



License Manager

Users Manual

Rev 3.0

For use with v2017.04.05 and higher

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Introduction

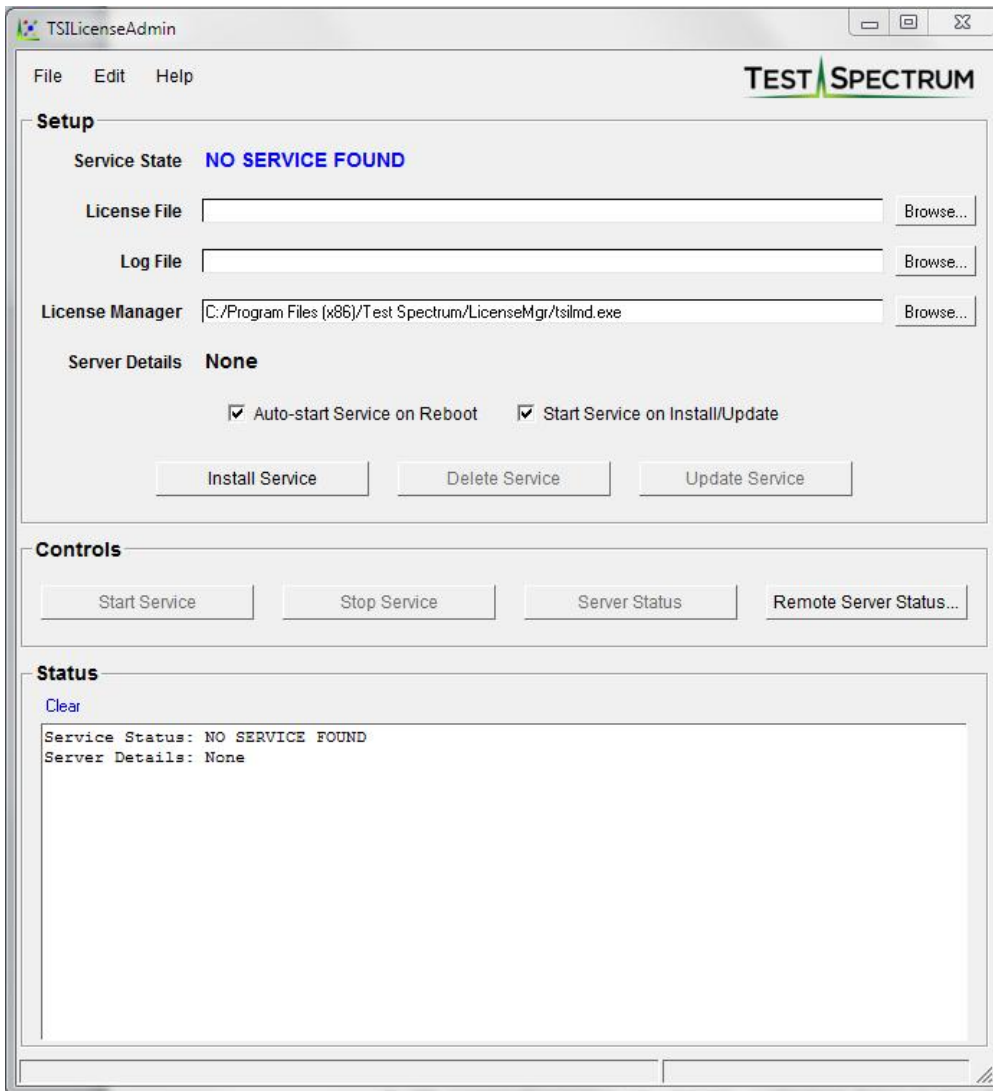
License Manager is an application which manages licenses to various Test Spectrum tools. It operates as a service in Windows and can be interacted with through the command line or with the **TSI License Admin** Utility. This document explains how to both install and remove the License Manager as a windows service using the utility and manually through the windows command prompt. Help is also available at the command line by typing `tsilmd -h`.

