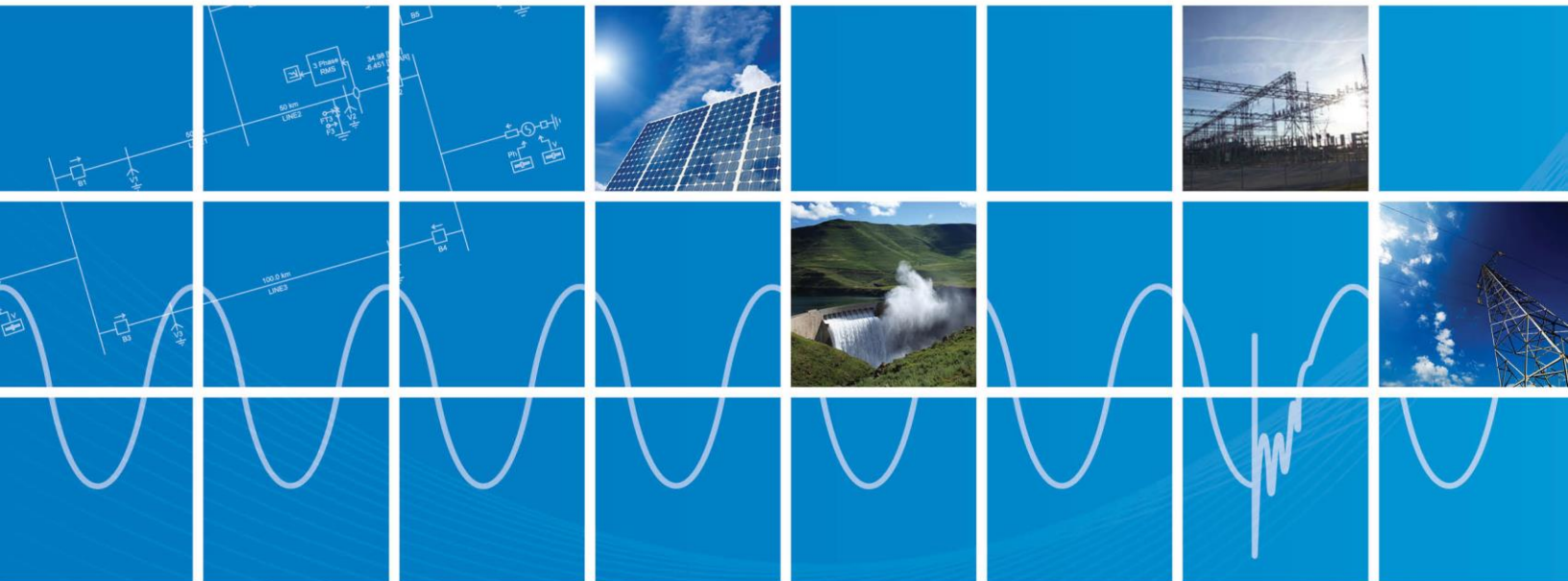# Resolving Certificate Licensing Issues

Written for resolving certificate licensing issues for the following MHI products:

- PSCAD™ V5

- PSCAD™ X4: Version 4.5 and Version 4.6

- FACE v2.0 – Field and Corona Effect

- Enerplot v1.0

- PRSIM v1.0

- The PSCAD Initializer v1.0

November 2, 2020
Revision 5

Contents

1.   Introduction

1.1   Overview

This manual presents known issues and solutions related to certificate licensing. It is intended to be a continuously developing diagnostic tool as licensing evolves. If you encounter any issues that are not covered herein, please forward the details to our Support Desk (support@mhi.com).

The information in this manual is applicable to certificate licensing for the following software:

- PSCAD^{TM} V5
- PSCAD^{TM} X4: Version 4.5 and Version 4.6
- FACE v2.0 – Field and Corona Effect
- Enerplot v1.0
- PRSIM v1.0
- The PSCAD Initializer v1.0

This manual is broken down into the following categories:

- Section 2: Certificate Licensing Issues
- Appendix A: Using the Fortran Medic Utility
- Appendix B: Requirements for using Certificate Licensing
- Appendix C: Testing Certificate Licensing connectivity
- Appendix D: Viewing the licensing log file

1.2   Related Support Documents

Refer to this article for other, related, support documents.

2. Certificate Licensing Issues

2.1 Advanced Licensing Results in "Proxy Authentication Required (407)"

Problem

When attempting to acquire a license certificate, you encounter the following error:

Proxy Authentication Error (407)

Log File Evidence

```
ERROR:   ProtocolException:
ERROR:      Cause: The remote server returned an unexpected response: (407) Proxy Authentication
   Required.
ERROR:      Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage,
   System.Runtime.Remoting.Messaging.IMessage)
ERROR:   WebException:
ERROR:      Cause: The remote server returned an error: (407) Proxy Authentication Required.
ERROR:      Method: System.Net.WebResponse GetResponse()
ERROR:      Status: ProtocolError
ERROR:      Server:
ERROR:      ResponseUri: http://licensing.pscad.com/Licensing/NormalService
ERROR:      ResponseCode: ProxyAuthenticationRequired (407)
```

Solution 1

- Have your IT remove the proxy authentication requirement for pscad.com.

- Attempt to activate a certificate.

    Note
    Refer to Appendix B for certificate licensing requirements.

Solution 2

- Determine the HTTP Proxy address, port and settings.

- Launch PSCAD and go PSCAD | Options | Advanced Licensing.
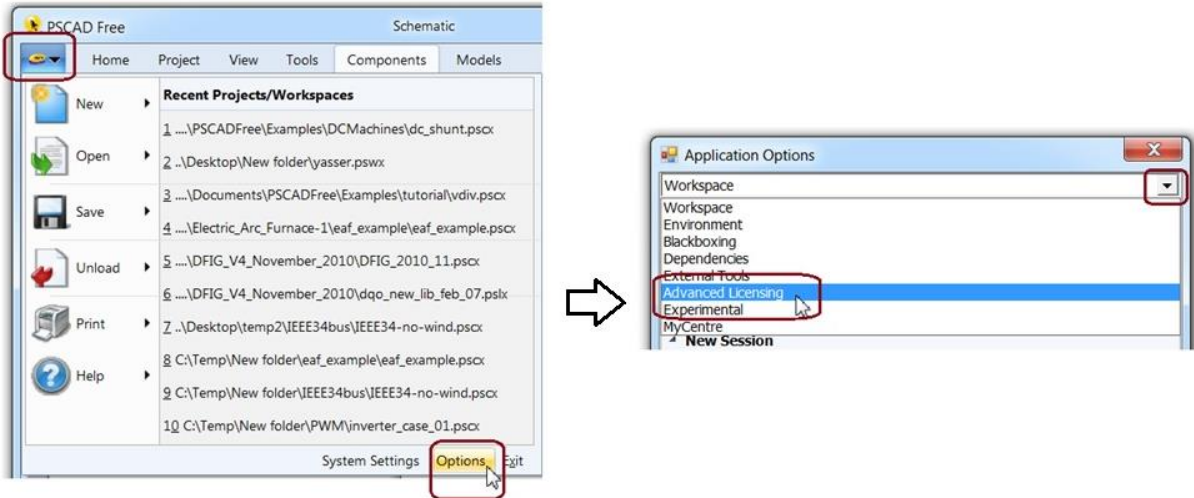
- Modify the Proxy Server (HTTP) settings as required, then select OK.
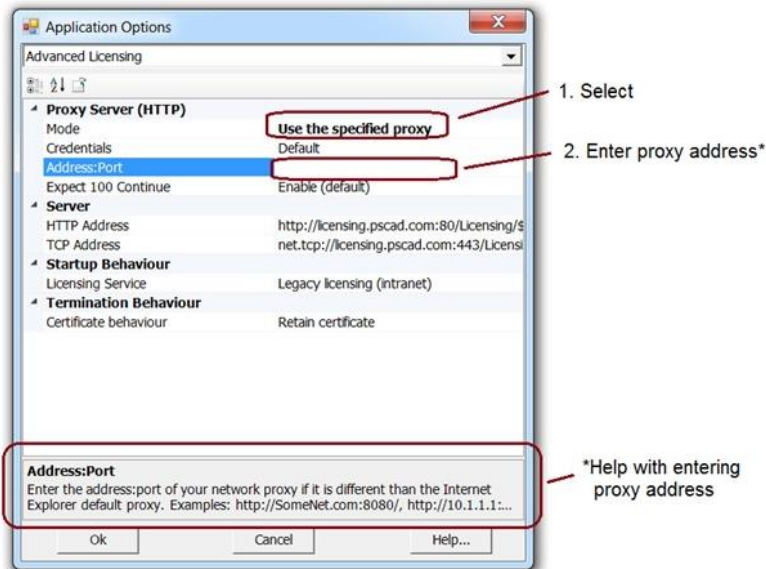
- Select "Ok" to apply the change.
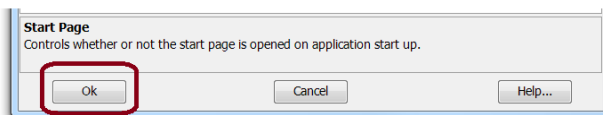
- Attempt to activate a certificate.

2.2 Receiving an "Unable to obtain the license certificate" Error

Problem 1

If the time or date on your computer is incorrect, the following message will display when trying to license software:

PSCAD

Unable to obtain the license certificate
Your system time appears to be incorrect.
To resolve this issue…
Please ensure that your system time is correct, and then try again.

Retry   Cancel
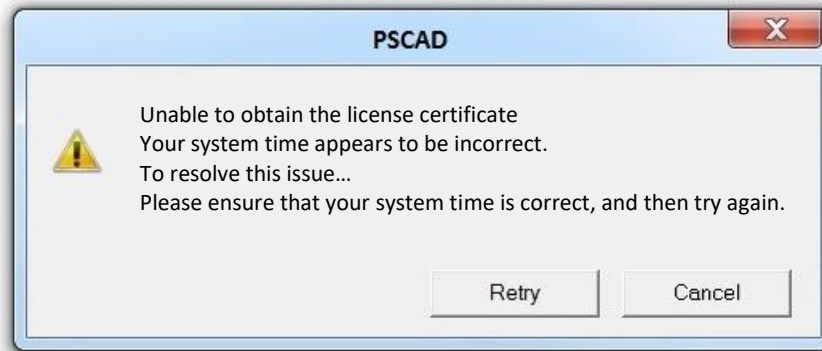
Solution 1

1. Determine the correct time zone, date and time in either of the following two manners:

   a. Use the "worldtimeserver" website as follows:

   - Go to the following website:

     http://www.worldtimeserver.com/current_time_in_UTC.aspx

   - Browse to your region using the "Countries" browser:

     Countries
     (UTC/GMT)
     Afghanistan
     Åland Islands
     Albania
     Algeria
     American Samoa
     Andorra

   - The time zone, date and time in your region will be displayed. For example:

     Location
     Tasmania, Australia
     The current time and date right now
     Current Time — 3:18:09 PM
     Date — February 2, 2016
     Time Zone — Australian Eastern Daylight Time (AEDT) +1100 UTC

b. Use the Fortran Medic utility as follows:

- Run the Fortran Medic utility as per Appendix A.2.

- After the utility is done retrieving information, scroll down to "Machine Info", and note the time zone, date and time that the computer should be set to:
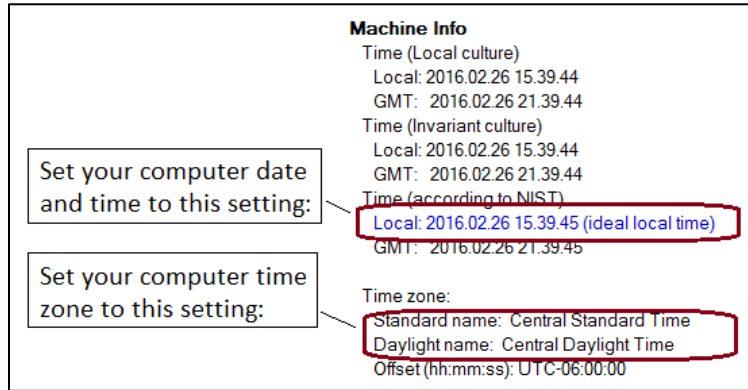
- If your computer time is different from the global time by more than three minutes, you will see the following error in the conflicts section:

  Your system clock is not synchronized to global network time.

