

# TPC Desktop Series

## Licensing Guide

8/16

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PO Box 105  
239 NOPAL STREET  
FLORENCE, OR 97439  
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**Sales: (800) 460-3002**

**Email: [sales@traverse-pc.com](mailto:sales@traverse-pc.com)**

**Technical Support: (541) 248-5147**

**Email: [tech@traverse-pc.com](mailto:tech@traverse-pc.com)**

**<http://www.traverse-pc.com>**

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## Typography

We will be using the following typography to distinguish items in the text:

- [Enter]            Brackets indicate keys on the keyboard.
- flexibility*        Italics are used to highlight words for more emphasis.
- "Lot 2"            Numbers or text that you enter.

## System Requirements

This version of TPC Desktop requires Windows 10 / 8.1 / 8 / 7 / Vista and Internet Explorer Version 6.0 or later. We recommend you have 2 GB of RAM 32-bit OS) 4 GB RAM (64-bit OS) and 60 MB of free hard disk space in which to install the program. **An internet connection is required for program validation.**

## Important Licensing Information

Our License Agreement allows you to use TPC on only one computer at a time unless you purchase additional licenses. We do offer one courtesy installation for an additional home or field computer, *but not for a second user* and assuming that the two programs are not being used at the same time. To request a courtesy license contact Traverse PC.

# Licensing Requirements

TPC Desktop 2011 (TPC) requires a valid license to run. A license needs to be validated before it will successfully run TPC. Once validated, it must be available each time TPC is run and must remain available while TPC is running.

## License Types

**Trial License** –allows a copy of TPC to run for a certain number of days following the first execution. Most trials are 30 days. Trial licenses list the remaining days along with the license type.

**Stand-Alone License** –this is typical of a non-network or small home network installation. A stand-alone license typically allows you to install and run one copy of TPC. All licensing is done by the application on the computer it is installed on.

**Network License** – TPC can be installed either on a network server or individual network workstations (clients). Either way, the network licenses are managed by a Network License Server (NLS).

**Commuter License** – if TPC is installed on a network client that will be disconnected from the network under which the license is maintained, the client can request a Commuter License which fulfills the licensing requirements while the client is disconnected from the network. Commuter licenses are checked out and checked in.

**Grace License** – a grace license is granted when a NLS is not on-line. TPC will run for a short time period, usually 7 days, while the NLS is being restored. It allows for un-interrupted license fulfillment in the case of a network failure.

## Persistent License Data

Licenses require persistent data that resides on the licensed computer or NLS. It retains information about the license and manages the users and clients accessing the license.

In the case of a network license, the persistent data may limit the number of users that can run the application concurrently.

Persistent license data is found in the `lservrc` file. It is an encrypted ASCII text file. It contains the edition and version of TPC licensed and can contain more than one license.

## Locking Criteria and Data

Licenses are tied to **Locking Criteria**, which when combined, generate the unique **Locking Data** or *fingerprnt* for a particular computer. As part of the licensing process, you may be asked to provide the *Locking Data* for a particular network license server or client.

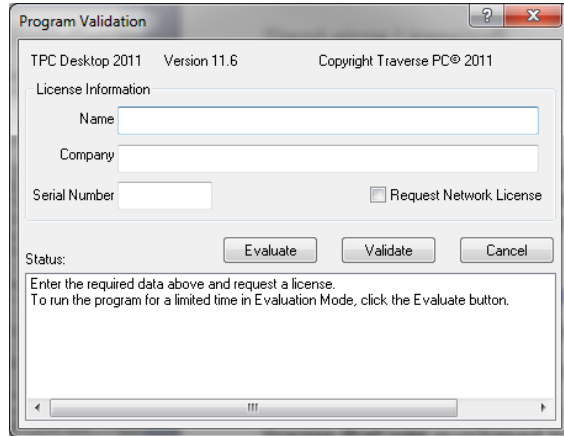
# Trial License

TPC installs with a Trial License, usually 30 days, in which you can run TPC in Evaluation Mode. At the end of the trial period you will no longer be able to run TPC without purchasing a regular license.

## Running a Trial License

To run a trial license, choose **Evaluate** in the **Program Validation** dialog.

TPC will display the number of days remaining on the Trial License in the **About** dialog and in the **License** panel of the Task View.



