S-070903 - What could cause Web2 login to hang or show "Could not open database"?

The most likely cause for these symptoms is that the Web2 application pool is not using the correct Windows profile for the 'identity' on the Internet Information Services (IIS) server.

With an incorrectly configured identity, logging in to the file vault via Web2 in a web browser will either:

- Show the login page trying to load or hang indefinitely after entering the credentials.
- Successfully log in, but fail to navigate between folders or hang when viewing file details.
- Show the following error (see example in attached 'web_login_databas_error.jpg'):

  'Could not open database. This could happen if the network connection is broken or if the database has been removed'
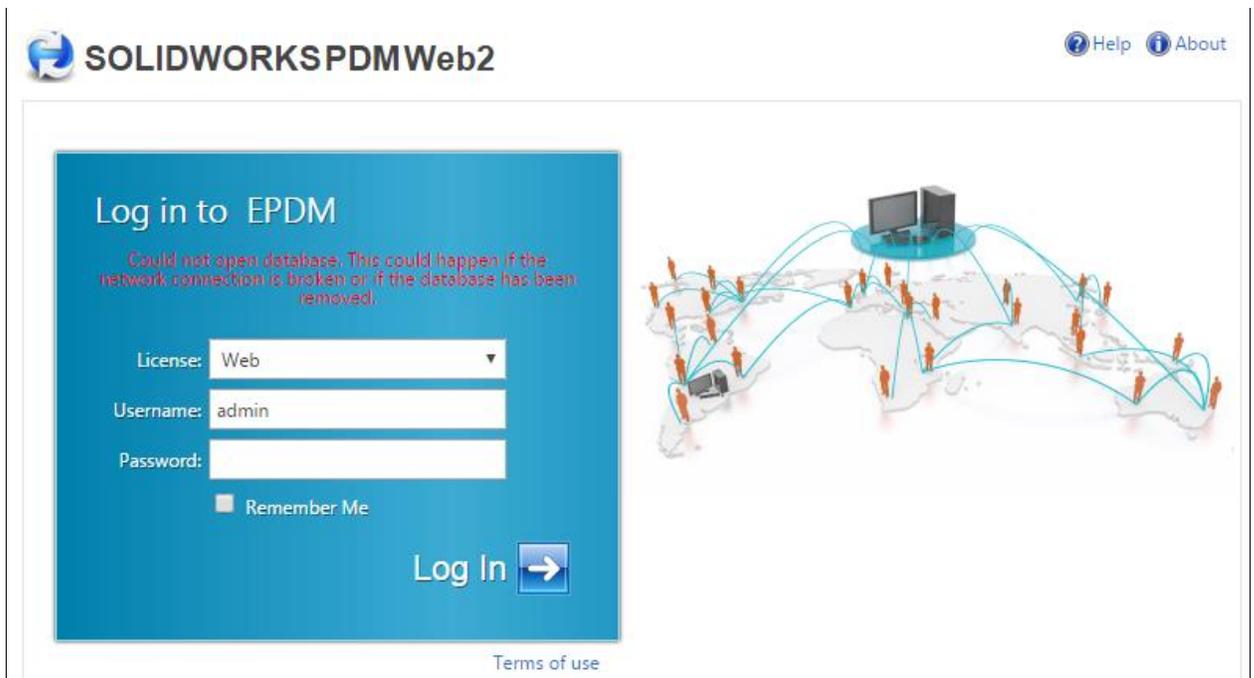
The Web2 application will use the SOLIDWORKS PDM client API to access file vault information on the IIS server. In order for the API to be able to access the file vault, the application pool MUST run under a Windows user profile that has sufficient local application data and registry entries required by the client API. For example the API needs access to the cached card images and potential add-ins etc.

When you log into Windows with a user profile on the IIS server and access the local file vault view, the local application data folders and HKEY_CURRENT_USER registry entries for the vault will be created under that profile. This allows the Windows user to work in the vault. The Web2 application must also have access to these same entries. This is why the set up instructions for Web2 outlines that you need to access the file vault view at least once with a Windows profile and then use this SAME profile as the application pool identity.