- Right-clicking on the error will display instructions on setting the correct time, date and time zone. An example is shown in the following screenshot; more detailed instructions are below, in Steps (2) and (3):
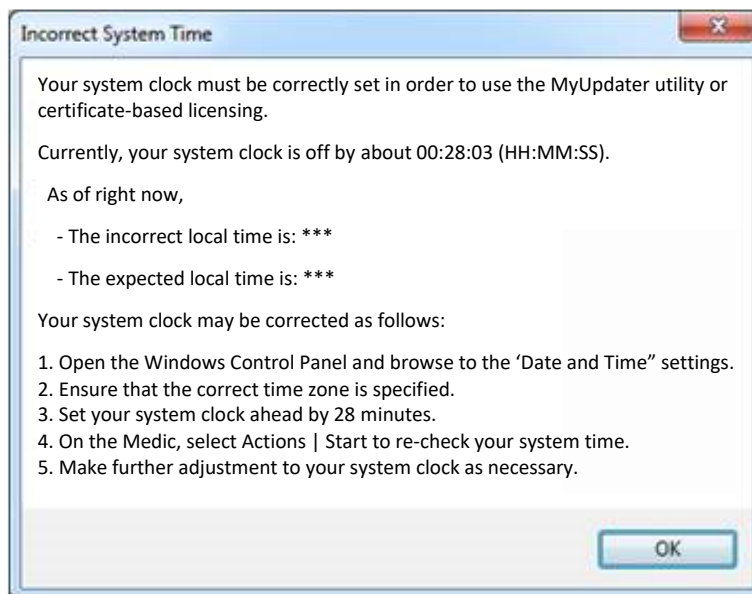
2. Configure the correct time zone, date and time on your computer as follows:

a. From your Windows Start menu, browse to: Control Panel | Clock, Language and Region | Date and Time, then select "Change time zone".
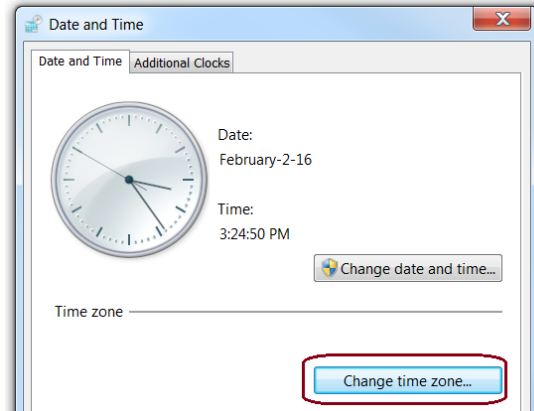
b. Select the correct time zone from the drop-down menu (as determined in Step (1)), then select "OK".
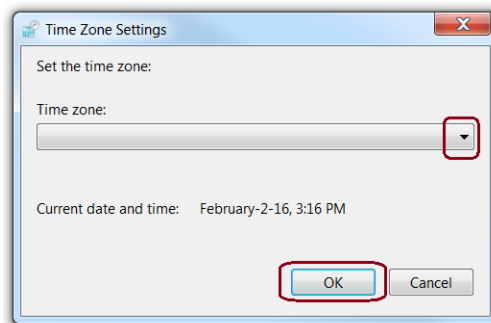
c. Select "Change date and time":
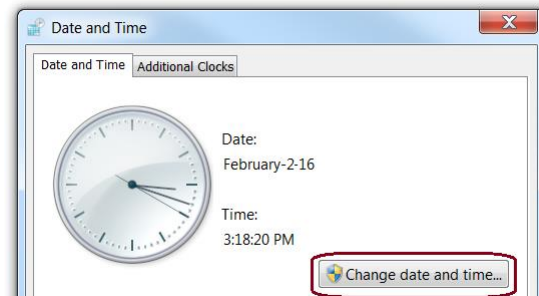
d. Select the correct date and time (as determined in Step 1), then select "OK":

3. Retry licensing the software. If the issue persists, repeat Steps (1) and (2) to further refine and correct the time.

Note
Refer to Appendix B for certificate licensing requirements.

Problem 2

When the user attempts to activate a license certificate for the Free Edition, the request is refused, and the following information is displayed in a dialog box:

Cause 1

The Windows operating system, Vista, is not compatible with PSCAD. This is determined as per the PscadLmgr.txt file, in which the following data is displayed:

Advanced Licence Manager <version (date)> starting on Windows Vista (6.00.6000)

…
ERROR: Error processing request.
ERROR: Exception:
ERROR: Cause: License does not support this Windows version.

Solution 1

Update operating system to a minimum of Windows 7 (SP1).

Cause 2

The user does not have access to the license in their MyCentre account.

Solution 2

Contact support@mhi.ca to request access.

2.3   Receiving an "Unable to determine login status" Error Message

Problem

When logging in to PSCAD using your MyCentre login credentials, the following error message displays:
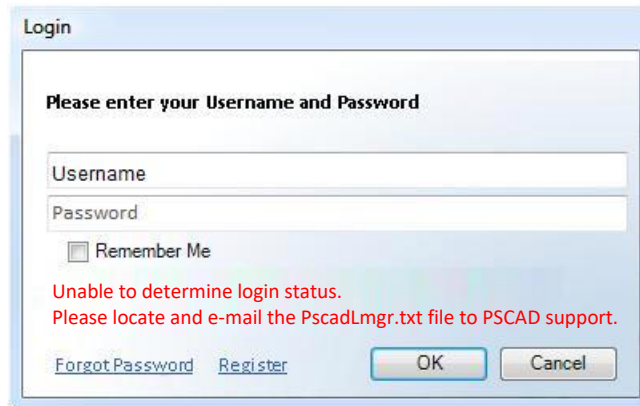
And the PscadLmgr.txt file reveals an error message similar to the following:

Hostname contains non-English characters. User: *USERNAME*, Host: *HOSTNAME*
Error: Login failed. Cannot convert UnknownType object to System.String

Cause

The machine host name contains non-English characters.

Solution

Switch the machine name to one which is composed of English characters.

> **Note**
> Refer to Appendix B for certificate licensing requirements.

2.4   PSCAD Client Cannot Contact the Server

Problem

PSCAD cannot ping the Server, nor activate a license from the Server.

Cause

You are not able to access off-site websites, or our License Server, without all outgoing traffic going through your mandatory corporate proxy server. Therefore, PSCAD is not able to access our License Server.

And, if you run our ProxyDetector utility, it will attempt to reach our License Server via your default proxy server. An error similar to the following may display:

<pre style="color:red">
Exception:
   Cause: The HTTP request was forbidden with client authentication scheme 'Anonymous'.
   Type: System.ServiceModel.Security.MessageSecurityException
   Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage,
   System.Runtime.Remoting.Messaging.IMessage)
   TargetSite: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage,
   System.Runtime.Remoting.Messaging.IMessage)
WebException:
   Cause: The remote server returned an error: (403) Forbidden.
   Method: System.Net.WebResponse GetResponse()
   Status: ProtocolError
   Server:
   ResponseUri: http://licensing.pscad.com/Licensing/PingService
   ResponseCode: Forbidden (403)
</pre>

Background

In order to secure web traffic, IT personnel or applications will install one or more certificates generated by trusted certificate authorities on web-facing servers.

When web clients, such as PSCAD or the ProxyDetector want to communicate with, or through, a server, they request a list of certificates stored on the server, then verify the certificate chain of trust and open up a secure communications channel with the desired endpoint.

It appears that the primary cause of the error that you are encountering is that a server between the ProxyDetector and our License Server is trusting too many certificate authorities, and as a result, sends only a truncated (partial) list of certificates to our web client, such as PSCAD or the ProxyDetector, which then cannot verify the chain of trust. This is a known Windows issue, as described in the following link:

https://support.microsoft.com/en-us/kb/2801679   SSL/TLS communication problems after you install KB 931125

This error may be due to a server on your site, most likely your proxy server.

Solution

The following are possible workarounds:

1. Have your IT administrator of the proxy server review the certificate authorities trusted for client authentication and remove those certificates that do not really need to be trusted.

2. Have your IT department remove the proxy requirements for all web traffic destined for:

    *   http://licensing.pscad.com:80/Licensing/NormalService
    *   http://licensing.pscad.com:80/Licensing/FreeService
    *   http://licensing.pscad.com:80/Licensing/PingService

    This would allow the licensing web traffic to completely bypass the proxy server.

3. Take your laptop offsite or home, and acquire a license certificate. As the acquired certificate expires in 28 days, you would need to do this at least once every 28 days or less.

    Note
    Refer to Appendix B for certificate licensing requirements.

2.5 Receiving a "Communication with the server failed. (417) Expectation failed" Error Message

Problem

When trying to activate certificate licensing using correct MyCentre login credentials, the following error message is displayed:
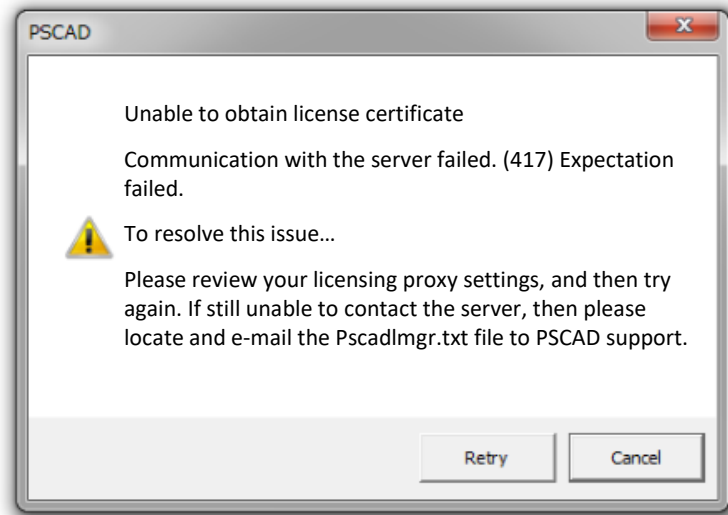
When the Retry button is pressed, the Login dialog box displays, and the user enters correct MyCentre login credentials. However, the following error then displays:
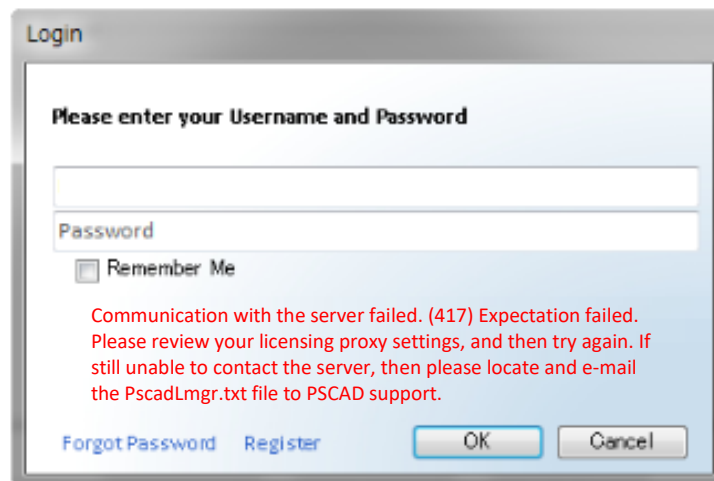
And, the PscadLmgr.txt log file displays the following messages:

Attempting to contact server using HTTP.(Fri(Fri May 20 12.58.03 2016) Connecting...

Endpoint = http://licensing.pscad.com:80(Fri May 20 12.58.03 201(Fri May 20 12.58.03 2016)   Active binding: WSHttpBinding

ERROR: ProtocolException:

ERROR: ProtocolException:

ERROR: Cause: Unexpected response from the remote server has been returned: (417) Expectation Failed.

ERROR: Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage, System.Runtime.Remoting.Messaging.IMessage)

ERROR: WebException:

ERROR: Cause: The remote server returned an error: (417) Expectation Failed

ERROR: Method: System.Net.WebResponse GetResponse()

ERROR: Status: ProtocolError

ERROR: Server: squid

ERROR: ResponseUri: http://licensing.pscad.com/Licensing/FreeService

ERROR: Http code = 26417

Aborting...