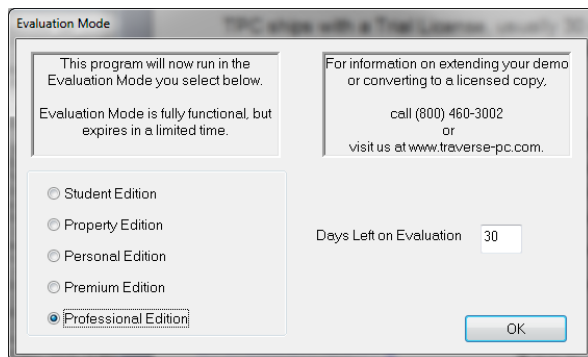
## Converting a Trial License

A Trial License can be converted to a normal license at any time by validating with a purchased serial number and installation key.

## Choose an Edition

In Evaluation Mode, you can choose which Edition of TPC you want to run.

Each edition displays its own set of features, but they all use the same survey file. So you can start a test survey in the Personal Edition then evaluate the Premium Edition using the same survey file.



## Evaluation Mode

As a general rule, the Evaluation Mode includes all the features of a regular licensed copy of TPC. Some restrictions related to printing and file size apply.

# Stand-alone Licensing

Each installed copy of TPC contains the necessary code to generate a stand-alone license. This license validates the installed copy for a particular licensed user and licensed computer. Once generated, the license can not be used to validate any other user or computer.

## Anatomy of a Stand-alone License

Stand-Alone licensing consists of the following parts.

**Serial number** – each copy of TPC ships with a serial number which uniquely identifies it.

**Installation key** – each copy of TPC ships with an installation key. This code ties the license that was purchased to the serial number, licensee and computer the license is installed on. To validate a license, the installation key is transmitted over the internet, along with the lock code, to a cloud based license server. The license file is returned. Installation keys come in a long for (01424AE483ED0D423AB7C2521E0EC25078) and a short form (URJ-244-NKJ).

**Authorization code** – depending on the license you purchased, your installation key also acts as an authorization code, enforcing any restrictions on the license.

**Lock code** – the lock code is generated by the computer being licensed and is transmitted, along with the installation key to generate a license.

**License server** – TPC generates a license for the specific computer you install it on by sending the serial number, installation key and lock code to a license server on the internet. The license server checks to make sure you are authorized to install TPC and issues you a license. It all happens behind the scenes using your internet connection.

**License file** – information about the license is stored in an ASCII based license file named lservrc (no extension). This file must be present in the application folder for TPC to run.

**Trial license** – if you have not yet purchased a serial number and installation key, you can run TPC for a trial period in Evaluation Mode. A trial license can be converted to a standalone license by entering a purchased serial number and installation key.

## Downloading TPC

If you download TPC for installation, the serial number and installation key will be e-mailed to you. If you have an installation CD, the serial number and installation key will be included with the CD.

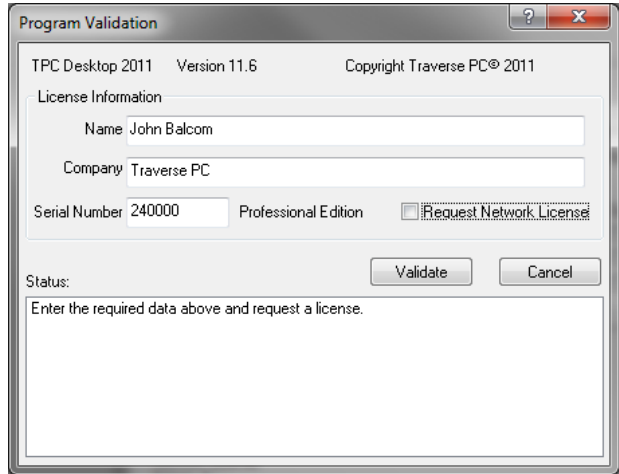
## Generating a Stand-alone License

Any time you run TPC prior to validating it, you will see the **Program Validation** dialog.

1. Enter the required user name, company and serial number and press the **Validate** button.

► **Hint:**

- **Do not turn on the Request Network License option** on a stand-alone computer. This option is only used when you have purchased a network license for multiple copies of TPC.
2. Enter your installation key in the pop-up dialog and choose **OK**.
  3. TPC will use your active internet connection to transmit the information to the license server and install your license.