If you use another identity such as the default 'Network service' or a user that has not been physically logged in to the IIS server, then the appropriate application data and registry sections will not exist and the Web2 API calls may fail. This would appear as random hangs, navigation failing or problems logging in.

Troubleshoot this problem as follows:

- Open the web.config file (normally under 'C:\inetpub\wwwroot\SOLIDWORKSPDM\Web2\Web.config' for the Web2 application and make sure that the file vault name is spelled correctly in the keys 'VaultName' and 'VisibleVaults'.
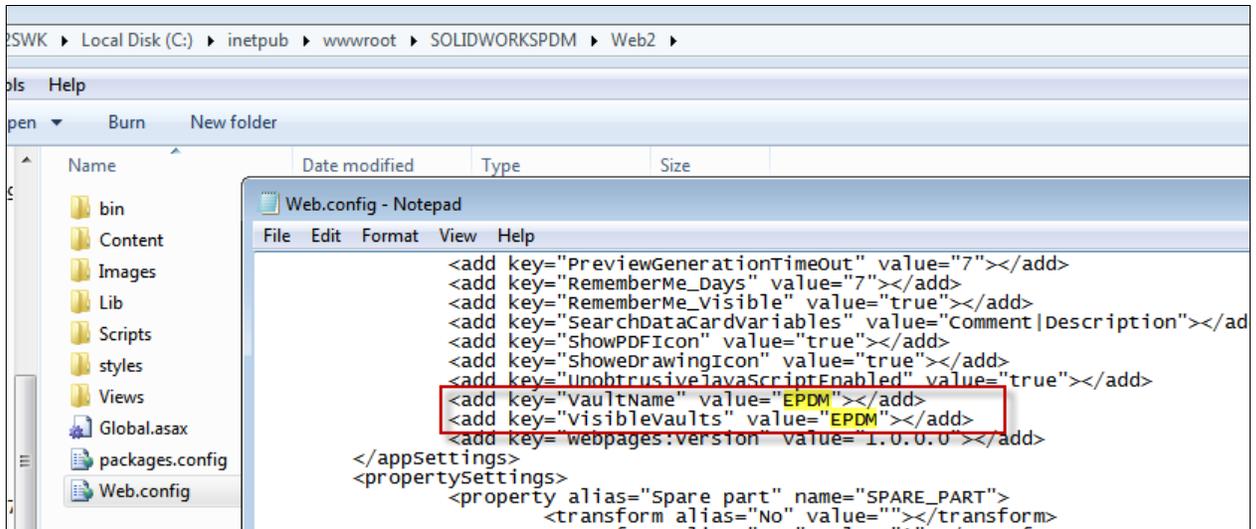
- In the IIS manager, open the advanced properties for the application pool (normally named 'SOLIDWORKS PDM Web2') and verify the 'Identity' setting. Make sure that the **identity** is set to a Windows profile (user) and password that has physically logged on to the IIS server and browsed into the local file vault view at least once. For example, if you are administering the IIS server, use the account that you are currently logged in as.