Attempting to contact server using TCP..(Fr(Fri May 20 12.58.03 2016) Connecting...

Endpoint = net.tcp://licensing.pscad.com

   Active binding: NetTcpBinding

ERROR: Exception:

ERROR: Exception:

ERROR: Cause: net.tcp://licensing.pscad.com:443/Licensing/FreeService could not connect. The duration of the connection attempt was 00:00:21.0444369. TCP Error Code 10060: Because the connection already called did not properly respond after a period of time, it was unable to connect. Or because connected host has failed to respond, established connection failed. 198.163.208.32:443.

ERROR: Type: System.ServiceModel.EndpointNotFoundException

ERROR: Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage, System.Runtime.Remoting.Messaging.IMessage)

ERROR: TargetSite: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage, System.Runtime.Remoting.Messaging.IMessage)

ERROR: SocketException:

ERROR: Cause: Because the connection already called did not properly respond after a period of time, it was unable to connect. Or because connected host has failed to respond, established connection failed. 198.163.208.32:443

ERROR: ErrorCode: 10060

ERROR: SocketErrorCode: TimedOut

ERROR: NativeErrorCode: 10060

ERROR: Meth ERROR: Tcp code = 10060

ERROR: Failed to contact server

Cause

A proxy server in the customer's network is blocking communication with our server, preventing the activation of certificate licensing.

Solution 1

Bypass the proxy server in your network, to allow the certificate licensing to work.

Solution 2

- Launch PSCAD, and display the Application Options dialog box (from the PSCAD Start menu, select "Options"):
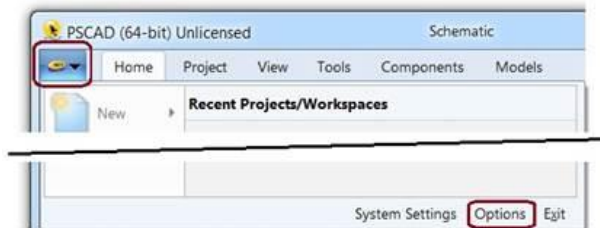
- Select the Certificate Licensing page from the drop-down menu:
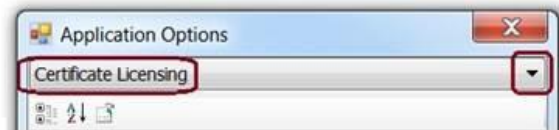
- Change the Expect 100-Continue to "Disable":
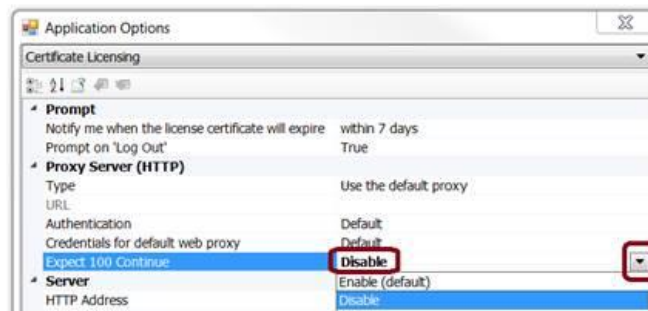
- Select OK to apply the change:
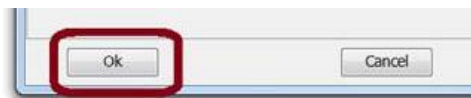
- Close PSCAD.
- Launch PSCAD, and see if it becomes licensed.

Note
Refer to Appendix B for certificate licensing requirements.

2.6   Receiving "User <> is not authorized for <PSCAD 461 x64>" Error Message

Problem

The user is unable to run authorized software via MyUpdater. The following messages display in MyUpdater:

Error: Unable to get session info from Update Server on UpdateServer.pscad.com:80
Cause: User<> is not authorized for <PSCAD 461 x64>
Unable to upload file(s)
Unable to start session. Unable to import a blank SessionCookie.
Attempting to renew your <PSCAD 461 x64> license
Unable to extend PSCAD 461 x64 license…
Cause: User <> is not authorized for <PSCAD 461 x64>
Attempting to start <PSCAD 461 x64>
Launching <Pscad.exe>
Using elevated privileges.

Cause

This MyUpdater user is not logged in. Therefore, any MyCentre products for which the user is authorized may be launched from MyUpdater, but may not be installed or updated.

Solution

Log in to MyUpdater (select "Log in" from the "Account" tab).

> **Note**
> Refer to Appendix B for certificate licensing requirements.

2.7 Receiving "Failed to contact the server" Error Message

Problem

When attempting to log in to PSCAD using MyCentre login credentials, the following error message is displayed:
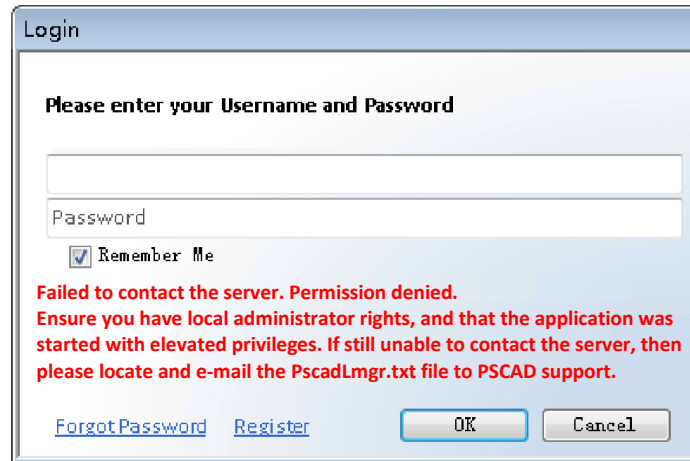
Cause

Communication to our certificate licensing server is being blocked by the user's anti-virus and/or firewall software.

Solution

Ensure that the requirements as listed in Appendix B are met.

2.8   Receiving "You need to be online and logged into your account" Error Message

Problem

When attempting to update software using MyUpdater, the following error message is displayed:
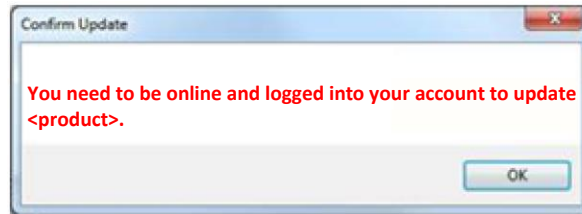
Cause

Communication to our certificate licensing server is being blocked by something in the user's network, for example a proxy server.

Solution 1

Bypass the proxy server in your network, to allow communication between MyUpdater and our sofware server.

Solution 2

Contact our support desk to see whether there is an alternative method of software installation. Ensure to include your MyCentre user account name or certificate number, and a description of the issue.

> **Note**
> Refer to Appendix B for certificate licensing requirements.

2.9 Certificate Licensing is randomly released

Problem

Certificate licensing is suddenly released for no reason a few minutes after activation. When licensing is re-activated, the same issue occurs.

Possible Cause

The computer sometimes loses track of where the Common Documents folder is, which is required for licensing:

C:\Users\Public**Documents**\Manitoba HVDC Research Centre\Licensing\Licenses

C:\Users\<user_id>\AppData\Local\Manitoba Hydro International\Licensing\Licenses

Solution

Ask your IT staff to help to ensure this path is always available.

2.10   Receiving an "Unable to contact the server" Error Message

Problem

The following error displays when trying to log in to PSCAD:
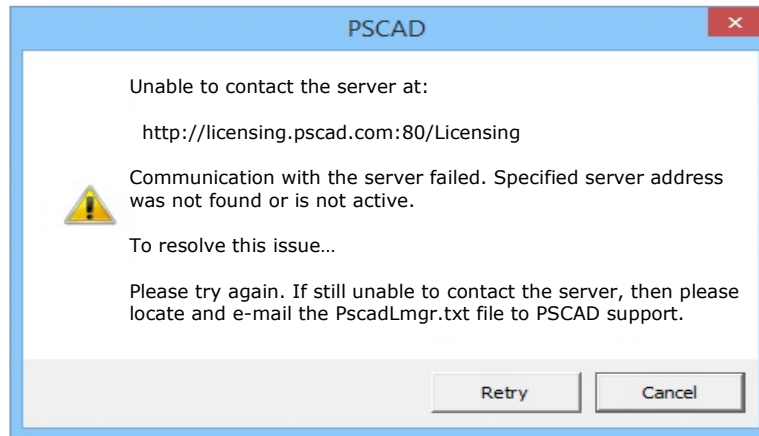
And the following logging information is listed in the PscadLmgr.txt file:

Attempting to Login

…

Attempting to contact server using HTTP…

Connecting…

Endpoint = http://licensing.pscad.com:80/Licensing

   Active binding: WSHttpBinding

ERROR: Exception:

ERROR: Cause: There was no endpoint listening at http://licensing.pscad.com/Licensing that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.

…

ERROR: WebException:

ERROR: Cause: The remote server returned an error: (404) Not Found.

…………………

Attempting to contact server using TCP...

Connecting...

Endpoint = net.tcp://licensing.pscad.com:443/Licensing

   Active binding: NetTcpBinding

ERROR: Exception:

ERROR: Cause: There was no endpoint listening at net.tcp://licensing.pscad.com:443/Licensing that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.

…

ERROR: Tcp code = 21005

ERROR: Failed to contact server

Cause

In the PSCAD application, the license server addresses are set incorrectly. Therefore, PSCAD attempts to contact the license server using the wrong addresses, thus communication fails.

The Fortran Medic can detect if these addresses are set incorrectly. For more information, refer to Appendix A.5, Item 2.

Solution

Fix the setting in PSCAD as follows:

- Launch PSCAD.

- Display the Application Options dialog (you do <u>not</u> need to be logged in to display this):
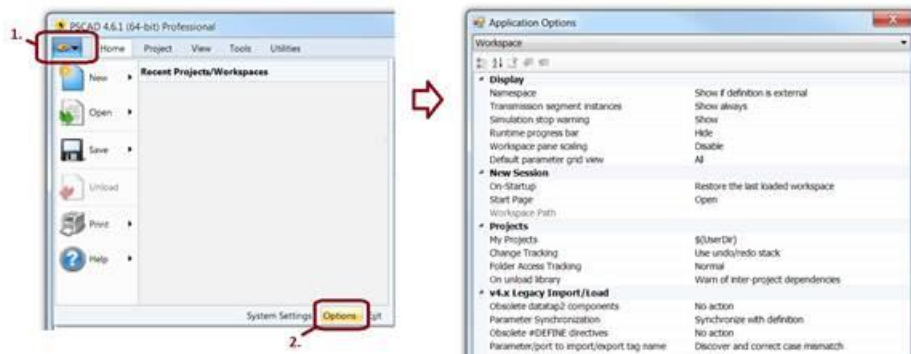
- Display the Certificate Licensing page:
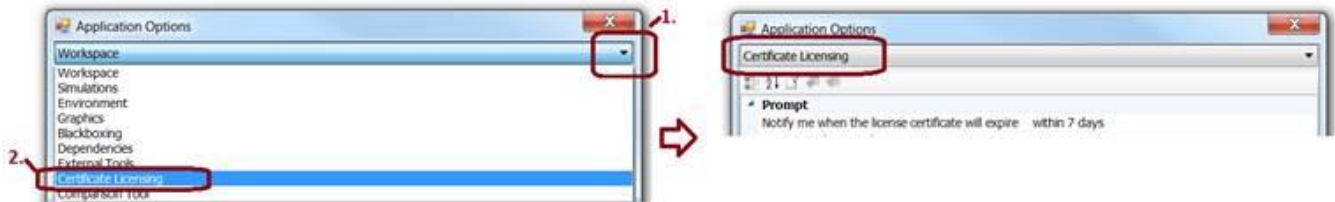
- Ensure that the two Server fields are set to the correct addresses as shown in the screenshot below:
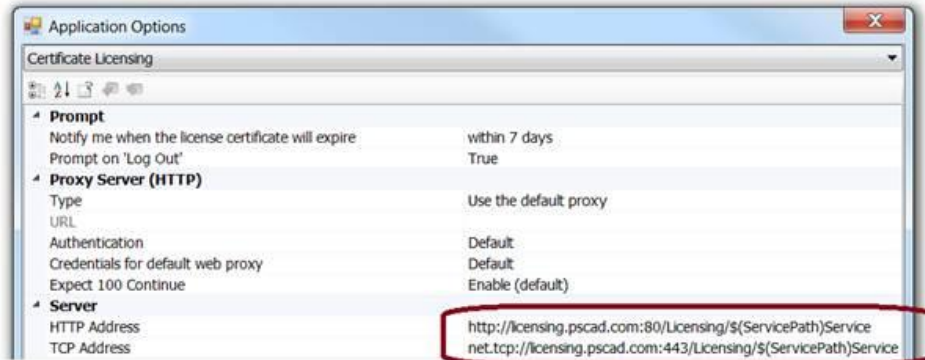
Note
You may simply copy/paste the following text in these fields:

First field:
http://licensing.pscad.com:80/Licensing/$(ServicePath)Service

Second field:
net.tcp://licensing.pscad.com:443/Licensing/$(ServicePath)Service

- Select "OK" to save the changes and exit the Application Options:
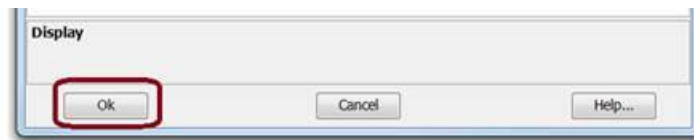
- Try logging in to PSCAD:

- If login is successful, select "Acquire Certificate":

- A certificate should now be activated on your machine. This certificate will be valid for a period of 28 days, or refreshed to a new 28 day period whenever PSCAD is launched with online connection.