## License Validation

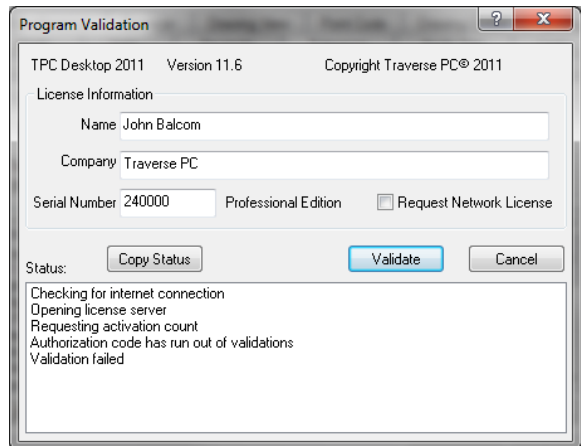
Each time you run TPC, it checks for a valid license and displays the license information in several places. As you run TPC, it will periodically re-check the license in the background.

If a license can not be validated, TPC will not run.

## License Restrictions

Your license may include restrictions that limit the number of computers it can validate TPC on, the expiration date, the program features and so on.

In the example shown here, an attempt was made to re-use a serial number and installation key on a second computer. TPC requested an activation count for the license and discovered that it had a limited number of validations, all of which have already been used. As such, the validation failed.



# Network Licensing

Any network installation of TPC can request a network license, which allows a certain number of concurrent licenses to be run. As the network administrator, you decide whether to install and maintain one copy of TPC on a network server or install TPC on individual network clients. Either way, the network manages the licenses used by each client running TPC.

## Anatomy of a Network License

**Network License Server (NLS)** - TPC manages network licenses on a network license server (NLS). TPC includes a separate setup program that installs the NLS on the network server of your choice. See Network License Server Setup.

**Network Application Server** – TPC can be installed on any network application / file server. Clients that are always connected to the network can create a shortcut to this installation. Keeping just this one installation current will keep TPC current on the entire network.

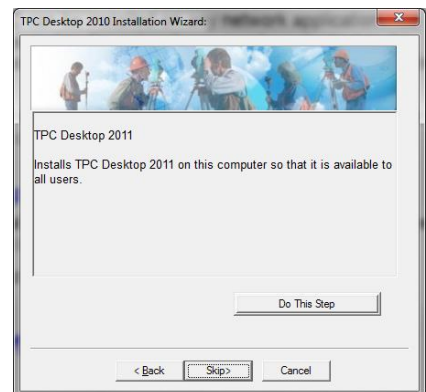
**Client Installation** – if desired, TPC can be also be installed locally on any network client. When the client runs TPC, it will be running its own local copy of TPC. However, the license will still be provided by the NLS.

**Client Settings** – a user can customize TPC to look and feel the way they want. These settings are stored on the client computer, in the user's registry settings.

**Program Data** – a user can store program data locally or on the network. TPC provides primary and secondary (optional) locations for survey data (project files) and program data (blocks, templates, spelling dictionary, etc). All data can easily be directed to any folder with read/write privileges.

## Installing TPC on a Network Application Server

1. Choose the server you want to install TPC on and run the **Setup.exe** program from the Installation CD or let the CD auto-run.
2. Skip the welcome screen. Do NOT choose [x] Show Network Install options.
3. At the TPC Desktop 2011 screen, choose **Do This Step**. Follow the install wizard to install TPC in the folder of your choice.



## Network License Server Setup

1. Choose a network server to be the Network License Server (NLS). This server needs to be visible to all clients that will be running TPC.

## Network Licensing

2. Insert the TPC Installation CD and run **\SentinelRMS\Server\Setup\Setup.exe**. You must have administrative privileges.
3. TPC installs the NLS in the following folder **\Program Files\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\WinNT**.
4. Clients communicate with the NLS on port 5093. You will want to enable this port in your firewall.

Later on, you will be asked to copy the persistent license file (lserverc) to this folder.

