

# Setting up a MARIN SLL License Server

To be able to create a license for your license server, MARIN needs the host ID of the system that you will use as the license server.

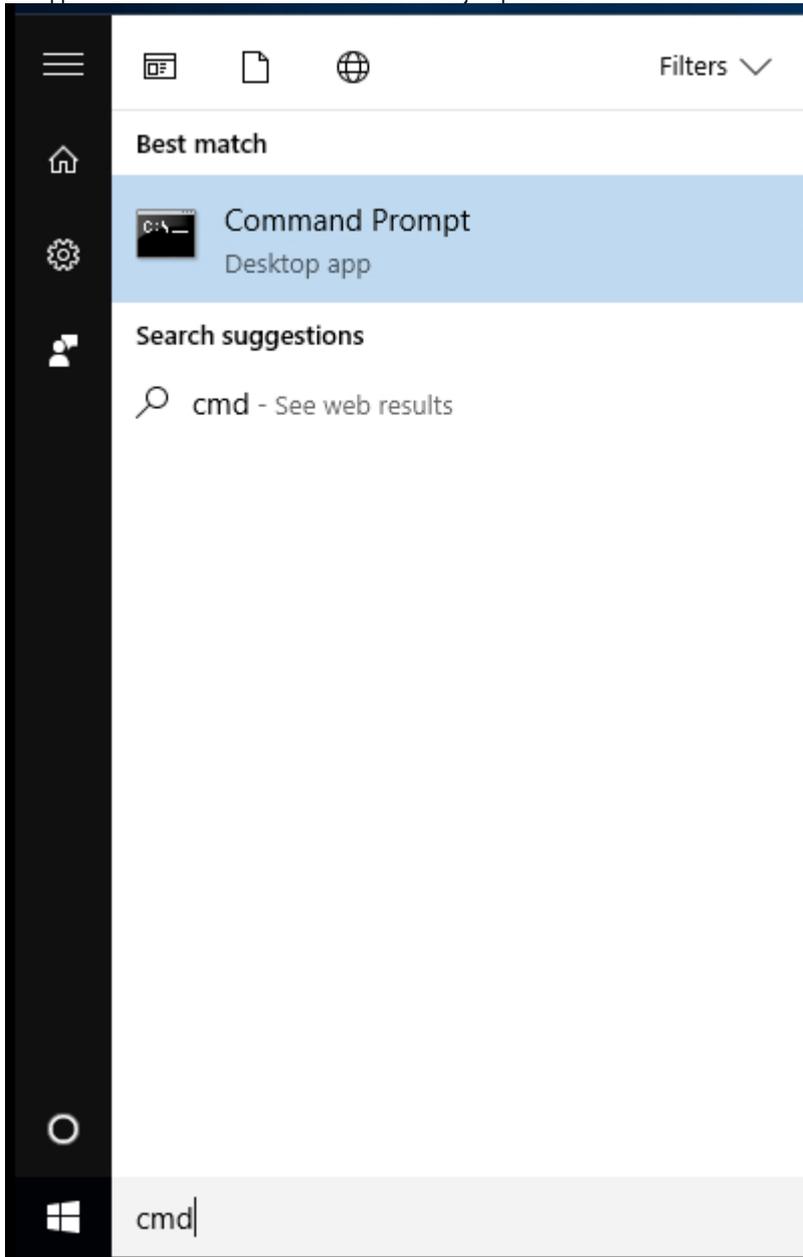
MARIN SLL licenses usually are named after the program they are for and always have the extension ".sll". You need to store them in one of the default locations mentioned below or in a custom location, mentioned in environment variable MARIN\_LICENSE\_PATHS.

The SLL license server for Windows is an executable, available in the marin\_sll\_server.zip file. It can be run on the command line or it can be installed as a service.

When the license server is running it can also be queried by the SLL status executable.

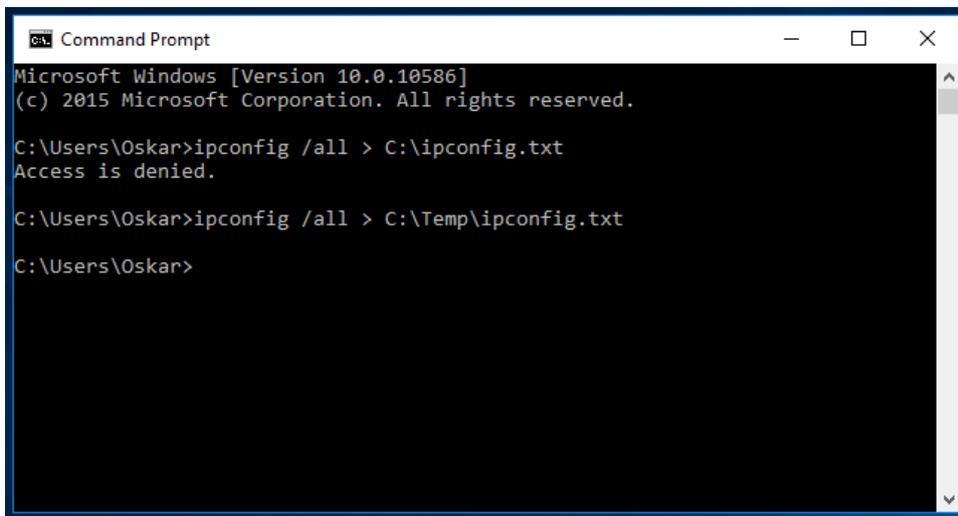
## Obtaining the host ID of the license server.

1. Open a Command Prompt. In Windows 10 you can do this by clicking the Start button and typing "cmd". The Command Prompt Desktop app will appear as Best match. You can either click it or just press Enter to start the Command Prompt.



