

SST License Manager User's Manual
Issue May, 2024

SST License Manager

(SSTLM™)

User's Manual

Version 10.xx
(Standalone & Server Versions)



Please read the following carefully

SST has a policy of continuing product development: therefore the information contained in this document may be subject to change without notice.

This software and this manual have been developed and checked for correctness and accuracy by SST. However, no warranty, expressed or implied, is made by SST as to the accuracy or functioning of the software.

Security System User's Manual Server V9.xx © September 2023, SST Companies.

All rights reserved. No part of this document may be reproduced, stored in retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of SST Companies

The software programs described in this document are confidential information and proprietary products of SST Companies

For Technical queries, contact

SST Systems, Inc.
5674 Stoneridge Drive, Suite 107
Pleasanton, CA 94588
USA.



Tel: (408) 452-8111
Fax: (408) 452-8388
Email: info@sstusa.com
www.sstusa.com

SST India Pvt. Ltd.
7, Cresant Road
Bangalore – 560 001
India.



Tel: +91-80-40336999
Fax: +91-80-41494967
Email: sstindia@bgl.vsnl.net.in
www.sstindia.com

Table of Contents

1.0 Introduction.....	1
1.1 Installing the Server SST License Manager (SSTLM)	1
1.1.1. Environmental Variables for SST License Manager	1
1.1.2. Open Firewall/Router for SSTLM.....	4
1.1.3. Installing SST License Manager	4
1.1.4 Product Key Generation using SSTLM	4
1.1.5 Installing/Renewing/Repairing the Activation Key (License) using SSTLM.....	5
1.2 Installing the client program	6
1.2.1 Windows 10 or Later	6
1.2.2 Older version of Windows	8
1.2.3 Windows NT 4.0 (Server/Workstation).....	9
1.3 Product Key Generation using Client program.....	9
1.4 Installing the Activation Key using Client program	10
1.5 Renewing/Re-Installing the License using the Client program	11
1.6 Installing Manage License Tool for Remote Administration	11
2.0 Security System Features	12
2.1 Control SSTLM through Config.ini	13
2.2 Analyse Key	15
2.3 Install Key.....	16
2.4 Product Key generation and Activation Key installation	16
2.5 Renewing license	16
2.6 Diagnose License.....	16
2.7 Save Report	17
2.8 Borrow License	17
2.9 Delete License	20
2.10 System Info	20
2.11 Clear.....	20
2.12 Release License.....	20
2.13 View Log File and Clear Log File	20
2.14 Blocking License Access.....	20
2.15 Restrict Users.....	21
2.16 Configuring SST License Manager to listen through a Specific User IP	21
3.0 List of Error messages	23
4.0 Frequently asked Questions.....	27

Appendix A	41
SST License Manager Version 5.0 and 5.1	41
SST License Manager Version 4.31	41
SST License Manager Version 4.3 and earlier than 4.3	41
Appendix B - Installing a virtual network adapter in Windows 10 or Later	42
Appendix C - Details on command line Switches available for SSTLM Installation.....	48
Appendix D – Configuring SSTLM and Client Program(s) with UDP Port Option	50
SST License Manager Installation	50
Client Program Installation	51

SST License Manager

1.0 Introduction

This manual explains how to install either the standalone or server version of SST License Manager (SSTLM), in the Microsoft Windows operating systems. This program is supplied with SST products such as CAEPIPE, CAEPIPE 3D+, checkSTRESS, etc.

Any hardware or software specific requirements are clearly indicated wherever necessary. The manual assumes that you are familiar with the concepts of Windows NT operating system terminology and commands. If you are not, you may need to have your operating system manual available while you read this manual.

Note:

If you are using the old version of SST License Manager (i.e., earlier than version 5.0), then follow the procedure listed in Appendix A to uninstall the same before installing the new version of SST License Manager.

1.1 Installing the Server SST License Manager (SSTLM)

Before installing the SST License Manager and the Client product on any of your computers, please make sure the computer(s) meets the following requirement listed below.

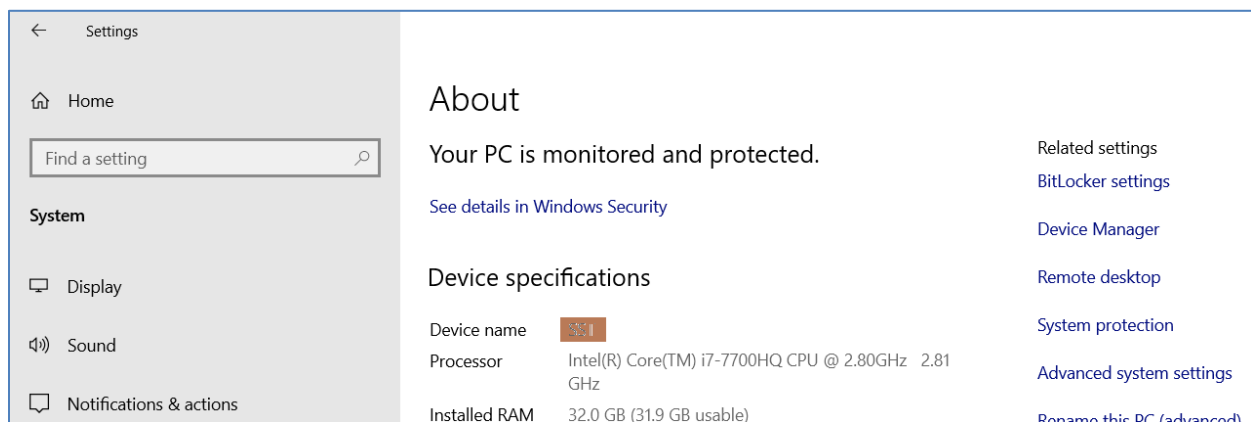
- a. Internet Explorer 5.01 or later and Windows Installer 2.0 or later.
- b. Windows OS (Windows NT 4.0 or later)

1.1.1. Environmental Variables for SST License Manager

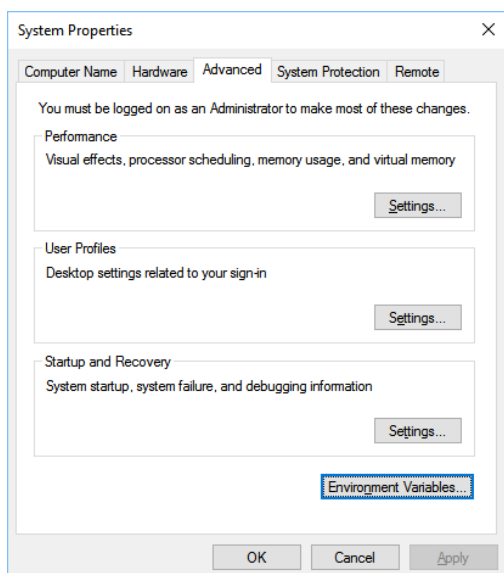
Before proceeding with the installation of SST License Manager, register two (2) Environmental Variables as detailed below when the License Server meets the following.

- a. Have more than one (1) network adapters. Network adapters also includes Virtual adapter configured in the server.
- b. Computer identified for installing SST License Manager is configured to have Dynamic IP through a DHCP server.

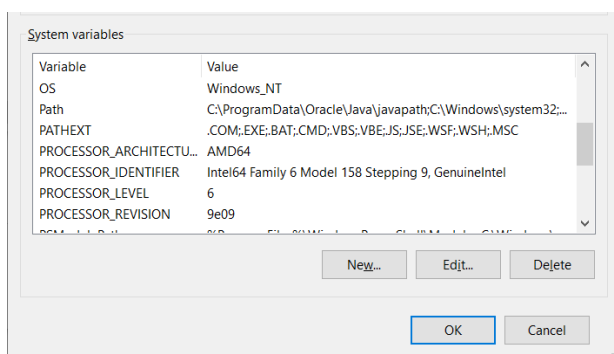
Double click or launch "System" and then select the option "Advanced System Settings"



Press the button “Environmental Variables” as shown in the figure below.



Click the button “New” under the “System Variables” as shown in the figure below.



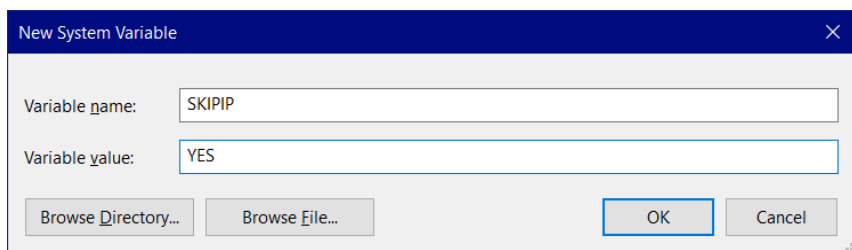
SKIPIP

Setting the Environmental Variable “SKIPIP” with its value as “YES” under System Variables will instruct SST License Manager to skip the validation of IP Address information available in the Activation Key against the IP Address of the Network Card in which the SST License Manager Service is listening through. This will be useful when the SST License Manager is installed in a Laptop where the machine will be used in different Network or in a server with Multiple Network Adapters.

Starting Version 10.00 of SSTLM, Environmental Variable “SKIPIP” with its value as “YES” will be set automatically during the Installation of SSTLM irrespective the number of Network Adapters available in that machine. Hence, the procedure given below to define this variable manually can be skipped.

Type “SKIPIP” under the variable name prompt and key in as “YES” under the value prompt.

Press the button “OK” to complete the setting.



USEIP

Setting this variable will instruct SST License Manager to run the SSTLM Service through a specified IPV4 address of the network adapter when the server has more than one network adapter. This Environmental variable definition can be skipped, if the license server has only one network adapter.

SSTLM Version 9.00 or later has a built-in feature to automatically identify and start the service in a Network Card that is Currently Active and in Use. This feature will be helpful, when there are multiple network cards such as WiFi Card and Wired Card(s).

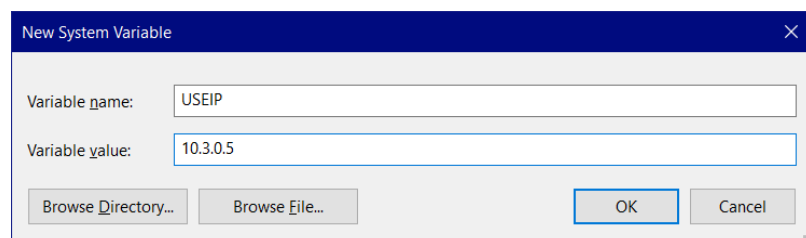
For better clarity, SSTLM will do the following when there are multiple network cards in a machine.

1. SSTLM will identify the Network Card that is Currently Active and in Use and will start the SSTLM Service on that Card.
2. When the Active Network Card is changed (say from WiFi to Wired or from Local Network to VPN), then restarting the SSTLM service after switching the Network or Network Card will make the SSTLM Service to run again on the Current Active Card with the updated data.
3. When NO Network is Active, then SSTLM Service will still start automatically on loop back adapter with IP 127.0.0.1.

In summary, SSTLM Service will work seamlessly (independent of the type of Network the client use or connect to) and will also minimize the usage of USEIP Variable.

However, if a user wishes to force SSTLM to listen through a specific IP Address in a multiple network adapter environment, then they can perform the procedure given below.

Click the button “New” again under the “System Variables” and define another Environmental Variable named “USEIP” with its value as the required IP Address. For example, if you wish to force SSTLM to listen through a Network Adapter that has a Static IP “10.3.0.5”, then enter the value of the variable as shown below.



For SSTLM Version 9.00 or later, USEIP variable can also be defined through “config.ini” file available in the SSTLM installation folder. Please note, when this variable and its value is set through Environmental Variable (as shown above), then its value set through “config.ini” will be ignored.

PORT_TYPE

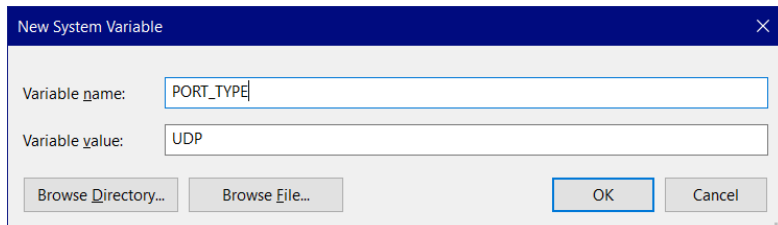
SSTLM relies on TCP for its communication protocol, ensuring reliable and ordered data transmission. However, in scenarios where TCP communications are hindered by VPN restrictions, SSTLM offers the flexibility to adapt by using UDP.

By configuring SSTLM to utilize UDP (User Datagram Protocol), it can seamlessly navigate through VPN blockades, maintaining its crucial communication channels uninterrupted. This adaptability underscores SSTLM's versatility and resilience in diverse networking environments, ensuring seamless operations even under challenging circumstances.

To utilize UDP, define an Environmental Variable “PORT_TYPE” with its value as “UDP” in both SSTLM Server and in the Client computers where the client program such as CAEPIPE, CAEPIPE 3D+, etc., are installed. After setting this variable in SSTLM Server, restart the “SSTLM” Service through Windows Services or restart the computer for the SSTLM to use the revised configuration.

Option to utilize UDP is available for SSTLM Version 10.00 or later and Versions 12.20 or later for Client products such as CAEPIPE, CAEPIPE 3D+, checkSTRESS, HOTclash, Translators, etc.

Click the button “New” again under the “System Variables” and define another Environmental Variable as shown below.



1.1.2. Open Firewall/Router for SSTLM

SST License Manager uses by default TCP Port 12000 for communication with Client program(s). So, ensure that the TCP Port 12000 is open from Firewall/Router for both incoming and outgoing traffics at Server and the Client machine(s).