2.11   Receiving an "Unable to obtain the license certificate" Error Message

Problem

When trying to activate a certificate license, licensing fails, and the following error displays:
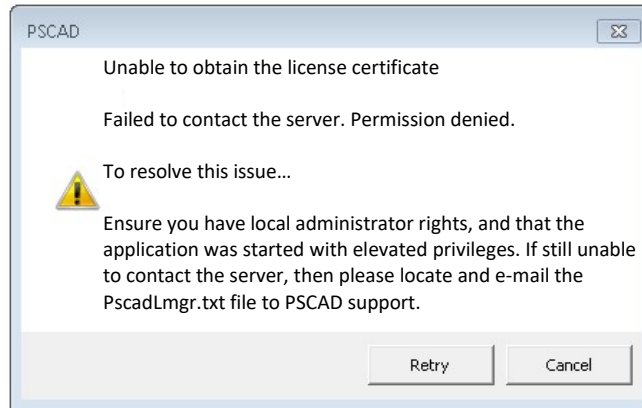
Consequently, the PSCADLmgr.txt log file lists the following messages:

Attempting to Request License Groups for pscad Free

User privileges   = Admin

Domain   =

Application type   = 32-bits

Proxy type   = Default

Proxy address   = <not set>

Proxy authentication = Default

Proxy credentials   = Default

Expect100Continue   = True

Attempting to contact server using HTTP...

Connecting...

Endpoint = http://licensing.pscad.com:80/Licensing/FreeService

Active binding: WSHttpBinding

ERROR: Exception:

ERROR: Cause: There was no endpoint listening at http://licensing.pscad.com/Licensing/FreeService that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.

ERROR: Type: System.ServiceModel.EndpointNotFoundException

ERROR: Invoking Type: System.Runtime.Remoting.Proxies.RealProxy

ERROR: Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage, System.Runtime.Remoting.Messaging.IMessage)

ERROR: WebException:

ERROR: Cause: Unable to connect to the remote server

ERROR: Method: System.IO.Stream GetRequestStream(System.Net.TransportContext ByRef)

ERROR: Status: ConnectFailure

ERROR: SocketException:

ERROR: Cause: An attempt was made to access a socket in a way forbidden by its access permissions 198.163.208.32:80

ERROR: ErrorCode: 10013

ERROR: SocketErrorCode: AccessDenied

ERROR: NativeErrorCode: 10013

ERROR: Method: Void DoConnect(System.Net.EndPoint, System.Net.SocketAddress)

ERROR: Http code = 10013

Aborting...

Attempting to contact server using TCP...

Connecting...

Endpoint = net.tcp://licensing.pscad.com:443/Licensing/FreeService

Active binding: NetTcpBinding

ERROR: Exception:

ERROR: Cause: Could not connect to net.tcp://licensing.pscad.com:443/Licensing/FreeService. The connection attempt lasted for a time span of 00:00:00. TCP error code 10013: An attempt was made to access a socket in a way forbidden by its access permissions 198.163.208.32:443.

ERROR: Type: System.ServiceModel.CommunicationException

ERROR: Invoking Type: System.Runtime.Remoting.Proxies.RealProxy

ERROR: Method: Void HandleReturnMessage(System.Runtime.Remoting.Messaging.IMessage, System.Runtime.Remoting.Messaging.IMessage)

ERROR: SocketException:

ERROR: Cause: An attempt was made to access a socket in a way forbidden by its access permissions 198.163.208.32:443

ERROR: ErrorCode: 10013

ERROR: SocketErrorCode: AccessDenied

ERROR: NativeErrorCode: 10013

ERROR: Method: Void DoConnect(System.Net.EndPoint, System.Net.SocketAddress)

ERROR: Tcp code = 10013

ERROR: Failed to contact server

Aborting...

Furthermore, our Licensing Connection Tester (Appendix C) does not detect any issue with the connection.

Furthermore, our latest Fortran Medic tool does not detect an incorrect URL setting in PSCAD for our certificate license server (see Appendix A.5, Item 2).

Cause

Protection software is blocking this connection. Specifically, the K7Ultimate Anti-virus has been known to block connection and cause these errors.

Solution

- Disable the anti-virus software to activate the certificate, then re-able the software, or

- Somehow white-list PSCAD operations in the anti-virus software.

2.12   Receiving a "Failed to save the license certificate" Error Message

Problem

When trying to activate a certificate license, licensing fails, and the following error displays:
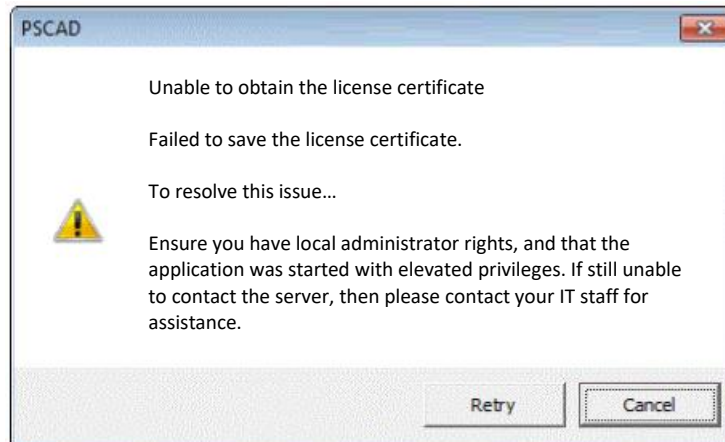
Cause 1

The user does not have permission to create a required file for certificate licensing in the Common Documents folder. If the file cannot created, then certificate licensing will not work. See Appendix A.6 Item 6 for the listing of required filepaths for certificate licensing.

For example, normally, a user with Windows "user" privileges would be able to create files in this folder. However, a network group policy overrides this, and specifies that users must have Windows "administrator" privileges to create files in this folder.

Solution 1

Use the Fortran Medic utility to configure for a Windows "User" to have full permissions in the Common Documents folder as per Appendix A.5 Step 6, or

Obtain assistance from your IT staff to allow a Windows "user" to have full permissions in the Common Documents folder.

or

Provide Windows administrator privileges to the user, so the user may create a file in the Common Documents folder. Then, the user should always launch the MHI product with Windows Administrator privileges (right-click on the link to launch the product, then select the option to "Run as administrator").

Cause 2

If the following messages are listed in the PscadLmgr.txt file (this log file may be displayed as instructed in Appendix D.2):

> Attempting to contact server using HTTP...
> Connecting...
> Endpoint = http://licensing.pscad.com:80/Licensing/NormalService
> Active binding: WSHttpBinding
> Succeeded
> Processing request...
> License is already owned by this user.
> Saving certificate to C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses
> ERROR: Unable to save certificate.
> ERROR: Cause: This implementation is not part of the Windows Platform FIPS validated cryptographic algorithms

…then a setting on your computer is not allowing a required encryption algorithm.

Solution 2

This issue may be fixed using the Fortran Medic utility as follows:

- Run the latest Fortran Medic utility as per Appendix A.2.

- When the utility has finished gathering information, scroll down to the "**Licensing**" heading (towards the bottom of the utility). One of the following three messages will be displayed:

  > Use only FIPS compliant algorithms
  > Value: 1 (Enabled)
  > Conflicts
  > This computer is not configured to support a required algorithm

  Or

  > Use only FIPS compliant algorithms
  > Status: <Registry value not found>
  > Conflicts
  > This computer is not configured to support a required algorithm

  Or

  > Use only FIPS compliant algorithms
  > Value: 5
  > Status: <Registry value is invalid>
  > Conflicts
  > This computer is not configured to support a required algorithm

- Right-click on the error message, and the following dialog box will display:

```
Confirm Registry Action                                    [ x ]

A required encryption algorithm is not allowed as this computer is configured to
only use FIPS compliant algorithms.

As a result:
- The MyUpdater will not be able to display your authorized products
- PSCAD will not be able to use certificate licensing
unless you select to allow non-FIPS-compliant algorithms.

To resolve this issue, this utility needs to create/update the following registry
value:

    Folder:  HKEY_LOCAL_MACHINE (32-bit registry)
    Key:     System\CurrentControlSet\Control\Lsa\FIPSAlgorithmPolicy
    Name:    Enabled
    Value:   0

Select OK to allow non-FIPS-compliant protocols
Select Cancel to leave the registry value unmodified


                                           [   OK   ]   [  Cancel  ]
```

- Select "OK" to allow the Fortran Medic utility to make the change to your computer.
- Retry activating a PSCAD certificate license.

2.13   Receiving an "Unable to save certificate…Access is denied" Error Messages

Problem

When trying to activate a certificate license, licensing fails, and any of the following three messages will display:

Failed to save the license certificate.
Ensure you have local administrator rights, and that the application was started with elevated privileges.
If still unable to contact the server, then please contact your IT staff for assistance.

Or

Failed to load the license certificate.
Ensure you have local administrator rights, and that the application was started with elevated privileges.
If still unable to contact the server, then please contact your IT staff for assistance.

Or, in the PscadLmgr.txt file (see Appendix D.2 to display this text file)

Processing request…
License is already owned by this user.
Saving received certificate to C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses
ERROR: Unable to save certificate
ERROR: Access is denied
Failed to obtain a license certificate

Cause

PSCAD is launched with "user" privileges. However, the customer's group policy is set to only permit "administrators" to create files in the Common Documents folder. The group policy does not permit a "user" to create files in the Common Documents folder.

Solution

Launch PSCAD with administrator privileges so that the file may be created:

- Close all instances of PSCAD.

- Launch PSCAD as an administrator – Right-click on PSCAD v46 link, and select "Run as administrator" from the menu:
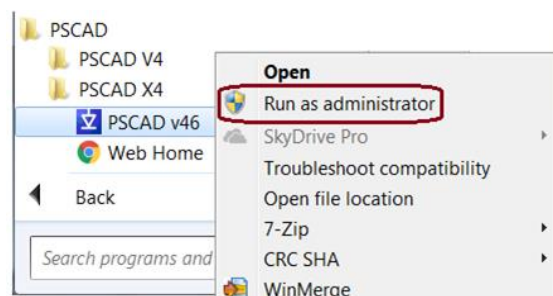
- Test the licensing.