2. In the Command Prompt type

```
ipconfig /all > C:\ipconfig.txt
```



```
Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

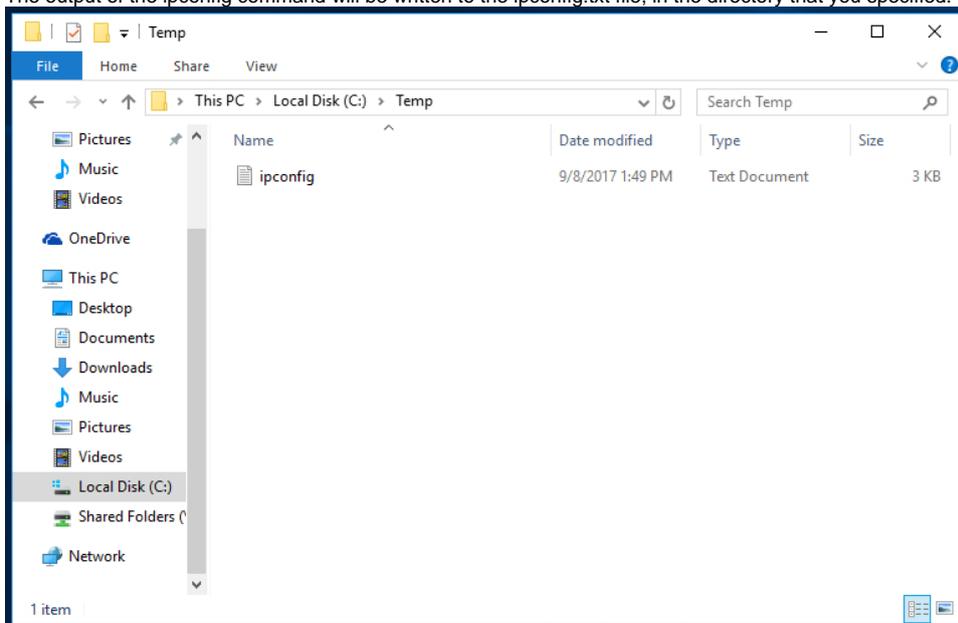
C:\Users\Oskar>ipconfig /all > C:\ipconfig.txt
Access is denied.

C:\Users\Oskar>ipconfig /all > C:\Temp\ipconfig.txt

C:\Users\Oskar>
```

If you get the error message "Access is denied" it means you do not have sufficient privileges to write in the specified directory. Choose a directory where you have write access.

3. The output of the ipconfig command will be written to the ipconfig.txt file, in the directory that you specified.



4. E-mail the ipconfig.txt to [support@marin.nl](mailto:support@marin.nl) so MARIN can create a license file for you. In the e-mail, please specify the program name and version number that you need a license for.

## Storing the license file

After installing the license server software, there will be folder in the installation directory called licenses. The server will look for licenses there first. Alternatively, you can store the license file in one of the SLL default directories or in a custom directory designated by the MARIN\_LICENSE\_PATHS environment variables.

## SLL default and custom directories

MARIN SLL license files and/or client configuration files can be stored in one of the following default locations on Windows:

```
C:\Program Files\marin\licenses
C:\Program Files (x86)\marin\licenses
C:\ProgramData\marin\licenses
```

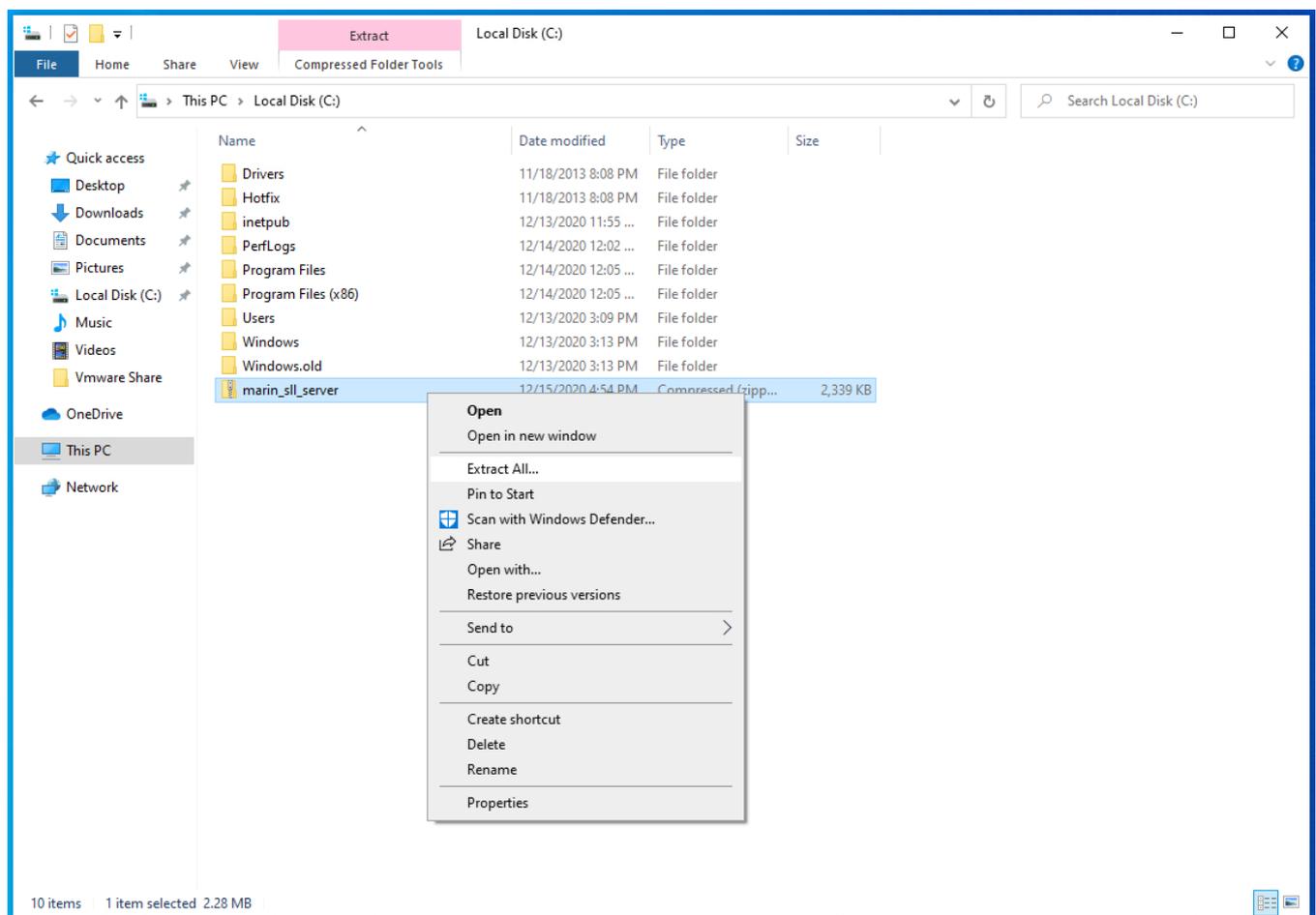
These locations do not exist on your PC by default. You need to create one of them if they do not exist yet.