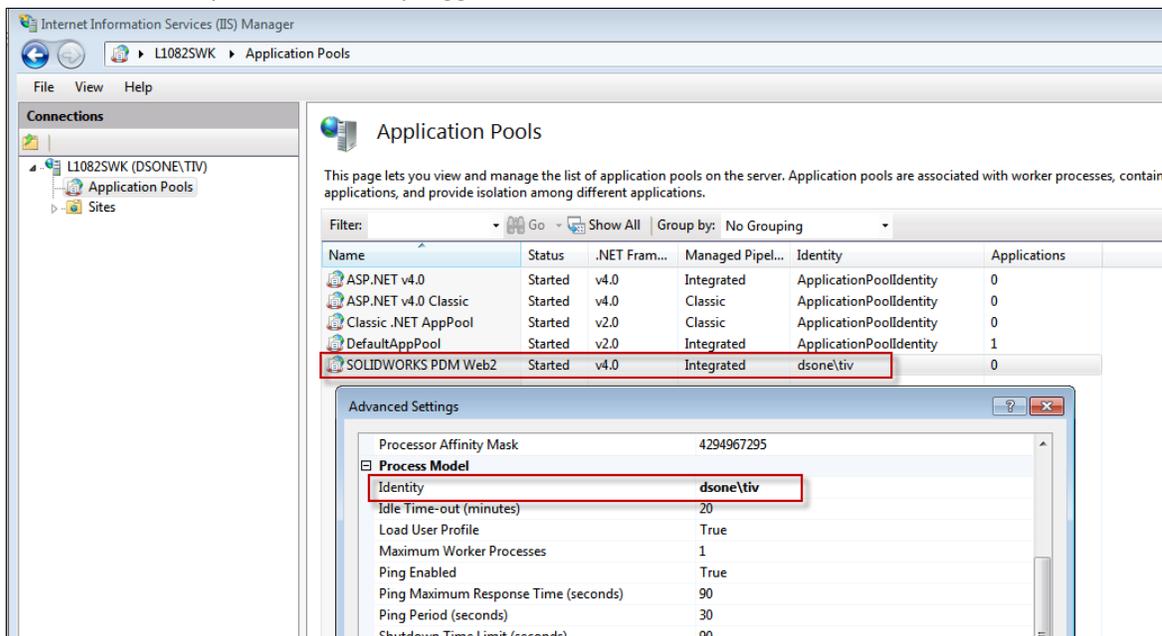
- Make sure that the option 'Load user profile' is set to 'True'. If this setting is set to false, the Web2 application will likely fail to log in if the user defined in the identity for the application pool not actively logged in to the IIS server.
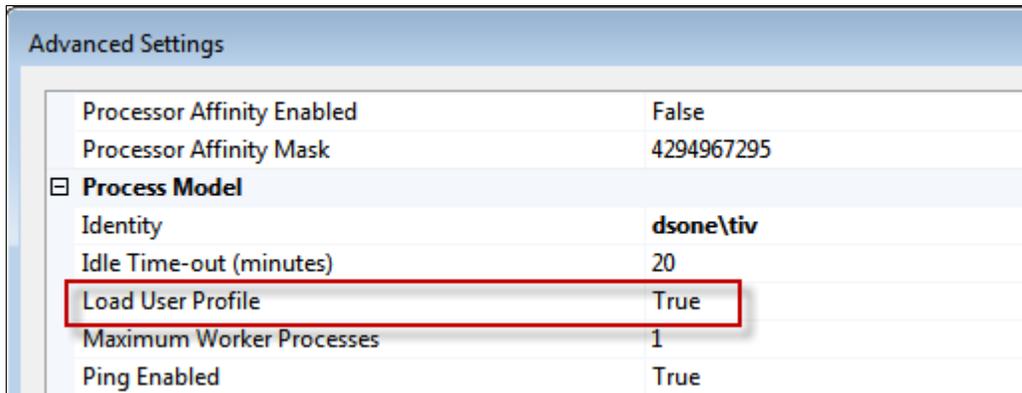
- If you have created a new user account for using as an identity for the application pool, **you must also log into the actual IIS server as this user** and browse into the local file vault view to make sure the registry and application data section is created for this profile. This includes:
  - User profile specific registry keys under 'HKEY_CURRENT_USER\Software\SolidWorks\Applications\PDMWorks Enterprise'.
  - Local application data folders under '%localappdata%\SolidWorks\SOLIDWORKS PDM'.
