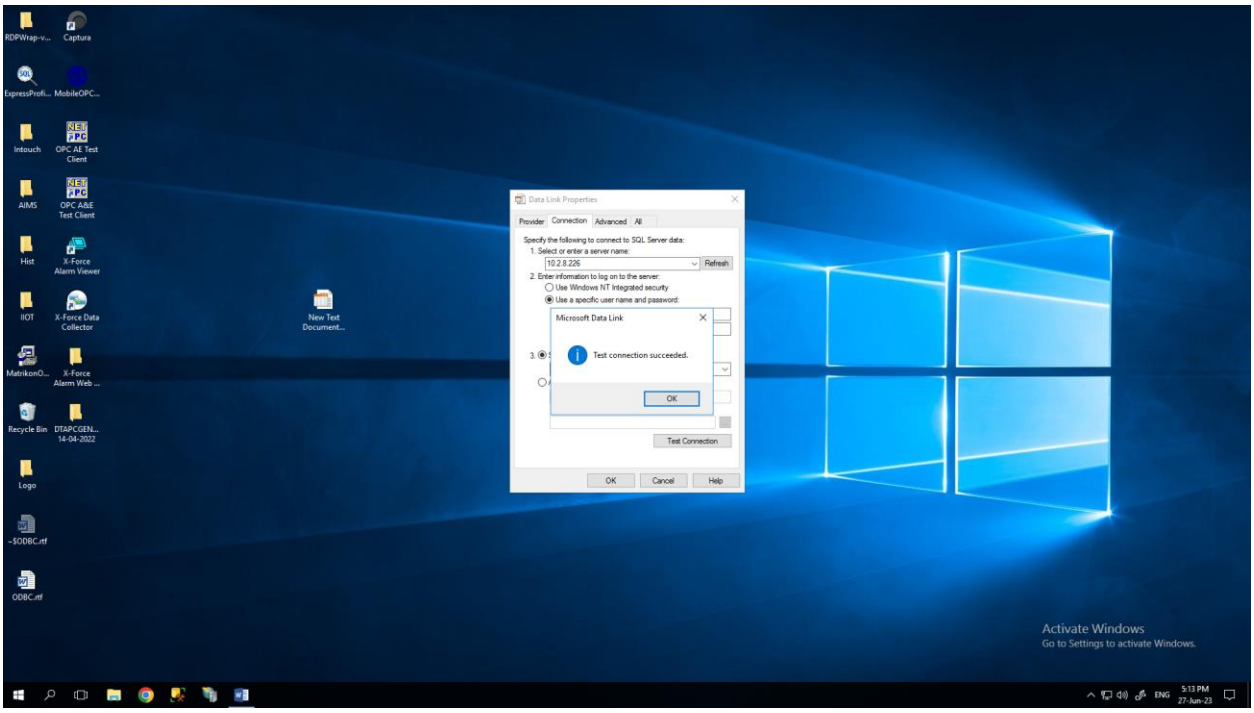


Select Database (For AVEVA InTouch Name of Database WWALMDB).



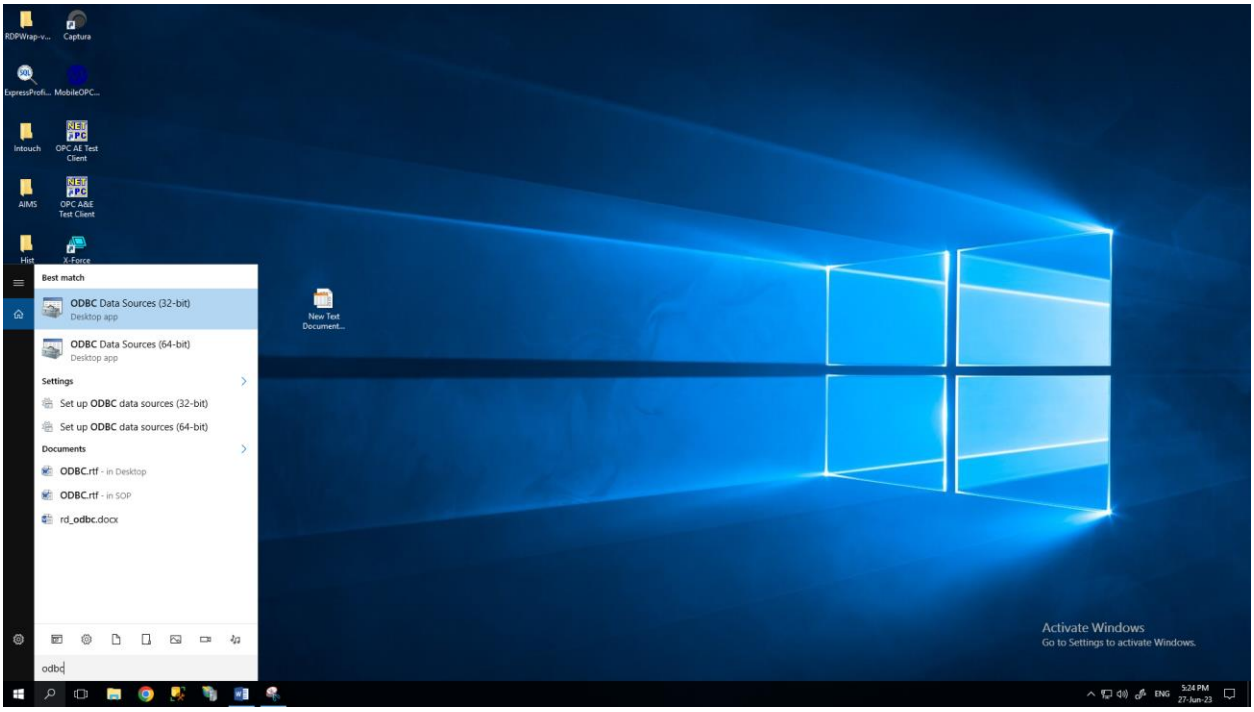


Then click on Test connection and below mentions message need to appear.

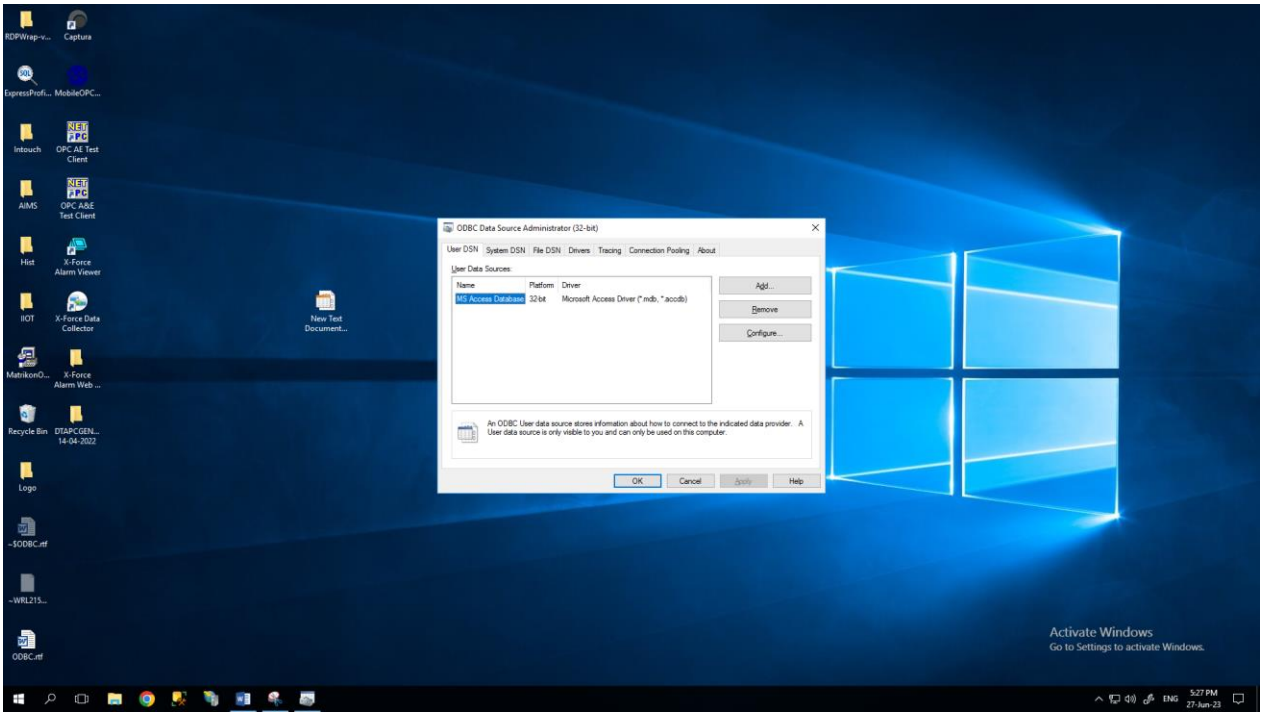


Once Above Steps are completed successfully it means the connectivity with data provider is **OK.**

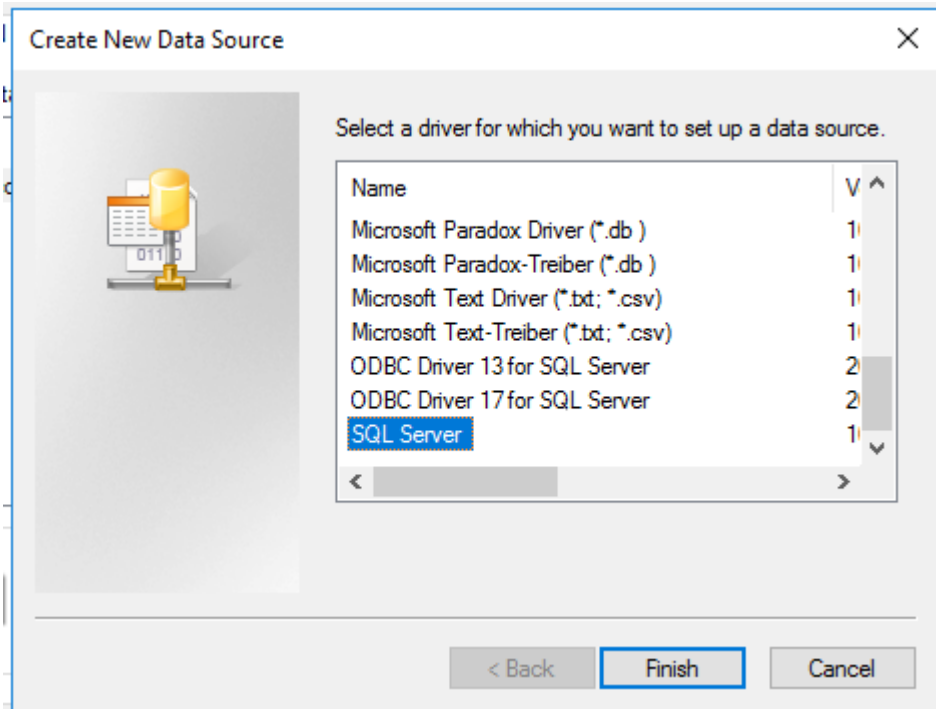
Now we need to configure ODBC Data source 32-bit and for that type on search Window write ODBC and select ODBC Data source 32-bit.