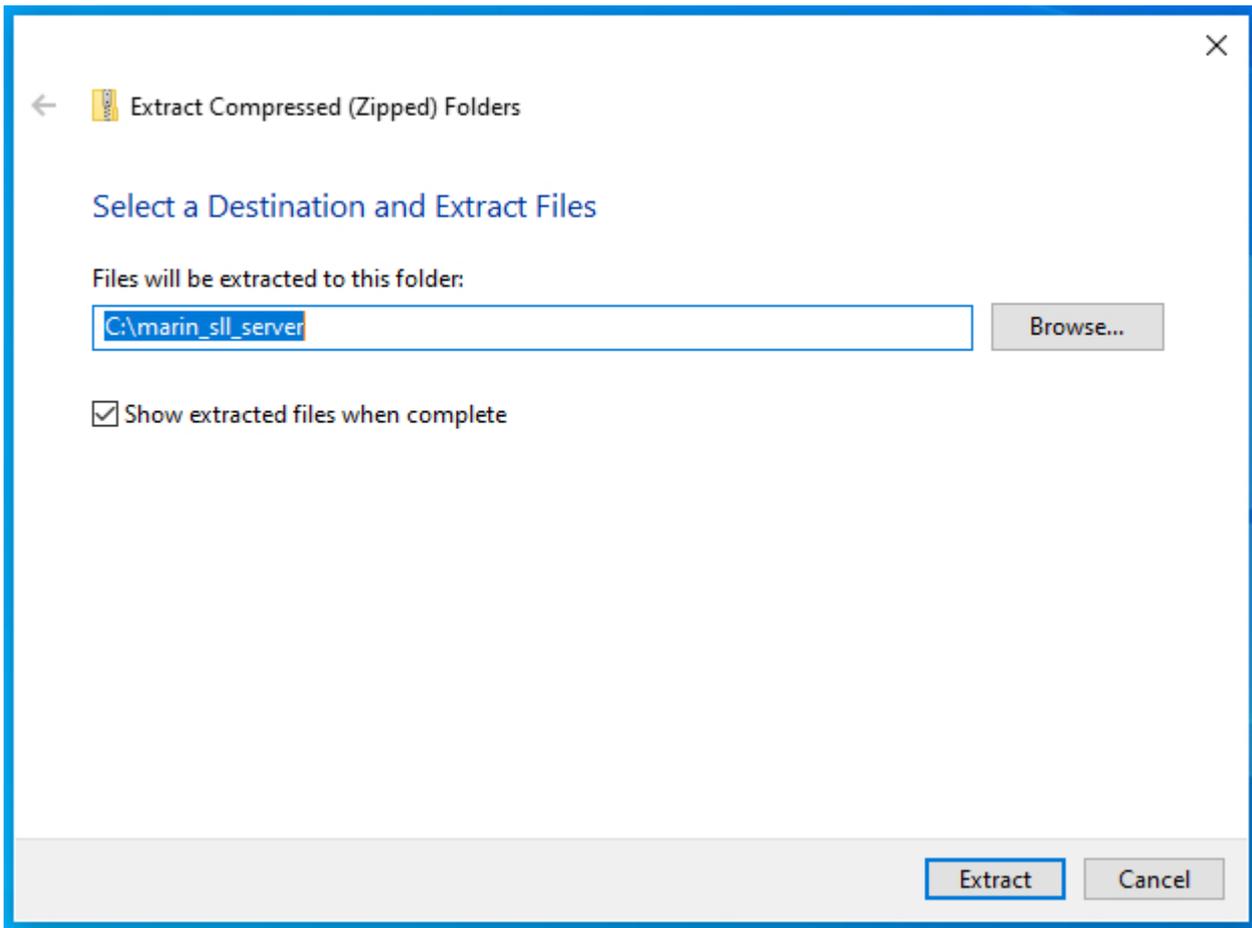
 C:\ProgramData is an invisible folder.

MARIN SLL license files and/or client configuration files can also be stored in other locations on your PC. If you do that, make sure that location is stored in environment variable `MARIN_LICENSE_PATHS`. Several license locations can be stored in this environment variable. They have to be separated with a semicolon(";"). For more information on how to set this variable in Windows, please read [Adding the MARIN\\_LICENSE\\_PATHS environment variable](#).

## Installing the license server software on Windows

The MARIN license server software is in the `marin_sll_server.zip` file. There is no real installation procedure. All you have to do is extract the contents of the zip file to a convenient location.