In case user defined TCP/UDP Port other than 12000 is used for communication then open that port from Firewall for both incoming and outgoing traffics at Server and the Client machine(s)

1.1.3. Installing SST License Manager

Download SSTLM from the website or through the link provided via email. Unzip the product in a temporary folder and run “setup.exe” in an Administrative mode and follow the instructions as they appear on the screen.



Note:

SST License Manager cannot be installed using MSI file. Program will issue an error with code “2869”, if you try to install the product using “Setup.msi”.

1.1.4 Product Key Generation using SSTLM

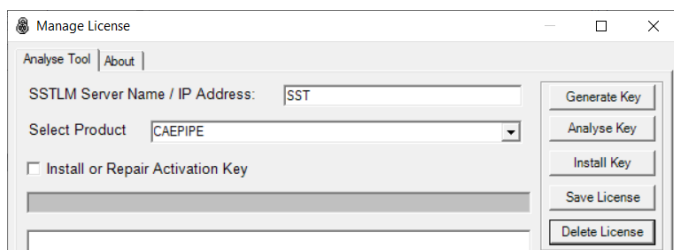
After the successful installation of the product, you will see a shortcut in the Start Menu as “SST License Manager > Manage License”.

To activate the license, you need to generate a “Product Key” for the licensed program. Licensed program can be any of the SST products. As an example, CAEPIPE is selected as a licensed program in the procedure listed below.

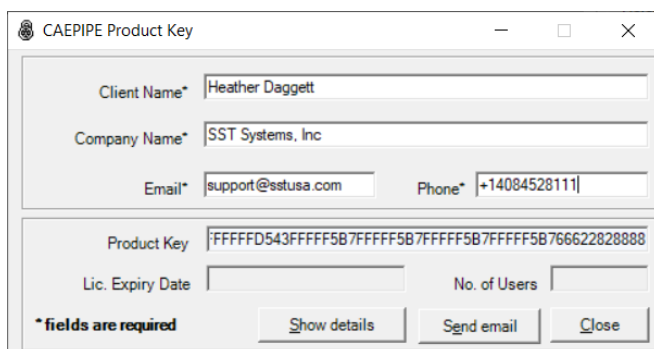
Please note, Product Key can be generated using SSTLM or using the client program such as CAEPIPE, CAEPIPE 3D+, etc. When a user does not have the administrative rights to the SST License Server machine, then the user can generate the Product Key using the client program such as CAEPIPE,

CAEPIPE 3D+ etc. See Section titled “Product Key Generation using Client Program” in this manual for further details.

- a. Launch “Manage License” through Start > SST License Manager.
- b. From the dialog box shown, select the name of the product from the “Select Product” combo box.



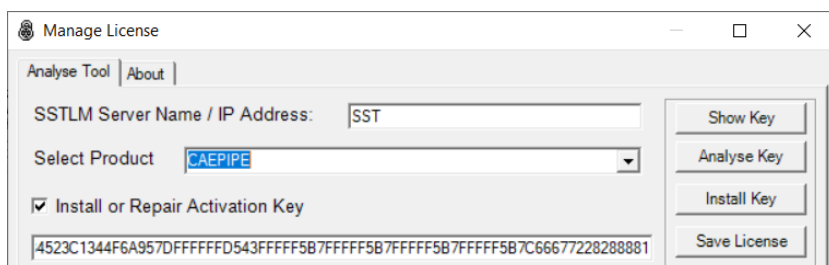
- c. Click the button “Generate Key”. This will generate a Product Key and show a dialog box as shown below. When the Product Key for the selected program is already available in the computer, then the button “Generate Key” will change to “Show Key”.



- d. Fill in the required and press the button “Send email”.
- e. If you do not have access to email, then press the button “Show Details” to store the license details in a text file. Include the text file thus created as an attachment while sending email from the computer where you have access to email.
- f. Upon receipt, SST support will issue the Activation Key (license) to the paid users for the license period or temporary license to the evaluation user.

1.1.5 Installing/Renewing/Repairing the Activation Key (License) using SSTLM

- a. Launch “Manage License” through Start > SST License Manager.
- b. From the dialog box as shown in the figure below, select the name of the product from the “Select Product” combo box.
- c. Select the check box “Install or Repair Activation Key”. This enables the text box below the check box.
- d. Paste the “Activation Key” in that text box and then press the button “Install Key”. On successful installation, the user gets a message as “Installed successfully”.



1.2 Installing the client program

Download the client product from our website or through the link provided via email. Unzip the product in a temporary folder and double-click “setup.exe” and follow the instructions as they appear on the screen.

For accessing the license information, the client computer needs to communicate with the license server (computer where the SSTLM is installed).

Client program(s) use TCP/IP Port 12000 for communication with SSTLM by default. So, ensure that the TCP Port 12000 is open from Firewall/Router for both incoming and outgoing traffics in the client computer(s).

In case user defined TCP Port is set through the variable “USEPORT” via config.ini or Environmental variable with its value as “Port number other than 12000 for SST License Manager Version 9.00 or later, then open that Port from Firewall/Router for both incoming and outgoing traffics in the client computer(s) as well as in the SSTLM Server.

Similarly, in case UDP Port is set through the variable “Port_Type” via config.ini or Environmental variable with its value as “UDP” for SST License Manager Version 10.00 or later, then open the corresponding UDP Port from Firewall/Router for both incoming and outgoing traffics in the client computer(s) as well as in the SSTLM Server.

The communication between the client computer and the server computer can be established by setting an Environmental Variable “SSTLM” in the client computer(s).

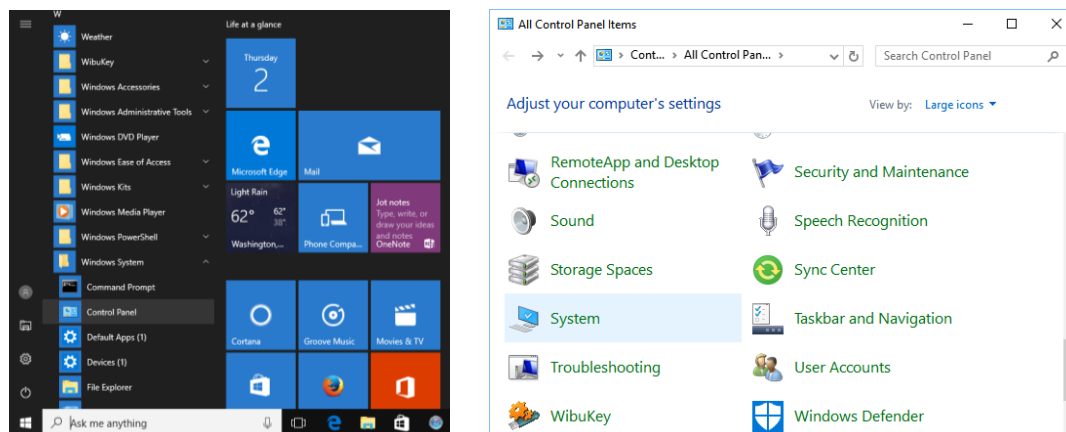
The Environmental Variable is set automatically in the computer where the SSTLM is installed. In other words, if you install the client program in the same computer as where the SST License Manager is installed, then there is no need to set the environmental variable “SSTLM” and the program will set its value as the name of the computer. On the other hand, if the client program is installed in a different machine other than the SSTLM Server, then follow the procedure listed below in Subsection 1.3.1 below for setting the environmental variable under different operating systems.

Please note, the automated procedure for locating the server computer by the client computer for sharing license information is not enabled for the following reasons at this time.

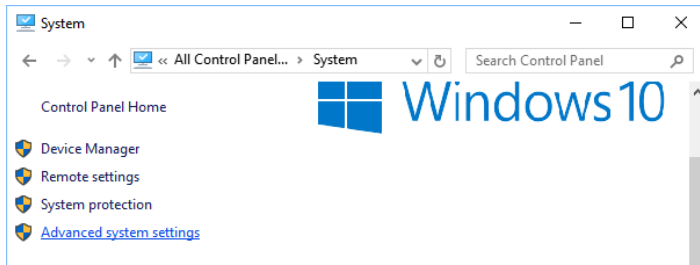
1. SST License Manager is used as a security system for all SST’s products and hence user may have different SSTLM servers in the same network for different products.
2. Multiple SSTLM servers configured for same product with split in number of licenses.
3. Delay in response under large network environment.

1.2.1 Windows 10 or Later

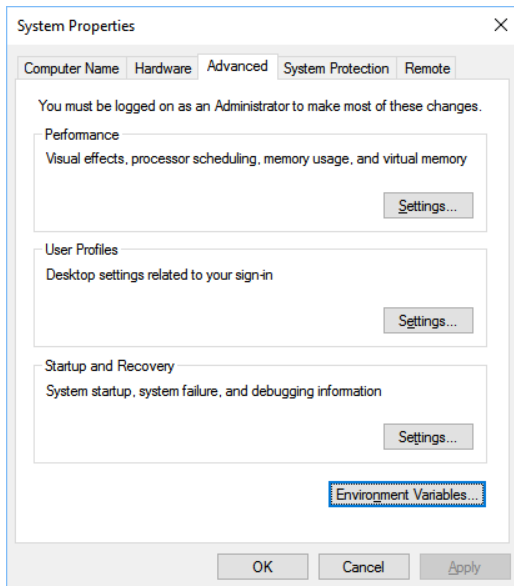
Open Control Panel through Start > Windows System.



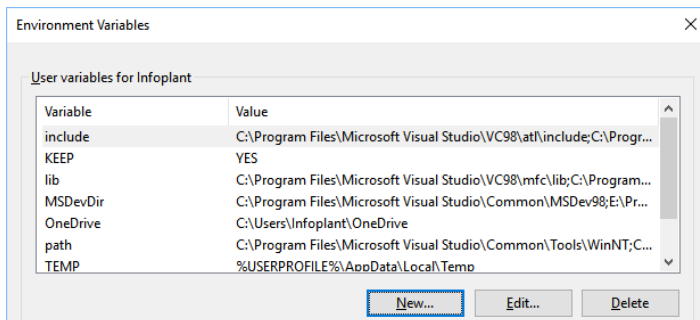
Double click or launch “System” and then select the option “Advanced System Settings”



Press the button “Environmental Variables” as shown in the figure below.

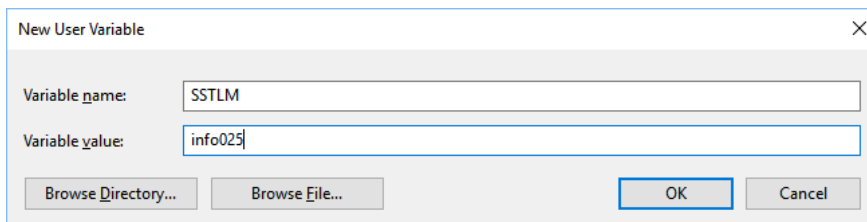


Click the button “New” under the “User Variables” as shown in the figure below.



Type “SSTLM” under the variable name prompt and key in the name or IP Address of the computer where SST License Manager is installed (for e.g., info025 or 192.0.0.4) under the value prompt.

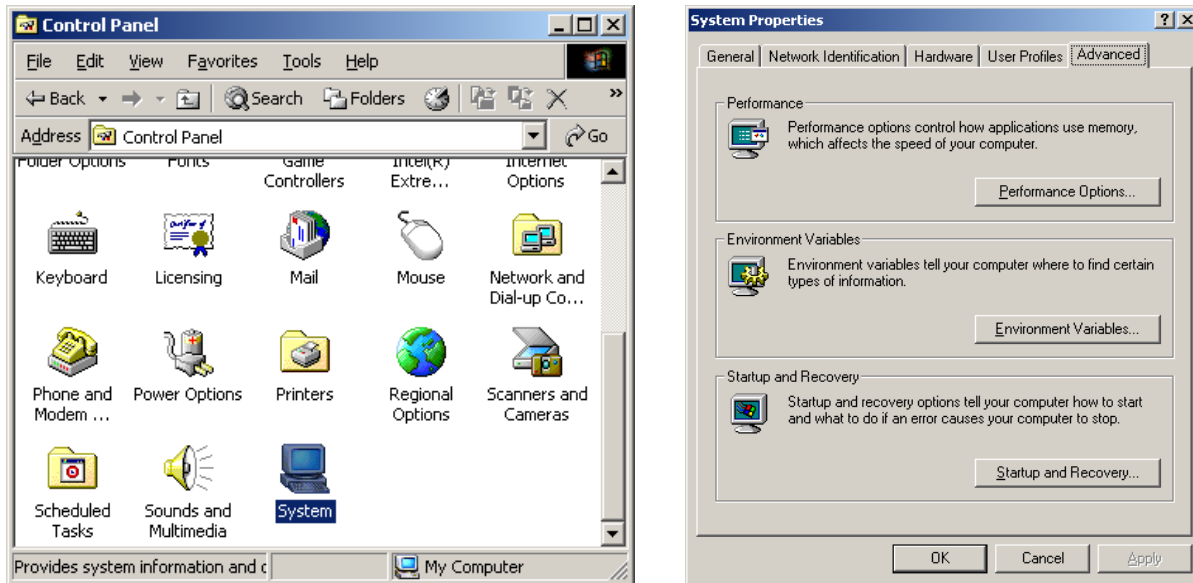
Press the button “OK” to complete the setting.



1.2.2 Older version of Windows

Open the “Control Panel” window through Start Menu > Settings > Control Panel.

Double-click on “SYSTEM” icon as shown in figure left below.