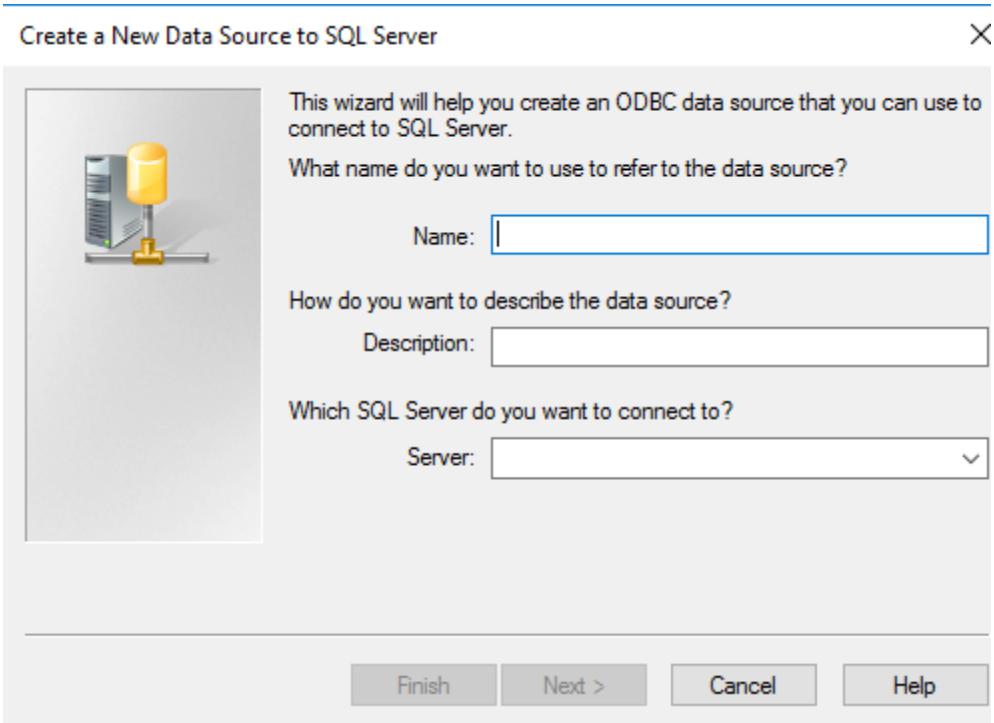
Below mention screen after select ODBC Data source 32-bit and Now click on ADD.

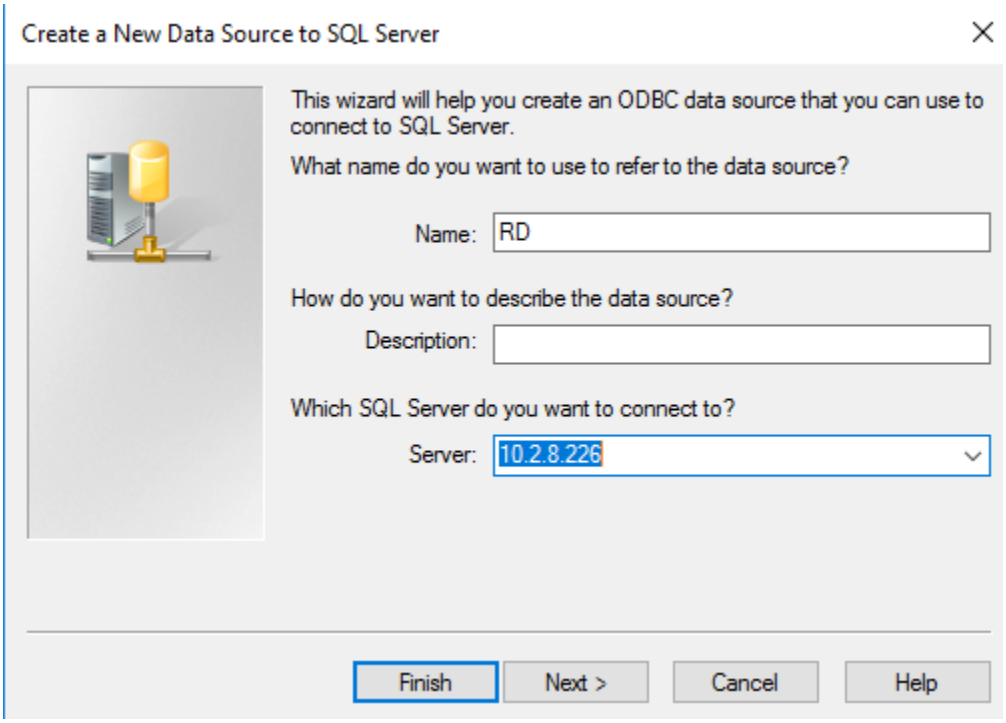


Select a driver for which you want to set up a data source. (Scroll down and find SQL Server and select it and Click on finish)

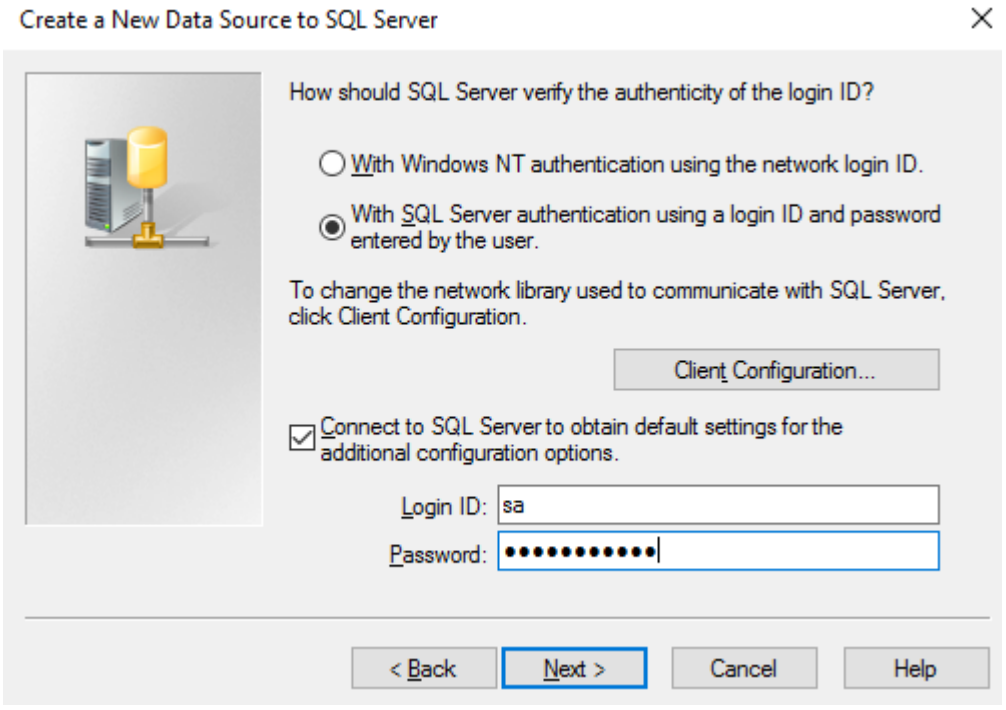


Enter Name which ever you need to give in Description filled not compulsory to enter any data in Server filed enter IP (From where we received ODBC data).



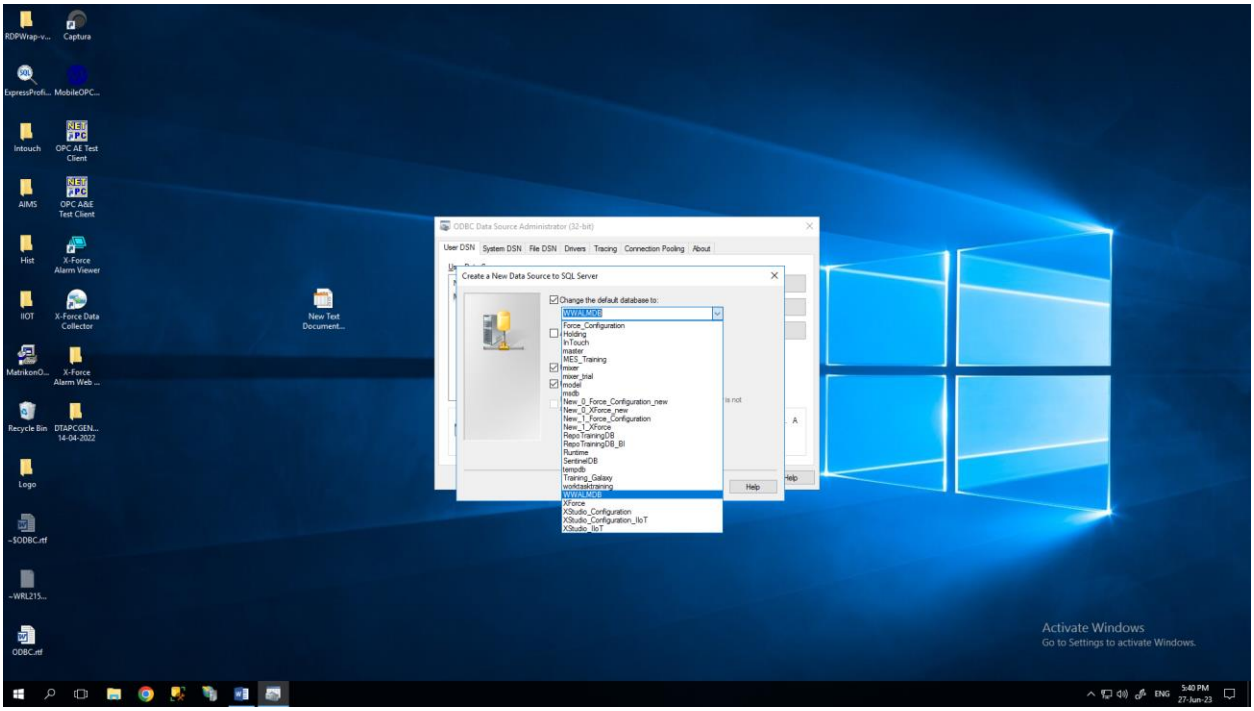


Click next and you will see below mention screen where you need to enter username and password enter user name and password of windows authentication or SQL Data base (Where we received ODBC data)