Installation

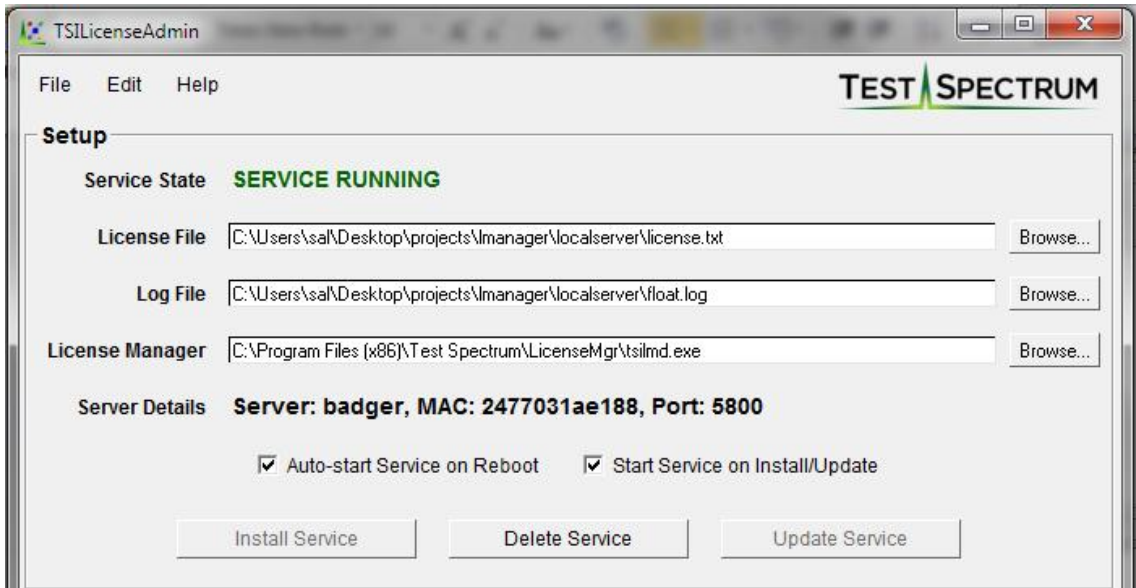
License Manager has been tested on Windows XP/7/10 based PC's and requires administrator privileges. It requires at least 15MB of memory and 50MB of disk space. Contact Test Spectrum <http://www.testspectrum.com/licenseserver> for the latest version. Download and run the installer executable on the system you wish to install the **License Manager**. The installer will let you choose the installation folder

Graphical Installation

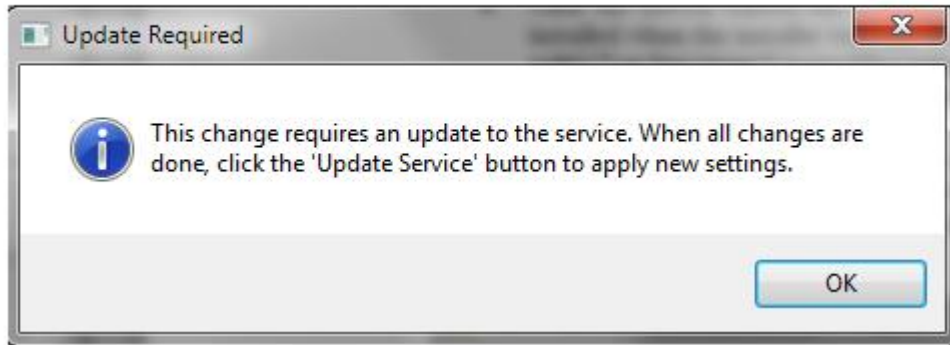
- Click the windows start menu and navigate to 'All Programs' -> 'Test Spectrum' -> 'tsiLicenseAdmin'. Right click the mouse and select 'Run as administrator'.
- The TSI License Manager Admin utility should open and appear as follows



- Click the browse button for 'License File' and select the license file supplied by Test Spectrum.
- Click the browse button for 'Log File' and select or create a log file that the License Manager will log messages of the operation of the server.
- Click the browse button for 'License Manager' and select the 'tsilmd.exe' file that was installed when the installer was ran. The defaults installation path is '**C:\Program Files (x86)\Test Spectrum\LicenseMgr\tsilmd.exe**'.
- Click the '**Install Service**' button to install the **License Manager** as a windows service. The '**Auto-start service on Reboot**' checkbox allows the service to restart on every windows reboot. The '**Start Service on Installation**' checkbox allows the service to automatically start after installation is successful.
- Ensure the **Service_Running** status is displayed.