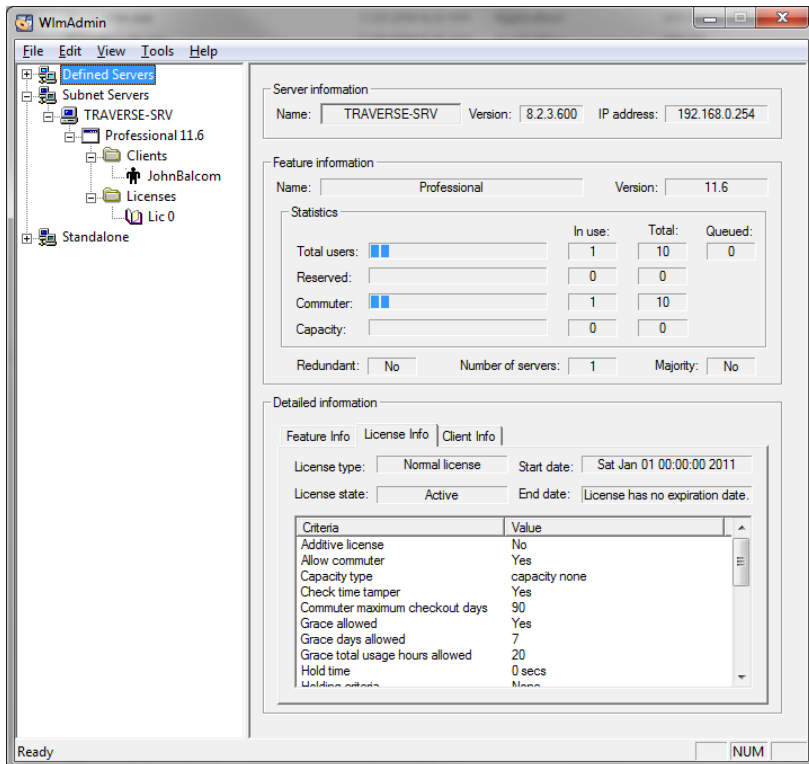
## Running the Network License Server

Copy the **\SentinelRMS\Tools** folder from the Installation CD to any location on the network from which you wish to manage the NLS. This can be your own workstation or a network application / file server.

Create a shortcut to **\SentinelRMS\Tools\WimAdmin.exe** and run it.

This is the application you will use to manage the network licenses.

It lists each client that is currently using a network license, each commuter license that has been checked out and how many licenses are available for future use.





## Creating the Network License File

The Network License Server (NLS) requires a persistent license file named **Iservrc** in order to serve the network licenses. It must be available in the same folder (NLS folder) that the license server is installed in (default: **\Program Files\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\WinNT**).

You may be asked to provide locking data from which your license file will be generated. To provide the locking data, open the **\SentinelRMS\Tools** folder you copied from the TPC Installation CD and run the **wechoid.exe** program.

The Locking Criteria associated with your network license will be provided to you.

Select the appropriate criteria in this screen and return the Locking Data (Selector and Code) to Traverse PC. Once the locking data has been received, you will be issued a license file (Iservrc) which you will copy to the NLS folder. The license file you receive will be tied to the NLS that generated the locking data.

Multiple license servers can be used to create redundancy within the network. You can also request a **Grace License** time period in which clients can continue to run TPC in the event that the NLS is unavailable.

The screenshot shows the Wechoid dialog box with the following settings:

Locking Criteria	Value
<input type="checkbox"/> IP Address	192.168.0.102
<input type="checkbox"/> ID PROM	
<input checked="" type="checkbox"/> Disk ID	0x813E2715
<input checked="" type="checkbox"/> Host Name	C40
<input checked="" type="checkbox"/> Ethernet Address	00-26-2D-FC-F2-06
<input type="checkbox"/> Computer ID	
<input type="checkbox"/> Hard Disk Serial	DC01P01008SE008A7996
<input type="checkbox"/> Standard Custom	
<input type="checkbox"/> Processor ID	
<input type="checkbox"/> Extended Custom	

Locking Data	
<input checked="" type="radio"/> New Style <input type="radio"/> Old Style	
Selector	Code
0x1C	*1VF HP8J XRT6 4LGY

OK

## Updating the Network License File

If you are asked to update the license file, follow these steps:

1. Run **WlmAdmin.exe** and choose Tools, Service Loader, Remove.
2. Traverse PC will ask you to either replace the existing **Iservrc** file with the updated **Iservrc** file or add the contents of the new **Iservrc** file to the existing **Iservrc** file.
3. Run **WlmAdmin.exe** and choose Tools, Service Loader, Add.

## Adding a New License to an Existing License Server

You may need to add a new license to an existing license server. For example, you may need to add more seats to your existing license or you may need to add a license for a newer version of Traverse PC. There are two ways to accomplish this:

To add a license to an existing server from a string (usually a text string in an email beginning with \*B and ending with exclusive):

1. Run **WlmAdmin.exe**
2. Right-click the appropriate server
3. Choose **Add Feature | From a String | To Server and its File**
4. Copy and paste the string in

Your new license should be added. You will need to repeat the process for each license that needs to be added.

To add a license to an existing server from a text file:

1. Run **WlmAdmin.exe**
2. Right-click the appropriate server
3. Choose **Add Feature | From a File | To Server and its File**
4. Browse to the text file and open it

Your new license should be added. This method can be used to add multiple licenses at the same time.