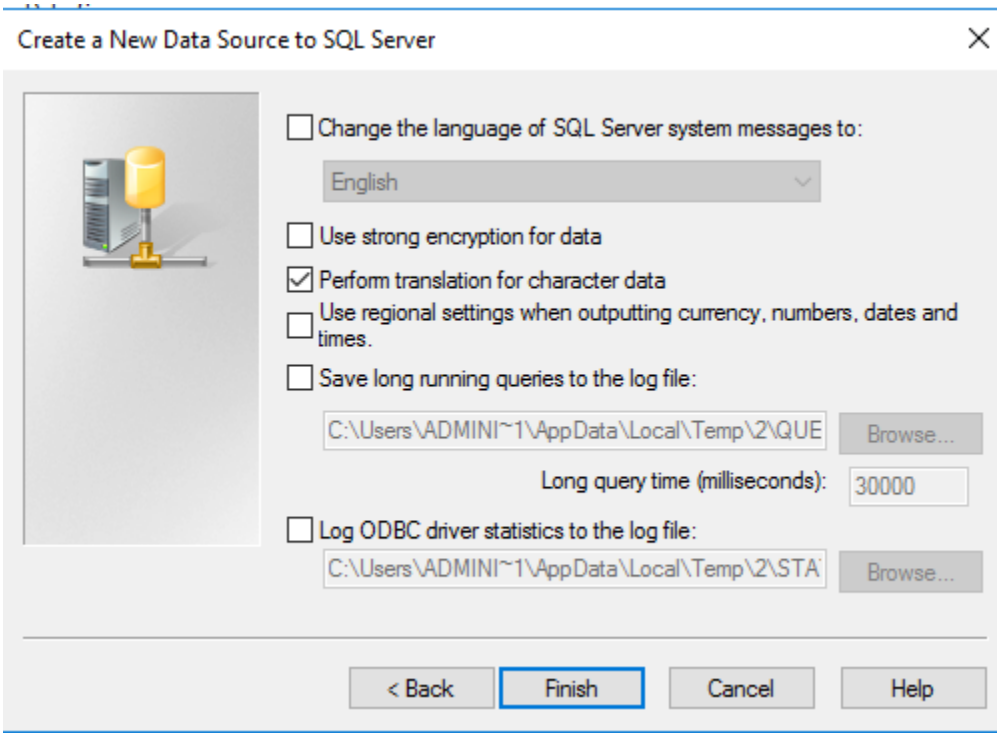


Click on Next

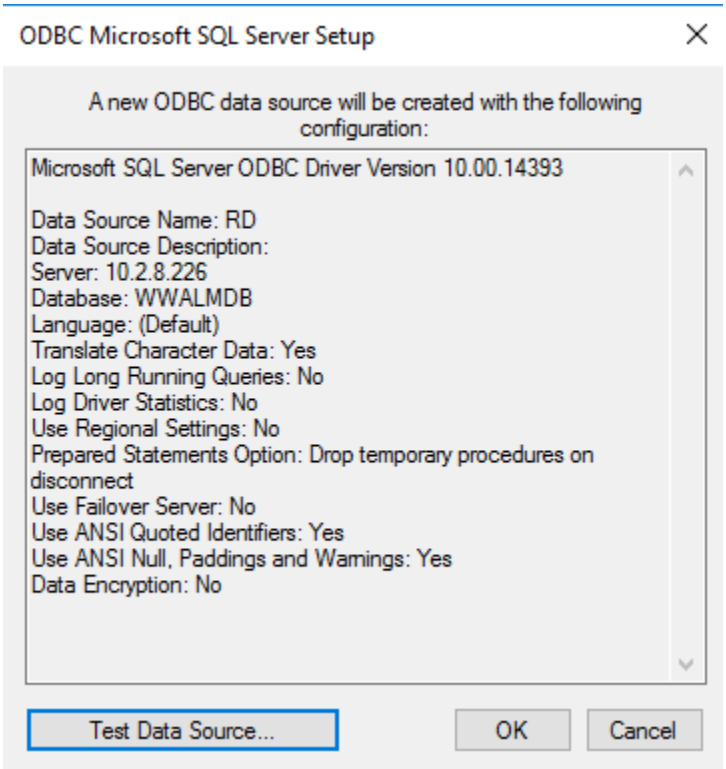
Click on **change the default database to;** and select database where ODBC data is received (WWALMDB).



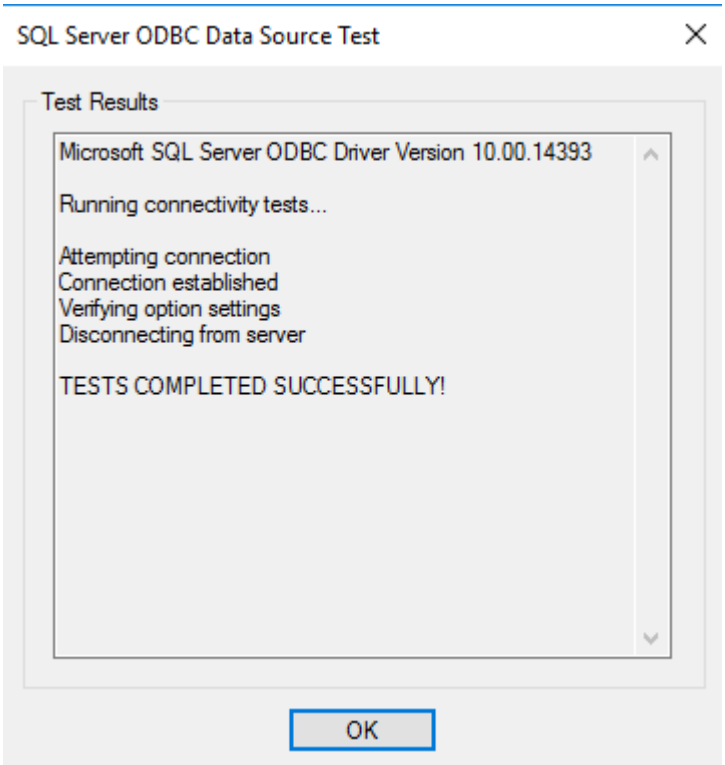
Click on Finish



Then, Click on Test Data source.

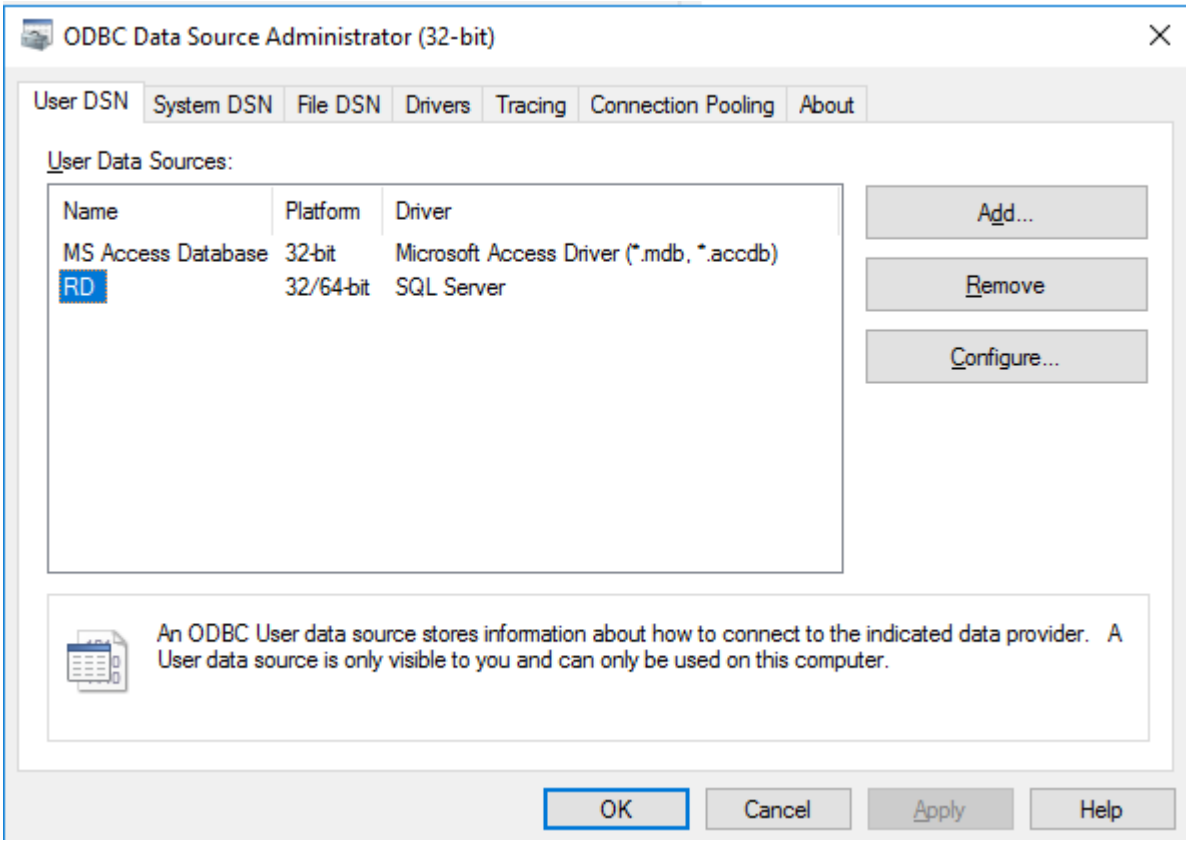


The message appear as below. Which shows Test is completed successfully. Click on ok.

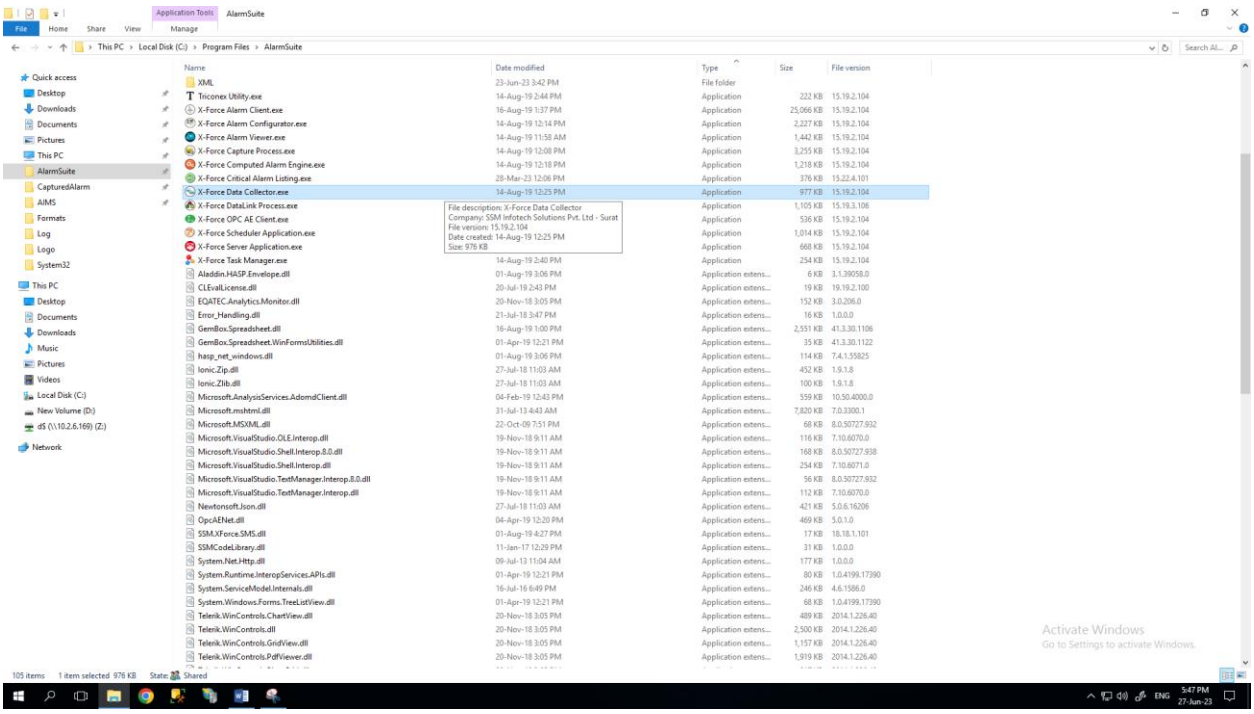


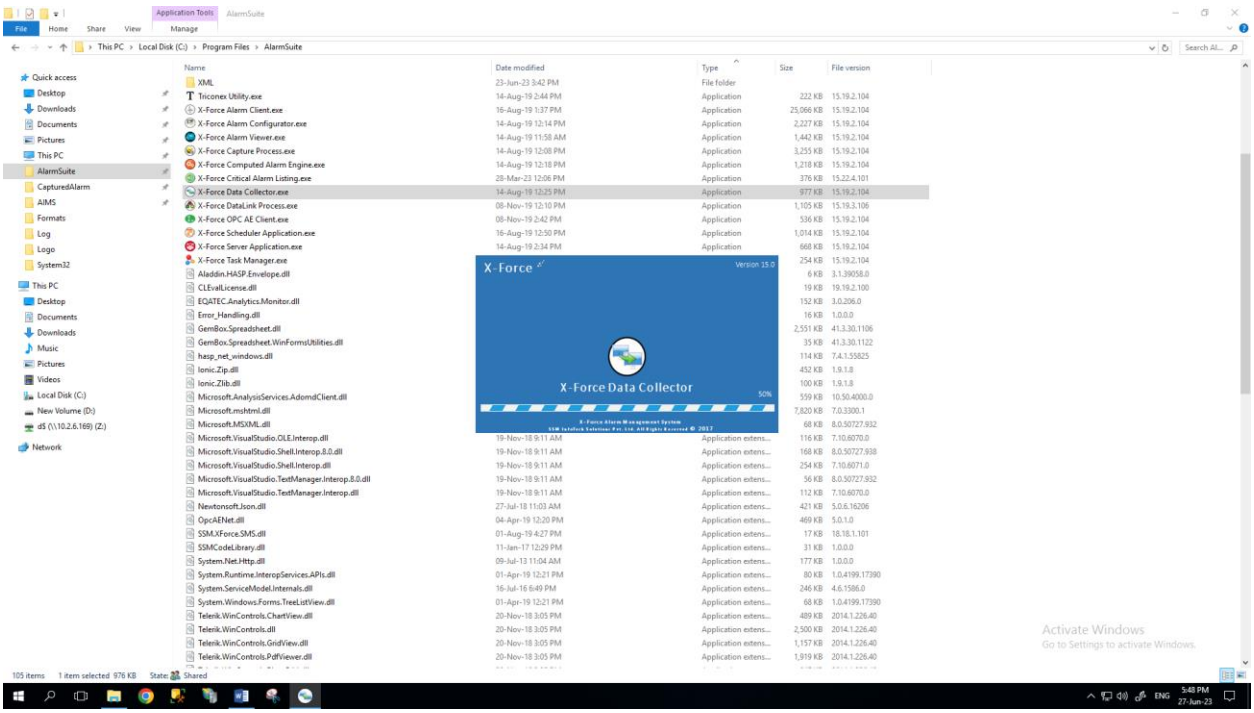
Now again click on OK.