- Any changes to the running setup will prompt the user to update the service with the following dialog:



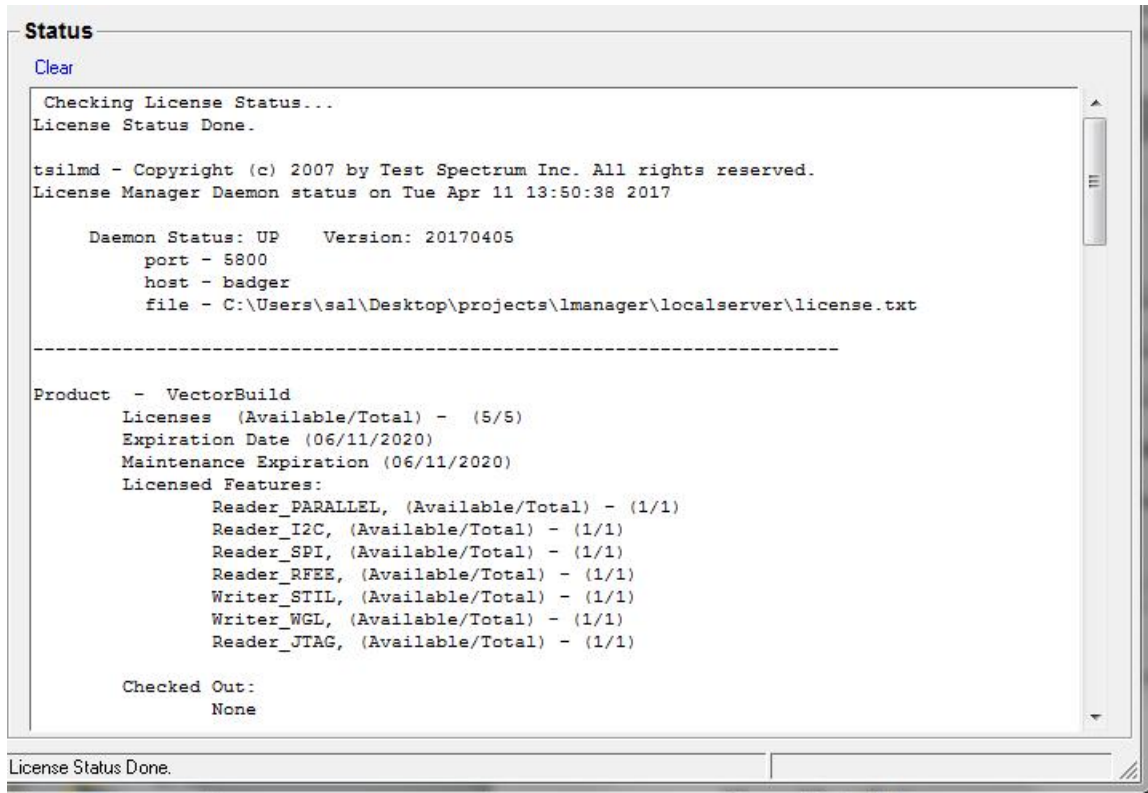
- Clicking the **'Update Service'** button now will make all the desired changes to the **License Manager** configuration.
- Clicking the **'Delete Service'** button will remove the service from the windows services.

Service Control

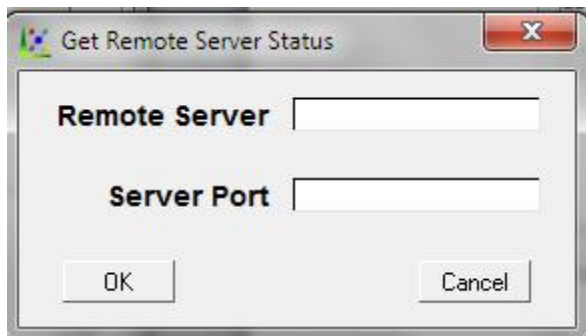
- The **'Controls'** panel allows users to Start/Stop the **License Manager** service, and see local and remote status of the **License Manager** server.



- Clicking the **'Stop Service'** or **'Start Service'** buttons will perform the respective activities.
- Click the **'Server Status'** button to see a status of the licensed products and features in the status window.