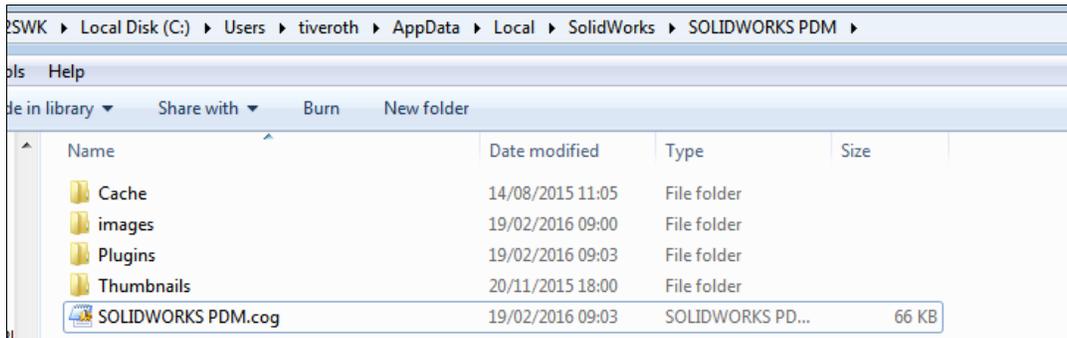
- The user account that is defined as the application pool identity must also be included in the local "IIS_IUSRS" group on the IIS server.
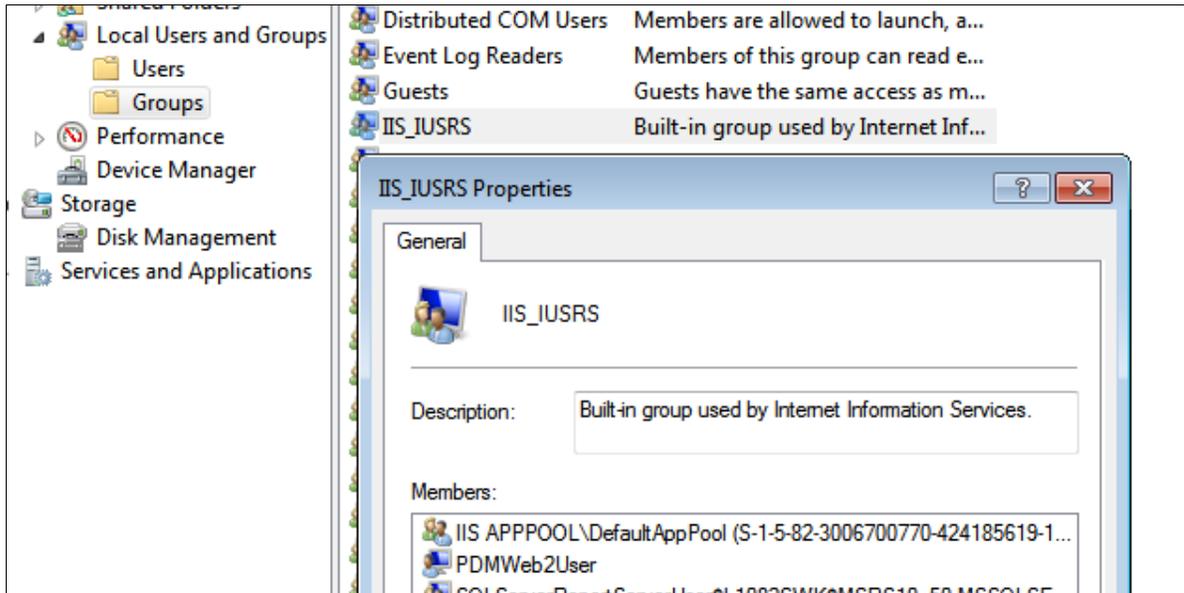
- The account that is defined as the application pool identity must also have local administrative permissions.