User DSN Created RD As Shown Below, Then Click on Ok.

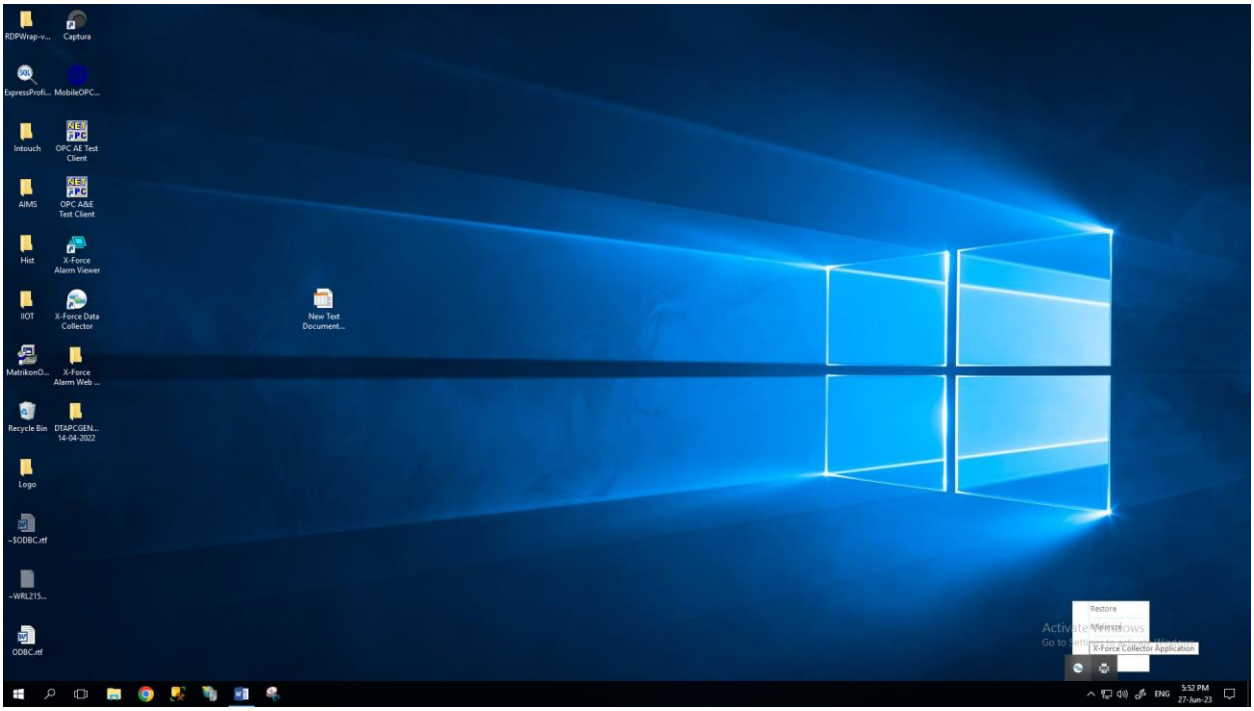


Now, Open X-Force Data Collector application.

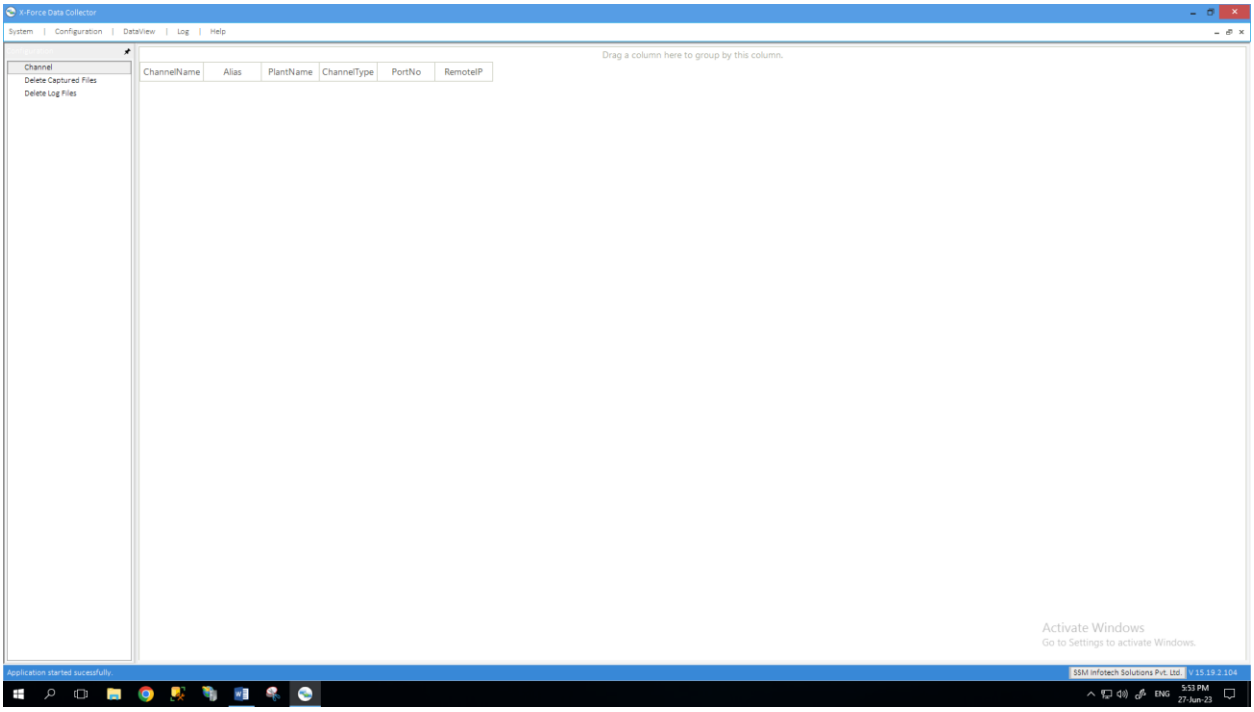




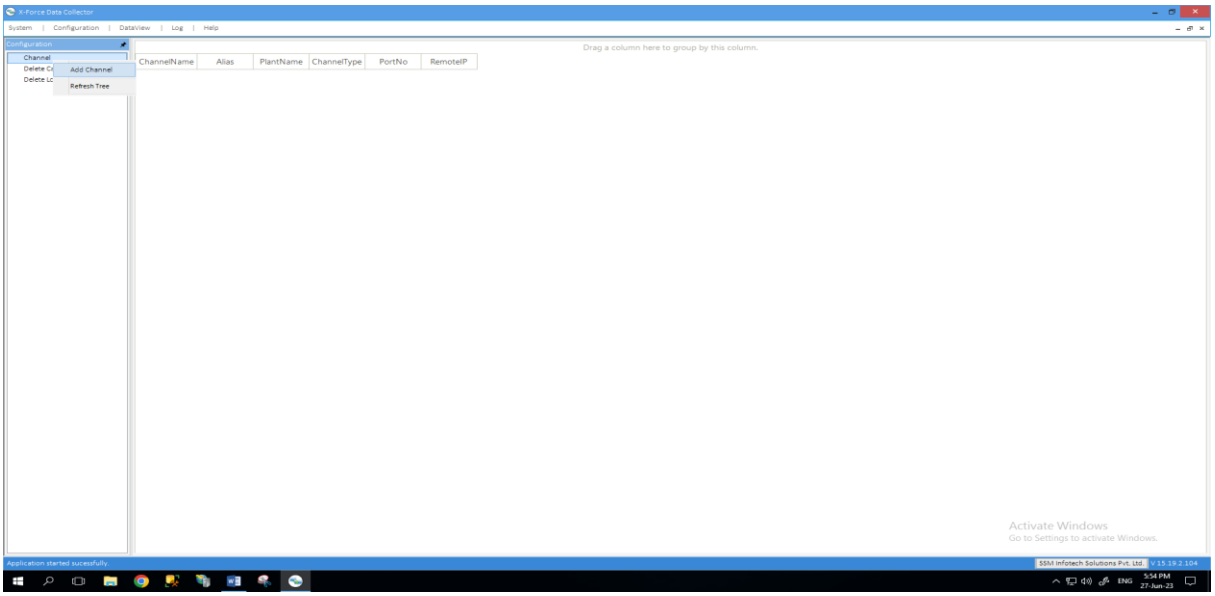
Now right click on application icon and click on restore.



In application select configuration menu.



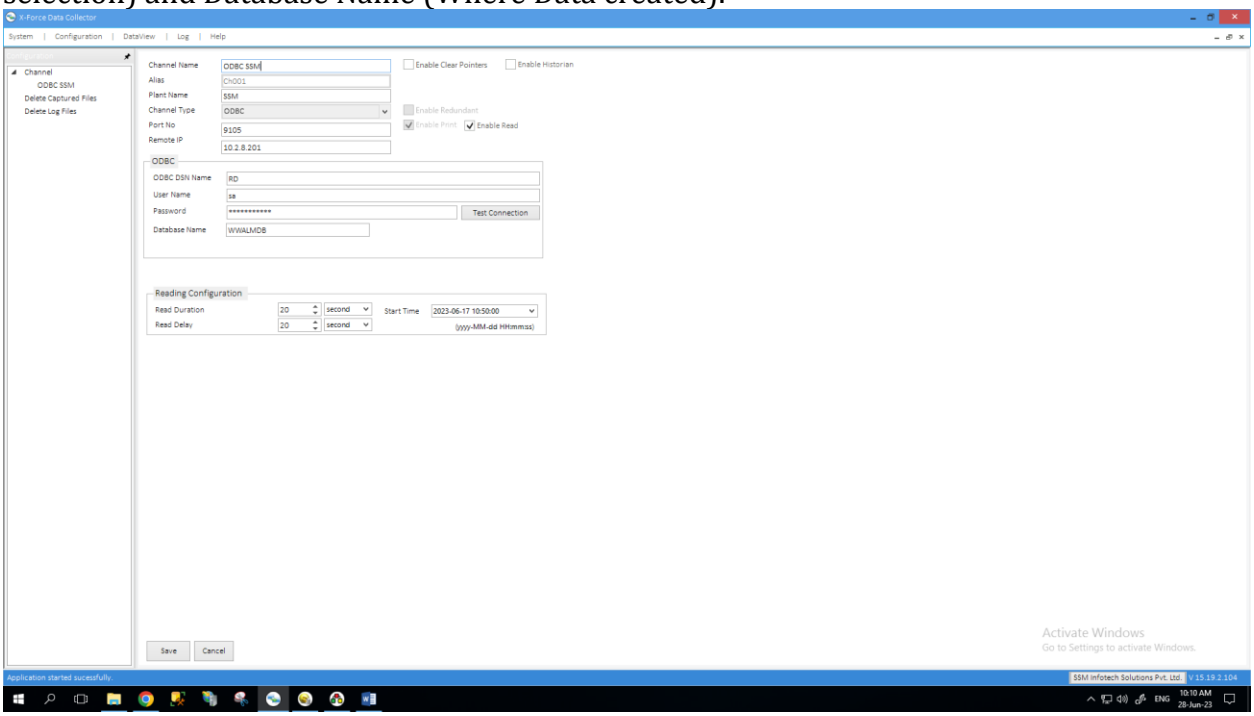
Click on channel then right click on it and select Add Channel.