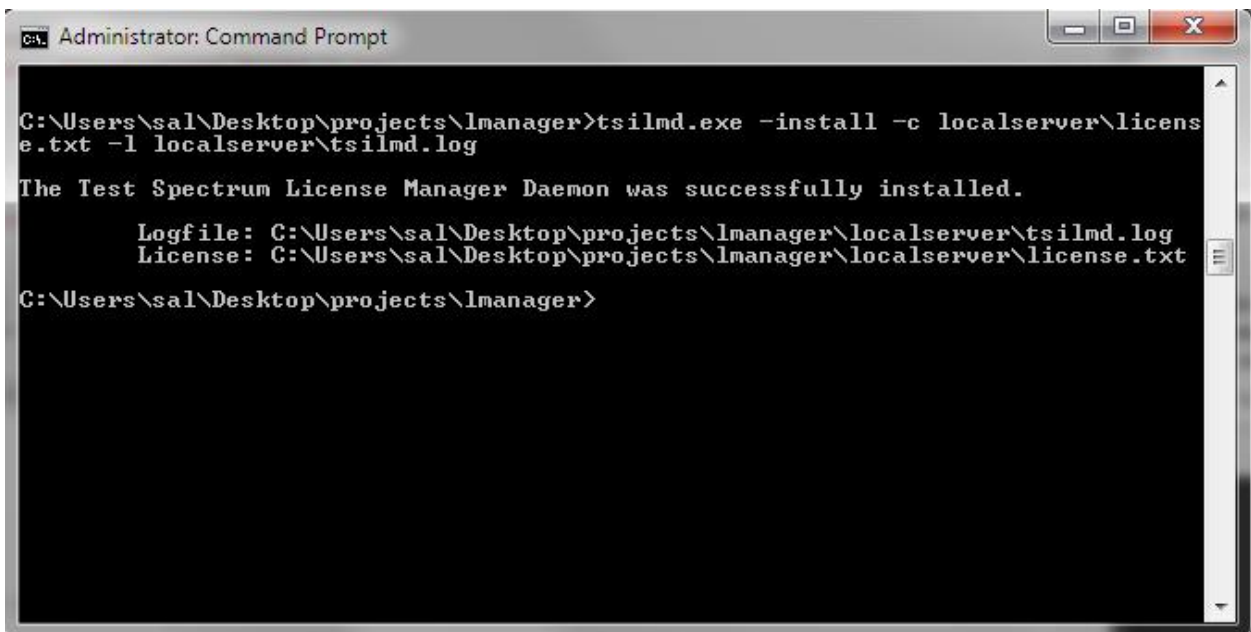
- Click the **'Remote Server Status'** button to get the status of another **License Manager** running on your network. Enter in the name (or IP) and port of the remote server.



Manual Installation

- Download and run the installer executable from the system you wish to install the **License Manager**. The installer will let you choose the installation folder.
- Open a command window (as administrator) and navigate to this same directory.
- Install the **License Manager** as a Windows service by typing the following (see Figure 1), where <license file> and <log file> identify the names of the license and log files respectively (use quotation marks to surround absolute paths or names with spaces) :

```
C:\TSI_License_Mgr\tsilmd.exe -install -c <license file> -l <log file>
```



```
Administrator: Command Prompt

C:\Users\sam\Desktop\projects\lmanager>tsilmd.exe -install -c localserver\license.txt -l localserver\tsilmd.log

The Test Spectrum License Manager Daemon was successfully installed.

        Logfile: C:\Users\sam\Desktop\projects\lmanager\localserver\tsilmd.log
        License: C:\Users\sam\Desktop\projects\lmanager\localserver\license.txt

C:\Users\sam\Desktop\projects\lmanager>
```

Figure 1

Installing License Manager as a windows service, where the license file is called 'license.txt' and the log file is called 'tsilmd.log' and will be created in this same directory.

- Open the Services window by clicking on the *Start Menu* and typing *services* in the search box.
- In the services window, click on the *Test Spectrum License Manager Daemon* and then click *Start*. **Figure 2** shows the services window.