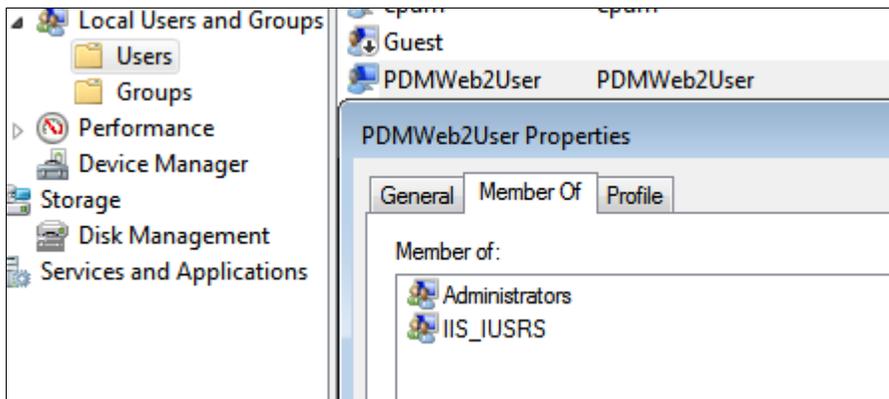
- The local file vault view on the IIS server must be created as a "Shared" view if you are using an identity other than the currently logged in Windows user. A shared view will create the view connection details in the HKEY_LOCAL_MACHINE registry which is accessible to all profiles on the system.
- If all of the above steps are verified and you still see a database error trying to log in via Web2, make sure that you can actually log into the local file vault view on the IIS server with the 'Admin' login. If you cannot log into the local vault view on the server, the Web2 application will not be able

to access the vault either.
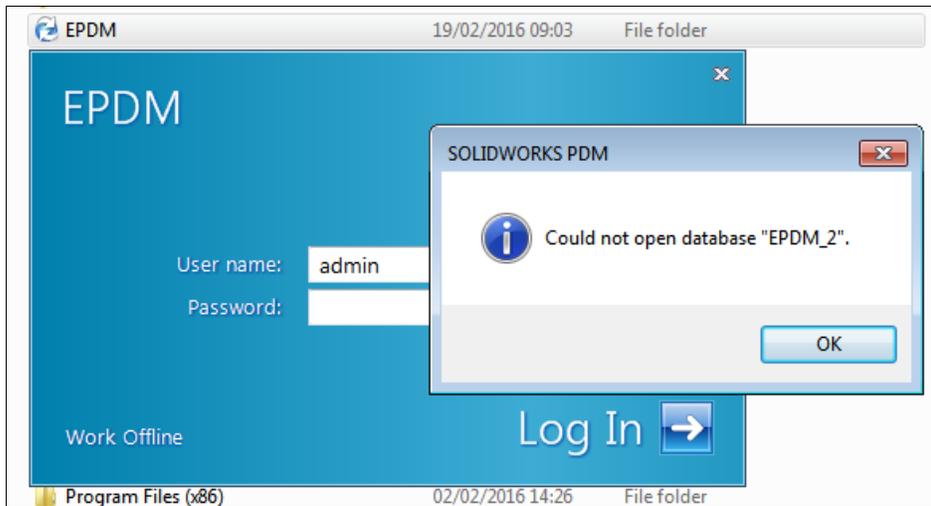
- o Verify that the server and database name that are defined in the view connection details are valid and can be reached from the physical IIS server system. Check the 'DbName' and 'DbServer' values under 'HKEY_LOCAL_MACHINE\SOFTWARE\SolidWorks\Applications\PDMWorks Enterprise\Databases\<vault>'.
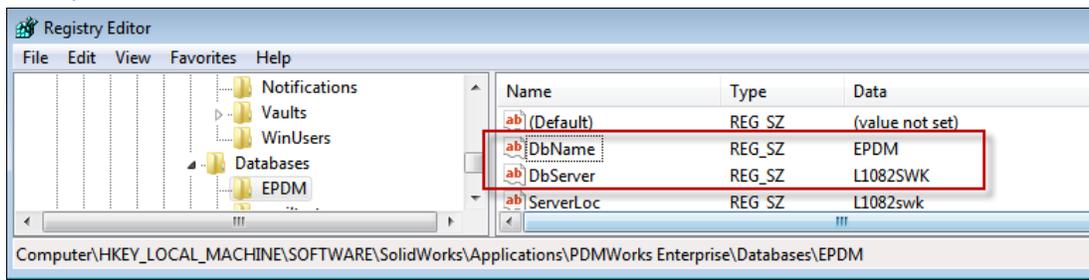
- o Check for connection errors from the local file vault view in the client log via the administration tool.