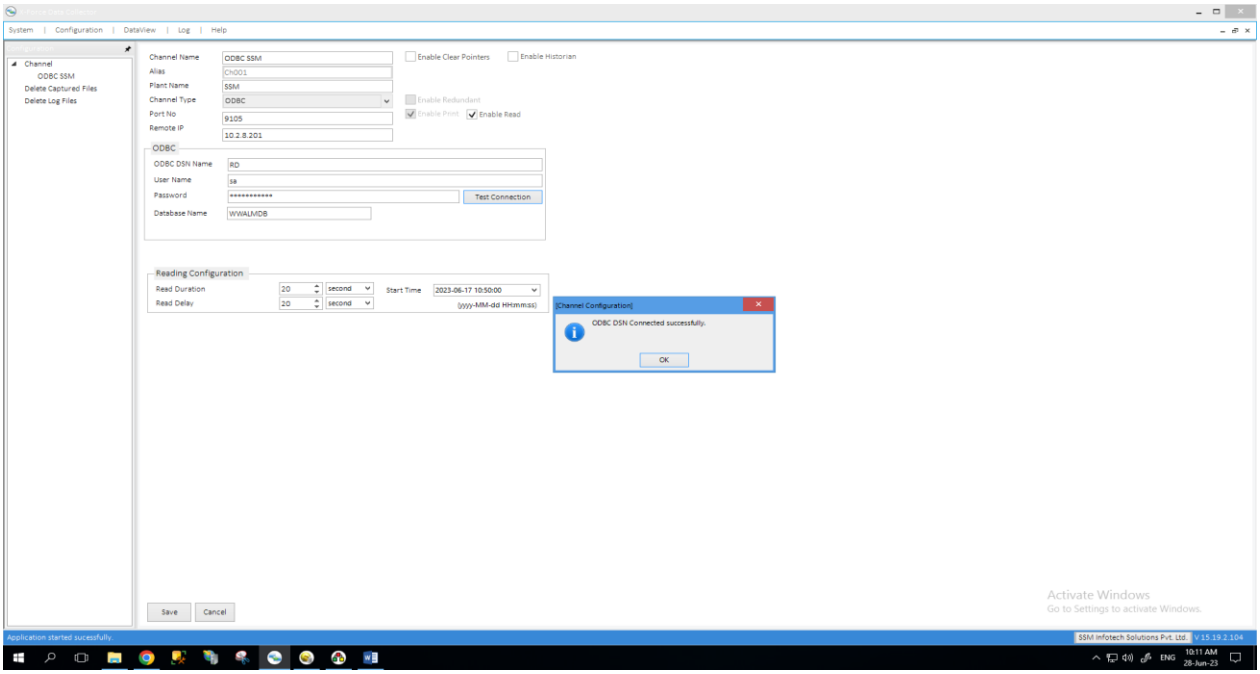
As shown below,

Enter channel name, Plant Name, Channel type select ODBC Port No (Enter port number which is not use before for print), Remote IP (Where We want to print the data)

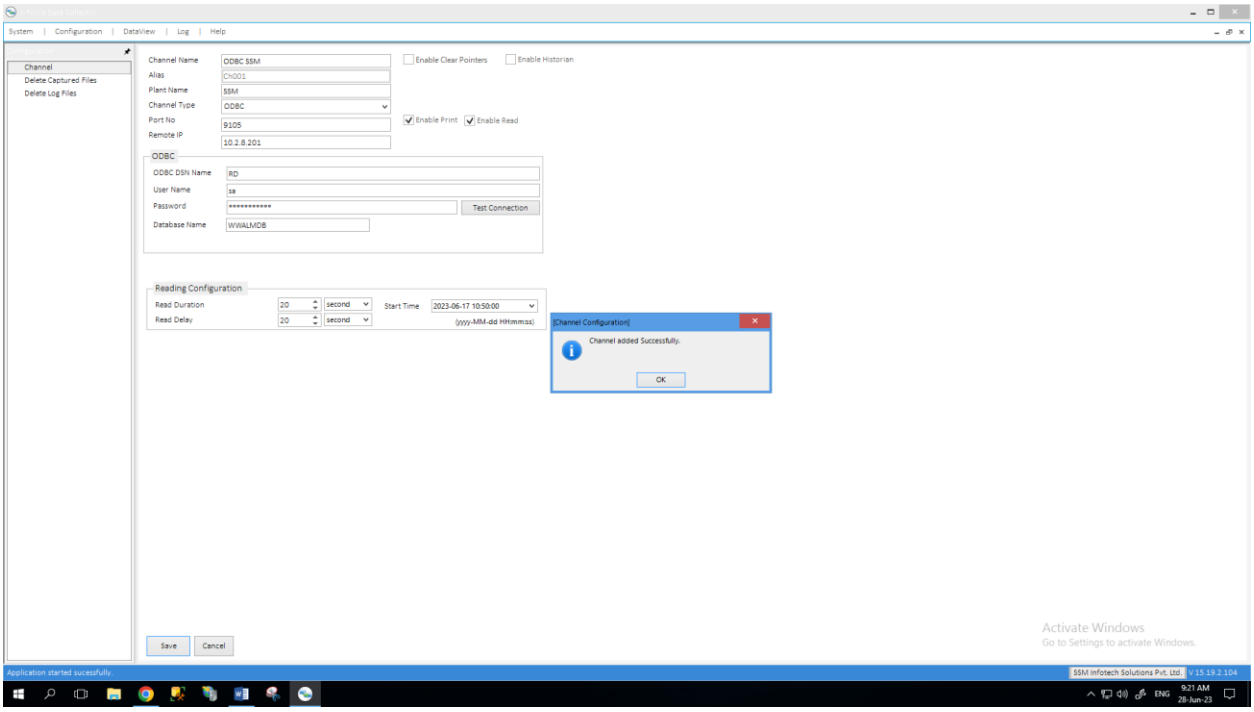
In ODBC section,
Enter ODBC DSN Name, Username (SQL Database username or windows authentication which method you use before accordingly enter username), Password (accordingly user selection) and Database Name (Where Data created).



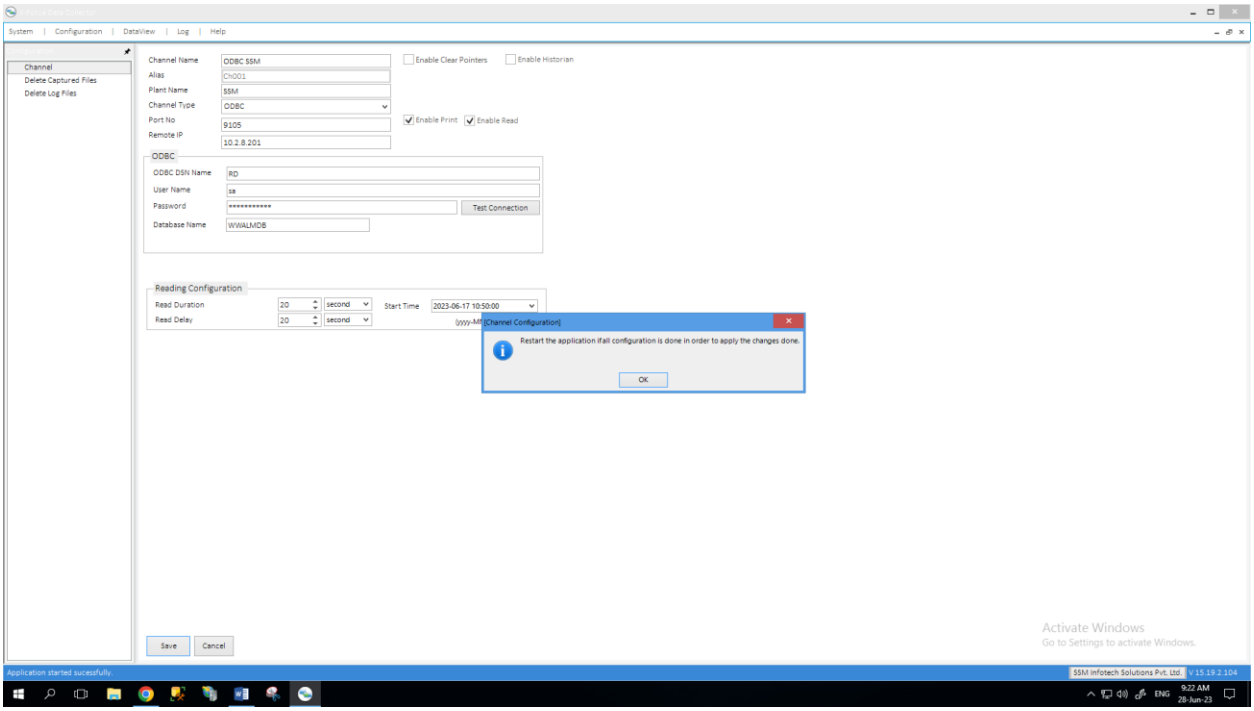
Click on Test connection For ODBC DSN Connected successfully or not. Click on Ok after that Click on Save.



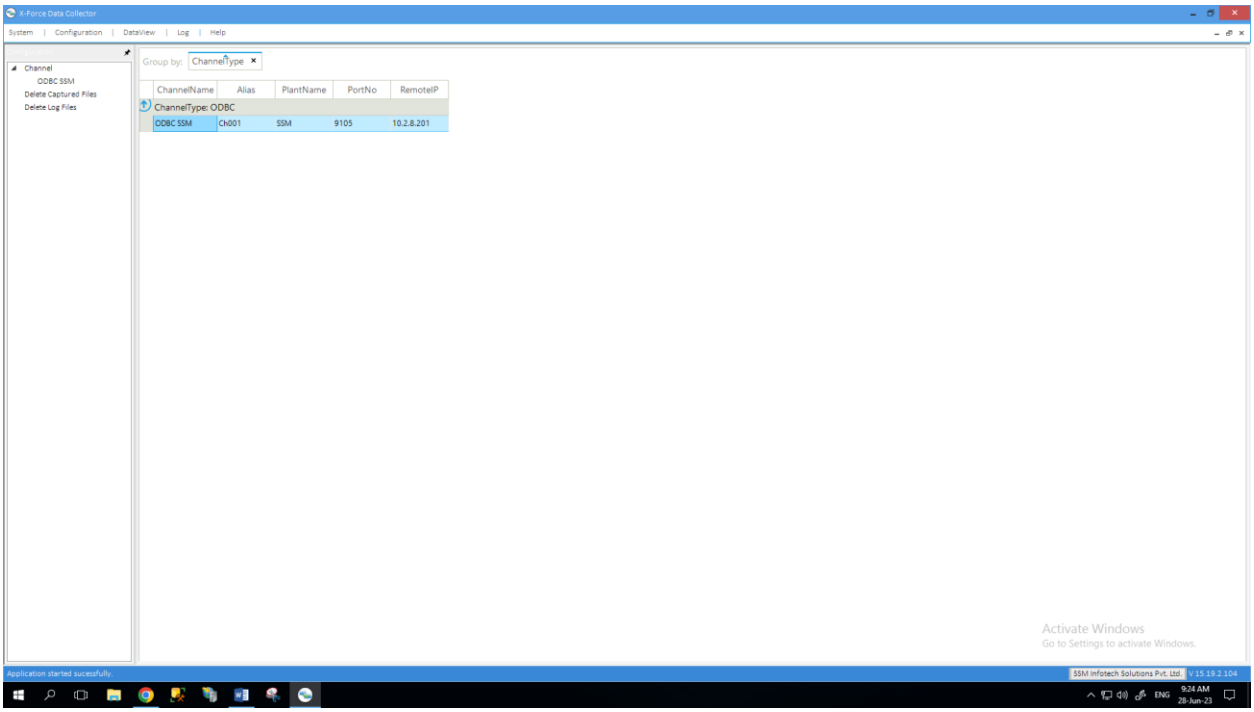
Then below mention message appear click on ok.