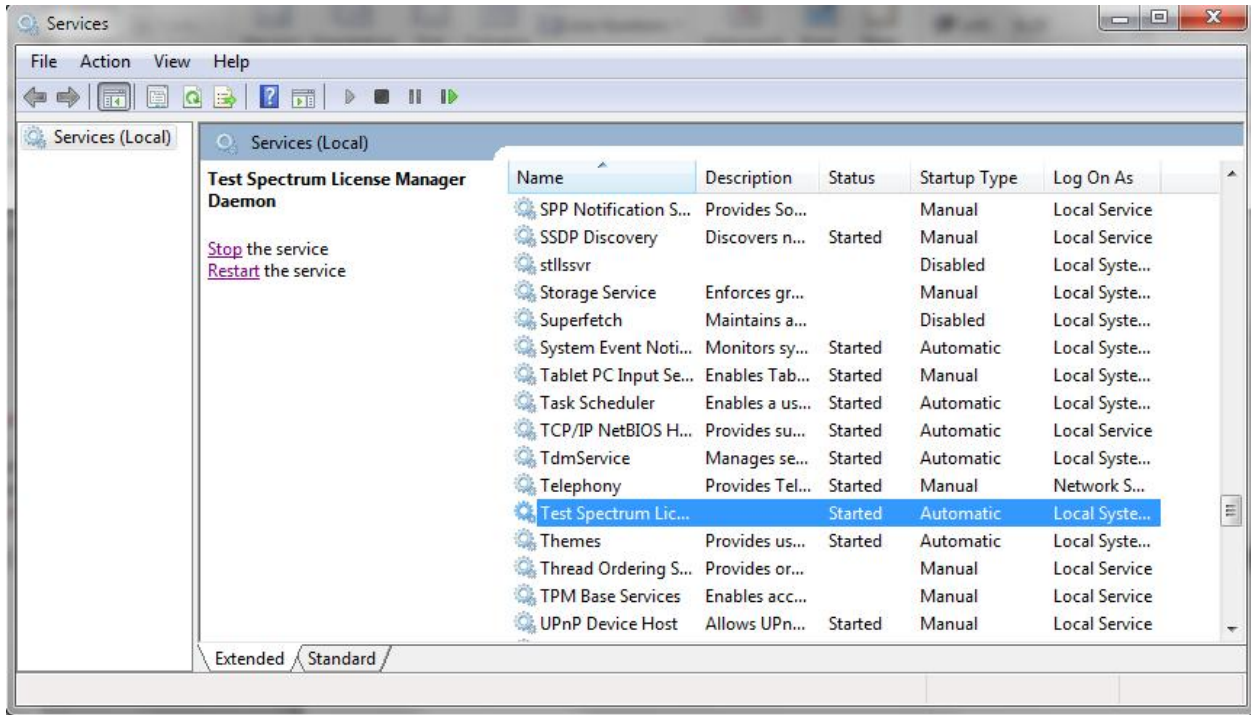


Figure 2
Services window after installing and starting the License Manager

Any error messages generated during the installation can be seen either in the user named log file (tsilmd.log is the name used in the example above) or in error.log if the error occurs before the License Manager can create the user named log file.

Removal

License Manager includes a command line option to remove itself from the service manager. The following instructions identify how to do this.

Windows

- Open the Services window by clicking on the *Start Menu* and typing *services*. See *Error! Reference source not found.*
- In the services window, click on the *Test Spectrum License Manager Daemon* and then click *Stop*. **Figure 2** shows the services window.
- Open a command window and navigate to the directory that the *tsilmd.exe* file is located.
- Remove the **License Manager** as a Windows service by typing the following (see **Figure 3**):

```
C:\TSI_License_Mgr\tsilmd.exe -remove
```