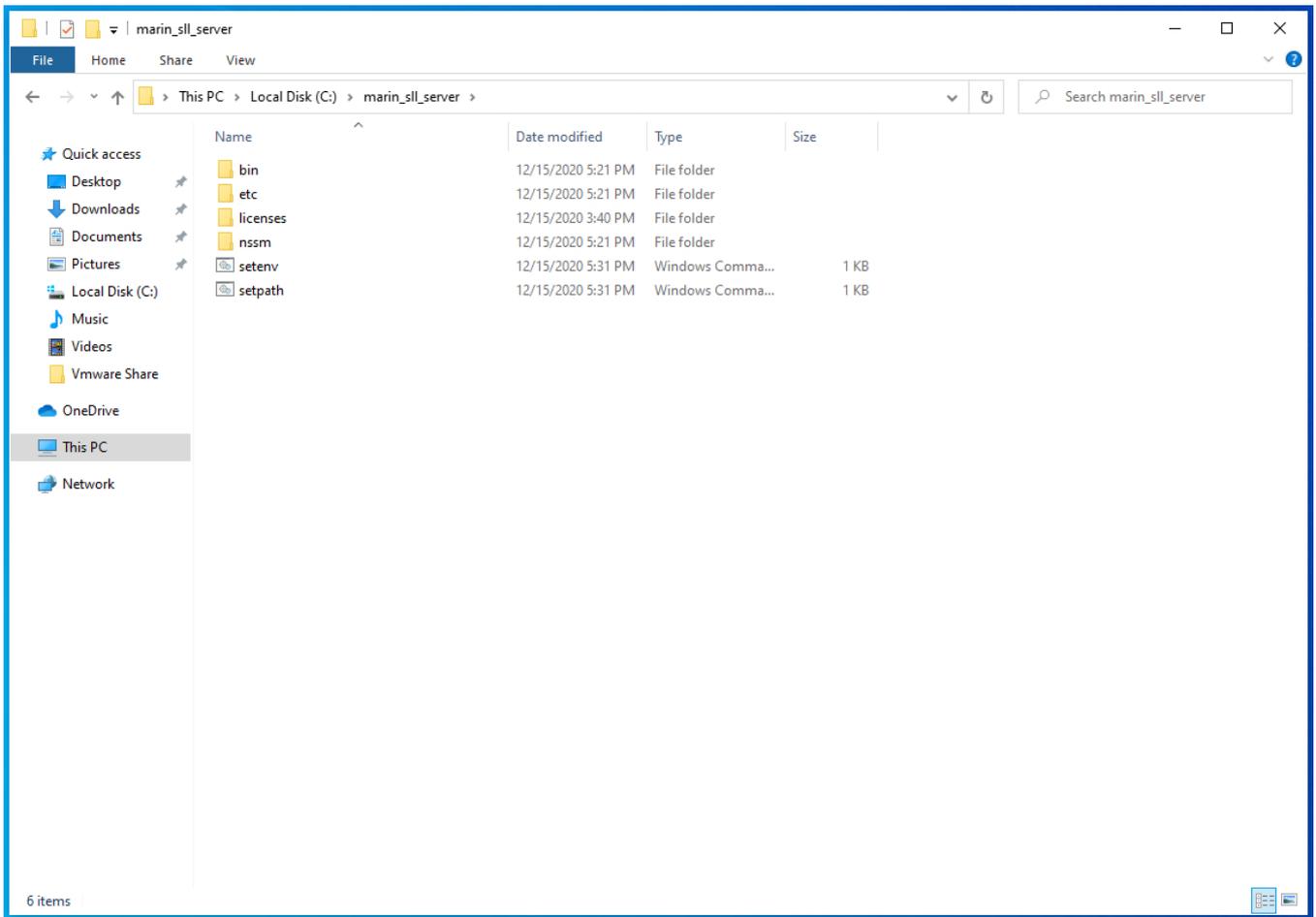


## Running the server on Windows

The MARIN SLL license server can run on the command line or as a service. **Running it as a service is the preferred method.**

### On the command line

In the location where you extracted the files, there is a batch file called setenv.cmd. Double click it to open a Command Prompt. The batch files that are executed will set the rights paths for the following command.



To start the server, type:

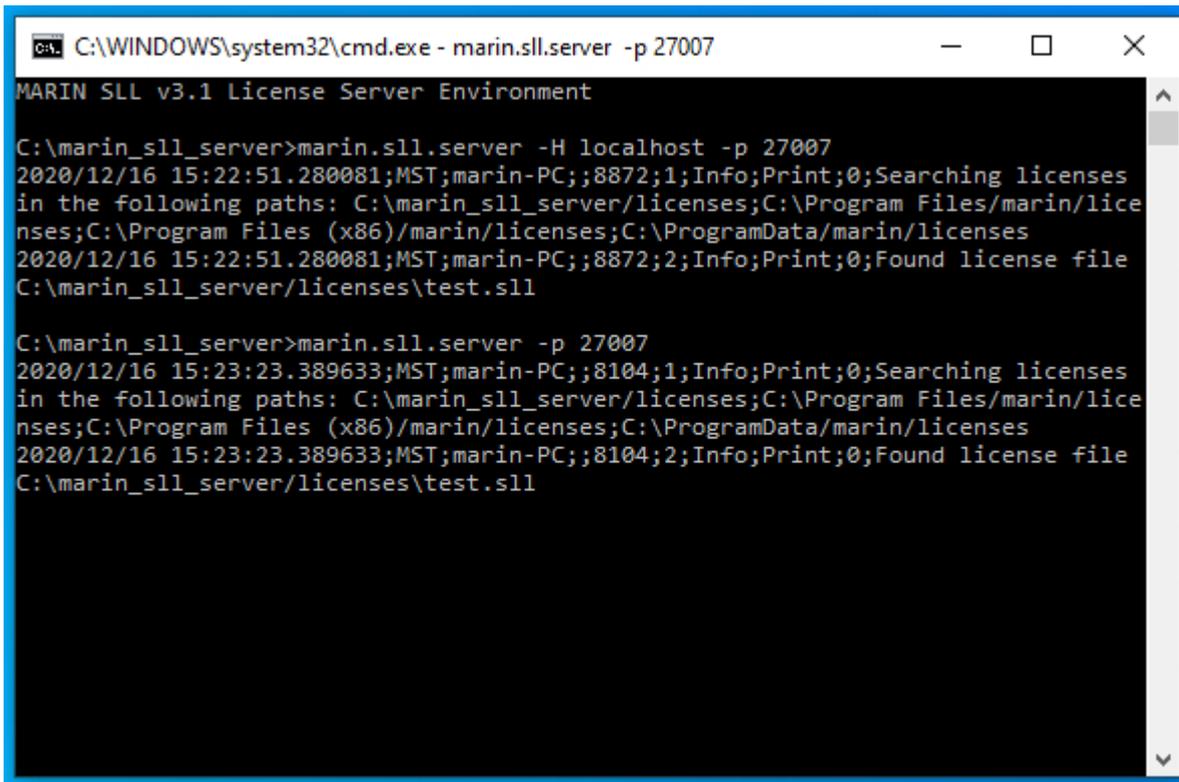
```
marin.sll.server
```

```
C:\WINDOWS\system32\cmd.exe - marin.sll.server
MARIN SLL v3.1 License Server Environment
C:\marin_sll_server>marin.sll.server
2020/12/16 15:15:55.499570;MST;marin-PC;;7632;1;Info;Print;0;Searching licenses
in the following paths: C:\marin_sll_server/licenses;C:\Program Files/marin/lice
nses;C:\Program Files (x86)/marin/licenses;C:\ProgramData/marin/licenses
2020/12/16 15:15:55.515341;MST;marin-PC;;7632;2;Info;Print;0;Found license file
C:\marin_sll_server/licenses\test.sll
```