Then again one message popup which said Restart application if all configuration done. Click on ok.

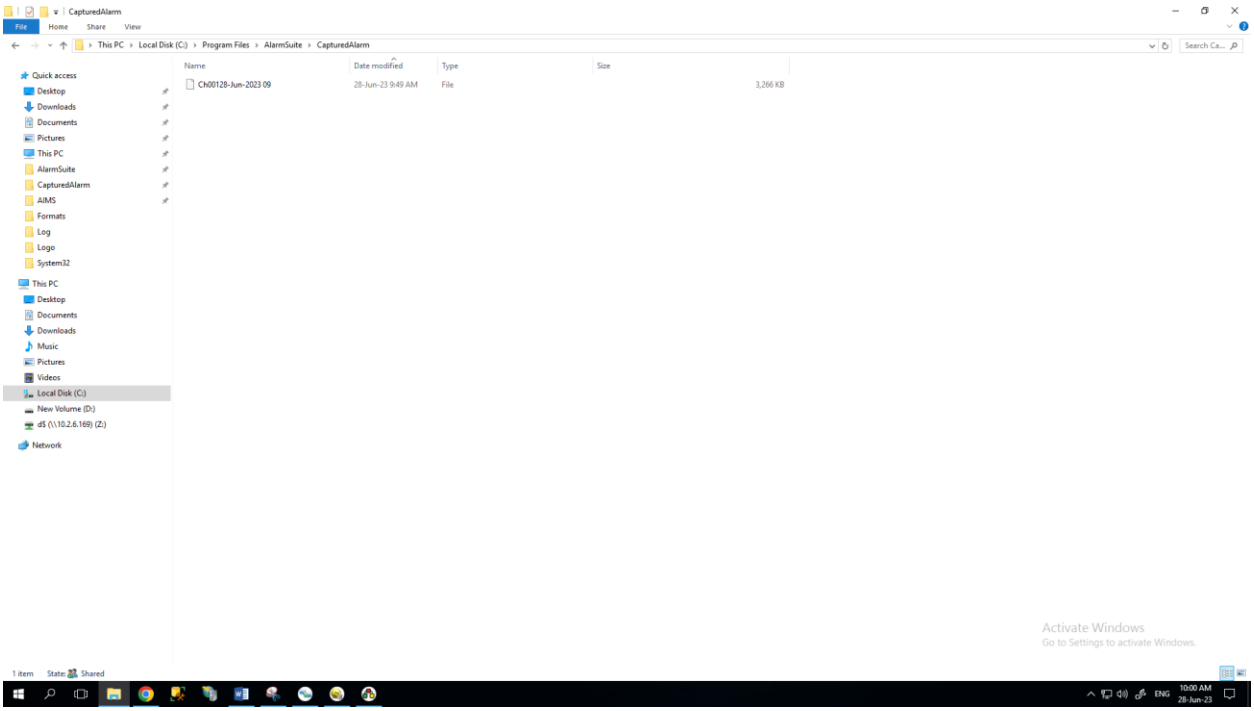


The Channel Which Appear As Shown below.

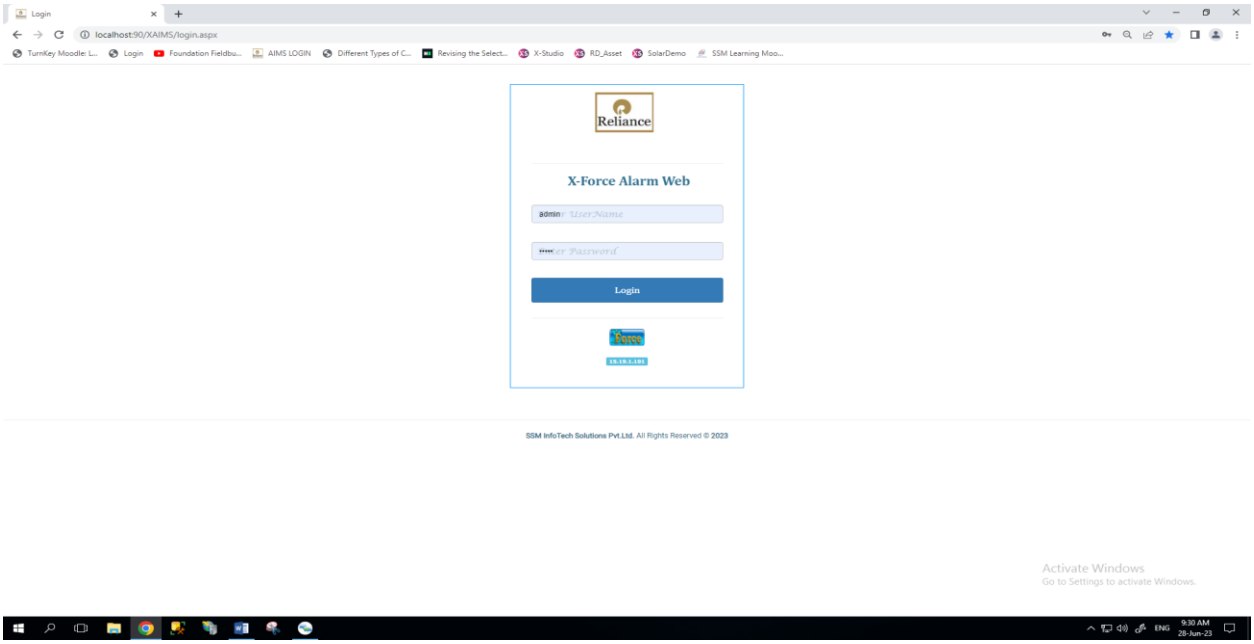


Restart the Application X Force data Collector Application.

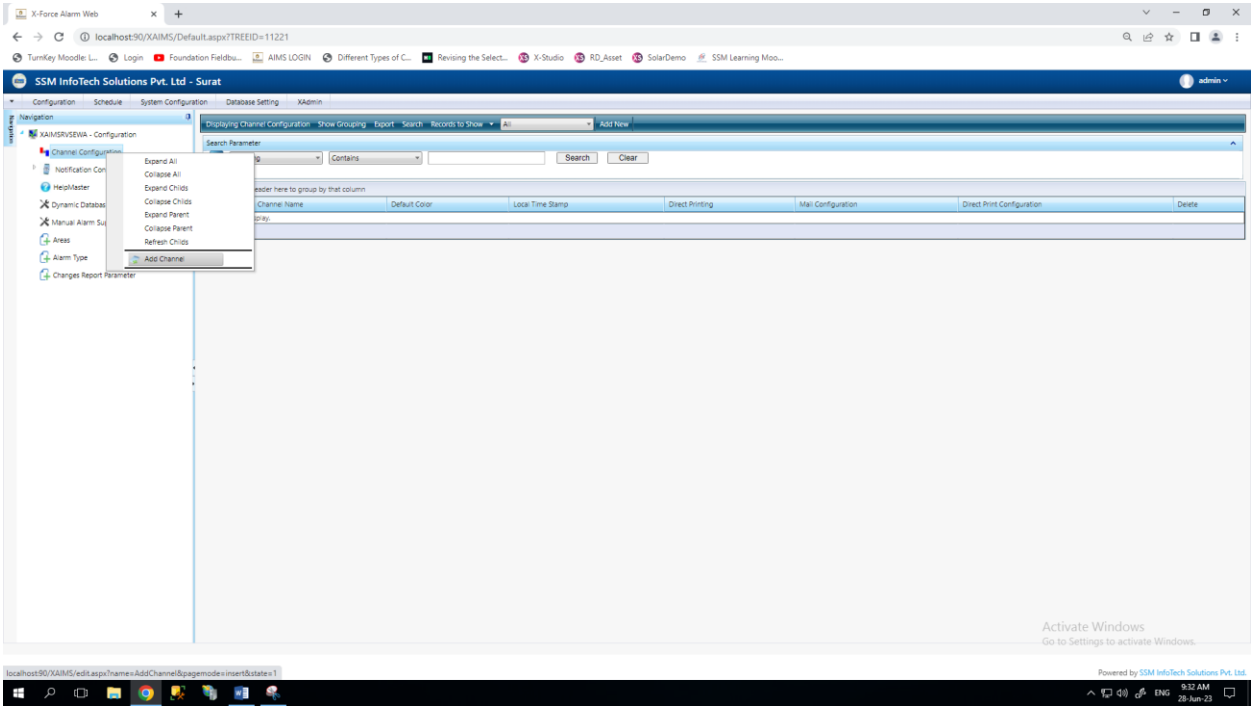
Once configuration done go to Alarm suit folder and check capture folder there data need to come in as below screen.



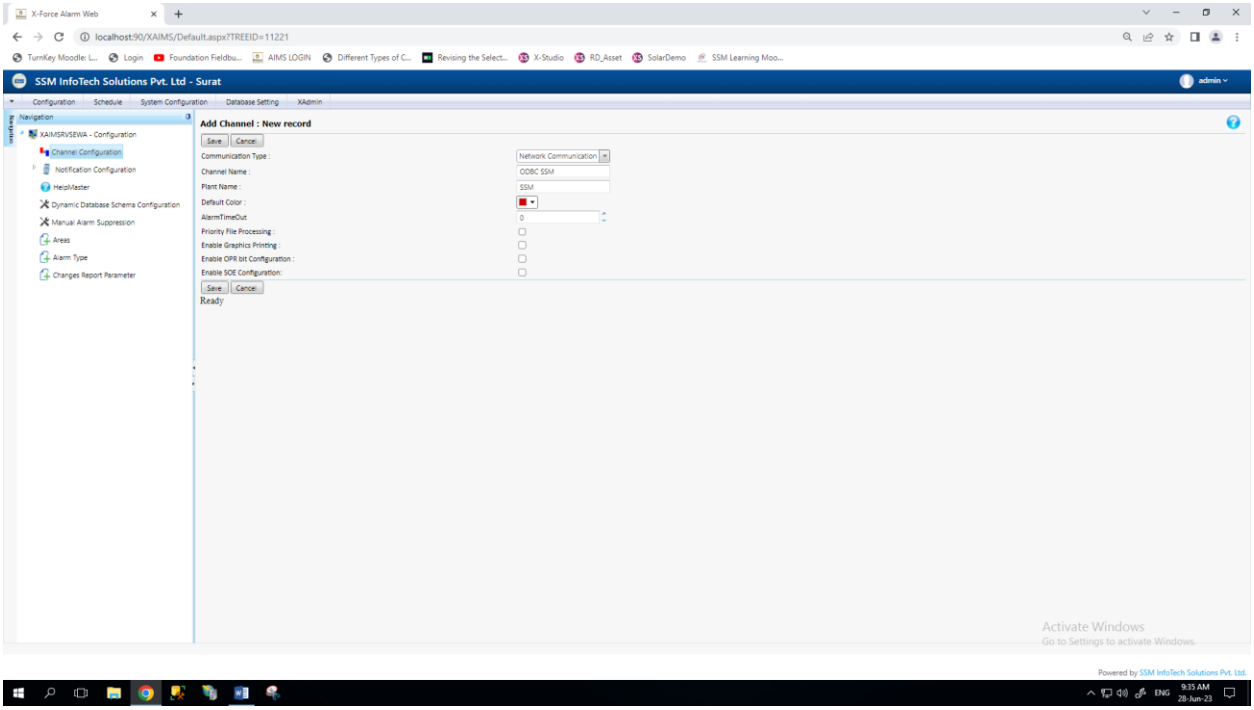
Now In X-Force Alarm Web Configuration. Login with credential (User Name and Password)