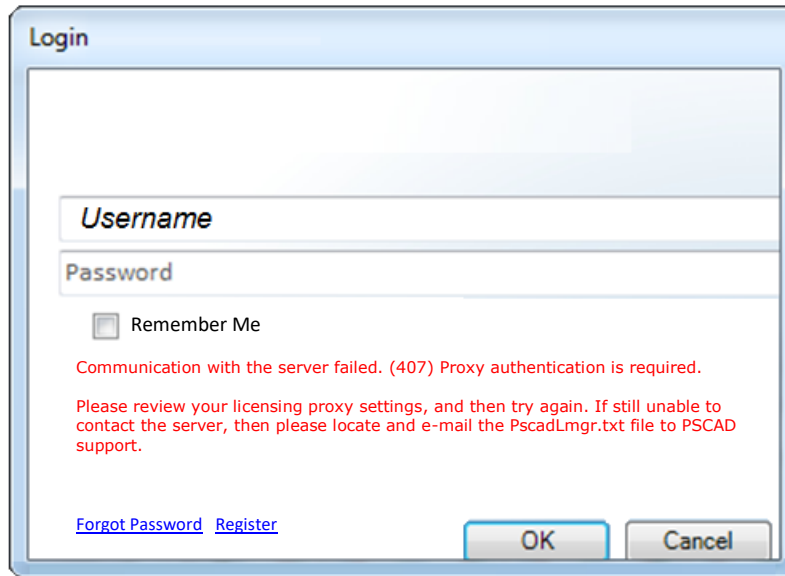## 2.14 Receiving a "Proxy authentication is required" Error Message

Problem

When trying to log in and activate a certificate license in the PSCAD application, the following message displays:

The PscadLmgr.txt file lists messages similar to the following:

```
Attempting to Login
…
Attempting to contact server using HTTP...
Connecting...
Endpoint = http://licensing.pscad.com:80/Licensing/NormalService
Active binding: WSHttpBinding
ERROR:  Exception:
ERROR:  Cause: There was no endpoint listening at http://licensing.pscad.com/Licensing/NormalService that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.
…
ERROR:  WebException:
ERROR:    Cause: Unable to connect to the remote server
…
ERROR:    Status: ConnectFailure
ERROR:  SocketException:
ERROR:    Cause: The connection request failed because the connected computer did not respond within a certain time or because the established connection to the host does not work anymore  198.163.208.32:80
ERROR:    ErrorCode: 10060
ERROR:    SocketErrorCode: TimedOut
ERROR:    NativeErrorCode: 10060
…
ERROR:    Http code = 10060
Aborting...

Attempting to contact server using TCP...
Connecting...
Endpoint = net.tcp://licensing.pscad.com:443/Licensing/NormalService
Active binding: NetTcpBinding
ERROR:  Exception:
ERROR:    Cause: Could not connect to net.tcp://licensing.pscad.com:443/Licensing/NormalService. The connection attempt lasted for a time span of 00:00:21.0104202. TCP error code 10060: The connection attempt failed because the connected computer did not respond within a certain time or because the established connection to the host does not work anymore 198.163.208.32:443.
…
ERROR:  SocketException:
ERROR:    Cause: The connection attempt failed because the connected computer did not respond within a certain time or because the established connection to the host does not work anymore 198.163.208.32:443
```

ErrorCode: 10060
ERROR: SocketErrorCode: TimedOut
ERROR: NativeErrorCode: 10060
…
ERROR: Tcp code = 10060
ERROR: Failed to contact server
Aborting...

When the Certificate Licensing Connection Tester Utility is run (Appendix C), messages similar to the following are generated:

Certificate Licensing Connectivity - Test Summary
000   settings were able to configure the local client.
000   settings were able to connect to the server.
Connectivity and Operation - Analysis
Network ping appears to be blocked.
Unable to contact the server without using a proxy.
Licensing is not able to contact the server.

Cause

The user's network is blocking communication to both of our server IP addresses:

- http://licensing.pscad.com:80/Licensing (preferred)
- net.tcp://licensing.pscad.com:443/Licensing (fallback)

In order to activate certificate licensing, PSCAD must be able to reach one of the above addresses.

Solutions

1. Preferred solution: Ask your IT staff to allow access to one of the above IP addresses, so that you can activate the license through your company's network.

2. Alternative solution: Move your laptop to a different network (e.g. home), and try to activate the certificate from there. If licensing works, configure PSCAD to "retain" the license (see screenshots below), then return the machine to your work network and continue to use this certificate.
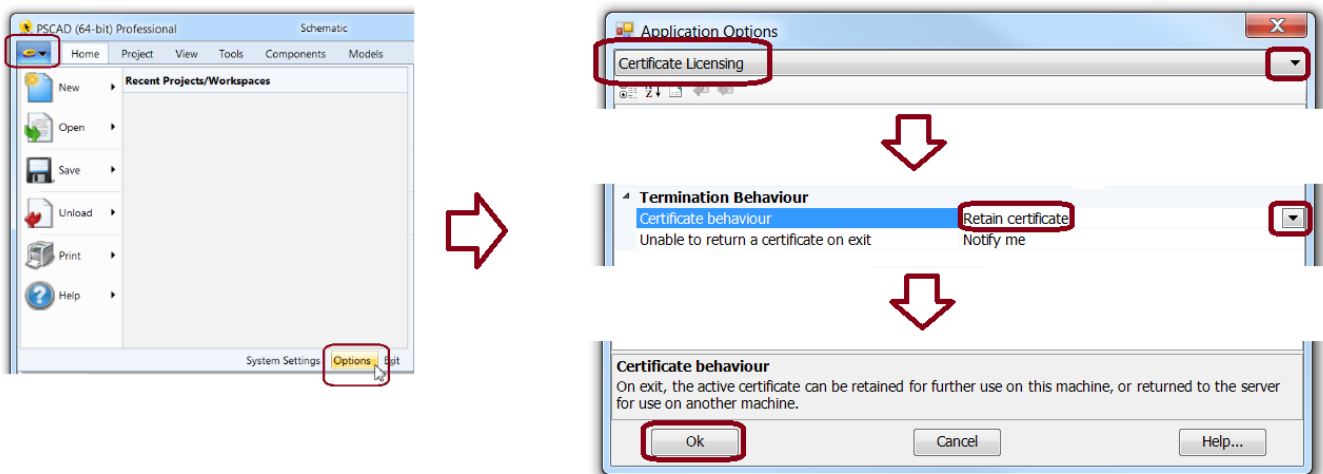
Note

If you are sharing this license certificate with other users, this is not the preferred solution, because the license certificate will not be available for other users, but will remain activated on your machine.

2.15   Receiving an "Unable to obtain the certificate" Error Message

Problem

When trying to activate a certificate in the PSCAD application, the following error displays:

Unable to obtain the certificate

When the PscadLmgr.txt file is displayed (as per Appendix D.2), the following messages display:

Saving received certificate to C:\Users\

ERROR: Unable to save certificate.

ERROR: Cause: Access is denied.

Cause

The user does not have permissions for the following locations, therefore, a certificate may be not saved to the user's machine:

C:\Users\Public\Public Documents

Solution (1) – For any version

Obtain permission to create and write to the above location.

Solution (2) – For PSCAD v4.6.3+

If using PSCAD v4.6.3 and later, configure PSCAD to use a folder for which you have permissions, as follows:

- In a location in which you have permissions, create a new folder. For example: C:\PSCAD\Licensing

- Add the following path to the folder: Manitoba HVDC Research Centre\Licensing\Licenses. In the above example, the path will become: C:\PSCAD\Licensing\Manitoba HVDC Research Centre\Licensing\Licenses

- Determine your preferred PSCAD launch shortcut (e.g. desktop, Windows Start menu, Task Bar).

- In the PSCAD launch shortcut, modify the command line argument to point PSCAD to the new folder. Using the above example, this would be added as shown:
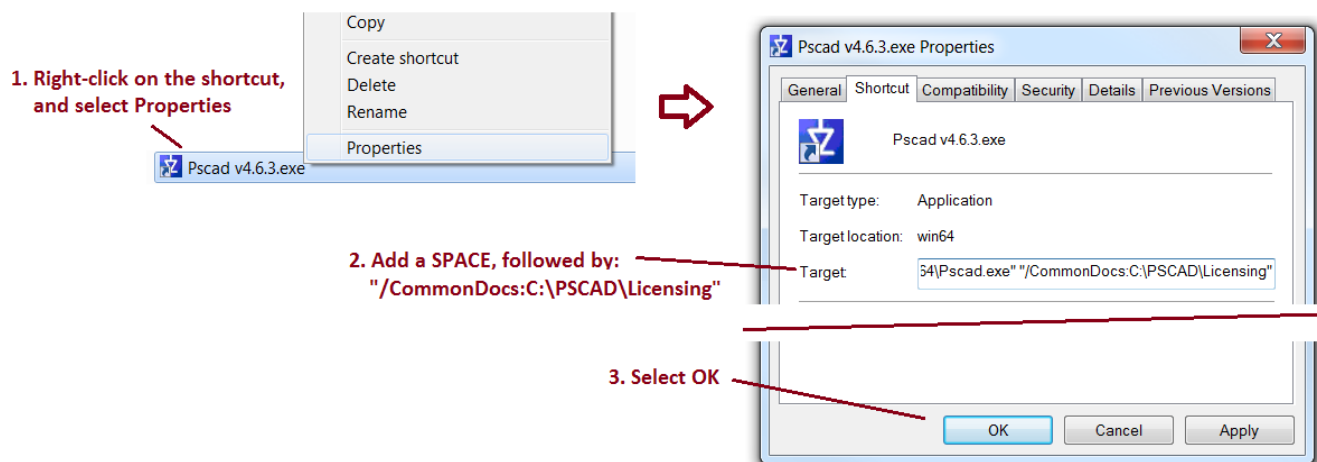
- Whenever PSCAD is launched using this shortcut, the licensing file will be stored in the new folder.

Note about Solution (2):

The alternative folder must be specific to a machine. You cannot use a public folder accessible to all machines as then all users would share a common user profile settings, which could be modified by any user.

Example of a valid path:

 \\SomePublicFolder\Machine1\CommonDocuments [used only by Machine1]

 \\SomePublicFolder\Machine2\CommonDocuments [used only by Machine2]

Example of an invalid path:

 \\SomePublicFolder\CommonDocuments   [used by all machines]

2.16   User is unable to activate and save a License Certificate

Problem

A user has access to certificate licensing, and has apparently checked out a certificate on his machine. However, the certificate cannot be used to run PSCAD on that user's machine, and the certificate is now considered to be checked out and not available for any other user.

In the lmgr.txt file, the following messages display:

> Saving received certificate to [SOME FILE PATH]
>
> ERROR: Unable to save certificate.
>
> ERROR: Cause: Access is denied.

Cause

The certificate is seemingly checked out to a machine, and this is logged in MyCentre. However, PSCAD was unable to save the license file for the Certificate Licensing to this user's machine, because the user does not have the required permissions to do this. Specifically, the user does not have read/write/create/delete permissions for the following location:

> C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses

Solution

The user must be granted the required permissions as indicated above.