If you do not see a line that starts with "Found license file", no license file was found. Please make sure the license file is in <marin\_sll\_server\_install\_dir>\licenses, in one of the default directories or in one that was specified with the MARIN\_LICENSE\_PATHS environment variable.

The marin.sll.server executable accepts the following arguments:

-h	Display the usage of marin.sll.server.exe
-H	Host on the specified hostname or IP Address
-p	Host on the specified port (default: 32481)



```
C:\WINDOWS\system32\cmd.exe - marin.sll.server -p 27007
MARIN SLL v3.1 License Server Environment

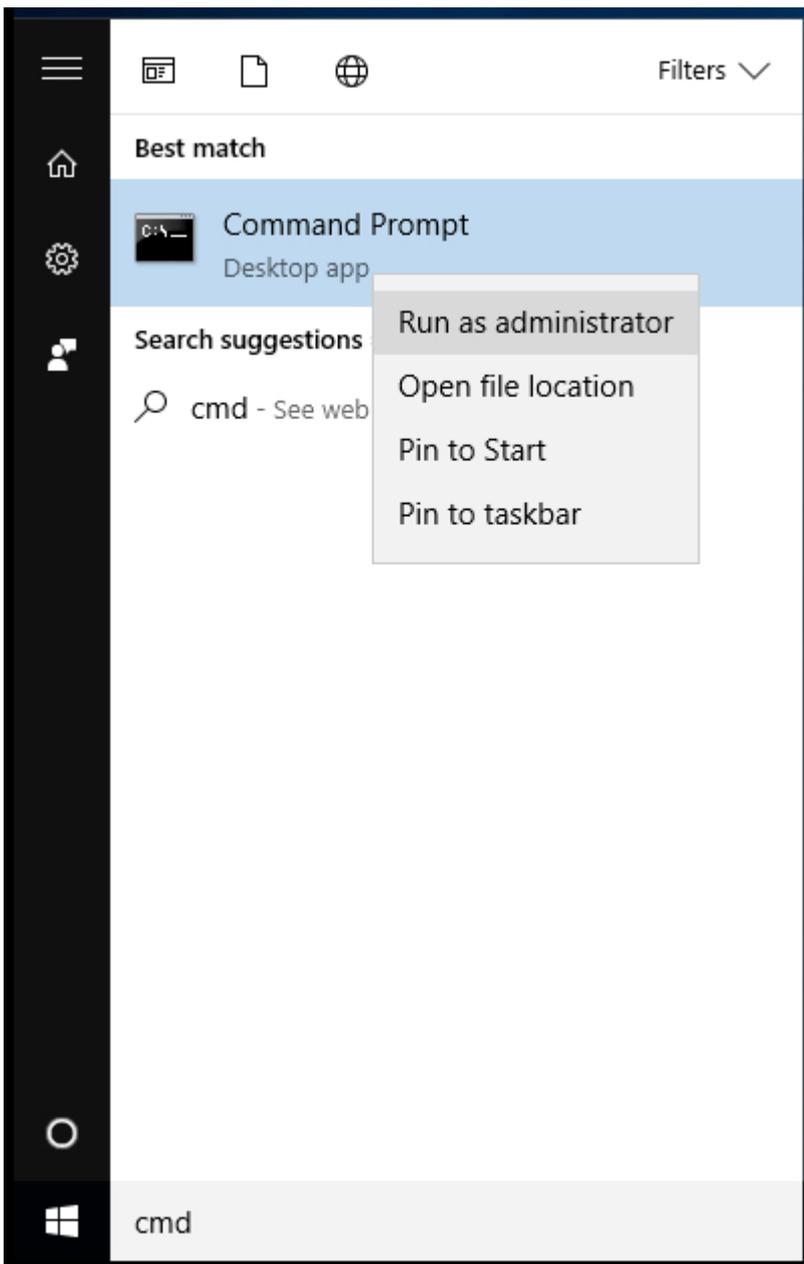
C:\marin_sll_server>marin.sll.server -H localhost -p 27007
2020/12/16 15:22:51.280081;MST;marin-PC;;8872;1;Info;Print;0;Searching licenses
in the following paths: C:\marin_sll_server/licenses;C:\Program Files/marin/lice
nses;C:\Program Files (x86)/marin/licenses;C:\ProgramData/marin/licenses
2020/12/16 15:22:51.280081;MST;marin-PC;;8872;2;Info;Print;0;Found license file
C:\marin_sll_server/licenses\test.sll

C:\marin_sll_server>marin.sll.server -p 27007
2020/12/16 15:23:23.389633;MST;marin-PC;;8104;1;Info;Print;0;Searching licenses
in the following paths: C:\marin_sll_server/licenses;C:\Program Files/marin/lice
nses;C:\Program Files (x86)/marin/licenses;C:\ProgramData/marin/licenses
2020/12/16 15:23:23.389633;MST;marin-PC;;8104;2;Info;Print;0;Found license file
C:\marin_sll_server/licenses\test.sll
```

To stop the server, select the Command Prompt, in which the server runs, and press Ctrl+C.