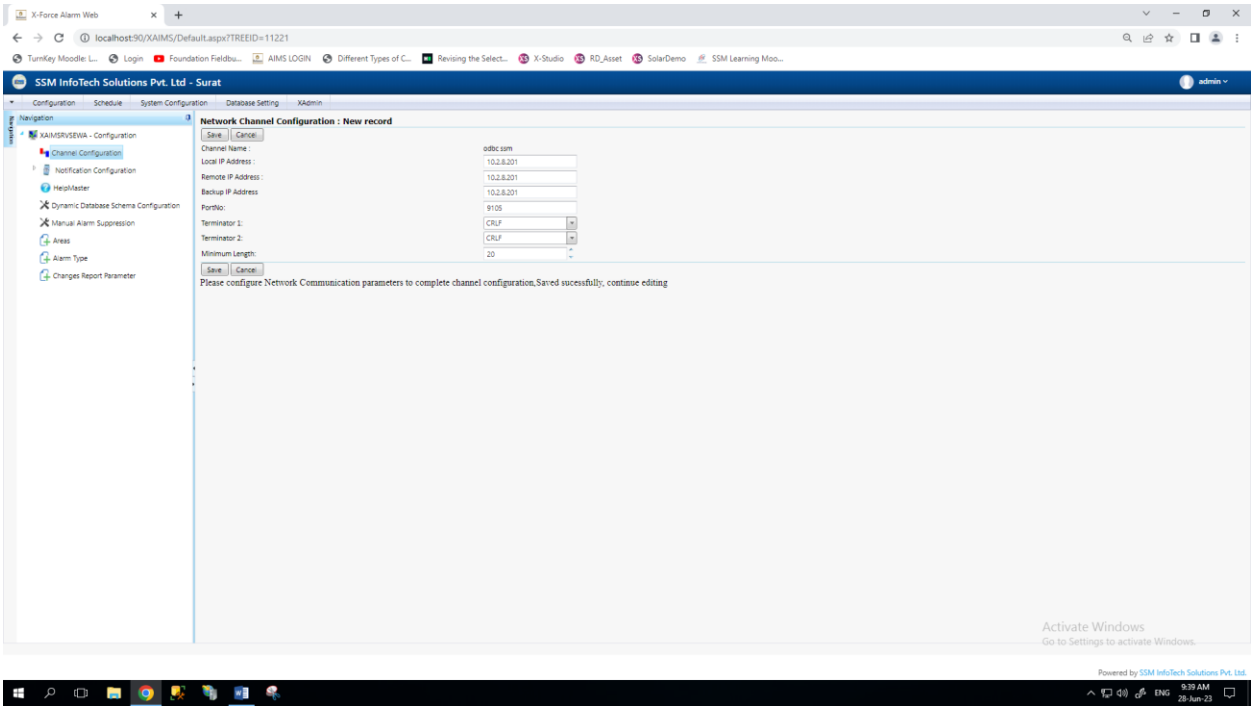
Click on Configuration, Expand configuration click on channel configuration and right click on it and select ADD channel.



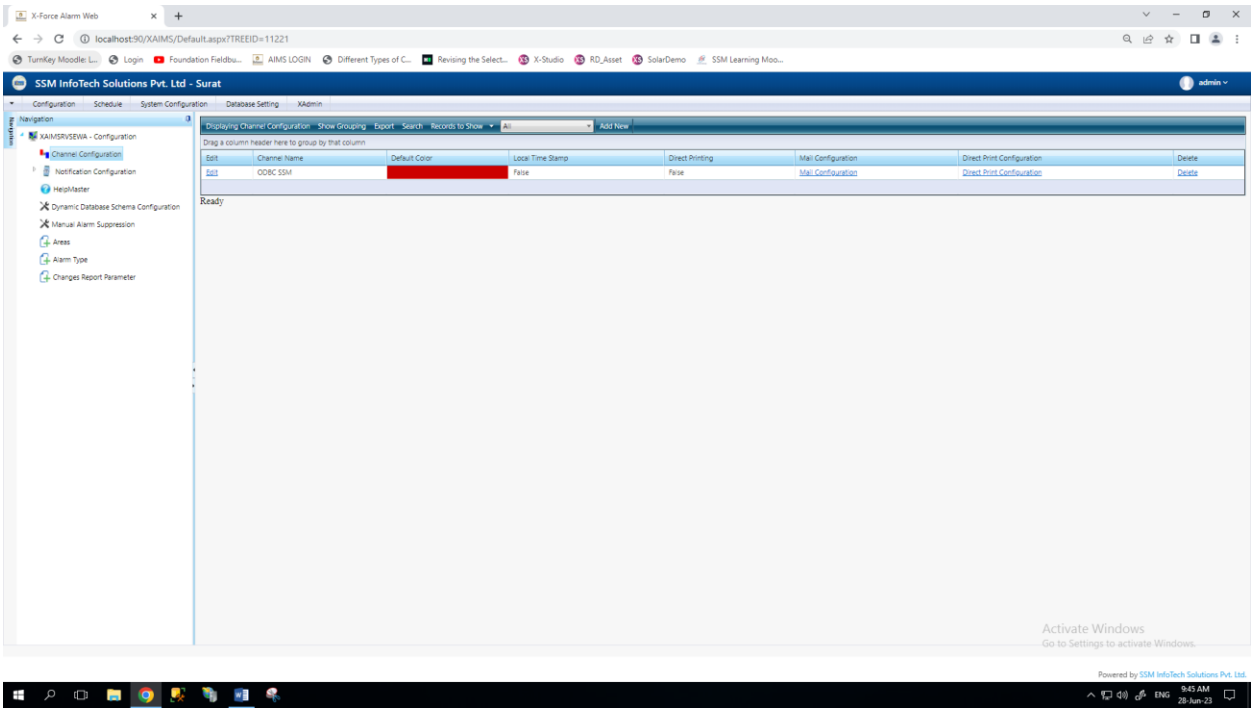
Then Add Details like communication type (Network Communication), Channel name, Plant Name, Set Default Color Then click on save.



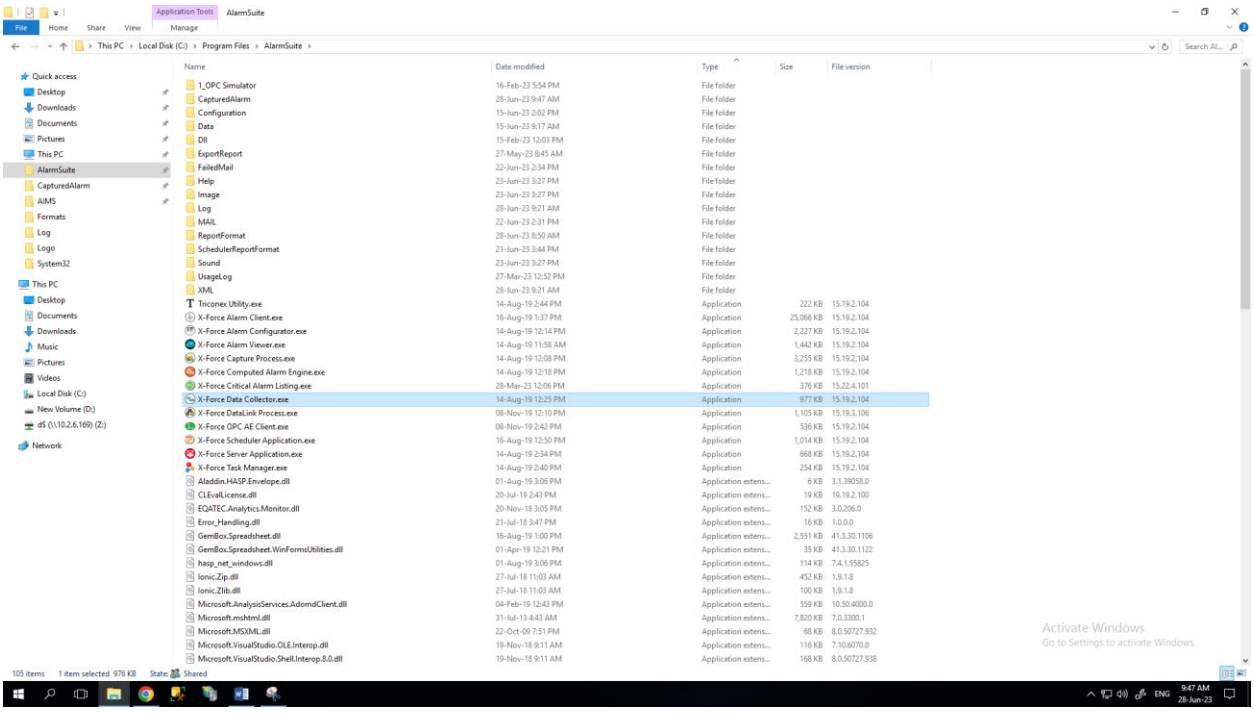
As Shown Below write local IP, Remote IP, Backup IP, Port No, Select Terminator 1 and 2, Set Minimum Length Data accordingly. And click on save.

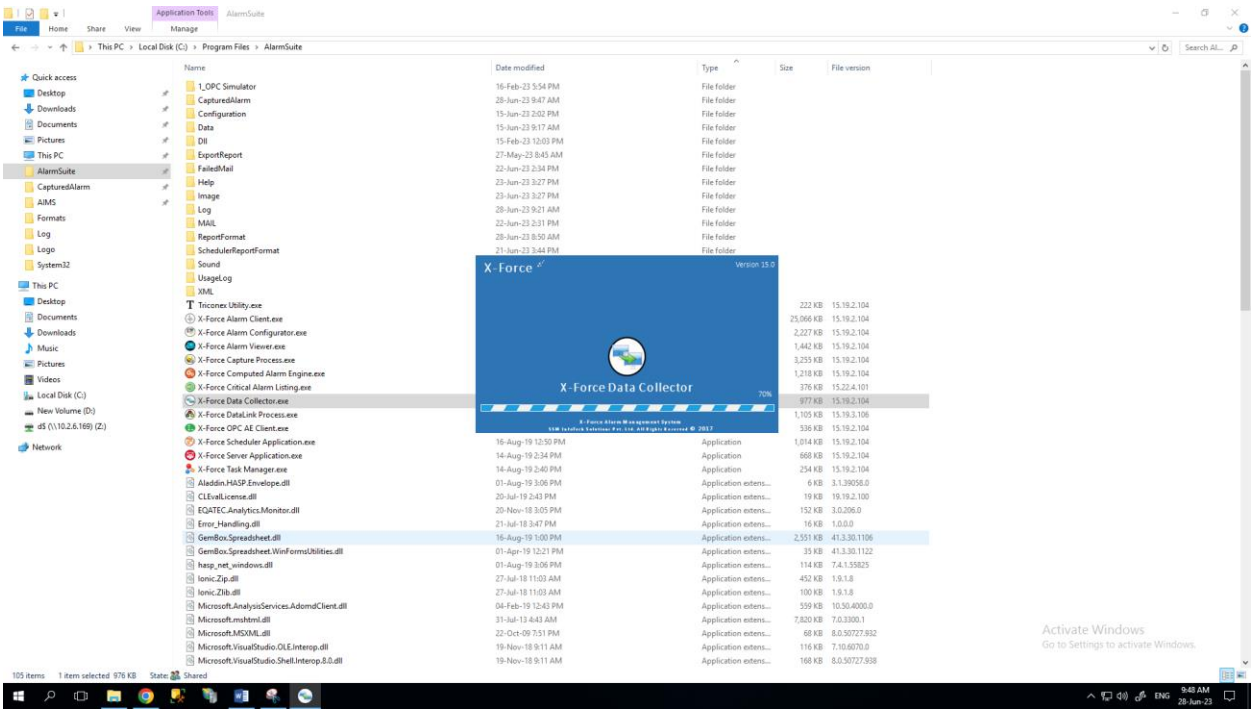


Channel is Appear here as shown below.