The user may contact our Support Desk (support@mhi.ca) and request that the certificate be returned to the server, so that it may be re-activated. When communicating with the Support Desk, please ensure to include your PSCAD license number.
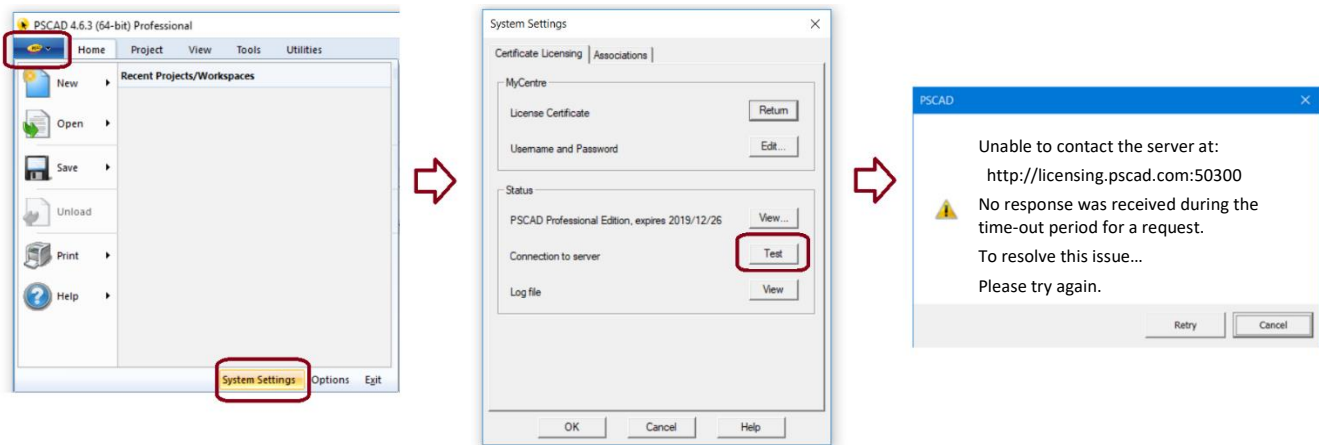
2.17   User is unable to log in or to activate a License Certificate

Problem

When attempting to log in to MyCentre through PSCAD, the following error displays:
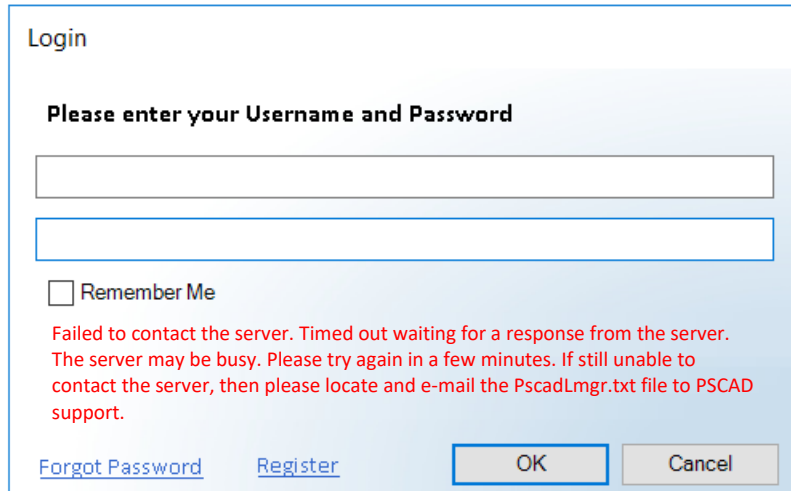
Also, when a connection test is run, an error related to connection to server 50300 is displayed:

Also, messages similar to the following may display in the PscadLmgr.txt file:

(Sun Nov 25 10.44.43 2018) Endpoint = http://licensing.pscad.com:**50300**/Licensing/NormalService
(Sun Nov 25 10.44.43 2018)   Active binding: WSHttpBinding
…
(Sun Nov 25 10.45.05 2018) ERROR: Failed to contact server
…
(Sun Nov 25 10.45.05 2018) Endpoint = net.tcp://licensing.pscad.com:**50301**/Licensing/NormalService
(Sun Nov 25 10.45.05 2018)   Active binding: NetTcpBinding
…
(Sun Nov 25 10.45.26 2018) ERROR: Failed to contact server

Cause

PSCAD is somehow configured incorrectly, and trying to connect to the wrong location for the certificate licensing server (50300). This causes the login error.

Solution

- Correct the two server addresses in PSCAD if required:

  ° Launch PSCAD.

  ° Ensure the certificate licensing server addresses are set to the following addresses. If not, copy and paste in the correct addresses:

    http://licensing.pscad.com:80/Licensing/$(ServicePath)Service
    net.tcp://licensing.pscad.com:443/Licensing/$(ServicePath)Service
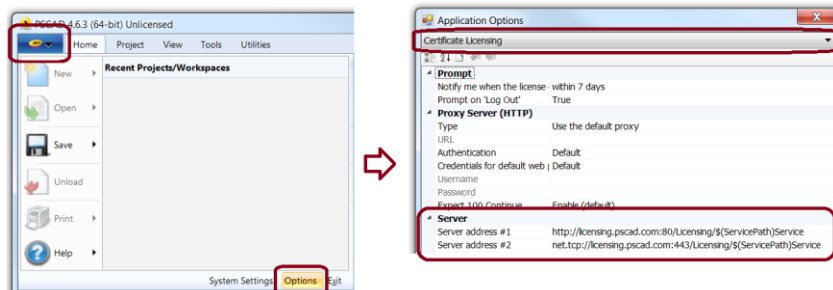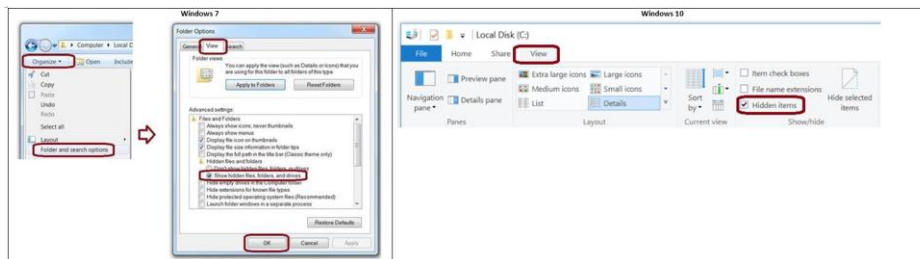

- Login and licensing should now work.

If the issue persists, and if multiple versions of PSCAD v4.6 are installed, uninstall all versions of PSCAD v4.6, and delete any desktop and taskbar shortcuts to PSCAD v4.6.

- Browse to the following folder:

  C:\Users\[username]\AppData\Local\Manitoba HVDC Research Centre\PSCAD

  Note
  If the AppData folder is hidden, it may be displayed as shown:

- In the above-listed folder, if the user_profile_46.xml file is present, move the file to a new temporary sub-folder. PSCAD 4.6.3 can then install the correct Certificate License Server address default settings.

- Re-install PSCAD 4.6.3.

- Launch PSCAD 4.6.3, and it should create and save the correct default settings file.

If the issue persists after trying the above suggestions, please send in the following to our support desk (support@mhi.ca):
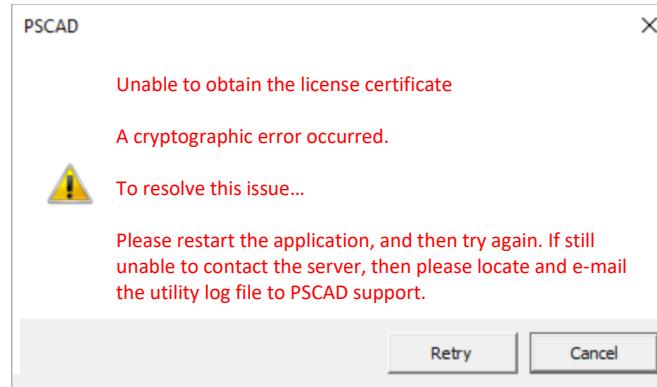
- Your licensing log file:

- Your Medic log file as per Appendix A.3.

2.18   Receiving a "A crytographic error occurred" Error Message

Problem

When attempting to activate a license certificate, the following error displays:

Solution

In some cases, simply launching the application with Windows Administrator privileges resolves the matter:

- Close all instances of the application.

- Right-click on the application launch link, and select "Run as administrator".

If the above suggestion does not resolve the matter, please request assistance from the MHI support desk. To expedite assistance, please include the information as specified in this article.

2.19   User is Unable to Activate, Return, or Renew a License Certificate when Connected over VPN

Problem

When a user is connected over VPN, and is attempting to activate, return, or renew a license certificate for one of the MHI products (e.g. PSCAD, FACE, Enerplot...), this action fails.

> **Note**
> This issue assumes that the customer is already logged in to MyCentre.

The product licensing log file shows messages similar to the following:

Attempting to contact server using http://licensing.pscad.com:80/Licensing/$(ServicePath)Service

…

ERROR: Cause: There was no endpoint listening at http://licensing.pscad.com/Licensing/NormalService that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.

…

ERROR: Cause: A connection attempt failed because the connected party did not properly respond after a period of time, or established connection failed because connected host has failed to respond 172.22.1.61:80

ERROR: ErrorCode: 10060

…

Attempting to contact server using net.tcp://licensing.pscad.com:443/Licensing/$(ServicePath)Service

…

ERROR: Cause: A connection attempt failed because the connected party did not properly respond after a period of time, or established connection failed because connected host has failed to respond 172.22.1.61:443

ERROR: ErrorCode: 10060

…

ERROR: Failed to contact the server. Timed out waiting for a response from the server.

Unable to [activate / return / renew] the license certificate. Failed to contact the server. Timed out waiting for a response from the server.

Background – Failed Attempt to Activate a Certificate:

When connected over VPN, the customer launches one of the MHI products, and attempts to activate a certificate.

The licensing log file displays messages similar to those listed above, and a corresponding message is displayed in the particular application:

- In the PSCAD application, a message is displayed indicating that the Start Page cannot connect to the MyCentre Server, and an error is displayed:
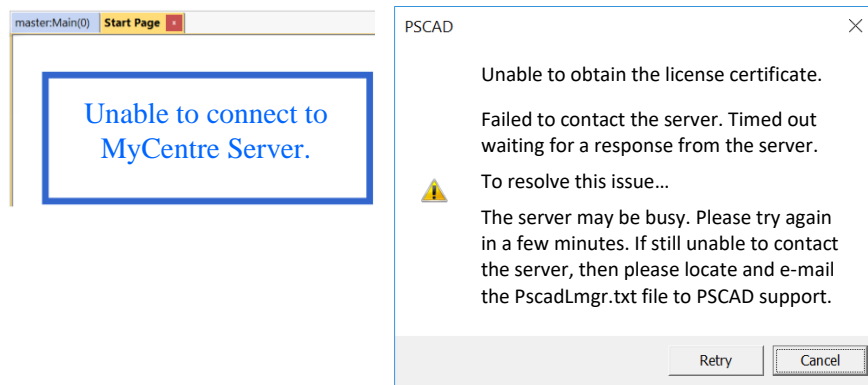
Background – Failed Attempt to Return a Certificate:

When not connected over VPN, a customer logs in to MyCentre, launches one of the MHI products, checks out a certificate, then closes the products with the certificate "retained". On a following day, the customer connects over VPN, launches the product, and the product remains licensed. An attempt to return the certificate fails. The licensing log file displays messages similar to those listed above.

The licensing log file displays messages similar to those listed above, and a corresponding message is displayed in the particular application:

- In the PSCAD application, a message is displayed indicating that the Start Page cannot connect to the MyCentre Server, and an error is displayed:
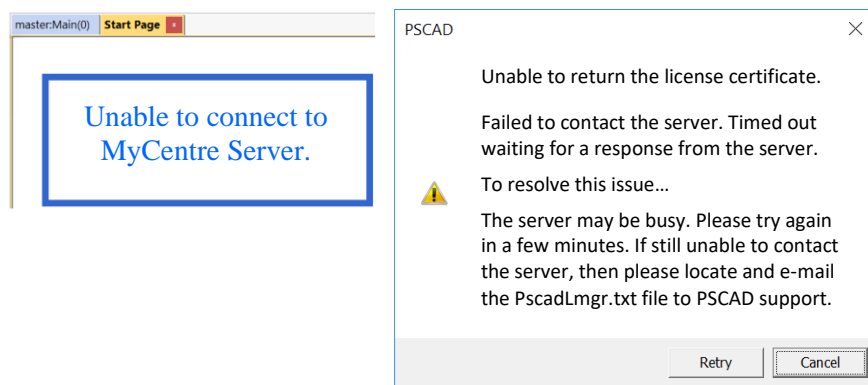

Background – Failed Attempt to Renew a Certificate:

When not connected over VPN, a customer logs in to MyCentre, launches one of the MHI products, checks out a certificate, then closes the products with the certificate "retained". On a following day, the customer connects over VPN, launches the product, and the product remains licensed, however, the renewal fails. The licensing log file displays messages similar to those listed above.

Cause

VPN connection somehow blocks communication to the license server.

Solution

Restart the machine, ensure VPN is disabled, and activate or return the certificate.

2.20   Receiving an Error Message "Unable to obtain the license certificate" when attempting to activate, renew or return a certificate

Problem

When a user is attempting to activate, return, or renew a license certificate for one of the MHI products (e.g. PSCAD, FACE, Enerplot, ...), this action fails.