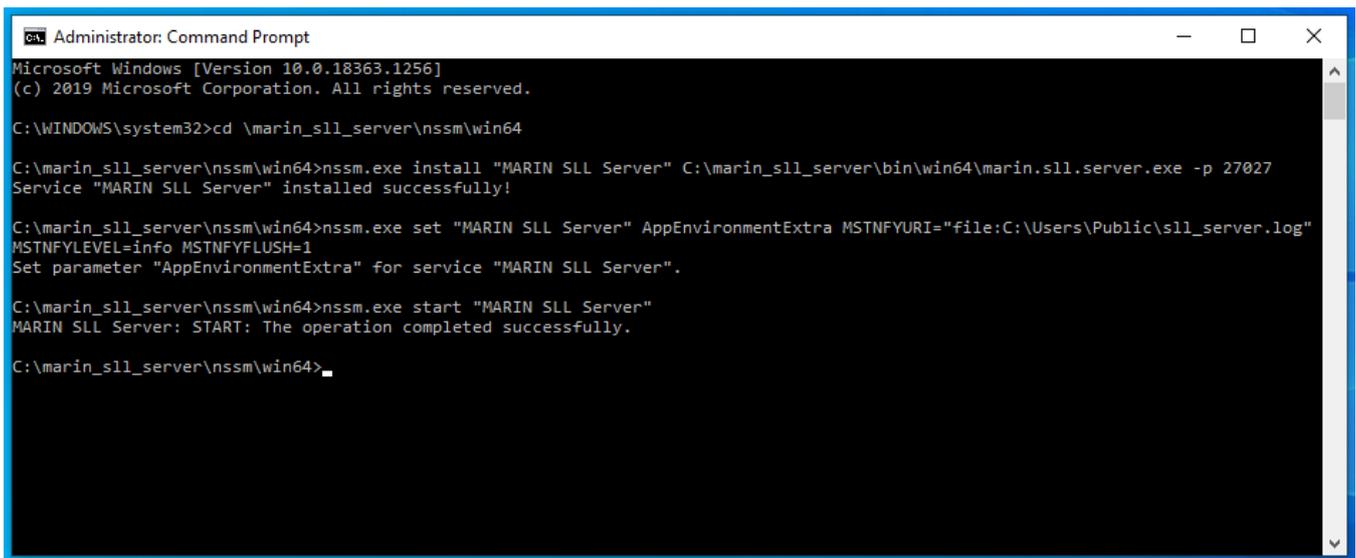
## As a service

The preferred method of running the MARIN SLL license server is to run it as a service. To install and start the MARIN SLL license server executable as a service, we recommend using NSSM, the Non-Sucking Service Manager. The 64 bit NSSM executable can also be found in the `marin_sll_server_windows.zip` file, in folder `nssm/win64`. To use it run a Command Prompt **as administrator**.



Navigate to the nssm\win64 directory and run the following commands:

```
nssm.exe install "MARIN SLL Server" <location of>\marin.sll.server.exe
nssm.exe set "MARIN SLL Server" AppEnvironmentExtra MSTNIFYURI="file:C:\Users\Public\sll_server.log"
MSTNIFYLEVEL=info MSTNIFYFLUSH=1
nssm.exe start "MARIN SLL Server"
```



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.1256]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>cd \marin_sll_server\nssm\win64

C:\marin_sll_server\nssm\win64>nssm.exe install "MARIN SLL Server" C:\marin_sll_server\bin\win64\marin.sll.server.exe -p 27027
Service "MARIN SLL Server" installed successfully!

C:\marin_sll_server\nssm\win64>nssm.exe set "MARIN SLL Server" AppEnvironmentExtra MSTNIFYURI="file:C:\Users\Public\sll_server.log"
MSTNIFYLEVEL=info MSTNIFYFLUSH=1
Set parameter "AppEnvironmentExtra" for service "MARIN SLL Server".

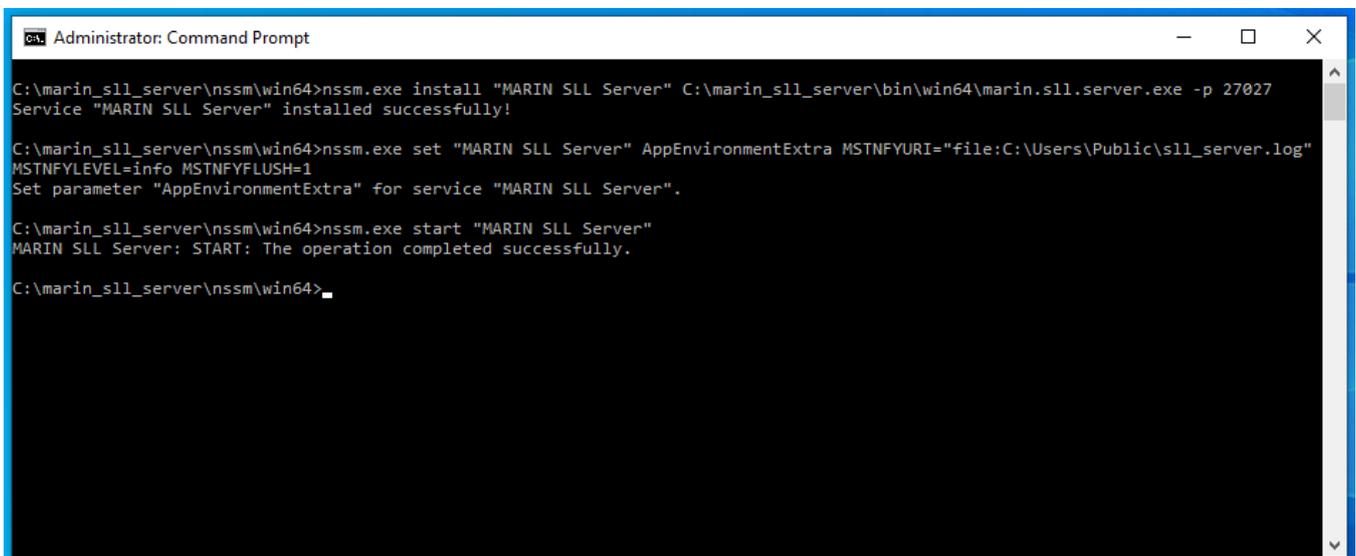
C:\marin_sll_server\nssm\win64>nssm.exe start "MARIN SLL Server"
MARIN SLL Server: START: The operation completed successfully.