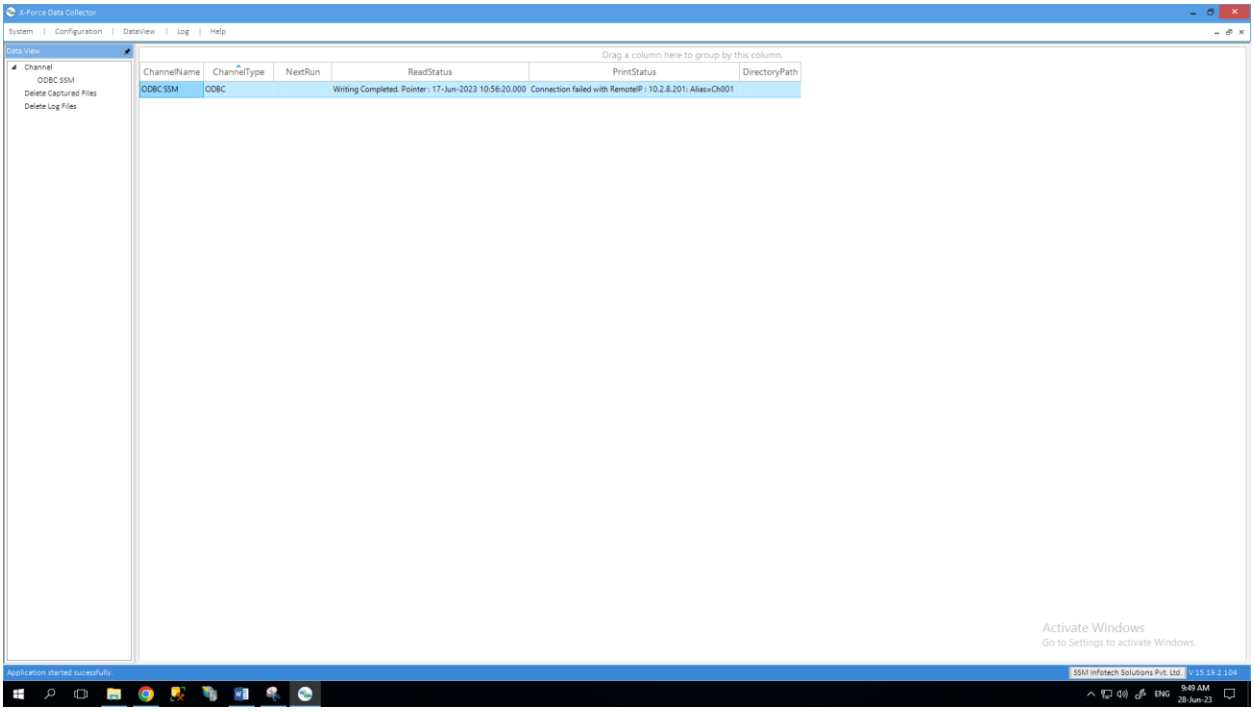


Now Open X-Force Data collector Application.

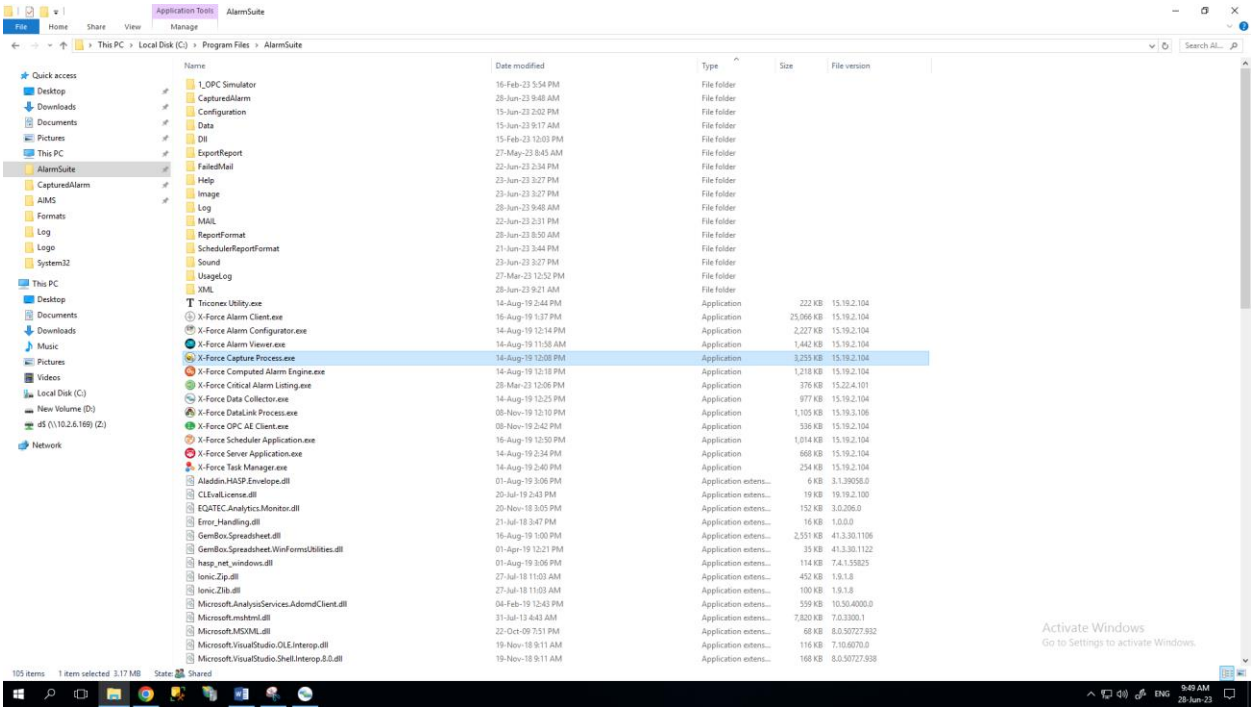




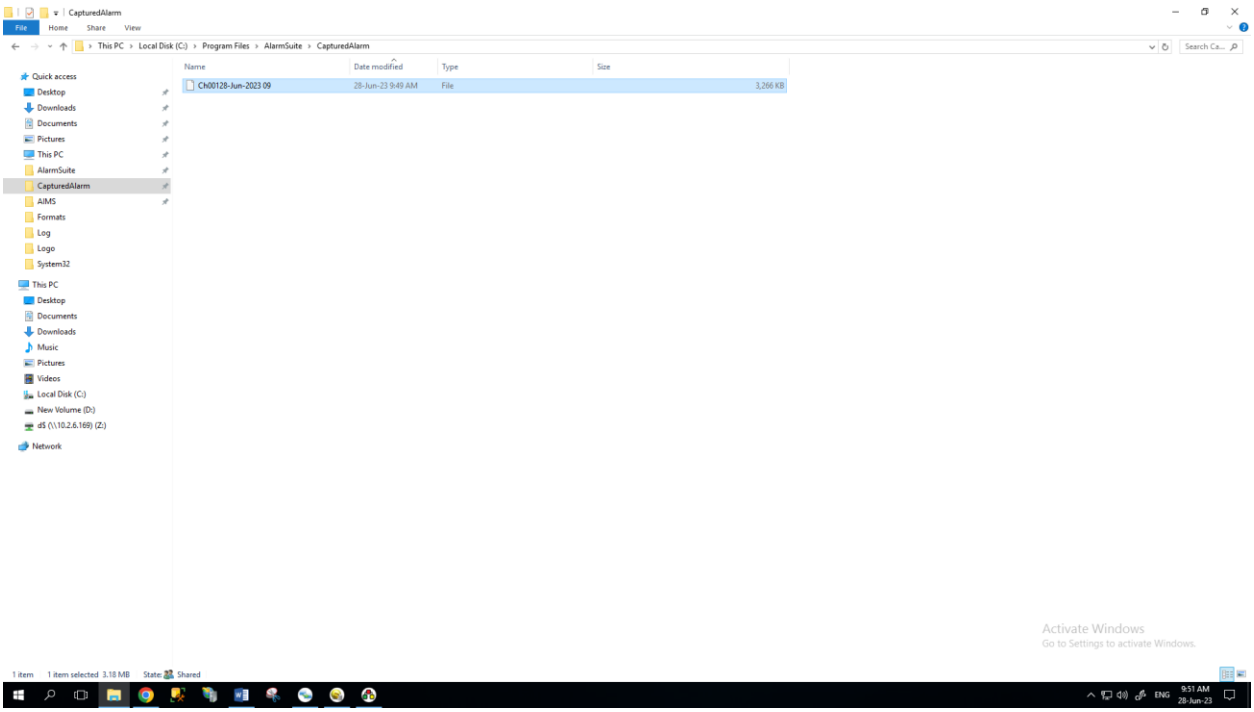
As Shown Below, ODBC SSM Channel, **Check Read Status (Reading from and writing).**



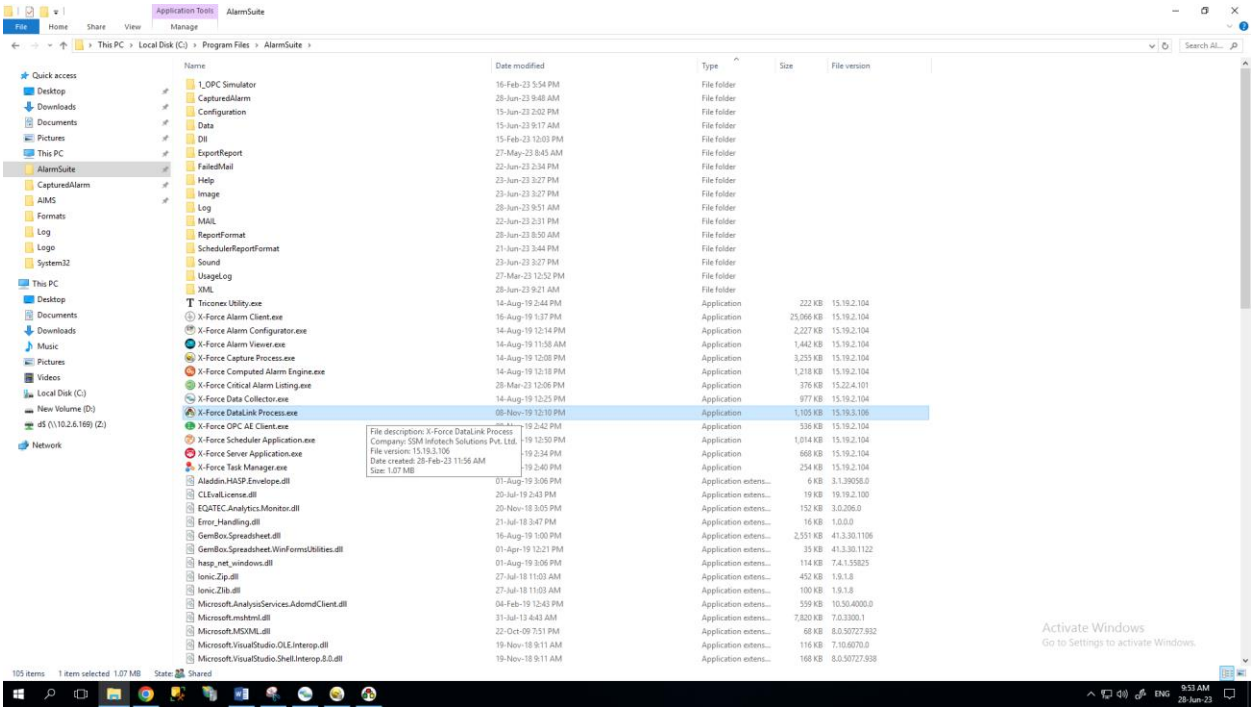
Now open X-Force Capture Process application.



Check Capture File Generated or not.



Now, Open X-Force DataLink Process application



Click on ODBC SSM Channel, Check Data coming or not.