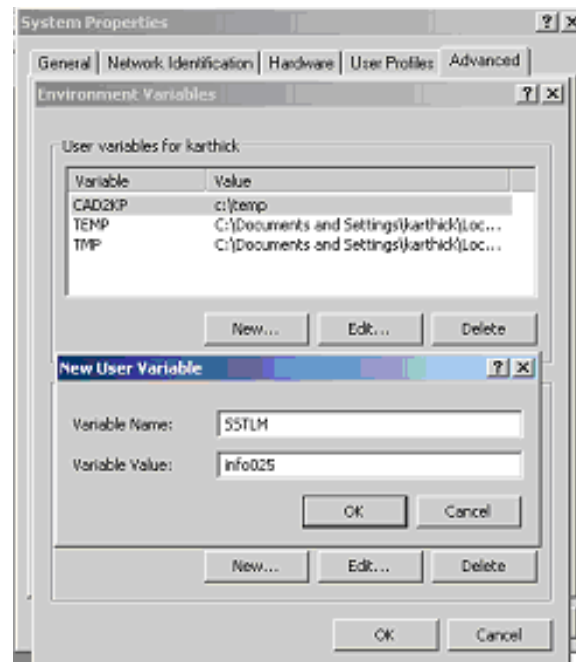


Select the tab “Advanced” and press the button “Environmental Variables” as shown in figure right above.

Click the button “New” under the “User Variables” as shown in the figure below.

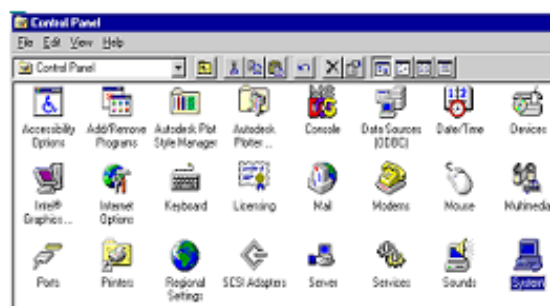
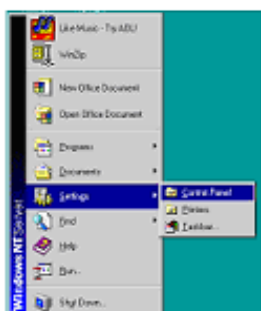
Type “SSTLM” under the variable name prompt and key in the name or IP Address of the computer where SST License Manager is installed (for e.g., info025 or 192.0.0.4) under the value prompt.

Press the button “ok” to complete the setting.



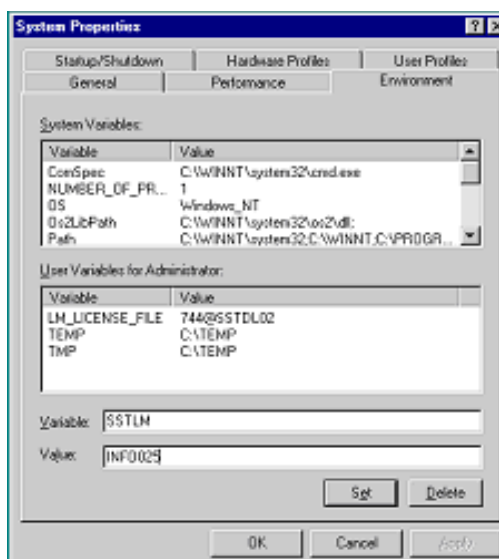
1.2.3 Windows NT 4.0 (Server/Workstation)

Open the “Control Panel” window through Start Menu->Settings->Control Panel as shown in the figure left below.



Double-click on “SYSTEM” icon as shown in figure right above.

From the window, select the tab “Environment”, you will see a window as shown in the figure below.



Type “SSTLM” under the variable name prompt and key in the Name or IP Address of the computer where the SST License Manager is installed (for e.g., info025 or 192.0.0.4) under the value prompt.

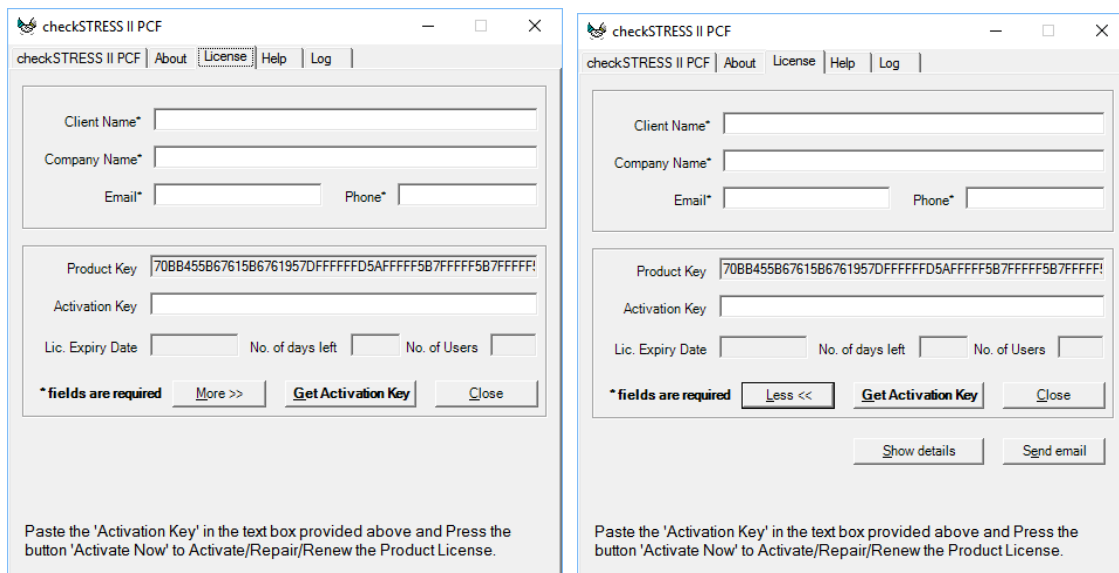
Press the button “set” and then “Ok” to complete the setting.

1.3 Product Key Generation using Client program

After the successful installation of the product, launch the product through the Start menu or by double clicking the program “icon”.

Select the tab “License” as shown below. The client program communicates with the server computer and sends a request to check for the availability of the license to use the product.

The server (SST License Manager) checks for the availability of the license in the windows registry. If not available, the program automatically generates a new Product Key and sends the same back to the client computer as shown in the figure below.



For CAEPIPE and a few other SST's products, the "License" dialog will be shown automatically, if the license (Activation Key) is not configured.

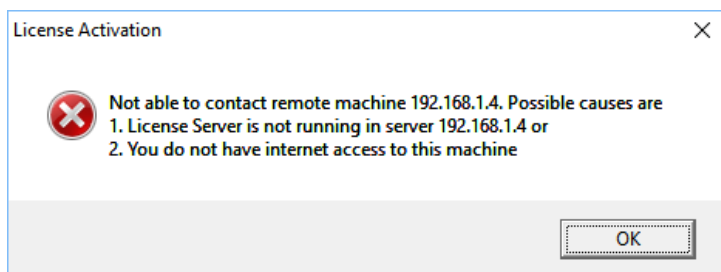
Fill in your details in to the dialogue box and press the button "More >>" to expand the menu and then press the button "Send email".

If you do not have access to email, then press the button "More >>" and then "Show Details" to store the license details in a text file. Include the text file thus created as an attachment while sending email from the computer where you have access to email.

Upon receipt, SST support will issue the Activation Key (license) for evaluation users or full license for the paid users.

Note:

You will receive a similar message as shown below; if you press the button "Get Activation Key" as the automated License issuing process is suspended at this time.

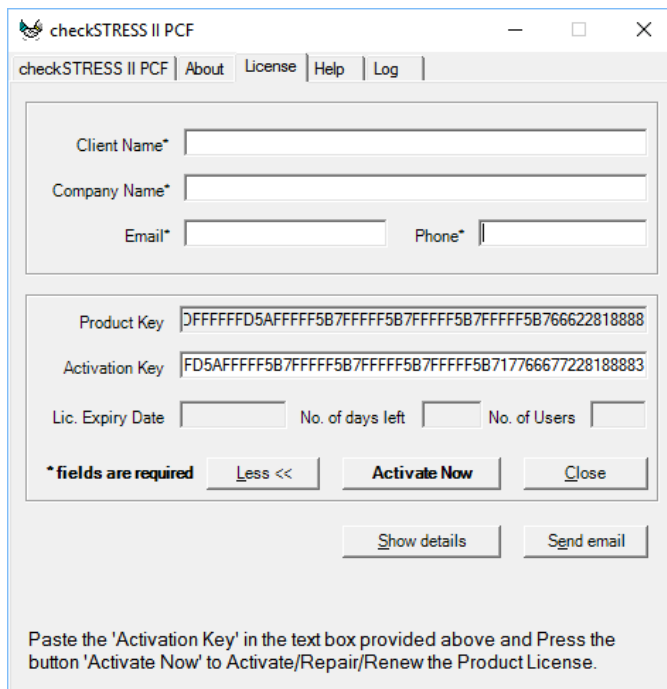


1.4 Installing the Activation Key using Client program

After the receipt of the Activation Key, launch the program again and select the tab "License" as shown above.

As stated above, for CAEPIPE and a few other SST's products, the "License" dialog will be shown automatically, if the license (Activation Key) is not configured.

Enter the Activation Key in the "Activation Key" text box (without any blank spaces) and click the button "Activate Now". Upon successful installation, the user gets a message "Activation Key successfully installed".



1.5 Renewing/Re-Installing the License using the Client program

Launch the program and select the tab “License” as shown in Subsection 1.5 above.

For CAEPIPE, select the option “Layout window > Help > “Renew/Repair Activation Key”.

For a few other SST’s products, select the option “Help > Renew/Repair Activation Key”.

Enter the Activation Key in the “Activation Key” text box (without any blank spaces) and click the button “Activate Now”. Upon successful installation, the user gets a message “Activation Key successfully installed”.

1.6 Installing Manage License Tool for Remote Administration

Important Note: *Manage License Tool is not required to be installed in the computer where the SST License Manager is installed as it is already part of the SST License Manager.*

Manage License Tool is an independent tool that can be installed in any client computer and can be used for Remote Administration of SST License Manager. This tool will be useful for Users who do not have access to the computer where SST License Manager is installed. The details on using this Tool are described in Chapter 2 of this manual.

To install this tool, download the product from our website or through the link provided via email. Unzip the product in a temporary folder and double-click “setup.exe” and follow the instructions as they appear on the screen.

2.0 Security System Features

TCP (Transmission Control Protocol) and UDP (User Datagram Protocol) are two prominent transport layer protocols in computer networking, each with its distinct characteristics and applications.

TCP is a connection-oriented protocol that guarantees reliable and ordered data delivery between communicating endpoints. It achieves this by establishing a connection, acknowledging received data, and retransmitting lost packets, ensuring data integrity and sequencing. Hence, by default, SSTLM relies on TCP for its communication.

In contrast, UDP is a connectionless protocol that provides a lightweight, low-overhead communication mechanism. Unlike TCP, UDP does not establish a connection or perform error checking and retransmission. Instead, it simply sends data packets to the recipient without any guarantee of delivery or order.

So, in scenarios where TCP communications are hindered by VPN restrictions, SSTLM offers the flexibility to adapt. By configuring SSTLM to utilize UDP (User Datagram Protocol), it can seamlessly navigate through VPN blockades, maintaining its crucial communication channels uninterrupted. This adaptability underscores SSTLM's versatility and resilience in diverse networking environments, ensuring seamless operations even under challenging circumstances.

For further details on configuring SSTLM to utilize UDP, see the Section titled "Control SSTL through config.ini" in this document.

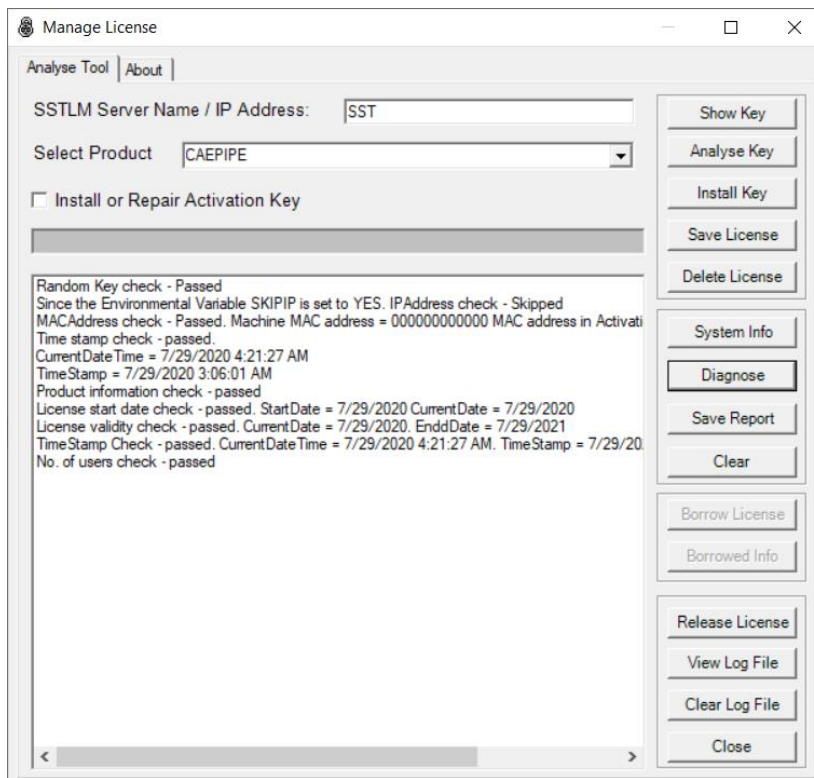
All features of SSTLM can be controlled and managed through the program "ManagerLicense.exe" available in the installation folder of SST License Manager. When a SSTLM is installed in a machine along with the product license(s) then that machine is generally termed as "Server or License Server or Master Server". In large networks, product users may not get login credentials to control the Master Server due to security reasons. In such scenarios, product user or network administrator can install SST License Manager in other machine (Secondary Server) and control the Master Server using this Secondary Server. Read the Sections given below for further details.