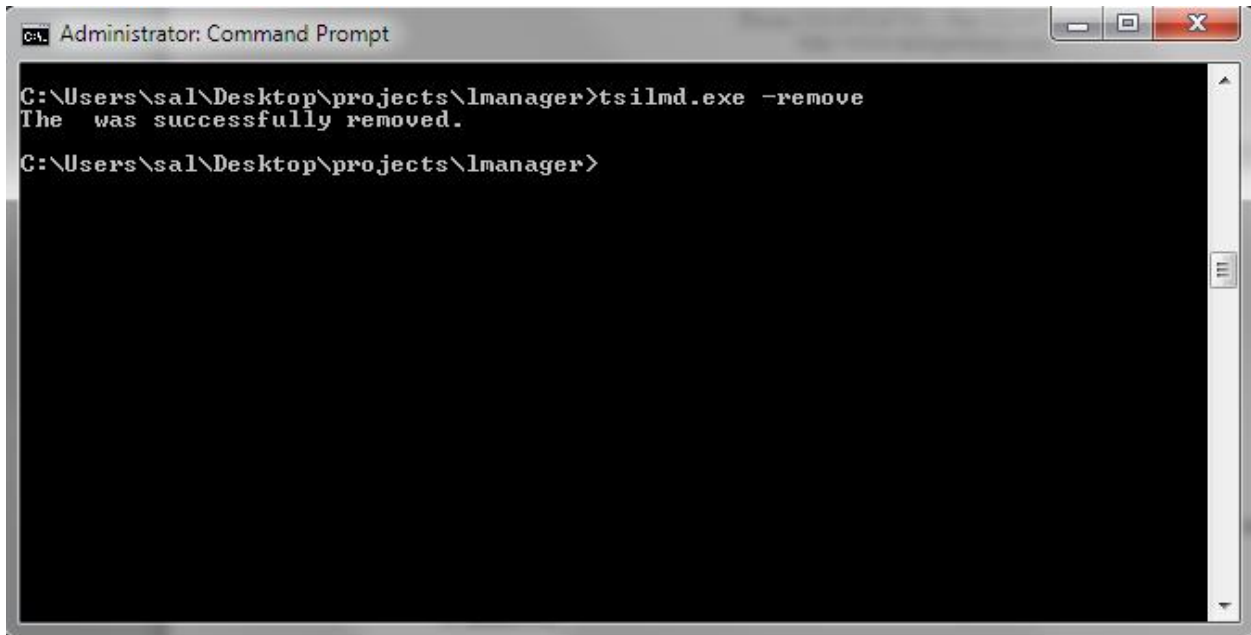


Figure 3
Removing License Manager.

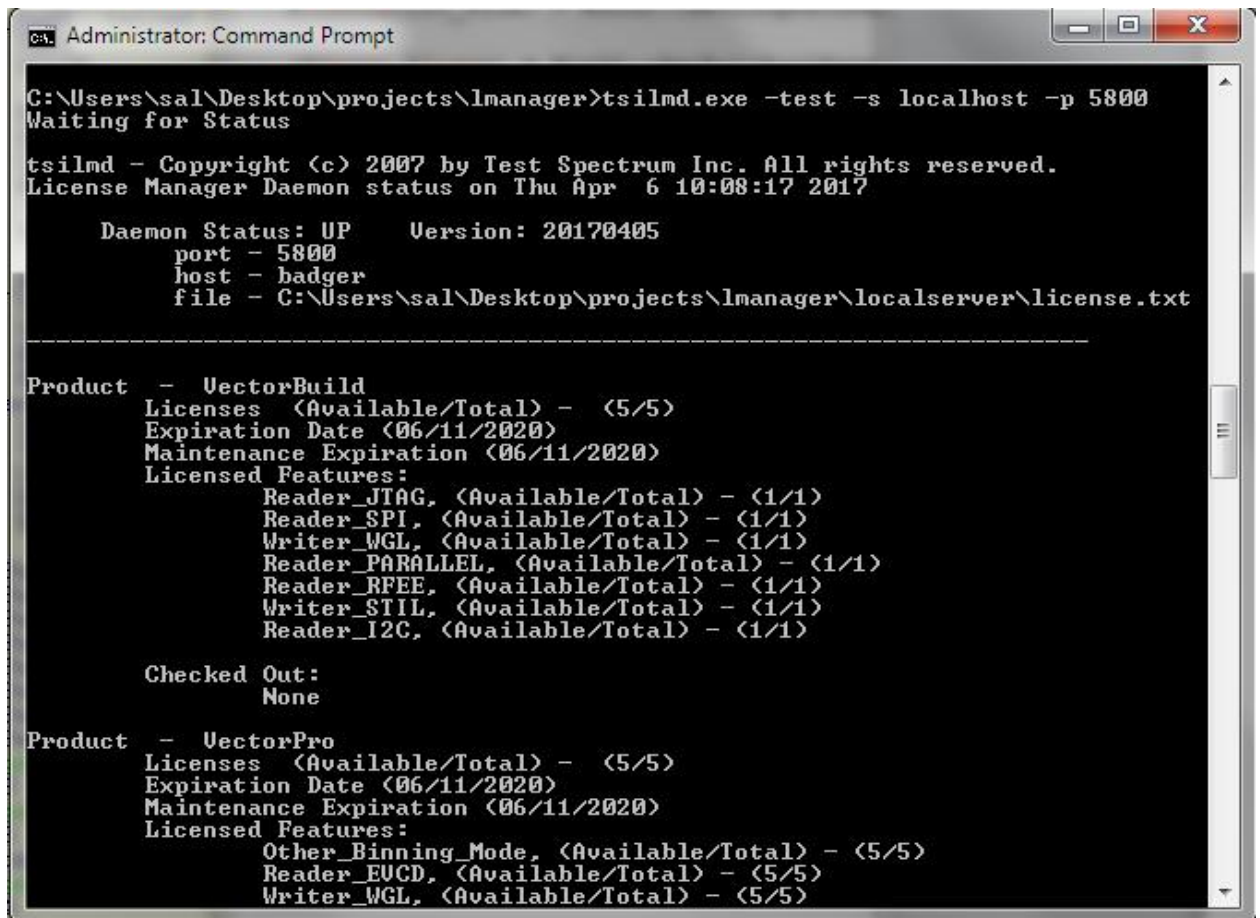
Checking Status

A command line option is available to check the status of the **License Manager**, after it has been installed and started as a service. The following instructions identify how to do this.