C:\marin_sll_server\nssm\win64>
```

Make sure that the service was installed successfully and that the START operation completed successfully.

The default port number used by the server is 32481. If you want to install the license server as a service but you want to use a different host name or port number you can add the -H or -p options on the nssm install command:

```
nssm.exe install "MARIN SLL Server" <location of>\marin.sll.server.exe -p 27027
nssm.exe set "MARIN SLL Server" AppEnvironmentExtra MSTNIFYURI="file:C:\Users\Public\sll_server.log"
MSTNIFYLEVEL=info MSTNIFYFLUSH=1
nssm.exe start "MARIN SLL Server"
```



```
Administrator: Command Prompt

C:\marin_sll_server\nssm\win64>nssm.exe install "MARIN SLL Server" C:\marin_sll_server\bin\win64\marin.sll.server.exe -p 27027
Service "MARIN SLL Server" installed successfully!

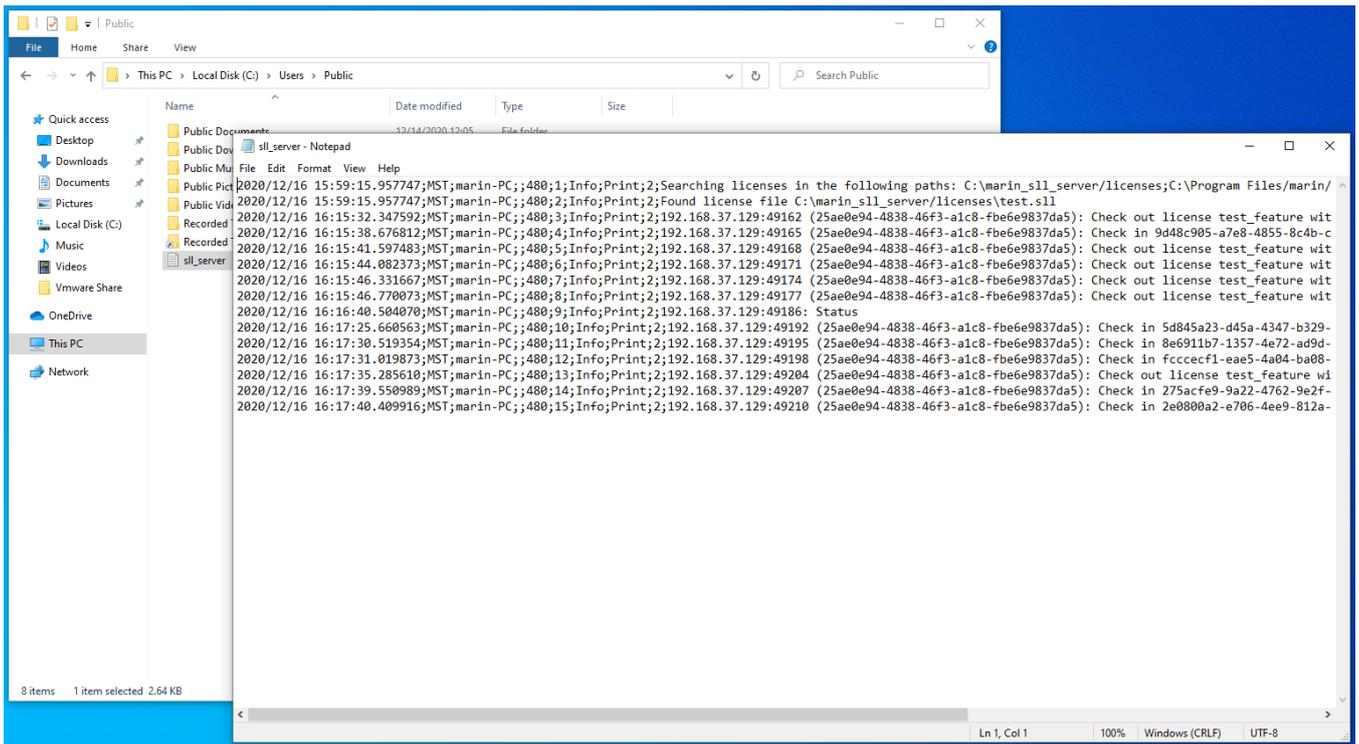
C:\marin_sll_server\nssm\win64>nssm.exe set "MARIN SLL Server" AppEnvironmentExtra MSTNIFYURI="file:C:\Users\Public\sll_server.log"
MSTNIFYLEVEL=info MSTNIFYFLUSH=1
Set parameter "AppEnvironmentExtra" for service "MARIN SLL Server".

C:\marin_sll_server\nssm\win64>nssm.exe start "MARIN SLL Server"
MARIN SLL Server: START: The operation completed successfully.

C:\marin_sll_server\nssm\win64>
```

## SLL Server Logfile

In the commands above, the logfile was set to C:\Users\Public\sll\_server.log. It contains the same information that you would otherwise see in the command prompt window, if the license is run from the command line.



## Querying the license server status

The MARIN license server can be queried with the MARIN SLL status executable. It can be queried on both the server and the (Windows) clients. Open a Command Prompt in the same directory as the `marin.sll.status.exe` and type

```
marin.sll.status
```

The `marin.sll.status` executable accepts the same arguments as the `marin.sll.server` executable.

<b>-h</b>	Display the usage of <code>marin.sll.server.exe</code>
<b>-H</b>	Host on the specified hostname or IP Address
<b>-p</b>	Host on the specified port

```
C:\Windows\System32\cmd.exe

C:\marin_sll_server\bin\win64>marin.sll.status -p 27027
Feature
Name: test_feature
Version: 1.0
Checkouts: 4/15
License
  Model: floating
  Licensed to:
    Acme Rocket-Powered Products, Inc.
    Fairfield, New Jersey
    license_administrator@acme.inc

  Issued by: support@marin.nl
  Date of issue: 23-11-2020
  Features:
    test_feature, versions 1.0 (15)
  Expiry date: 23-11-2021
  Number of days left: 342

Client 25ae0e94-4838-46f3-a1c8-fbe6e9837da5
  Last request time: 75149490593800 nanoseconds since boot
  Address: 192.168.37.129:49246
  Checkouts: 4