A number of new and improved features have been added to:

1. Control SST License Manager through Config.ini
2. Generate Product Key and Install Activation Key
3. Check and renew the license.
4. Diagnose the license problems and generate reports.
5. Save report in a ASCII file.
6. Save Product Key information.
7. Borrow License and
8. Administrate Master Server through a Secondary Server.

Note:

1. Some of the features listed in this chapter are not applicable for the standalone version of SST License Manager.
2. For Remote License Administration, the remote computer should have SST License Manager 6.6 or later installed in that computer.



2.1 Control SSTLM through Config.ini

Many new additional features have been added to control the functionalities of SST License Manger through Config.ini file available in the installation directory of the SSTLM. The functionalities that are newly added as described below are available to SSTLM Version 9.00 or later.

Given below are sample contents from config.ini file.

BlockAccess=No

RestrictUsers=No

BlockBorrow=No

BlockRemoteDelete=Yes

BlockRemoteLogDelete=Yes

Trace=on

AutoRecovery=yes

UsePort=13500

Port_Type=UDP

BackLog=128

Block Access

By setting the keyword "BlockAccess" as "Yes" (i.e., BlockAccess=Yes), an administrator can block users from accessing the product licenses available in that machine for one or more users. For further details, see the Section titled "Blocking License Access" in this manual.

Restrict Users

By setting the keyword “RestrictUsers” as “Yes” (i.e., RestructUsers=Yes), an administrator can allow accessing the product licenses ONLY to the users listed in table for each product. For further details, see the Section titled “Restrict Users” in this manual.

Note:

Both “BlockAccess” and “RestrictUsers” cannot be set as “Yes” at the same time. In other words, either “BlockAccess” or “RestrictUsers” can be set as “Yes” at any point in time.

Block Borrow

By setting the keyword “BlockBorrow” as “Yes” (i.e., BlockBorro=Yes), an administrator can block a remote SSTLM machine from borrowing the product license from the master license server. For further details on Borrowing License, see the Section titled “Borrow License” in this manual.

Block Remote Delete

By setting the keyword “BlockRemoteDelete” as “Yes” (i.e., BlockRemoteDelete =Yes) will prevent a remote SSTLM machine (Secondary Server) from deleting the license from a Master Server.

Block Remote Log Delete

By setting the keyword “BlockRemoteLogDelete” as “Yes” (i.e., BlockRemoteLogDelete =Yes) will prevent a remote SSTLM machine (Secondary Server) from deleting the SSTLM log from a Master Server.

Trace

By setting the keyword “Trace” as “on” (i.e., Trace=On) will instruct SSTLM to report additional data to an ASCII file (Trace.txt) related to the license usage by each user. Turn on this feature only when it is requested by the SSTLM product support team. Generally this feature is used to debug SSTLM product in case of problems.

Auto Recovery

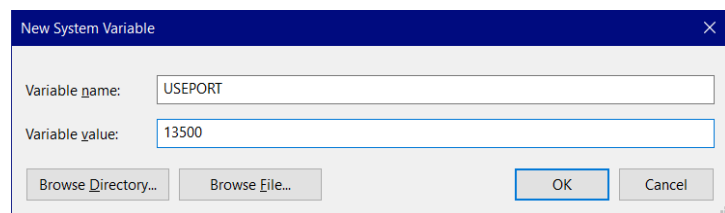
By setting the keyword “AutoRecovery” as “Yes” (i.e., AutoReceovery=Yes) will instruct SSTLM to restart the SSTLM service automatically in case of failures.

Warning:

If the server becomes unstable due to unknown reasons, then turn OFF this Auto Recovery feature or delete this keyword completely from the config.ini file and restart the Server.

UsePort

Setting the keyword “UsePort” with an Integer value will instruct SSTLM to listen through the TCP Port defined. For example, setting the port number as 13500 (i.e., UsePort=13500) will instruct SSTLM to listen through the user defined TCP Port 13500. if UsePort is defined with a Port number other than 12000 then the Client program should be configured to access the product license through the same port number from the client machine(s). This can be done by defining a System Environmental Variable “USEPORT” with its value same as that of the SSTLM user defined TCP Port number set through “UsePort” variable in config.ini.



When this keyword is NOT defined in Config.ini then SSTLM will ONLY listen through the Default TCP Port 12000. Similarly, when the Environmental Variable “USEPORT” is not defined in the Client

machine(s) then the Client program such as CAEPIPE, CAEPIPE 3D+, PD2CAEPIPE, checkSTRESS, etc., will access the license ONLY through the Default TCP Port 12000.

When a user defined TCP Port is specified for communication between SSTLM Master Server and Client program through Client Machine then ensure that both incoming and outgoing traffics from Server Machine as well as the Client Machine are NOT blocked using Firewalls (Hardware / Software).

Warning:

Older version of client programs such as CAEPIPE Version 12.00 or earlier, CAEPIPE 3D+ Version 12.00 or earlier, checkSTRESS Version 11.00 or earlier, etc. do not have an option to listen through a user defined port. In such cases, users will receive an error message as “SSTLM is not running in Server” even when the UsePort is defined with SSTLM and Client Programs.

Port_Type

Setting the keyword “Port_Type” with its value as “UDP” will instruct SSTLM to listen through the UDP Port instead of TCP Port. For example, setting “Port_Type” as “UDP” will instruct SSTLM to listen through UDP Port 12000. On the other hand, setting “Port_Type” as UDP and “USEPORT” with a value 13500 will instruct the SSTLM to listen through the UDP Port 13500.

When “Port_Type” and/or “UsePort” is configured in SSTLM via config.ini or through Environmental Variable, then each Client computer (where the client program is installed) should be configured to access the product license through the same port type and the port number.

This can be done by defining a System Environmental Variable “PORT_TYPE” with its value as “UDP” (same as that of the SSTLM user defined variable “Port_Type” set in config.ini) and/or “USEPORT” with its value as the same as that of USEPORT value defined in config.ini.

Warning:

This variable can be set via the config.ini file or via Environmental variable for SSTLM Version 10.00 or later. Similarly, this variable can be set via the Environmental variable in client computers with client programs such as CAEPIPE, CAEPIPE 3D+, checkSTRESS, etc. version 12.20 or later.

Older version of client programs does not have an option to communicate through a UDP port. Hence, users will receive an error message as “SSTLM is not running in Server” even when the “Port_Type” is defined in the Client computer.

BackLog

By setting the keyword “BackLog” with an Integer value will instruct SSTLM to revise the number of Backlog Queue. For example, setting the value of “BackLog=512” will set the number of Backlog Queue as 512 from the default 128. Backlog queue is valid only for TCP Port. In other words, changing the value of this variable will not have any impact when SSTLM is configured to listen through UDP Port using “Port_Type” variable.

Warning:

Setting the BackLog with a larger value will impact the performance of the server connections. Optimal value can be between 20 to 200.

2.2 Analyse Key

Display the License Key Information viz. MAC Address (Physical Address of Ethernet card), IP Address, Start Date, End Date of License and Number of users from the local server / remote server. For displaying the license information available in the remote server, simply enter the Name / IP address of the SSTLM in the text box “SSTLM Server Name / IP Address”, select the product from the list and press the button “Analyse”.

2.3 Install Key

Used to Install / Repair Activation Key at Local / Remote SSTLM server.

To Install / Repair Activation Key, select the product from the 'Select Product' option and check the 'Install or Repair Activation Key' for activating the text box. Paste the Activation Key supplied, and then press the 'Install Key' button.

To Install / Repair the Activation Key at the remote SSTLM server, enter the Name / IP address of the SSTLM in the text box "SSTLM Server Name / IP Address", select the product from the list and press "Install Key".

2.4 Product Key generation and Activation Key installation

Before generating the Product Key, the user has to make sure that the following requirements are met.

1. Ethernet card installed with proper driver files.
2. Static TCP/IP assigned to the server computer. If your computer (where SSTLM is installed) is configured to obtain the IP Address automatically from an DHCP server, then user can disable the feature of checking the IP Address by defining an environmental variable with name "SKIP_IP" and setting its value as "YES". This feature can also be used when a product is installed in a Laptop that is being used in a different network environment with different TCP/IP address.
3. Network cable plugged and connected to the network. Please note, if you generate a Product Key without connecting to a network (network cable unplugged), then the license issued for that Product Key can't be used when the network cable is plugged-in. On the other hand, the license issued for the Product Key generated with network cable plugged-in can be used in unplug mode also. It is recommended to keep the network cable plugged-in before generating the Product Key, if the SST License Manager is installed in a Laptop (configured to use both in standalone and network mode).

In the current version of the product, the request will be send by the client computer (where the software is loaded) to the server to check for the availability of the product key information from the client computer. Upon unavailability of the product key information, server automatically generates the Product Key and sends it back to the client computer. Upon receiving the same, client computer will pop up the Product Key in a dialog box with the blank Activation Key field. The user can then paste the "Activation Key" received via email in to the dialog box and press the "Activate" button. In other words, the Activation Key can also be installed to the server computer from any client computer.

2.5 Renewing license

Each time the product is launched, the server will check automatically for the expiry of the license. Upon expiry of the license, the server will send a request to the client computer. The client computer will then inform the same to the user and opens a dialog box to enter a new Activation Key and displays the Product Key in same dialog box to continue further.

2.6 Diagnose License

In case of any problems with the license, the user now has a facility to diagnose the problem themselves from the local or remote SSTLM server. To diagnose problems, follow the steps given below.

1. Enter the Name / IP address of the SSTLM Server in the text box "SSTLM Server Name / IP Address".
2. Select the product from "Select Product" combo box.
3. Then press the button "Diagnose". This will show the details in the space provided in the dialog box as shown in figure below.
4. To save the report in a text file, press the button "Save Report" and key-in the name of the file in the "Save As" dialog.

5. By reading the report, user can understand and fix minor problems themselves. In case of major problems; user can send the generated report via SST's technical support portal at <http://www.sstusa.com/support.php>.
6. It is recommend for the user to send the license information along with diagnose report for to debug the problems.
7. To save the license information from the Local / Remote SSTLM server; press the button "Save License" and key-in the name of the file in the "Save As" dialog. Send both report file as well as license information via SST's technical support portal at <http://www.sstusa.com/support.php>.

2.7 Save Report

Save the information shown in the "Analyse Tool" dialog box in a text file specified by the user.

2.8 Borrow License

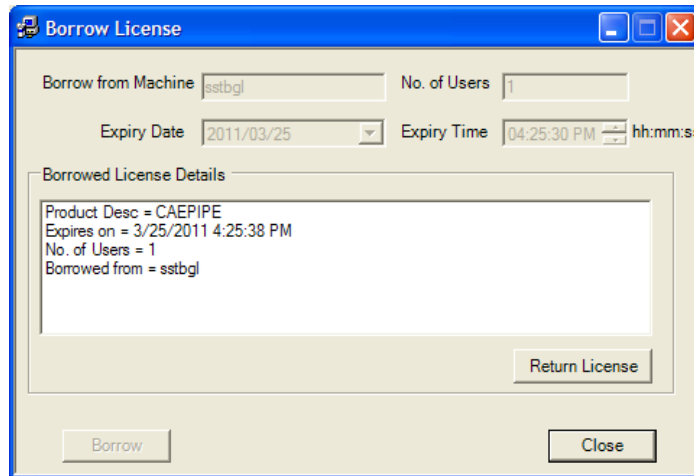
With the current version of SST License Manager, the user can now borrow the license from one Remote SSTLM computer and Install it to another Remote Computer using a local computer available on the network. In addition, it is also possible to borrow the license from the server computer more than once for any product until the number of users becomes 0. The procedure for borrowing the license is explained below.

Borrowing the license to the Local computer from the Remote computer

1. Log in to the computer where you wish to borrow the license with a user name and password that has administrative right for that computer.
2. Install SST License Manager 6.6 or later in the computer from the website or via the download link provided in email by SST.
3. Make sure that the computer is connected to the network and the network cable is plugged in.
4. Make sure that the remote computer where the product license is available is in the network and is accessible from the other computer.
5. Launch the program "Manage License" from the Start Menu > Programs > SST License Manager.
6. From the "Tools" menu, select the option "Analyse Tool".
7. Select the product from the "Select Product" combo box as shown in figure under Section 2.0 above.
8. Click the button "Borrow License". This displays a form as shown in figure below.

9. Enter the name of the computer or IP address (valid only for a computer with a STATIC IP assigned) from which you wish to borrow the license.
10. Key-in the number of users you would like to borrow.

11. Specify the Expiry Date and Time and press the button “Borrow”. If the valid license is available in the server computer, then it will be borrowed and details of the same will be shown as shown in figure below.



12. To use the “Borrowed” license, set the Environmental variable “SSTLM” in the client computer to point to this new computer, where the license is being borrowed. Refer Section 1.3 for more details on configuring the Environmental Variable.
13. After the expiry of the “Borrowed License”, SST License Manager will report the same to the user during the use of the client product. Please note, user has to return the license to the original computer (where the license being borrowed) in order to release the number of users borrowed. Till then, the license is not available for the other users connected to the original computer (where license being borrowed from).
14. To return the license, before or after expiry of the “Borrowed License”, press the button, “Return License” by highlighting the details as shown in figure above.