A message is displayed, for example, the following is posted in PSCAD for a failed activation:
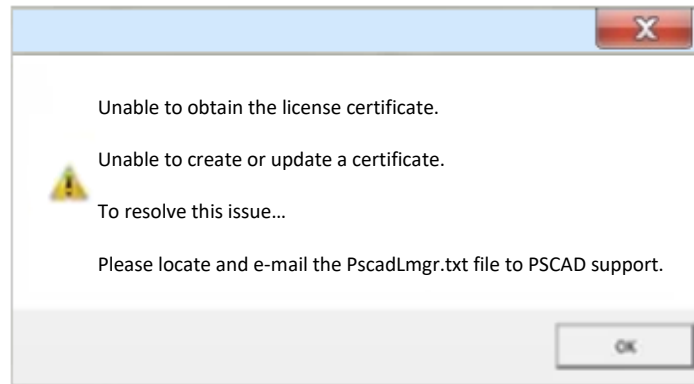
Also, the licensing log file displays the following error:

Attempting to Request License Groups for [product]
…
Failed to obtain a license certificate

Cause 1

User does not have full permissions on creating/modifyng the certificate filepath, which is required for using certificate licensing:

C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses

Further evidence, when the Fortran Medic utility (Appendix A.1) is run, an error indicating that the user does not have full permissions on the above path is specified in the "Certificate Licensing" section.

Solution 1

One of the following options may resolve this:

- User may try launching PSCAD with Windows Admininstrator privileges (from the Windows Start menu, browse to the PSCAD link, right-click on the link, select "More", then select "Run as administrator"), or
- User may obtain full creation/modification permissions on the above filepath (contact your IT Team if applicable).

Cause 2

Protection software is preventing the user from being able to modify the following path:

C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses

One known protection software that blocks this, is BitDefender.

One other note is that the Fortran Medic utility (see Appendix A.1) detects the following error:

Certificate is saveable

Failed

Unable to create or update a certificate.
Access to the path 'C:\Users\Public\Documents\Manitoba HVDC Research
Centre\Licensing\Licenses' is denied.

Solution 2

Configure your protection software to allow the user full permissions to the above path, or

Simply turn off the protection software temporarily, when activating, renewing or returning a certificate.

2.21 Receiving an Error Message "Unable to obtain the license certificate…All such certificates are currently in use" when attempting to activate a certificate

Problem

When a user is attempting to activate a license certificate for one of the MHI products (e.g. PSCAD, FACE, Enerplot, …), this action fails.

A message is displayed, for example, the following is posted in PSCAD for a failed activation:
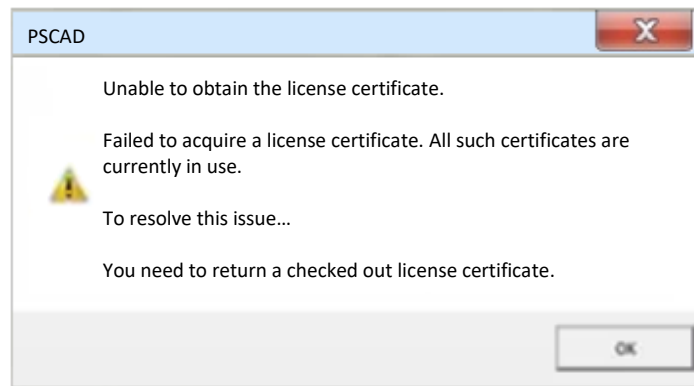
Cause (1)

All license certificates for this product are checked out already on other machines, and none are available.

Solution (1)

Determine to whom licensing is checked out, and request that they launch PSCAD and return the certificate:

- To use MyCentre to determine who has checked out a license, log in to MyCentre, and browse to the workgroup | licenses. For details on using MyCentre, refer here: rhttps://www.pscad.com/knowledge-base/article/651
- To return the certificate, the user must launch PSCAD on the machine on which the license is checked out, then select the option to return the certificate.

Cause (2)

The machine name had been changed after the certificate was checked out, therefore the certificate was deemed to be invalid, and licensing was halted.

In this case, note that MyCentre records indicate that the license is currently checked out on that user's machine.

Solution (2)

- Send in an e-mail to the MHI Support Desk (support@mhi.ca), requesting that the license be returned. Ensure to provide the license number in your request.
- Delete the following file from the machine:

    C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses\74.xml

- Once you have received confirmation that the license has been returned, try to activate the license certificate.

2.22 Receiving an Error Message "Communication with server failed. Unable to use WCF to connect..." when attempting to activate a certificate

Problem

When attempting to activate a license certificate for PSCAD, FACE, Enerplot, ...), this action fails, and the following messages display:

The type 'Microsoft.VisualStudio.Diagnostics.ServiceModelSink.Behavior, Microsoft.VisualStudio.Diagnostics.ServiceModelSink, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b03f5f7f11d50a3a' registered for extension 'Microsoft.VisualStudio.Diagnostics.ServiceModelSink.Behavior' could not be loaded. (C:\Windows\Microsoft.NET\Framework64\v4.0.30319\Config\machine.config line 232)

Cause

According to online documentation, this can occur when a machine has one or more of the following is installed:

- Visual Studio 2010

- Visual Studio 2012

- Visual Studio 2013

- Visual Studio 2015

And then one or more of the above software become partially or completely uninstalled, or removed.

Solution (1)

1. Perform the following:

   a. Download the run the <u>latest</u> Fortran Medic as per Appendix A.2.
   **Note**
      Older versions of the Medic (August 2020 and older) will not work.

   b. When the Medic displays the results, scroll down to the "Certificate Licensing" heading, then look for the "VSDiag_RegWcf" subsection.

   c. If any instances of this utility are discovered on your machine, the Medic will list any Visual Studio folders which contain this utility. For example, the following was detected on a test machine:

   VSDiag_RegWcf.exe
   C:\Program Files\Microsoft Visual Studio 10.0\Common7\IDE\vsdiag_regwcf.exe
   C:\Program Files (x86)\Microsoft Visual Studio 14.0\Common7\IDE\vsdiag_regwcf.exe

   d. If any instances of this utility were detected in Step (d) above, then perform the following for each instance:

      - Launch a Windows Command Prompt with Administrator privileges.

      - In the Command Prompt, browse to one of the folders listed by your Medic.

      - In the Command Prompt, type in the following, then press Enter.
        Vsdiag_regwcf.exe -u
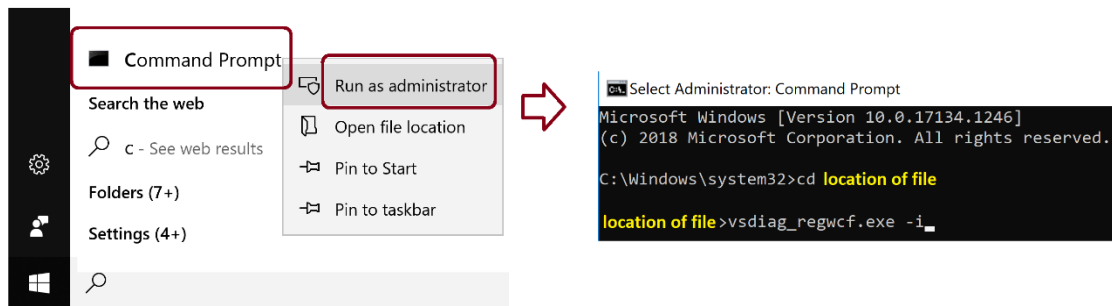
e. Reboot your machine.

f. Launch PSCAD and try to activate a certificate.

Solution (2)

This solution will locate and modify the .NET Framework machine.config files to remove all ServiceModeSink references and then reboot.

The second method is to edit the machine.config files to remove any and all references to the ServiceModeSink assembly (dll) which apparently cannot be found and loaded on your machine. This action is only possible if the Medic has detected that the machine.config files have references to the offending ServiceModeSink assembly.

There are generally two machine.config files of interest here:

- C:\Windows\Microsoft.NET\Framework\v4.0.30319\Config\machine.config

- C:\Windows\Microsoft.NET\Framework64\v4.0.30319\Config\machine.config

a. Check if the above files have any ServiceModelSink references as follows:

> **Note**
> This step will require Windows Administrator privileges on your machine.

- Download the run the <u>latest</u> Fortran Medic with <u>Windows Admininstrator privileges</u> (see note (ii) below) as per Appendix A.2.
  Notes
  (i) Older versions of the Medic (August 2020 and older) will not work.
  (ii) When the Windows User Account displays, select "Yes".
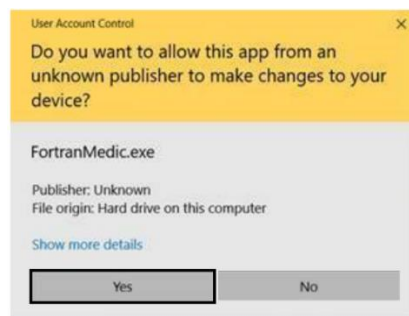
- When the Medic is finished, scroll down to the **Certificate Licensing** section. Scroll down a bit more, to information similar to the following:

b. If one or both files have the **references found** status, then the Medic might be able to be used to help resolve the issue.

c. On the Medic menu, select *Help | Advanced help | ServiceModeSink issue | Fix*

   Warning
   Please carefully read the displayed instructions and disclaimers.
   You may want to have an IT person present.
   Proceed with caution if you want to.

d. The Medic implements the fix as described below. You do **not** need to manually rename or copy anything:

  - Copies the existing machine.config file to a machine.config.cached_original

  - Loads the existing machine.config file and remove the ServiceModelSink nodes from the file, then save the modified content as machine.config.cached_modified

  - Replaces the machine.config file with the machine.config.cached_modified file

e. If the Medic is able to replace the original files with the modified files, reboot your machine, launch PSCAD and try to activate licensing.
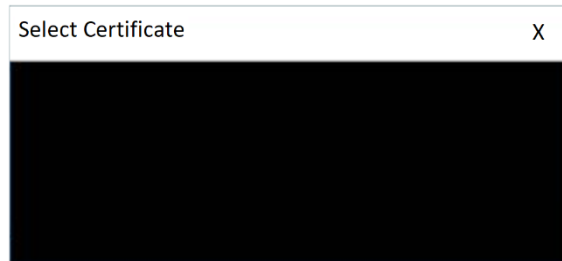
   Note
   If you need to revert (cancel) the above fix, then do the following:
   1. On the Medic menu, select *Help | Advanced help | ServiceModeSink issue | Revert to defaults*
   2. Then reboot your machine.

2.23   Certificate Licensing Selection Dialog is Blacked Out

Problem

When attempting to activate a license certificate, the selection dialog is blacked out:

And when the Medic Utility is run as per Appendix A.3, the status of of this file will display within the PSCAD installation. In the example below, the file is present:

Cause

The Windows MFCMIF80.dll is missing or too old.

Solution

Reinstall PSCAD.

Appendix A   Using the Fortran Medic Utility

A.1   Overview

The Fortran Medic utility is our standard mechanism for gathering and displaying information about a user's machine that is relevant to installing, launching, licensing, and running the software (see Appendix A.2).

This utility does not perform any reporting back to MHI, other than allowing a user to generate a text log file and forward it to our Support Desk to assist with troubleshooting (see Appendix A.3).

This utility does not modify anything on a machine without a user's explicit permission, which is obtained by clicking on the green or red arrows and confirming the recommended action (see Appendix A.4).

Many of the issues that may be detected by the utility are related to MHI products and relevant third-party software installations,compatiblity, integration of Intel compilers with Microsoft Visual Studio, lock-based and

certificate licensing, and protection software that may be preventing MHI product usage (see Appendix A.5 for some of the more common issues).

Appendix A.6 lists some of the functions in the Fortran Medic Utility.

A.2   Running the Fortran Medic Utility

The utility may be run as follows:

a. Download the latest "FortranMedic" from our website:

    http://updater.pscad.com/utilities/FortranMedic.zip

b. Unzip the downloaded file, save it to a local drive, and run the unzipped "FortranMedic.exe" file.