  Checkout 056ea701-b1ee-4d96-a98f-207f0833e460
  Feature: test_feature

  Checkout 165258a7-28b6-4fbf-aba5-df91430d5a36
  Feature: test_feature

  Checkout acb1d030-670b-4868-ab1a-43cfd3202f4e
  Feature: test_feature

  Checkout d3ce9a32-577f-43d0-ba23-7478af2828c6
  Feature: test_feature

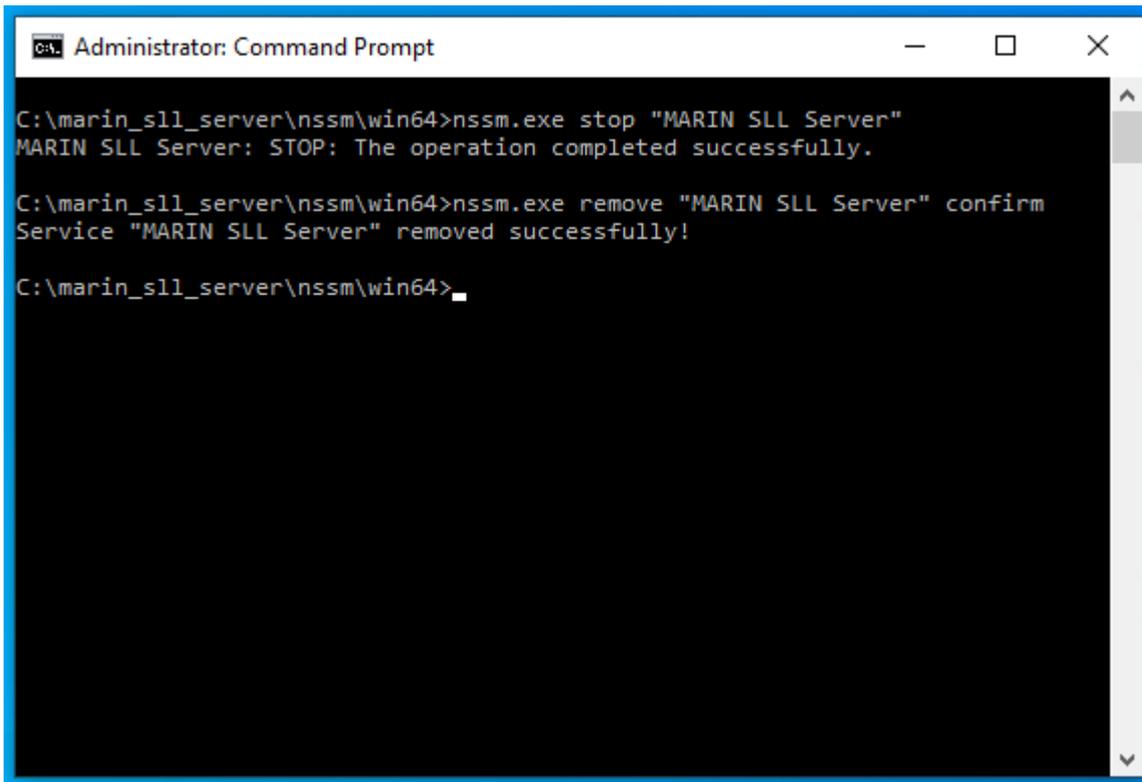
C:\marin_sll_server\bin\win64>
```

In the example above 4 out of 15 available licenses, for the feature called test\_feature, have been checked out

## Stopping and removing the license server service

To stop and remove the license server service you can use NSSM too.

```
nssm.exe stop "MARIN SLL Server"
nssm.exe remove "MARIN SLL Server" confirm
```



```
C:\marin_sll_server\nssm\win64>nssm.exe stop "MARIN SLL Server"
MARIN SLL Server: STOP: The operation completed successfully.

C:\marin_sll_server\nssm\win64>nssm.exe remove "MARIN SLL Server" confirm
Service "MARIN SLL Server" removed successfully!

C:\marin_sll_server\nssm\win64>
```

 Please note that you have to start the command prompt as administrator to stop and remove the license server.

## Using the MARIN SLL License server over IPv6

Using the MARIN SLL License server over IPv6 is very similar to using it over IPv4. You only need to start the `marin.sll.server.exe` with the `-H ::` argument.

```
marin.sll.server -H ::
```

You can also specify the preferred port with the `-p` argument, just like you would using it over IPv4.

This also applies when installing the server as a service, which is the preferred method. If you want to install the license server as a service but you want to use a different port number you need to add the `-H` and `-p` arguments on the `nssm` install command, e.g.:

```
nssm.exe install "MARIN SLL Server" <location of>\marin.sll.server.exe -H :: -p 27027
nssm.exe set "MARIN SLL Server" AppEnvironmentExtra MSTNIFYURI="file:C:\Users\Public\sll_server.log"
MSTNIFYLEVEL=info MSTNIFYFLUSH=1
nssm.exe start "MARIN SLL Server"
```



## Enable IPv4

Please note that IPv4 needs to be enabled on the server. The server needs IPv4 to verify that the licenses on the server are valid.

The screenshot displays the Windows Settings application with the 'Ethernet' section selected. The 'Local Area Connection' is shown as 'Unidentified network' and 'Connected'. Below this, the 'Network Connections' control panel window is open, showing the 'Local Area Connection' status. The 'Local Area Connection Properties' dialog box is open, showing the 'Networking' tab. In the 'Connect using:' section, 'Intel(R) PRO/1000 MT Network Connection' is selected. Under 'This connection uses the following items:', the following protocols are checked: Client for Microsoft Networks, File and Printer Sharing for Microsoft Networks, QoS Packet Scheduler, Internet Protocol Version 4 (TCP/IPv4), Microsoft Network Adapter Multiplexor Protocol, Microsoft LLDP Protocol Driver, and Internet Protocol Version 6 (TCP/IPv6). The 'Internet Protocol Version 4 (TCP/IPv4)' checkbox is highlighted, indicating the step to ensure it is checked.