Borrowing the license from one Remote computer to another Remote computer

1. Log in to the remote computer where you wish to borrow the license with a user name and password that has administrative right for that computer (SRV2 shown in figures below).
2. Install SST License Manager 6.6 or later in the computer from the website or via the download link provided in email by SST.
3. Log into a local computer in the network that you wish to use for remote administration with a user name and password that has administrative right for that computer (LM1 shown in figures below).
4. Install SST License Manager 6.6 or later in the computer from the website or via the download link provided in email by SST.
5. Make sure that all the three (3) computer are connected to the network and are accessible.
6. Launch the program “Manage License” from the Start Menu > Programs > SST License Manager.
7. From the “Tools” menu, select the option “Analyse Tool”.
8. Enter the Name / IP address of the SSTLM Server in the text box “SSTLM Server Name / IP Address” where the product license is to be “Borrowed To” from the Remote computer where the original product license is available. See the figures shown below for details.
9. Repeat steps 7 through 14 listed above.

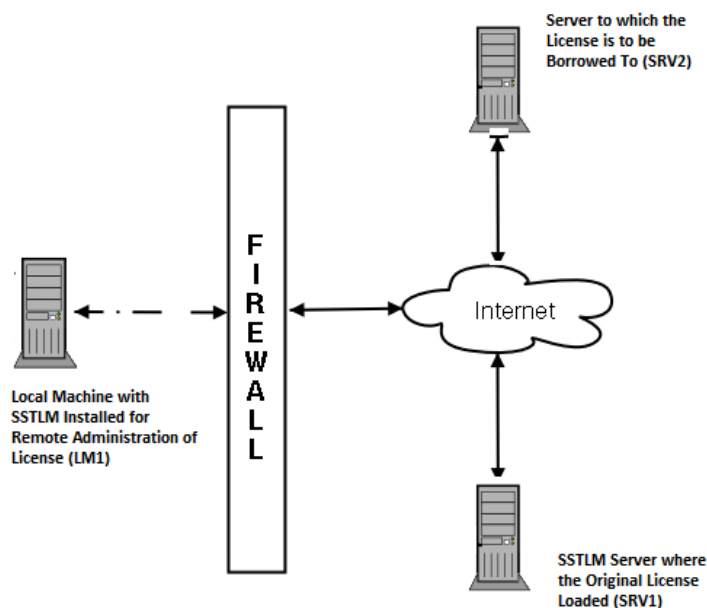
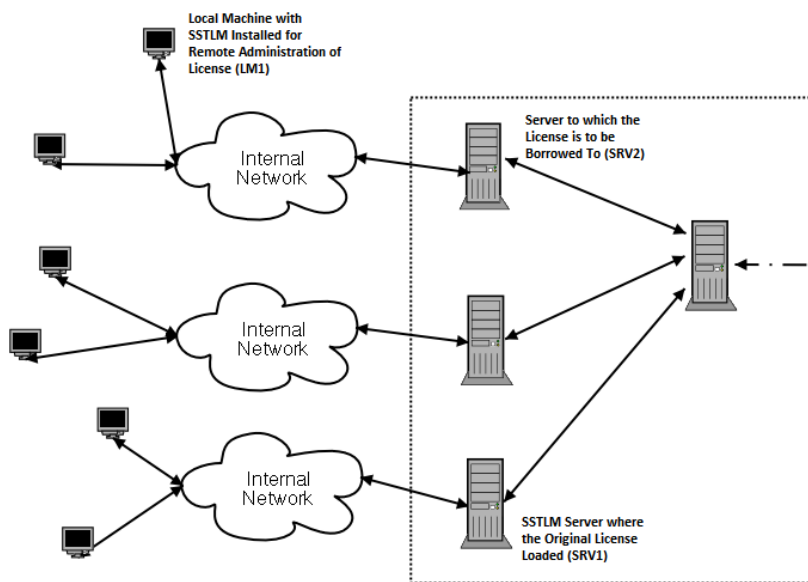
Note:

An administrator can prevent borrowing of product licenses by

1. All the computers involved in the Borrow License activity should have the same Version of SST License Manager and Manage License Tool installed.

For example, if you wish to Borrow a License from a Computer “BC1” that have SST License Manager Version 10.00 and Manage License Version 10.00 to another Computer “BC2”, then BC2 should have SST License Manager Version 10.00 and Manage License Version 10.00 installed.

2. Defining a system environmental variable called “BlockBorrow” and setting it to “Yes” for SST License Manager Versions up to 6.50.
3. Defining “BlockBorrow=Yes” in the config.ini available in the SSTLM Installation folder for SST License Manager Version 6.6 or later.



2.9 Delete License

Deletes the License information of the selected product from the Local / Remote SSTLM Server. This will pop up a warning message before deleting the License. Program will issue an error message when the user tries to delete the Borrowed License.

Note:

An administrator can prevent deleting of product licenses using a remote computer by defining a variable "BlockRemoteDelete=Yes" in the config.ini available in the installation directory of SSTLM.

2.10 System Info

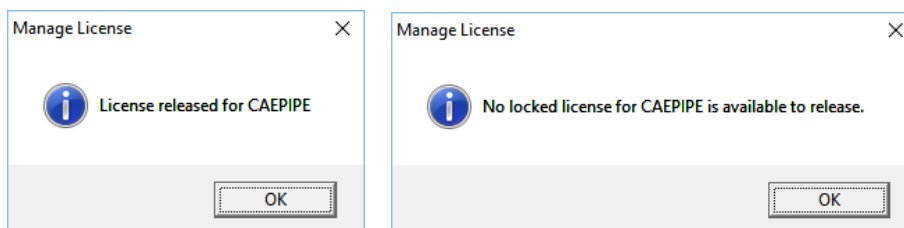
Displays the Physical address of Ethernet card and TCP/IP address of the Local /Remote SSTLM Computer.

2.11 Clear

Clear the contents shown in the dialog box.

2.12 Release License

Unused or Crashed user license(s) can be released from the SST License Manager. To perform this, enter the Name or IP address of the computer where the SST License Manager is installed; Select the product from the list and press the button "Release License". Upon successful removal, Manage License will issue the message as shown in figure left below.



When No crashed license is detected for the selected product, Manage License Tool will issue the message as shown in figure right above.

2.13 View Log File and Clear Log File

Product License usage information including License Borrowed details are recorded in the file "SSTLM.log" in SSTLM Installation folder. This information can be viewed through the "View Log File" button and can be cleared using "Clear Log File".

2.14 Blocking License Access

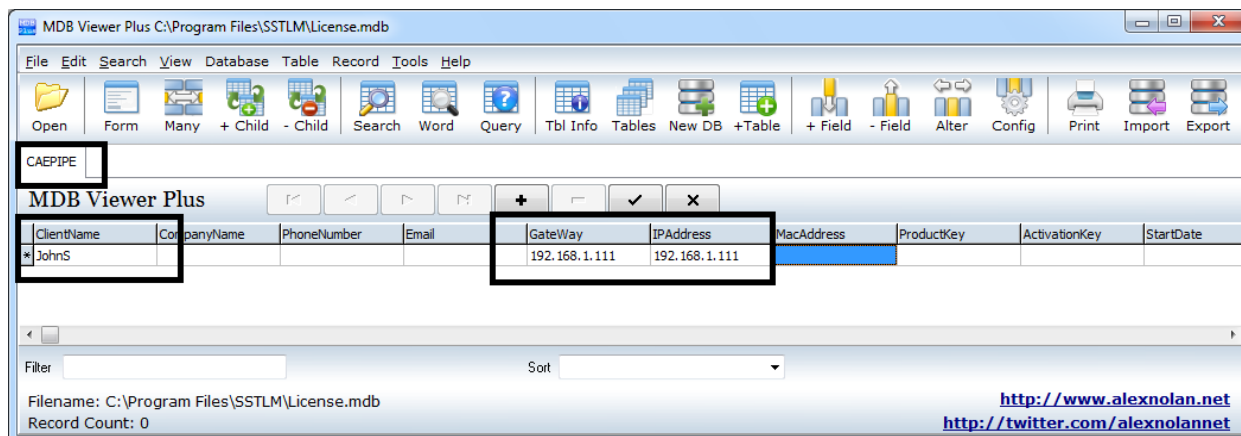
An administrator can block users from accessing the product licenses by defining a variable called "BlockAccess" and setting it to "Yes" through the config.ini

After doing the above, the administrator must list the user information in the "License.mdb" available in the SSTLM installation directory. For example, to block user with login name: JohnS with IP Address as "192.168.1.111" from accessing a CAEPIPE license, open license.mdb using the program "MS-ACCESS" or the freely available software "MDBPlus" or "ODE.exe" and insert the user information as shown below. The user information (Login name and IP Address) can be obtained from the log file "SSTLM.log" or through the option "View Log File" described in Subsection 2.10 above.

1. Open the table "CAEPIPE" inside license.mdb
2. Add JohnS under client name, 192.168.1.111 under "GateWay" and "IPAddress" fields
3. Add other (optional) identifying information under other fields, as required.
4. Make sure to update / post edit / commit the record.
5. Verify the data entered after adding the details and close the database.

Now, user JohnS will be blocked from accessing a CAEPIPE license. Make sure that the above information is added to the correct table name corresponding to the product licensed.

Please note, when this variable “BlockAccess” is set as “No” or not defined in the Config.ini then all users will be allowed to access the license without any restriction.



2.15 Restrict Users

An administrator can allow only a selected number of users in accessing the product licenses by defining a variable called “RestrictUsers” and setting it to “Yes” through the config.ini.

After doing the above, the administrator must list the user information in the “License.mdb” available in the SSTLM installation directory. For example, to allow user with login name: JohnS with IP Address as “192.168.1.111” for accessing a CAEPIPE license, open license.mdb using the program “MS-ACCESS” or a freeware “MDBPlus” or “ODE.exe” and insert the user information as shown above. The user information (Login name and IP Address) can be obtained from the log file “SSTLM.log” or through the option “View Log File” described above.

1. Open the table “CAEPIPE” inside license.mdb
2. Add JohnS under client name, 192.168.1.111 under “GateWay” and “IPAddress” fields
3. Add other (optional) identifying information under other fields, as required.
4. Make sure to update / post edit / commit the record.
5. Verify the data entered after adding the details and close the database.

Now, only user JohnS will be allowed in accessing a CAEPIPE license. Make sure that the information is added correctly to the table name corresponding to the product licensed.

Please note, when this variable “RestrictUsers” is set as “No” or not defined in the Config.ini then all users will be allowed to access the license without any restriction.

2.16 Configuring SST License Manager to listen through a Specific User IP

When a server has more than one network card installed, then the Administrator can configure and force SSTLM Service to listen through a specified User IP. This can be performed as follows.

For Version 6.50

1. Define a system environmental variable called “USEIP”.
2. Set the value of variable as “IP Address”. For example, if the administrator wants SSTLM Service to listen through IP “192.168.0.53” then set it value to “192.168.0.53”.
3. Stop and Start the SSTLM Service.

4. Administrator can confirm this setting by using the command ***netstat -aon | find "12000"*** at Command Interpreter "Cmd.exe"

For version 6.60 or later

1. Define a variable "USEIP=<IP Address>" in the config.ini file available in the SSTLM installation folder.
2. Set the value of variable as "IP Address". For example, if the administrator wants SSTLM Service to listen through IP "192.168.0.53" then add / edit the line in the config.ini as **USEIP=192.168.0.53** (without any blank spaces / special characters)
3. Stop and Start the SSTLM Service.
4. Administrator can confirm this setting by using the command ***netstat -aon | find "12000"*** at Command Interpreter "Cmd.exe" when the Default TCP Port 12000 is used for communication. If UsePort is defined with an Integer value other than 12000 in the config.ini, then replace the port number 12000 with the port number specified for UsePort variable in the command line given above.

Note:

The IP Address through which the SSTLM Service is listening to is written in the SSTLM.log file for user reference.

3.0 List of Error messages

This section lists the various errors messages while the SSTLM service is being run.

Select the Product and Proceed...

No product is selected from the “Select Product” combo box. Select the product and then proceed.

License for the selected product not available.

License for the selected product is not available in the computer.

Activation Key is not available for the selected product

License information is available in the computer without Activation Key. I.e., Activation Key for the selected product is not installed yet.

Cannot analyse borrowed license. Press Borrowed Info to see the details

Borrowed license cannot be analyzed using this feature. Press the button “Borrow License”, to view the details of the borrowed license.

Product not selected or Activation Key not entered

Install Key button is pressed without selecting the name of the product or without entering Activation Key.

License information is not available

Trying to install the Activation Key for a product whose License information is not available in that computer.

Cannot install activation key for borrowed license

Trying to install the Activation Key for a product where its license is being borrowed from other computer.

Cannot save borrowed license. In case of problem, try with Return License and Re-borrow

License information cannot be saved for license borrowed from other computer. In case of problems, try to return the same and borrow again.

Cannot diagnose borrowed license. Press Borrowed Info to see the details

Trying to diagnose a borrowed license. Details of the borrowed license can be viewed by pressing the button “Borrow License”.

Product Key for the original license is available without ActivationKey

Trying to borrow a license for a product from other computer whose license information is already available in the current computer without Activation Key. Press the button “Delete License” to remove the license information available in the current computer without the Activation Key before borrowing the same from the other computer.

Original license for the selected product is available in this computer.

Trying to borrow a license for a product from other computer whose original license information is already available in the current computer. Press the button “Delete License” to remove the completely the license information available in the current computer before borrowing the same from the other computer.