## Installing TPC Desktop on a Network

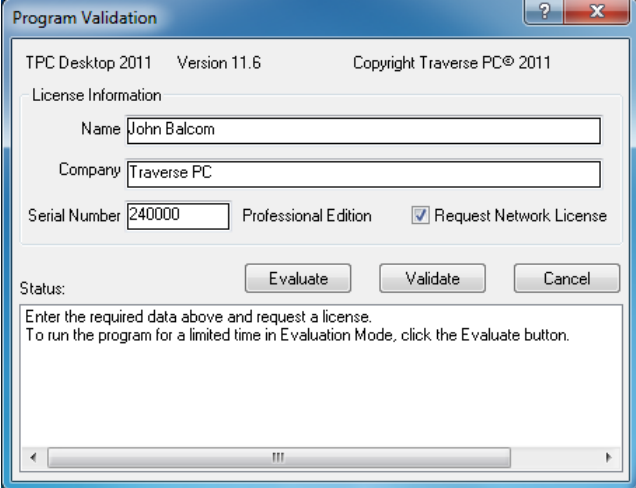
You can install TPC Desktop on a network application server (NAS) and create shortcuts to it on the individual clients or install TPC Desktop on each individual network client. The validation is the same regardless of which option you choose.

We suggest you install TPC on a NAS and create shortcuts to the NAS on each network client. Traverse PC makes monthly updates available for TPC Desktop. This method lets you provide the updates to your entire network just by updating the NAS.

## Validating Network Clients

The first time TPC runs on a network client, it needs to be directed to seek a network license.

1. Enter the **Name, Company** and **Serial Number** (of the network license).
2. Turn on **[x] Request Network License**.
3. Choose **Validate**. TPC displays a Validation Key dialog. If you were provided a network installation key, enter it. If a network key was not provided, leave it blank. Choose **OK**.



Program Validation

TPC Desktop 2011 Version 11.6 Copyright Traverse PC© 2011

License Information

Name:

Company:

Serial Number:  Professional Edition  Request Network License

Status:

Enter the required data above and request a license.  
To run the program for a limited time in Evaluation Mode, click the Evaluate button.

Note: Network installation keys are used to identify multiple network licenses on a single NLS. A typical network installation key looks like this, “USFS REGION 1” where both the organization and location are identified. The same NLS could then service a second license for “USFS REGION 2” and so on.

TPC Desktop (client) will try to locate the license server on your network via a broadcast to port 5093. If the NLS responds, TPC Desktop will request an available license from it.

Once a network license has been successfully granted, TPC no longer needs to display the **Program Validation** dialog each time it starts. It simply requests a network license in the background each time it runs.

If your client does not successfully validate, check the Troubleshooting Licenses chapter at the end of this guide.

# Commuter Licenses

A commuter license is checked out from the Network License Server (NLS) to a network client for the number of days specified in the network license. Once checked out, the client that checked it out can run TPC when it is disconnected from the network.

A client that will be disconnected from the network must have its own copy of TPC installed on the client. This can be installed from the same Installation CD used to install TPC on the network application server.

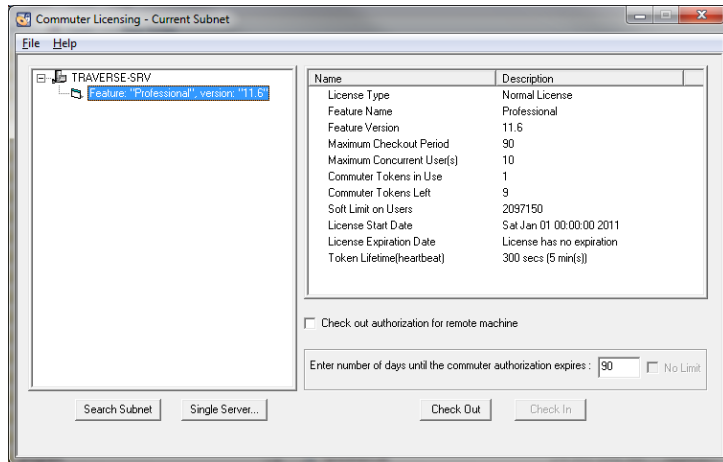
## Checking Out a Commuter License

Before disconnecting the client from the network, open the application folder and run **WCommute.exe**.

Choose **Search Subnet** and wait for the license server to be listed.

Select the license you want and choose **Check Out**.

That's all there is to it. You just checked out a commuter license.