Windows

- Open a command window and navigate to the directory that the tsilmd.exe file is located.
- Type the following (see Figure 4), where <Server> identifies the name of the server that **License Manager** resides on and <Port> is the port used for communication (both of these should be listed in the license file):

```
C:\TSI_License_Mgr\tsilmd.exe -test -s <Server> -p <Port>
```



```
Administrator: Command Prompt

C:\Users\sai\Desktop\projects\lmanager>tsilmd.exe -test -s localhost -p 5800
Waiting for Status

tsilmd - Copyright (c) 2007 by Test Spectrum Inc. All rights reserved.
License Manager Daemon status on Thu Apr 6 10:08:17 2017

    Daemon Status: UP      Version: 20170405
      port - 5800
      host - badger
      file - C:\Users\sai\Desktop\projects\lmanager\localhostserver\license.txt

-----

Product - VectorBuild
Licenses (Available/Total) - (5/5)
Expiration Date (06/11/2020)
Maintenance Expiration (06/11/2020)
Licensed Features:
  Reader_JTAG, (Available/Total) - (1/1)
  Reader_SPI, (Available/Total) - (1/1)
  Writer_WGL, (Available/Total) - (1/1)
  Reader_PARALLEL, (Available/Total) - (1/1)
  Reader_RFEE, (Available/Total) - (1/1)
  Writer_STIL, (Available/Total) - (1/1)
  Reader_I2C, (Available/Total) - (1/1)

Checked Out:
  None

Product - VectorPro
Licenses (Available/Total) - (5/5)
Expiration Date (06/11/2020)
Maintenance Expiration (06/11/2020)
Licensed Features:
  Other_Binning_Mode, (Available/Total) - (5/5)
  Reader_EUCD, (Available/Total) - (5/5)
  Writer_WGL, (Available/Total) - (5/5)
```

Figure 4
Checking the status of the **License Manager**.

- The output will be the current status of the **License Manager** service along with a listing of the products and available licenses.

License File

Two fields in the license file are changeable by the user, *SERVER* and *PORT*. *SERVER* is the name of the machine that the **License Manager** is running on and *PORT* is the port used to communicate with tools requesting a license. Changing any other fields will render the license unusable. Firewall settings might need to be edited to allow communication over the selected port.

Description

One license file is required for the **License Manager**. Shown below is an example of the contents of a floating license for the MyLicenseServer machine. Note that node locked licenses do not have the first line (SERVER=...).

```
SERVER=<MyLicenseServer> HOSTID=<0011abfe2411> PORT=<5800> DAEMON=<tsilmd>

PRODUCT=<VectorPro> EXP_DATE=<20081005> MAX_REV=<20081005> COUNT=<1>
HOSTID=<0016cffe2411> KEY=<68174b3b3cddaa34aaa88f94e8001f79>
  SUBPRODUCT=<Reader_VCD> COUNT=<1> KEY=<31fb2fe92f4a3f7bede60aec04e4e20a>
  SUBPRODUCT=<Reader_EVCD> COUNT=<1> KEY=<6086dff431821f1789c5c878a2fd1a79>
  SUBPRODUCT=<Writer_STIL> COUNT=<1> KEY=<e45596347853c409a3c511a217299bdf>
  SUBPRODUCT=<Writer_WGL> COUNT=<1> KEY=<fe546df86d6f1589be7d71a22bf64207>
ENDPRODUCT
PRODUCT=<VectorPort> EXP_DATE=<20081005> MAX_REV=<20081005> COUNT=<1>
HOSTID=<0016cffe2411> KEY=<b0e578277391fff192dc74ec344a26f00>
  SUBPRODUCT=<Reader_STIL> COUNT=<1> KEY=<3f3d01e371c01c6c85d700f631b02522>
  SUBPRODUCT=<Reader_WGL> COUNT=<1> KEY=<16df2a5175ea9ffd960e0e0db63b178d>
  SUBPRODUCT=<Writer_Image> COUNT=<1> KEY=<3b7169bec6ce0179973183ed1539d1bb>
  SUBPRODUCT=<Writer_IGXL> COUNT=<1> KEY=<dd573b1320054f5fecec72521c337b81>
ENDPRODUCT
```