Note:

Do not press the button “Delete License” unless the license for the selected product is expired and not used anymore by other users from other computer.

Cannot delete borrowed license. Use Return License from Borrow License dialog

Trying to delete the license borrowed from other computer. You cannot delete the license borrowed from other computer. Use Return License from Borrow License dialog.

License Borrowed To others. Cannot delete the license until they are returned

Trying to delete the original license, where it is borrowed to other computer(s). Hence cannot be deleted until it is returned.

Product Key available without Activation Key. Really want to delete?

Trying to delete a license whose Activation Key is not installed yet.

Delete the License information completely. Really want to proceed?

Issues a warning message before deleting the license information from the server computer

License removed completely for <Product_Name>

Upon successful removal of license, the above message will be issued.

Activation Key not installed yet

Activation for the selected product is not installed yet.

Product Information altered/damaged. Use Diagnose to produce report

License information is altered/damaged for the product in the computer. Use Diagnose to get more details.

ProductKey is not available. Cannot install Activation Key.

Trying to install the Activation Key where the license information is not available or deleted.

Activation Key is not available. Cannot borrow

The computer from which you are trying to borrow the license do not have Activation Key installed.

Product information not available to borrow

License for the selected product is available in the other computer to borrow.

Security error. Bad Timer Value

Activation key should be installed within 5 days from the date of generation.

All licenses are borrowed. Licenses are available only after it is returned

No free license available to borrow

Security Error. Key Damaged Or Invalid Key

Activation Key is edited or modified.

Trying to install in different Computer

TCP/IP address or Physical address of Ethernet card is not identical with the encrypted TCP/IP address or Physical address of Activation Key.

No. of users mismatch. Contact program vendor

Number of users available in Activation Key differs from the License information. This could happen, only when somebody tries to alter the Activation Key information.

Random Key damaged or invalid key

Activation Key has been altered/damaged. Hence, the information available in the Activation Key differs from the License information.

IPAddress in Activation Key differs from computer IPAddress. IPAddress of the computer is <IPAddress> whereas IPAddress in Activation Key is <IPAddress>

IP Address available in the Activation Key is different from the IP Address of the computer. i.e, IP Address of the computer is changed by the user or the computer is configured to obtain IP Address automatically

from the DHCP server. If you want to skip the IP Address check, then define the environmental variable with name as "SKIPIP" and set the value as "YES".

MAC Address in Activation Key differs from computer MAC Address. MAC Address of the computer is <MAC_Address> whereas MAC Address in Activation Key is <MAC_Address>

MAC Address available in the Activation Key is different from the MAC Address of the computer. This may happen when the Ethernet card is replaced with a new card. In such cases, contact support for replacing the old license with the new license based on new Ethernet card.

Product Key differs

Each product is assigned with some internal identification code. If the user tries to install the Activation Key issued for a specific product to other product, then the program issue the above error message.

Time stamp differs

License information is altered/damaged. Use Diagnose to get more details.

License start date is in future

Start date of license is in future.

License expired.

License for the selected product is expired.

System clock has been set back.

Computer date and time is less than the Time Stamp registered. This could happen only when the date of the computer is set back.

Invalid time stamp detected. Contact program vendor

License information is altered/damaged. Use Diagnose to get more details.

Cannot determine product. Invalid Product Key/Product Key altered

License information is altered/damaged. Use Diagnose to get more details.

StartDate of License altered/damaged. Contact program vendor

License information is altered/damaged. Use Diagnose to get more details.

EndDate of License altered/damaged. Contact program vendor

License information is altered/damaged. Use Diagnose to get more details.

No. of Users requested > No. of Users available in original key

No. of users requested during borrow license is greater than number of license available I the original license.

Borrow Expiration date exceeds the Product license validity

Expiry date time and time specified during license borrowing exceeds the original license validity.

Expiry date of Borrowed License has been modified

Borrowed License information is altered/damaged.

No. of users mismatch in Borrowed License. Contact program vendor

Borrowed License information is altered/damaged.

Product key differs in Borrowed License

Borrowed License information is altered/damaged.

Borrowed License start date is in future

Start date of borrowed license is in future.

Borrowed License expired

Borrowed license for the selected product is expired.

Start date of Borrowed license damaged/altered

Borrowed License information is altered/damaged.

Expiry date of Borrowed license damaged/altered.

Borrowed License information is altered/damaged.

4.0 Frequently asked Questions

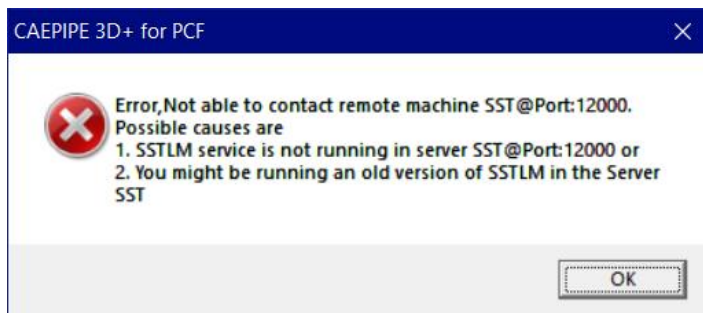
SSTLM Environmental Variable not set!

If you get an error message “SSTLM Environmental Variable not set” as shown below while launching the client software such as “CAEPIPE 3D+, CAEPIPE, checkSTRESS, etc. then ensure that “SSTLM” variable is defined in the machine where the client software is running. If not, then set the Environmental variable as detailed in Section titled “B-1. Create Environment Variables” under Section B above. If already set then restart the machine for the Windows to update the variable defined.



SSTLM service is not running in Server!

If you get an error message “SSTLM service is not running in Server” as shown below while running the software such as CAEPIPE 3D+, CAEPIPE, checkSTRESS, etc. then ensure that SSTLM service is running in the machine where the SST License Manager is installed as detailed below.

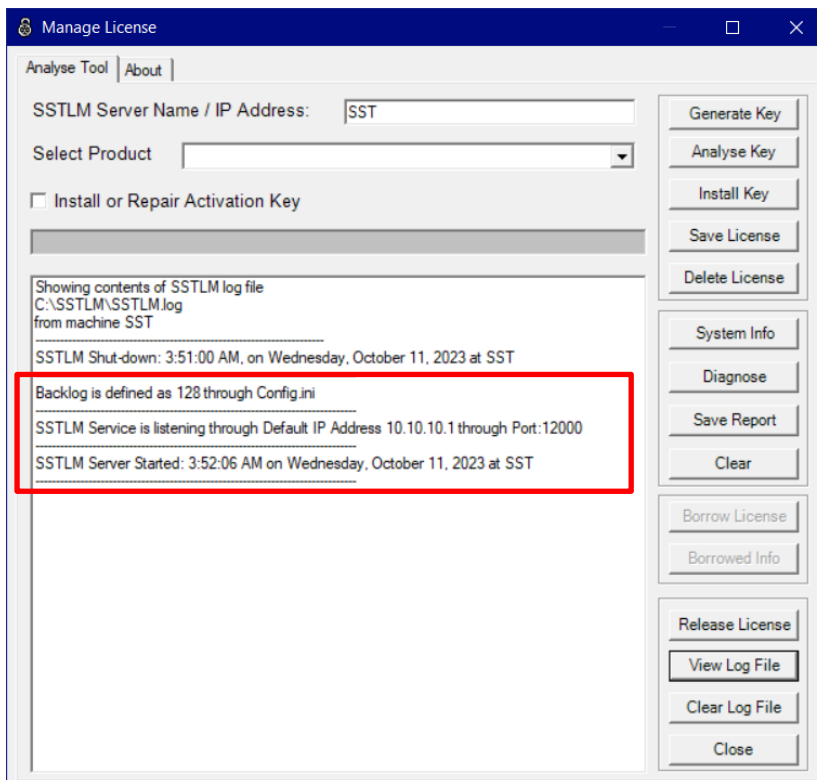


Procedure for checking whether the SSTLM Service is running.

In the below example, it is assumed that SSTLM Software is installed in the machine with name “SST”.

Step 1: Launch “Manage License” tool through Start > SST License Manager and click the button “View Log File”. This will show the Default Port and IP Address through which the Service is running. If you see the IP Address is shown as “127.0.0.1” then it means that SSTLM Service is running in Loop back adapter. So, restarting the SSTLM Service through Windows Services app will resolve the issue. After restarting, launch the client program again. If the issue is still not resolved then follow Step 2 through Step 4 given below.

Step 2: Launch “Manage License” tool again through Start > SST License Manager and click the button “View Log File”. This will show the current Port and IP Address through which the Service is running. As an example, from the log file shown below, it is to be noted that the SSTLM is started and is running through IP Address 10.10.10.1.



Step 3: Launch “Command Prompt” app (Windows Shell) and type the command as shown below and press enter.

“Ping <Name of the Computer> -4”. For example, “ping SST -4” assuming the name of the computer as “SST”.

From the results, you will observe that the IP Address of the Network Adapter is different from the IP Address of the Network Adapter where the SSTLM Service is running (seen above through “View Log File”). This happens when you have more than one (1) Network Adapter in the machine where the SSTLM Service is running.

```

C:\>ping SST -4

Pinging SST [192.168.0.227] with 32 bytes of data:
Reply from 192.168.0.227: bytes=32 time<1ms TTL=128
Reply from 192.168.0.227: bytes=32 time<1ms TTL=128
Reply from 192.168.0.227: bytes=32 time<1ms TTL=128
Reply from 192.168.0.227: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.227:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

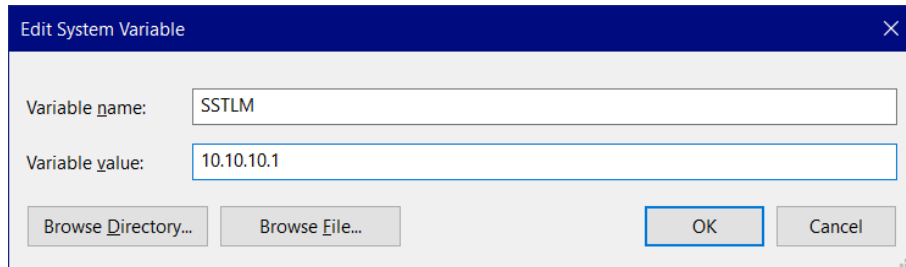
C:\>

```

Step 4: Now, to resolve the issue, you have the following two (2) options. Please note, the Options given below require assignment of Static IP addresses to the Network Adapters. In the above example, you may note that the Static IP Addresses are already assigned to the Network Adapters.

Option 1:

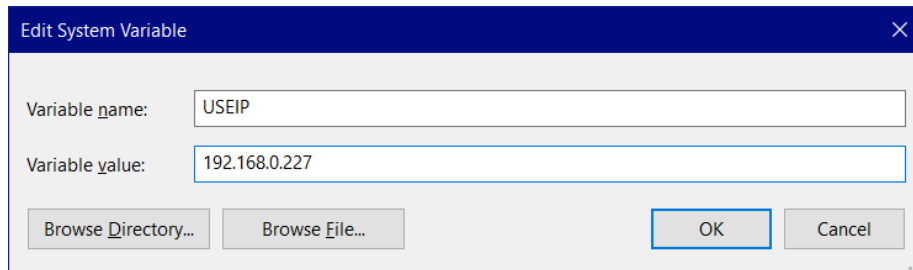
Change the value of the Environment Variable “SSTLM” as the “IP Address” in which the SSTLM Service is running. For the above example, SSTLM is running in IP Address “10.10.10.1”. So, enter the value as “10.10.10.1” instead of the machine name “SST”.



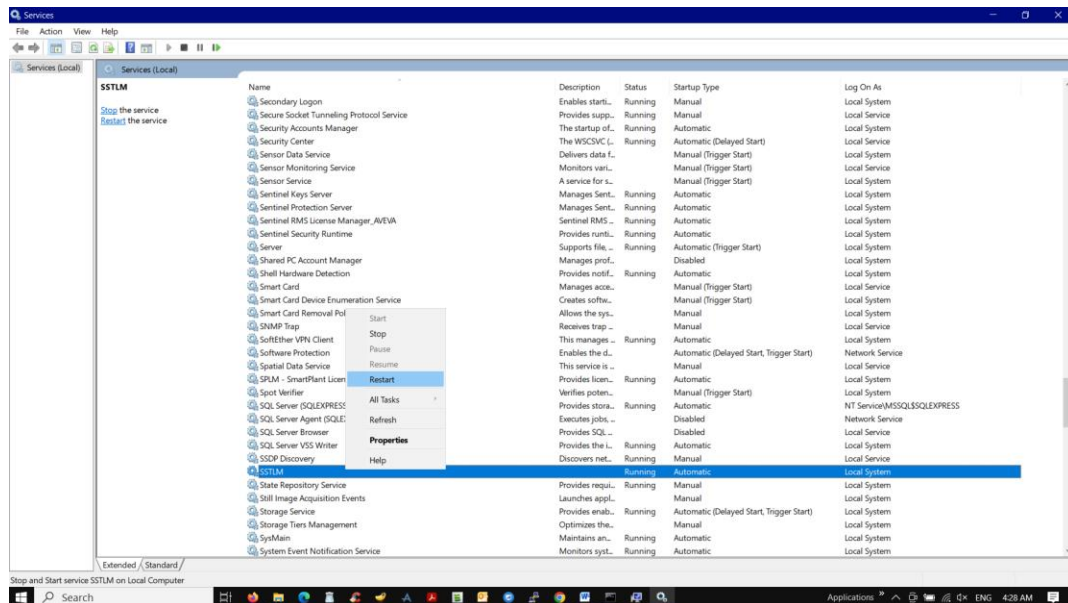
Option 2:

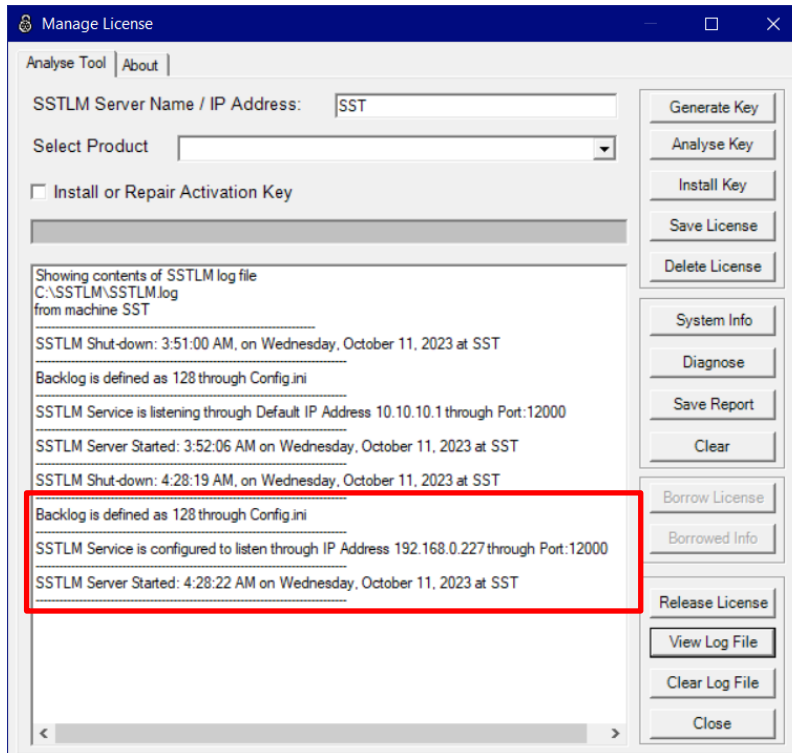
Force the SSTLM Service to listen through the IP Address 192.168.0.227 as given below.