## Running a Commuter License

Disconnect the client from the computer and run TPC. TPC will indicate that it is running a commuter license and display the number of days remaining on it.

The number of days available on the commuter license will continue to decrease until it reaches zero, at which time the commuter license will no longer run.

While your client is disconnected, the NLS will hold the license for you, during which time the license will not be available to anyone else on the network. If you started with a 10-user network license, the commuter license you checked out will reduce the number of available licenses to 9.

## Checking In a Commuter License

When you return to the network, connect the client to the network, open the application folder and run **WCommute.exe**.

This time, choose **Check In**. Your commuter license will be returned to the NLS.

# Troubleshooting Licenses

If TPC is unable to validate a license, consider the following.

## Error: Failed to figure out the license server correctly

This typically happens when a stand-alone license user turns on the option to Request Network License when validating the program. Stand-alone licenses do not use a network license server. This option should only be turned on when you have purchased a network license for multiple computers.

If you get this error when validating a network client, please refer to **Network License Server (NLS) Communication** and **Setting Environment Variables (Network Licenses)** below.

## Validation Errors

If you receive any error during validation that you are not able to resolve,

1. In the Program Validation dialog box, choose **Copy Status**, then paste (Ctrl + V) the information into your email to technical support ( [tech@traverse-pc.com](mailto:tech@traverse-pc.com) )

Traverse PC Technical Support will contact you for more information (if needed) or will provide a procedure to resolve the issue.

## Manual Validation

Traverse PC Technical Support may inform you that you will need to validate your program manually. This is a multi-step process that is rarely needed and you will be provided with the required steps if it is.

Here is the manual validation process:

1. Download and run this application [www.traverse-pc.com/ftp/public/wechoid.exe](http://www.traverse-pc.com/ftp/public/wechoid.exe)
2. Remove the checks from all boxes EXCEPT the Disk ID' box.
3. Send an email to [tech@traverse-pc.com](mailto:tech@traverse-pc.com) with the subject line "Manual Validation"
4. Copy in the 'Locking Data' 'Selector' (should be 0x4) and 'Code' from the bottom of the Wechoid application window (you can select it with your mouse then use Ctrl + C to copy it) and paste into your e-mail (you can use Ctrl + V to paste). **Please - No screen captures!**
5. Include your program Serial Number and the Installation Key you are using to validate your program

## Troubleshooting Licenses

Traverse PC will create the license for you and send it back to you with the following instructions:

Here is the license file for Serial Number: **Your Serial Number**

Installation Key: **Your Installation Key**

### The License String for Your Computer

1. Please select and copy (Ctrl + C) this license text, starting with \*B and ending with exclusive.
2. Open the lservrc.dat file in the default folder shown below with Notepad.

**NOTE: If you changed the Program Data path when you started the program, you will edit the lservrc.dat file in the location you changed it to.**

3. Paste (Ctrl + V) this license at the bottom of the file and save the file.

Once this license is added, TPC Desktop 2013 will be validated.

Windows 8, 7 or Vista Default License Path: C:\ProgramData\Traverse PC\TPC Desktop 2013\lservrc.dat

## Network License Server (NLS) Communication

Clients communicate with the NLS on port 5093. You will want to enable this port in your firewall.

## Setting Environment Variables (Network Licenses)

In a network server environment, there may be a problem finding the license server. If so, you can use environment variables to tell the program where the license server is located.

1. Open **System** in the Windows Control Panel
2. Click the **Advanced** tab
3. Click **Environment Variables**
4. In the **System Variable** area, click **New**

The Variable Name can be either LSHOST or LSFORCEHOST.

The Variable Value will be the name of the license server or the IP address of the license server. Both of these can be found by running **WlmAdmin.exe** and opening the license server. No-Net tells the program to look for a stand-alone license.

LSHOST tells TPC to look for the server in a specific location as well as on the entire server.

LSFORCEHOST tells TPC to look for the server in only one location.

## Error 88 on a Network License Workstation

Checking commuter license

Error[88] Operating in stand-alone mode using terminal client. This is not allowed by the vendor.

Checking network license

Error[4] Failed to figure out the license server correctly. Set environment variable LSHOST to (colon-separated) name(s) of server(s).

Validation failed

Users started getting this error exactly one month after everything was up and running OK on a 14 seat network license. It was caused when the server was migrated over the weekend and the MAC (Ethernet) Address of the server changed. They have now set a static MAC Address for the Sentinel RMS License Server so the problem should not arise again.