HOSTID is the MAC or Ethernet address of the server and DAEMON is the name of the **License Manager** service running in Windows. Next are the product blocks. In this example, both VectorPro and VectorPort are being licensed as shown in the PRODUCT field. Both have expiration dates of October 5, 2008 along with maximum revision numbers of 2008.10.05 as listed in the EXP_DATE and MAX_REV fields respectively. Only one license is available for VectorPro and one for VectorPort, as shown in the COUNT field. HOSTID is again the MAC or Ethernet address of the server (or if this is a node locked license, the MAC or Ethernet address of the node) and KEY is a key used to validate the license.

Each product contains multiple SUBPRODUCT fields. These are the readers and writers available for use. Each reader and writer shown has a single license as noted by the COUNT field, and KEY once again validates this portion of the license.

Firewall Exception Handling

Windows XP has a built in firewall which if enabled, will block communication over the port selected in the license file. The following steps describe how to disable the selected port.

- Open the *Windows Firewall* window by clicking on the *Start Menu -> Control Panel -> Windows Firewall*. See Figure 2.



Figure 2
Windows XP Firewall window.

- If the firewall is turned off, then no exception allowance needs to be made. Otherwise, make sure the *Don't allow exceptions* check box is unchecked and then select the *Exceptions* tab. See Figure 3 for the resulting window.

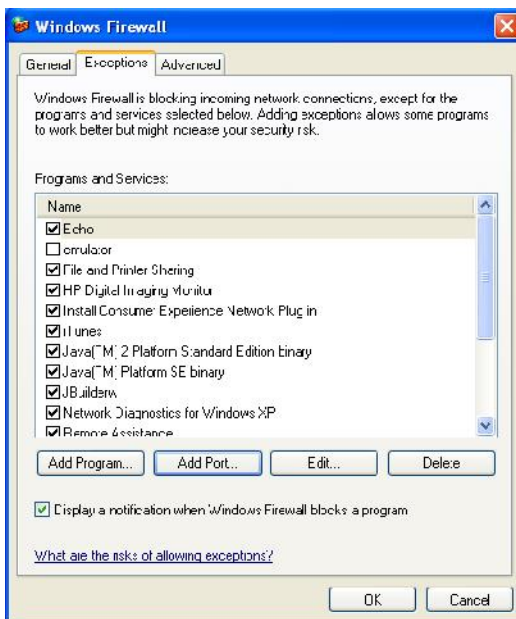


Figure 3
Exceptions tab in the Windows Firewall.

- Click the **Add Port** button and enter the desired port number along with a name to describe this exception. Make sure the *TCP* radio button is selected and then click **OK**. See Figure 4.

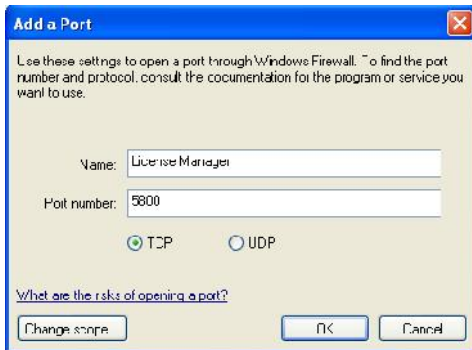


Figure 4
Adding port 5800 to a TCP exception called License Manager.

- Click **OK** to close the *Windows Firewall* window.

Firewall products by other manufactures might also need to have their settings modified. Consult the necessary documentation to accomplish this.

FAQ

Is there a particular directory that I need to put the tsilmd.exe file in?

No. Choose the directory that works best for you.

Do I need to restart the Test Spectrum License Manager Daemon every time I reboot?

No. Once the **License Manager** has been installed, it will be restarted every time Windows is restarted.

Do I have to log into Windows in order for the License Manager to start?

No. Once the **License Manager** has been installed, it will be restarted every time Windows is restarted, regardless of whether a user is logged in or not.

Is there a way to check the current status?

Yes. Once the **License Manager** has been installed and the service started, use the `-test` option. See the section on Checking Status for more information.

Glossary

Service

An application that runs in the background and starts whenever Windows is started.