- (a) Define an Environmental Variable with name “USEIP” with its value as “192.168.0.227” as shown below.

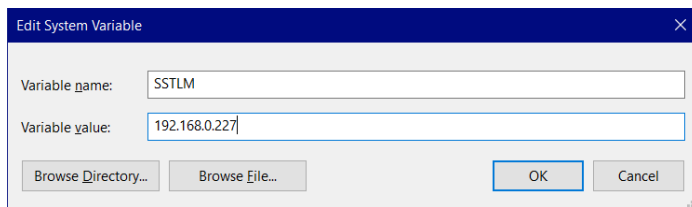


- (b) Restart the SSTLM Service through Windows Services. After restarting, launch “Manage License” tool and press the button “View Log File” and confirm the SSTLM Service is listening through the IP configured as shown below.





- (c) Now update the Environmental Variable “SSTLM” with its value to be “192.168.0.227” instead of “SST” as shown below.



How the program generates the Product Key?

After installing the software, the user has to launch the corresponding module of the SST / InfoPlant product. The program checks for the valid license key information in the registry and creates a new product key if it is not available. The server then redirects the product key thus generated to the client computer. The client computer will then pops up the same in a dialog box. Before generating the product key, ensure that the computer has the following.

1. Ethernet card installed with proper driver files.
2. Static TCP/IP assigned to the server computer. If your computer (where SSTLM is installed) is configured to obtain the IP Address automatically from an DHCP server, then user can disable the feature of checking the IP Address by defining an environmental variable with name “SKIPIP” and setting its value as “YES”. This feature can also be used when a product is installed in a Laptop that is being used in a different network environment with different TCP/IP address.
3. Network cable plugged and connected to the network. Please note, if you generate a Product Key without connecting to a network (network cable unplugged), then the license issued for that Product Key couldn't be used when the network cable is plugged-in. On the other hand, the license issued for the Product Key generated with network cable plugged-in can be used in unplug mode also. It is recommended to keep the network cable plugged-in before generating the Product Key, if the SST License Manager is installed in a Laptop (configured to use both in standalone and network mode).

What does the Product Key contain?

Product key is an encrypted key, which contains the information of the computer such as TCP/IP address, Physical address of Ethernet card and System date and time. It also contains the product code for the software. Based on this information, SST/InfoPlant support generates an activation key and the same is sent via Fax/E-mail.

In the security system dialog box, the Product Key is not fully visible. How to send the full Product Key in such cases?

Double click the Product Key text box by using the left mouse button; this highlights the entire Product Key. Then, click right button of your mouse and select "Copy" and paste them in a text file. Do not enter the Product Key manually in the text file; this may lead to invalid Activation Key generation.

Or

Press the button "Save As" to store the information along with the Product Key in a text file. Send the same via email to sales@sstusa.com.

We have installed the SSTLM service in server computer and the SST/InfoPlant product in client computer. When we tried to generate the Product Key, the program pops up "Environmental Variable SSTLM not defined". What could be wrong?

The user needs to set the environmental variable "SSTLM" on the client computer to point to the computer where the "SSTLM" service is running. Improper setting of this variable leads to the above error message. The environmental variable "SSTLM" can be set as follows.

- a. Open the Control Panel window
- b. Open the System Properties window by double clicking the "SYSTEM" icon from within the Control Panel window. Select the "Environment Variables" button from the "Advanced" tab for Windows 2000 or select the Environment tab for Windows NT and click "NEW" button.
- c. Then enter in the Variable prompt "SSTLM", and "<Computername>" (where the SSTLM service is running) in the Value prompt, for example info025. For more details, refer Section 1.3 above.

While launching the program for generating the Product Key, the system pops up error message "Security Error. Invalid Key contact program Vendor". What could be the reason?

This error pops up (remove comma) if the user of Windows NT does not have Read/Write access to the Windows Registry. This can be overcome by giving "Administrative" rights to the user.

How the Activation Key can be installed?

Refer Section 1.5 above in this document.

Is it possible to use both Server and Standalone versions in the same computer?

It is not possible to use both standalone and server versions on the same computer. But it is possible to replace the standalone version key with the server version key.

During the server version installation, the program throws an error message ".NET Framework not available. Run dotnetfx.exe available in the Setup CD to install the .NET Framework". What does it mean?

.NET framework contains the component to run the software on the corresponding computer. The Setup program checks for these components before installing the software and throws - results in? an error message if it is not available.

The environmental variable "SSTLM" is set in the server computer but the program says, "Environmental Variable SSTLM not set". What could be the reason?

The environmental variable "SSTLM" should be set on the client computer not on the server computer.

During the Activation Key installation, the program pops up "Security Error. Invalid Product Key". What does it mean?

The above said error occurs if the user selects the wrong product from the “Select Product” drop down option.

The program pops up an error “Security Error. Key Damaged or Invalid Key”. What could be the reason?

The Activation Key should be installed within five days from the date of generation of the license key. Failing to do so generates the above error.

The program pops up an error “Trying to install in the wrong computer”. Why does this occur?

This error is due to the mismatch of TCP/IP address or Physical address of the Ethernet card of the computer with the encrypted TCP/IP address or Physical address detail available in the “Activation Key”.

How to set the static TCP/IP address?

Windows 2000/XP

Open the “Control Panel” window through Start Menu->Settings->Control Panel or through My Computer->Control Panel. Then double click the “Network and Dial-up Connections”. Select the icon “Local Area Connection” and click “properties” from the file menu. Select the “Internet Protocol (TCP/IP)” and click properties. Click the Radio button “IP Address” and fill the TCP/IP address. The figures below show the above said procedure.

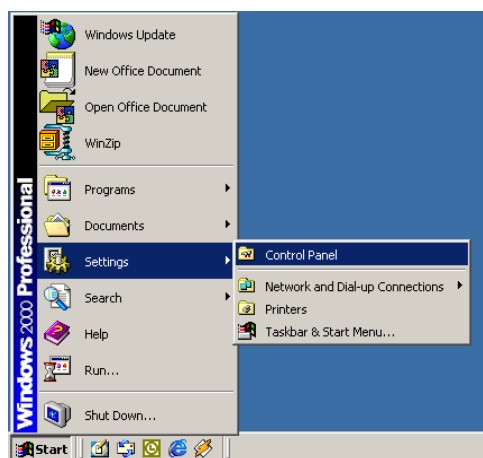


Figure 3.1

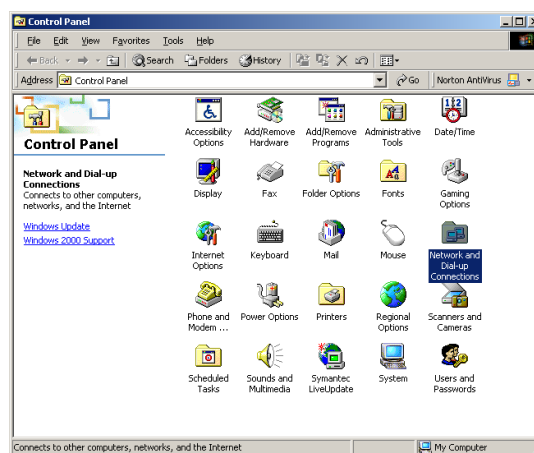


Figure 3.2

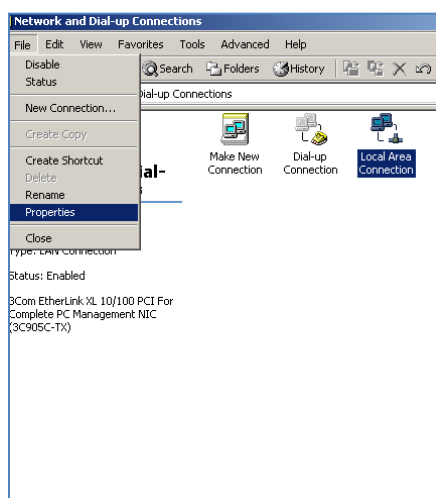


Figure 3.3

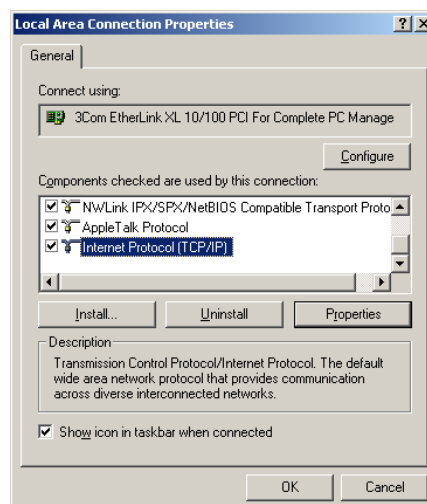


Figure 3.4

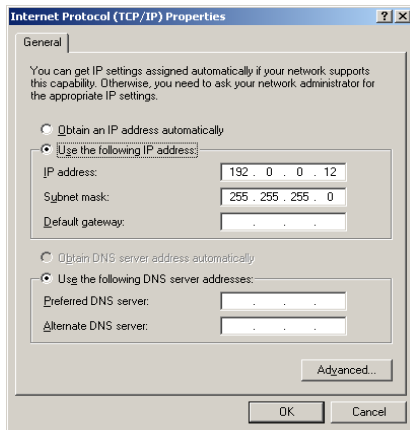


Figure 3.5

How to set the Environmental Variable “SSTLM” through Control Panel?

Refer Section 1.3 above in this document.

How to send the “Product Key” generated by the program to SST/ InfoPlant Support?

Double click the Product Key text box by using the left mouse button; this highlights the entire Product Key. Then, click the right button of your mouse and select “Copy” and paste it in to a text file. Do not enter the Product Key manually in the text file; this may lead to invalid Activation Key generation.

Or

Press the button “Save As” to store the information along with the Product Key in a text file. Send the same via email to support@sstusa.com.

SSTLM service is installed in the server computer and the environmental variable is set in the client computer and the SSTLM status shows “Started” in the “Services” panel. Even then the program pops up “Server not available. Terminating Application”. How to overcome this problem?

Sometimes the client computer throws (results in?) an exception and this makes the “SSTLM” service to(delete) shut down internally. Restarting the service “SSTLM” may solve the above said problem.

What needs to be ensured/checked before generating the Product Key for any SST/InfoPlant’s products?

1. Ethernet card installed with proper driver files.
2. Static TCP/IP assigned to the server computer. If your computer (where SSTLM is installed) is configured to obtain the IP Address automatically from an DHCP server, then the user can disable the feature of checking the IP Address by defining an environmental variable with the name “SKIPIP” and setting its value as “YES”. This feature can also be used when a product is installed on a Laptop that is being used in a different network environment with a different TCP/IP address.
3. Network cable plugged and connected to the network. Please note, if you generate a Product Key without connecting to a network (network cable unplugged), then the license issued for that Product Key can’t be used when the network cable is plugged-in. On the other hand, the license issued for the Product Key generated with a network cable plugged-in can be used in unplug mode also. It is recommended to keep the network cable plugged-in before generating the Product Key, if the SST License Manager is installed in a Laptop (configured to use both in standalone and network mode).

I have generated the Product Key without configuring the Static TCP/IP. How do I include this information and generate a new Product Key?

1. Launch the program “Manage License” through Start Menu->Programs >SST License Manager.

2. From the "Tools" menu, select "Analyse Tools".
3. From the dialog box shown, select the product and click the button "Delete Key".
4. Press the button "yes" to confirm and delete the Product Key.
5. Now launch the product one more time to generate the Product Key.
6. Create the Text file and send the same to via email to support@sstusa.com.

I cannot have a Static TCP/IP configured for our computer in the network due to technical difficulties. All our computers are configured to obtain the IP Address automatically from the DHCP server. How do I proceed further?

