

NETWORK LICENSING CHECK FIREWALL COMMUNICATION BETWEEN LICENSE SERVER AND CLIENT MACHINE

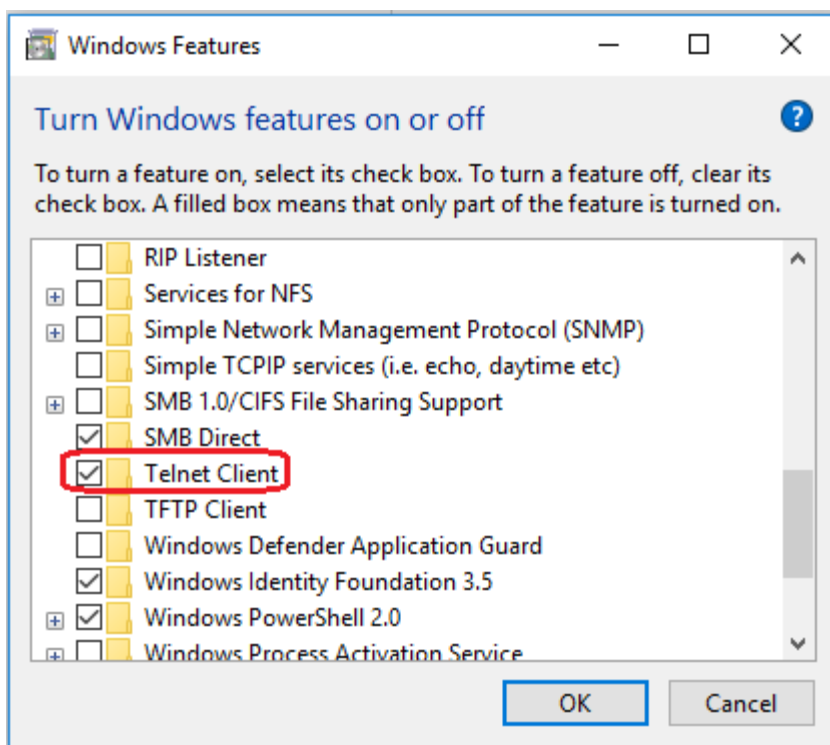
If the Flexlm license service is running properly on the license server machine, and the client machine has the system environment variable correctly set, but the client still can't check out a license/connect to the license server, this is often due to firewall restrictions. The firewall can restrict communication for certain port numbers and applications (executables).

Note that the server and client must have two-ways communication between them.

One way to check that the server can be reached using a certain port number is to use telnet. Telnet is typically installed, but not enabled on Win7, Win10 and Win11 machines.

1 CHECK BY TELNET

To enable telnet at client machine, go to **Programs and Features** -> **Turn Windows features on or off** -> Check **Telnet Client** (and Server if available).



From a DOS prompt type, you can try to ping and telnet the server in various ways like using name or IP-address. For example:

```
telnet servername 2002  
telnet ip.ip.ip.ip 2002
```

Here the default port number is 2002 for Sesam/Nauticus licenses.


```
Command Prompt
Microsoft Windows [Version 10.0.16299.1747]
(c) 2017 Microsoft Corporation. All rights reserved.
P:\>telnet SHAL800221 2002_
```

Or you can use the IP instead of server name.

```
Command Prompt
Microsoft Windows [Version 10.0.16299.1747]
(c) 2017 Microsoft Corporation. All rights reserved.
P:\>telnet 192.168.1.6 2002
```

If you get a blank page saying Telnet at the top, it means that it is open. (see below picture)

```
Select Telnet SHAL800221
```



If you get an error message, the port is blocked. Please contact IT to open it.

If the Port 2002 is opened, but still could not connect server, please check another port requested by license server.

- 1) Open dnvs.log from sever by notepad
- 2) Search 'Listening port'
- 3) Except port 2002 as below you can find,
(lmgrd) (@lmgrd-SLOG@) Listening port: 2002

you can also find another port xxxxx as below
(note: this port number is dynamical, so it might be different with below picture)
(dnvslm) (@dnvslm-SLOG@) Listening port: 49677

If you have marintek license, the port will be listed as below
(MARINTEK) (@MARINTEK-SLOG@) Listening port: 49682

- 4) Telnet server IP xxxx, if has error, please contact IT to open it.

2 OPEN UP FOR EXECUTABLES AT FIREWALL

Firewall exception rules have to cover the port numbers for both lmgrd and any vendor daemon like dnvslm, msc and marintek (typically 2002 and one or more varying port numbers) OR the lmgrd.exe and dnvslm.exe vendor daemon (possibly also msc.exe and marintek.exe) executables. It is common to open up for the executables instead of the port numbers.

Go to **Control Panel -> Windows Defender Firewall -> Allow an app or feature through Windows Defender Firewall**, click **Allow another app**.

Allow apps to communicate through Windows Defender Firewall

To add, change, or remove allowed apps and ports, click Change settings.

[What are the risks of allowing an app to communicate?](#)

[Change settings](#)

i For your security, some settings are managed by your system administrator.

Allowed apps and features:

Name	Domain	Private	Public	Group Policy
<input type="checkbox"/> BranchCache - Content Retrieval (Uses HTTP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No
<input type="checkbox"/> BranchCache - Hosted Cache Client (Uses HTTPS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No
<input type="checkbox"/> BranchCache - Hosted Cache Server (Uses HTTPS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No
<input type="checkbox"/> BranchCache - Peer Discovery (Uses WSD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No
<input checked="" type="checkbox"/> Captive Portal Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> Cast to Device functionality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> Connect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> Core Networking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> Cortana	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> Delivery Optimization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> DiagTrack	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No
<input checked="" type="checkbox"/> DIAL protocol server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No

[Details...](#) [Remove](#)

[Allow another app...](#)

In the **Add an app** dialog, Click **Browse**, add **dnvslm.exe** and **lmgrd.exe** from license manager installation path. (Normally, the default is C:\Program Files\DNV\Flexlm\Bin)

After adding, the **DNV daemon** and **Flexera** will show in the list.

Allow apps to communicate through Windows Defender Firewall

To add, change, or remove allowed apps and ports, click Change settings.

What are the risks of allowing an app to communicate?

[Change settings](#)

Allowed apps and features:

Name	Private	Public
<input checked="" type="checkbox"/> DiagTrack	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> DIAL protocol server	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Distributed Transaction Coordinator	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> DNV daemon	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Email and accounts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Feedback Hub	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> File and Printer Sharing	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> File and Printer Sharing over SMBDirect	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Flexera	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Game Bar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Get Help	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Intel(R) Management and Security Status	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[Details...](#) [Remove](#)

[Allow another app...](#)

If you have MARINTEK or MSC license, please add MARINTEK.exe and MAC.exe into above dialog.

Another way is to turn off windows defender firewall, but it is not recommended.

Author: Li Zheng Nan Anna, April 1st, 2020

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