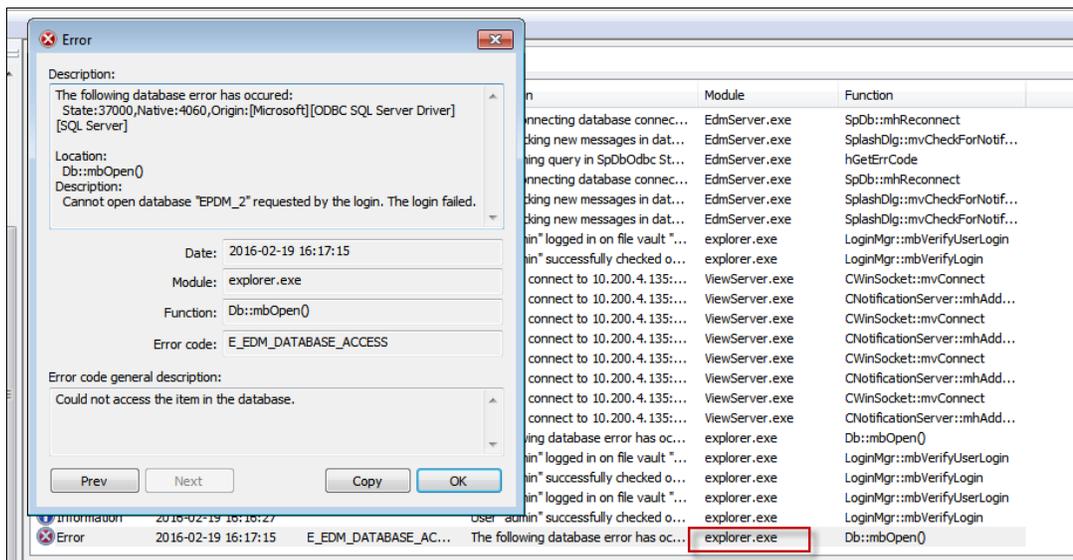
- o Check for connection errors from the Web2 IIS server application. You can find the application log under:
  'C:\Windows\System32\config\systemprofile\AppData\Local\SolidWorks\SOLIDWORKS PDM\SOLIDWORKS PDM.cog'. Look for errors from the 'w32p.exe' module.
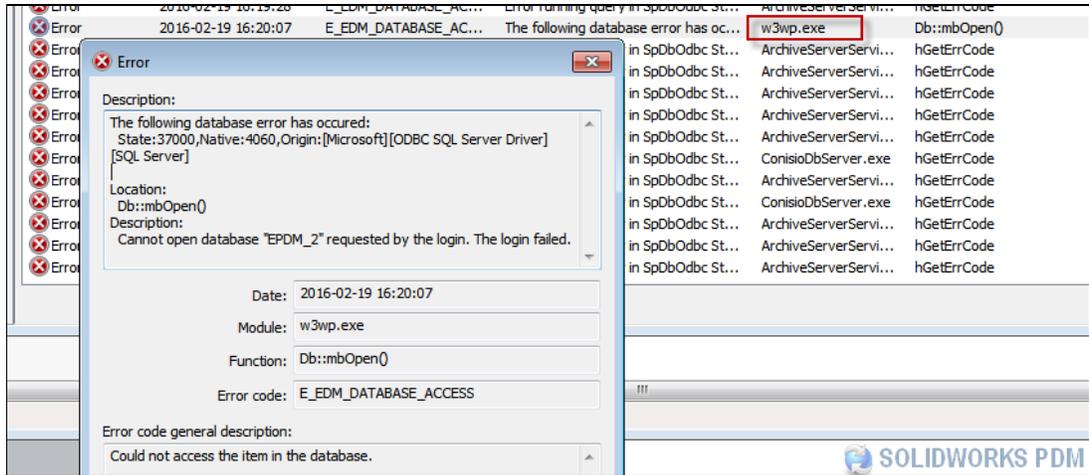
- o Use ODBC test to verify that the IIS server can reach the SQL server and vault database – see KB solution S-042701.