    To run the Medic without Windows Administrator privileges, select "No" when prompted by the Windows User Account Control. (The Medic will not be able to be used to make any changes to your machine)

    To run the Medic with Windows Administrator privileges, select "Yes" when prompted by the Windows User Account Control. (The Medic will be able to be used to make changes to your machine)

c. When the Medic opens, click on the "Actions" menu and select "Start". The utility will retrieve information about your computer.

A.3   Generating the Log File

The utility log file may be generated as follows:

a. Run the utility as per Appendix A.2.

b. Click on the "Actions" menu and select "Save Messages". The FortranMedic message window will display the location of the saved messages text file on your computer.

c. Send this log file to support@mhi.ca, along with any other relevant details.

A.4   Fixing Issues using the Utility
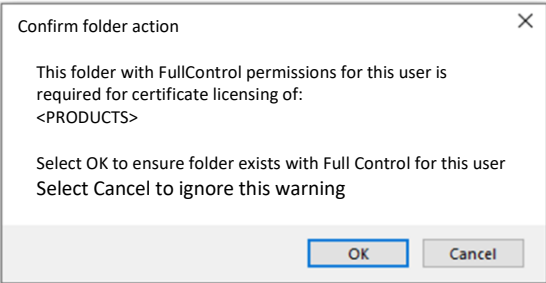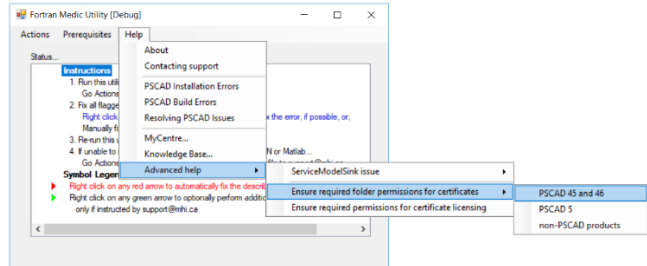
The utility may be used to fix issues as follows:

a. Run the utility as per Appendix A.2.

b. Right-click on any red arrow to display a menu to fix it.

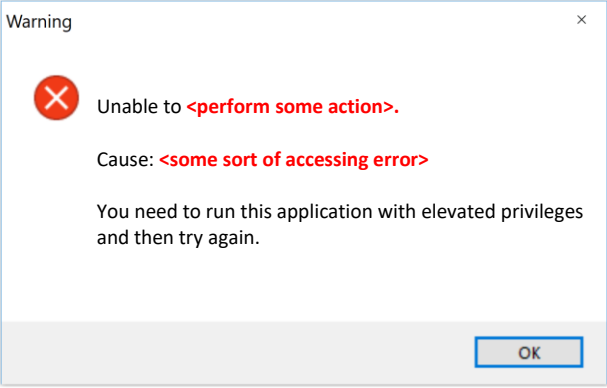c. Right-click on any green arrow to optionally perform additional actions only if instructed by support@mhi.ca.

Specific errors within this utility are listed in Appendix A.5.

A.5   Errors Listed in the Utility

The following table lists common errors within the utility along with solutions:

	Error	Solution
1.	**Machine Info** Conflicts Your system clock is not synchronized to global network time.	Your computer time is different from the global time by more than three minutes. Set the correct time, date, and time zone as per Section 2.2 Problem 1.
2.	**Licensing** PSCAD 4.x URL 1: http://licensing.pscad.com:80/Licensing/ $(ServicePath)Service_some_error_in_path	If this path is listed, this path must be incorrect, and may be fixed sas per Section 2.10.
3.	Folder Info … Other folders… User profile files are not creatable or saveable ▶ Unable to delete file.	This message is displayed if the Medic detects that PSCAD is not able to create and write to the user profile files in the user application folder. Right-clicking on the error displays the following message: To perform Solution 2 in the above dialog, refer to Section 2.15 Solution (2). To see the message that is displayed when the Medic does detect that PSCAD is able to create and write to the user profile files, see Appendix A.6 Item 1.
4.	**Licensing**… Certificate Licensing Contact Server Failed Unable to contact the server. You are most likely using a network connection which requires you to first log in using a browser.	This message is displayed if the Medic detects that the PSCAD application is unable to reach the certificate licensing server. This issue must be resolved if the user will wish to activate PSCAD licensing or log in to MyUpdater. Appendix B lists the IP addresses that the PSCAD machine must be able to connect to.

5.	**Licensing** … **Certificate Licensing** … PSCAD (v3, v4, x4) … C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses ▶ Folder does not exist (but is most likely required) **…** PSCAD (v5 and better), Enerplot, PRSIM, Initializer, FACE … C:\Users\\<USER ID>\AppData\Local\Manitoba Hydro International|Licensing\Licenses ▶ Folder does not exist (but is required)	Right-clicking on the "Folder does not exist" message as shown left will display the dialog box as shown below. Select OK to allow the Medic to 1. create any missing portions of the path listed to the left, and 2. to apply full permissions on this path for the current user. Confirm folder action ✕ This folder with FullControl permissions for this user is required for certificate licensing of: <PRODUCTS> Select OK to ensure folder exists with Full Control for this user Select Cancel to ignore this warning [OK] [Cancel] **Note** – Also see additional method for using the Fortran Medic utility to only do the second item listed above, to allow the user to have full permissions, as per Appendix A.5 Item 6, below.
6.	**Licensing** … **Certificate Licensing** … PSCAD (v3, v4, x4) … C:\Users\Public\Documents\Manitoba HVDC Research Centre\Licensing\Licenses ▶ Folder exists (with insufficient permissions) **…** PSCAD (v5 and better), Enerplot, PRSIM, Initializer, FACE … C:\Users\\<USER ID>\AppData\Local\Manitoba Hydro International\Licensing\Licenses ▶ Folder exists (with insufficient permissions)	The user does not have full permissions on the filepath. Full permissions on the filepath are required when using certificate licensing for running MHI products. See Section 2.12 for more details. To use the Fortran Medic utility to restore full permissions on the filepath: • Ensure you have Windows Administrator privileges on your machine. • Ensure you have launched the Medic utility with Windows administrator privileges (right-click on the downloaded/extracted FortranMedic.exe file (Appendix A.2), and select "Run as administrator"). Direct the Medic to restore full permissions on the required filepath according to the product you are using: **Note** - "non-PSCAD products" refers to PRSIM, Enerplot, FACE, Initializer.

7.	User attempts to perform any changes to their machine using the Fortran Medic utility.	A dialog similar to the following displays:
		The Fortran Medic utility was not launched with Windows Administrator privileges, therefore the Medic cannot make any changes to this machine. To allow the Medic to make changes to this machine, close the Medic, and relaunch the Medic with Windows Administrator privileges as specified in Appendix. A.2.

A.6   Functions Listed in the Medic

The following table lists some of the functions within the Medic:

	Function	Action

1.	**Folder Info …**
	Other folders…
	User profile files are saveable
	  Yes
		This message is displayed if the Medic detects that PSCAD is able to create and write to the user profile files in the user application folder.
		
		  Or, see Appendix A.5 Item 3 if the Medic detects that PSCAD is not able to perform the above.

Appendix B   Certificate Licensing – Requirements

Requirements for certificate licensing are posted to the [Knowledge Base](#).

Appendix C Testing Licensing Connectivity for Certificate Licensing

If connectivity is the suspected cause of a certificate licensing issue, the Proxy Detector Utility may be used to test the connectivity. The resulting log file may then be forwarded to our Support Desk for analysis.

- Download the following ZIP file:

  http://updater.pscad.com/utilities/ProxyDetector.zip

- Extract (unzip) ALL FILES to a temporary folder.

- Run the "ProxyDetector.exe" file from the new temporary folder.

- When the utility displays, click on Actions | Start licensing connectivity tests.

- When the following screen displays, simply select "Accept":
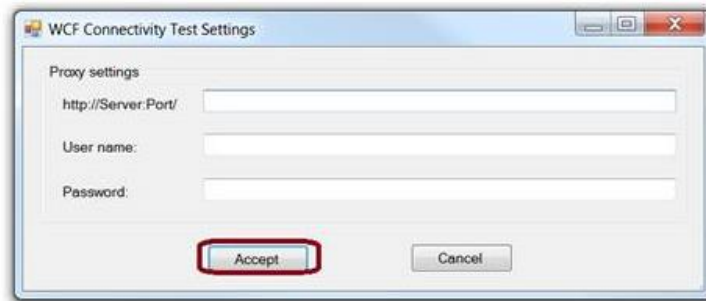
- Save the messages and send in the generated log file (support@mhi.ca):
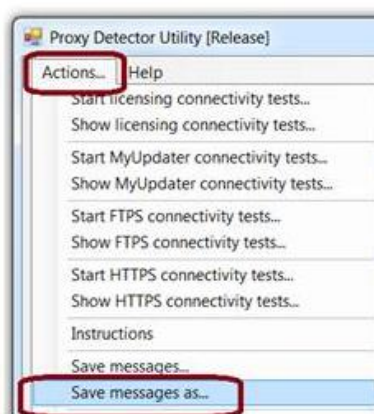
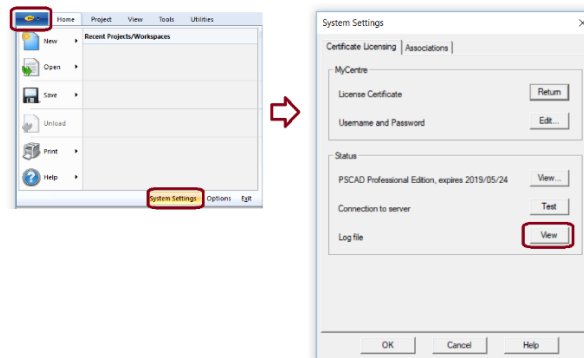# Appendix D Licensing Log File

D.1   Overview

The licensing log file is a log of licensing activities that were performed on a machine. This log file may be used to review licensing activities and to troubleshoot licensing issues.
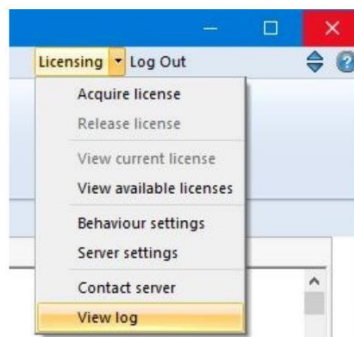
D.2   Displaying the Licensing Log File

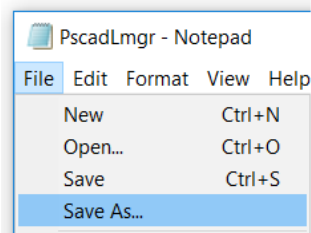   a.   For PSCAD V5, PRSIM, and the PSCAD Initializer:
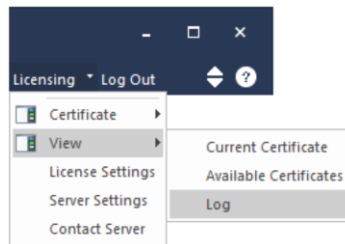
   b.   For PSCAD X4:

   c.   For Enerplot and FACE:

D.3   Sending in your Licensing Log File to the Support Desk

The licensing log file may be sent in to our Support Desk as follows:

   a.   Display the PscadLmgr.txt file as per Appendix D.2.

   b.   Save the PscadLmgr.txt file to your machine:

   c.   Send in your license log file to support@mhi.ca, along with a description of the issue.

DOCUMENT TRACKING

Rev.	Description	Date
0	Initial All content, except Appendix D was either moved over or copied over from the *Resolving PSCAD Issues* document. Appendix D is new content.	25/Apr/2019
1	Updates to Sections 1.1 and 2.17, and to Appendices A.1, B and D2; New Item 5 added to Appendix A.5	31/Aug/2020
2	New Section 2.18	15/Sep/2020
3	Update to Section 2.17; New Sections 2.19, 2.20 and 2.21	17/Sep/2020
4	New Section 2.22 New Step 6 added to Appendix A.5	13/Oct/20
5	New Section 2.23, and New Item 7 added to Appendix A.5; Update to Sections 2.12 and 2.21; Update to Appendices A.2 and B, Update to Items 5 and 6 of Appendix A.5	02/Nov/2020