

Engineering Note: EN0089 - Navigation Menu Options Missing from Hydro-Com

Summary: Correcting a Microsoft bug that prevents the navigation menu displaying

Products affected: Hydro-Com

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1 Summary

A Microsoft bug during some installations of Microsoft SQL Server compact may cause the computer to fail to find the appropriate database provider factories that allow Hydro-Com to access its database file. This occurs on the machine the database service resides (which may be a remote server if the client is accessing a database on a remote machine).

The fault can easily be identified as there will be no options in the navigation menu when the client runs. This note describes how to rectify this fault.

2 Confirming the fault

When Hydro-Com is run the user is presented with the screen shown in figure 1.

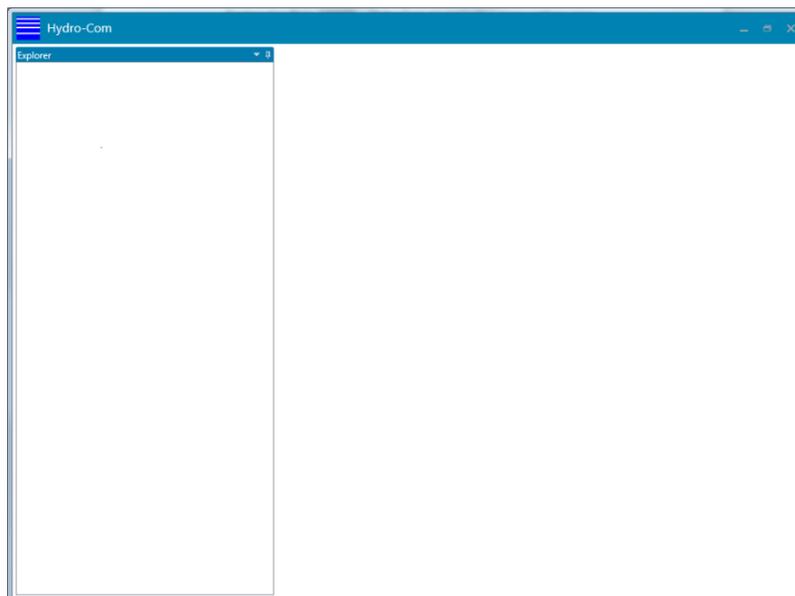


Figure 1 - No menu options

Press the windows button on the machine running the database service, search for "Event Viewer" and then open it. Locate the log Applications and Service Logs -> HydroComDatabaseEventLog. There will be an error recorded as shown in figure 2. The exact error description is very long and may vary depending on the current state of the system however the key information for identifying this fault can be found in the first few lines of the error as shown in figure 2.

Level	Date and Time	Source	Event ID	Task Category
Error	06/01/2017 19:53:47	HydroComDatabaseEvents	0	None

Event 0, HydroComDatabaseEvents	
General	Details
<p>The ADO.NET provider with invariant name 'System.Data.SqlClient' is either not registered in the machine or application config file, or could not be loaded. See the inner exception for details.</p>	

Figure 2 - Error Identification

3 Correcting the fault

This fault is corrected using the following steps:

1. Open Notepad
2. Open file c:\Windows\Microsoft.NET\Framework\v4.030319\Config\Machine.Config
3. Press Ctrl + F and search for "<system.data>"
4. Remove the line <DbProviderFactories/> as shown in figure 3.

```
<system.data>
  <DbProviderFactories>
    <add name="IBM DB2 for i5/OS .NET Provider" invariant="IBM.Data.DB2.iSeries" description=".NET Framewc
    <add name="Microsoft SQL Server Compact Data Provider" invariant="System.Data.SqlClient" descrip
  </DbProviderFactories>
  <DbProviderFactories/> //you need to delete this line!;
</system.data>
```

Figure 3 - Remove extra DbProviders Line

4 References

1. <http://laurenthinoul.com/how-to-solve-dbproviderfactories-section-can-only-appear-once-per-config-file-error/>