The user can disable the feature of checking the IP Address by defining an environmental variable with name "SKIPIP" and setting its value as "YES". This feature can also be used when a product is installed in a Laptop that is being used in a different network environment with different TCP/IP address.

I pressed the button "Delete Key" in the "Analyse Tool" and after that I got the error message: "License information is not available". I then realized that I hadn't installed the license within the "5 days limit". Did I "destroy" anything by pressing the "Delete Key" or should everything work just fine when I receive a new activation key.

By pressing the "Delete Key" you have deleted the Product Key and the other license information. Please generate the new Product Key by launching the product. This will check and generate the new Product Key and pop up the same in a dialog box.

Press the button "Create Text file". Email the generated text file to support@sstusa.com. A new Activation Key will be issued based on the information provided in the text file. Moreover, the limitation of 5 days limit has been removed from the SST License Manager.

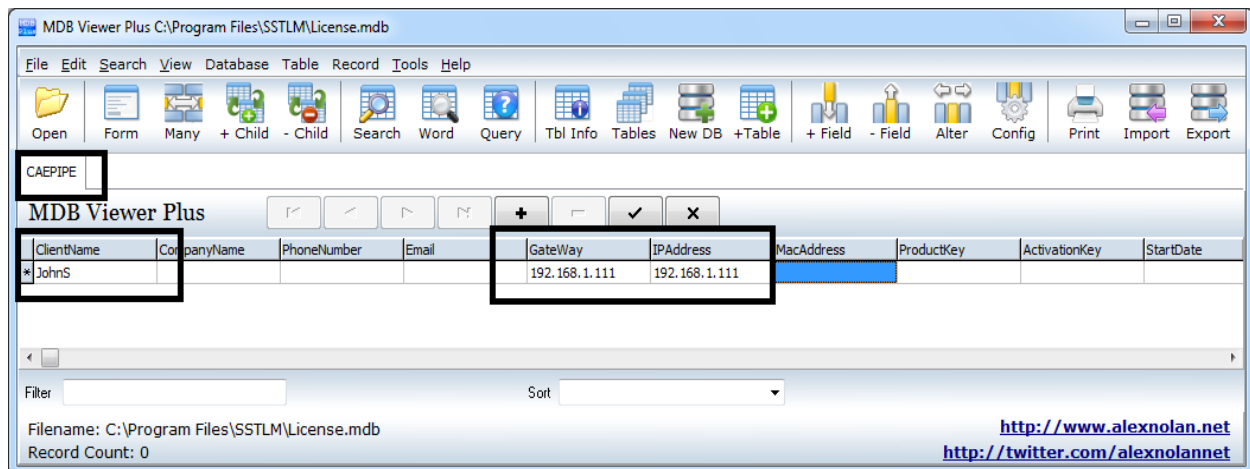
How to block users from accessing product licenses?

An administrator can block users from accessing the product licenses by defining a system environmental variable called "BlockAccess" and setting it to "Yes".

After doing the above, the administrator must list the user information in the "License.mdb" available in the SSTLM installation directory. For example, to block user with login name: JohnS with IP Address as "192.168.1.111" from accessing a CAEPIPE license, open license.mdb using the program "MS-ACCESS" or the freely available software "MDBPlus" or "ODE.exe" and insert the user information as shown below. The user information (login name, IP Address) can be got from the log file as described in Section 2.10 above.

1. Open the table "CAEPIPE" inside license.mdb
2. Add JohnS under client name, 192.168.1.111 under "GateWay" and "IPAddress" fields
3. Add other (optional) identifying information under other fields, as required.
4. Make sure to update / post edit / commit the record.
5. Verify after adding the details and close the database.

Now, user JohnS will be blocked from accessing a CAEPIPE license. Be sure to add this information to the correct table of the product that you have.



How to prevent users from borrowing licenses from SSTLM Server?

An administrator can prevent borrowing of product licenses by users by defining a system environmental variable called "BlockBorrow" and setting it to "Yes".

The server has two network cards, one for communicating with the clients and the other for backup purposes. The IP address that the clients can reach is 10.40.11.13 but the SSTLM service is listening on the other network 10.71.12.31. Due to this, clients are not able to communicate with SSTLM service. Is there a way to configure SSTLM service to listen through the IP Address 10.40.11.13?

Yes. When a server has more than one network card installed, then the Administrator can configure and force the SSTLM Service to listen through a specific User IP. This can be performed as follows.

1. Define a system environmental variable called "USEIP".
2. Set the value of variable as "10.40.11.13"
3. Stop and Start the SSTLM Service to use the new IP defined.
4. Administrator can confirm this setting by using the command **netstat -aon | find "12000"** at Command Interpreter "Cmd.exe" when the Default TCP Port 12000 is used for communication. If UsePort is defined with an Integer value other than 12000 in the config.ini, then replace the port number 12000 with the port number specified for UsePort variable in the command line given above.

We have users who tend to open up multiple licenses for CAEPIPE, then leave. Is there a way to remotely boot users using the SSTLM tools or Manage License tool? I tried to remove the license and then re-add it to drop all the users, but that failed and now I cannot activate the license again using the activation key we have.

Getting a Boolean error when trying to enter the activation key for our license server, is it possible to generate us a new key?

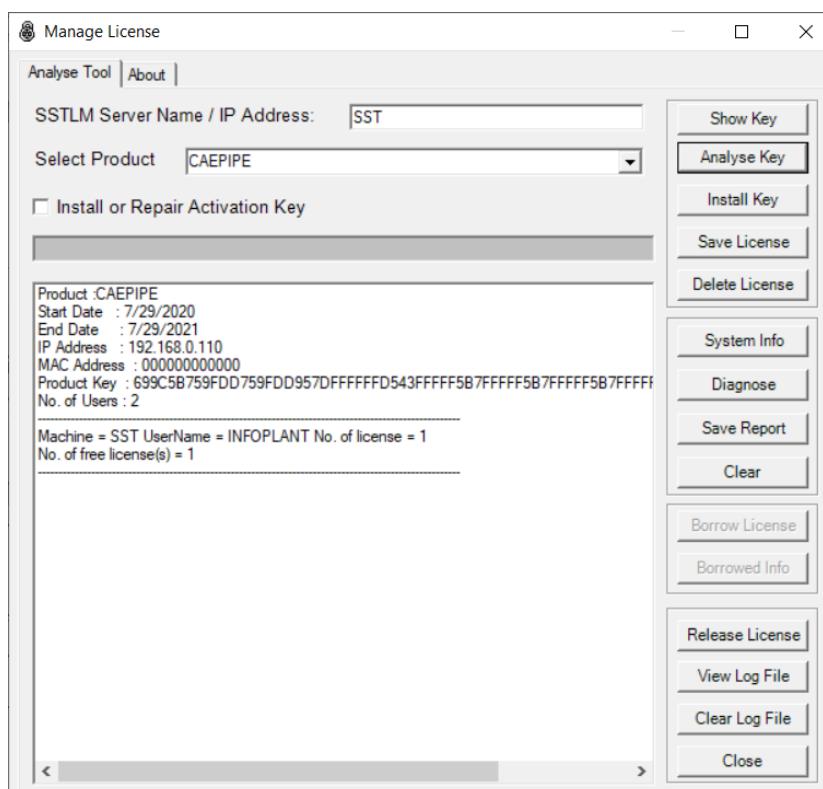
We do not have an option to remotely boot and release unused licenses through Manage License at this time. If you wish and have remote access to the computer where the SST License Manager is installed, then you can release the license by restarting the service "SSTLM" through Windows Control Panel > Administrative Tools > Services.

Please do not delete / remove the license to release the unused licenses.

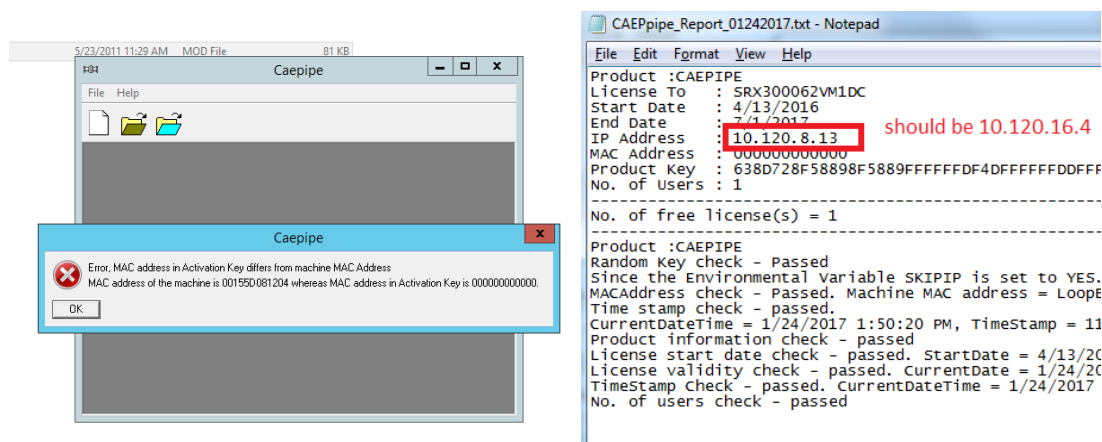
As you have deleted the license completely from your server, SSTLM cannot recognize the "Activation Key" that you are trying to use. Hence, it is issuing the error message as stated. You need to regenerate the Product Key by launching the program CAEPIPE again. From the dialog shown, press the button "More>>" and then select the option "Send email" to send the Product Key to us. We will issue the New Activation Key based on that.

Since the license is controlled from the Server, restarting the client computer will not release the locked license. Restarting the SST License Manager (SSTLM) service at the server computer will release the “locked” license.

The other persons in the network might be running the product or the license locked up due to some other reason. You can check the license usage through SST License Manager. i.e., select the product from the list and press the button “Analyse Key” through SST License Manager > Manage License. This will show the details of the license being used as shown below. If you see any locked license then you can release the same by restarting the “SSTLM” Service through Control Panel > Administrative Tools > Services.



Given below are snap shots of error and the SSTLM log info. Please note the ip address showed 10.120.8.13 when I ran the analyse key. It should be changed to 10.120.16.4.



From the Product Key (available in the report), we noticed that the IP Address of the computer is “10.120.8.13” and Mac Address is “000000000000”. So, it matches with the analysis report.

Now, after upgrading the server computer to 2012R2 from 2008R2, it is showing the correct computer MAC address “0015D081204”. This is different from “000000000000”. Hence, SSTLM is issuing the error as MAC address is different. This is also correct. Please note, SSTLM is not reporting any error regarding change in IP Address as the “SKIPIP” is set to yes.

Now, regarding solving the issue, delete the existing License from the server. Regenerate the Product Key and send the same to SST. SST will issue the new Activation Key with correct IP and MAC address included.

SSTLM and CAEPIPE programs are configured correctly and it was running without issues before. Today, we received the error message as “Error, Server not found. SSTLM is not running in Server”. What is this mean and how do we fix this issue?

The error message that you received is due to a network adapter malfunction. This adapter malfunction made the SSTLM to start and listen through the loop back adapter IP 127.0.0.1 (as seen through the SSTLM.log entry during the conference. This log file (available in the installation directory of SSTLM) can be seen reviewed through a text editor or through Manage License > View log.

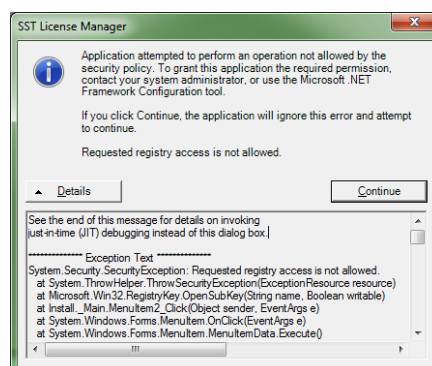
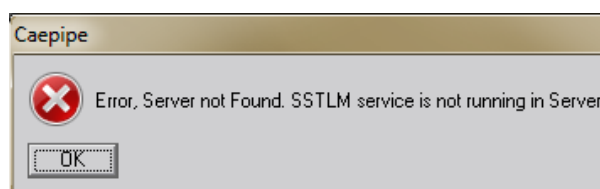
As detailed out during conference, in future,- delete If you get the error message again then review the SSTLM.log file and ensure that the SSTLM service is started and is listening through a valid IP. If not, then follow the steps given below.

1. Launch component services through “Windows Start Menu > Windows Administrative Tools > Services”.
2. Highlight the service “SSTLM”.
3. Press the icon “Stop” or use mouse right click > Stop, if the service status shows as “Running”.
4. Now, press the icon “Start” or use mouse right click > Start to start the service.

Launch CAEPIPE.

We have the software installed on one computer (server computer) with it working. We are now trying to get another computer on our network to access CAEPIPE and we are receiving the error below.

Based on the online troubleshooting (<http://www.sstusa.com/universal-troubleshooting.php>) we ran through the firewall help and the License Manager Service help and received the following error when trying to register the SST License Manager.



Could you provide some assistance?

From the information provided, we understand that you have already have installed the SST License Manager successfully in the server computer “XXX-EXX-87” and activated the license for CAEPIPE. This means that the “SSTLM” service is already registered and working. Hence, it not necessary for you to register the “SST License Manager” again through Manage License > Tools.

Secondly, please try the following.

1. Ensure that TCP/IP port 12000 or the TCP Port number specified through “UsePor” variable of config.ini in the server computer “XXX-EXX-87” is NOT blocked by Hard/Soft firewall/Antivirus program.
2. Similarly, ensure that TCP/IP port 12000 or the TCP Port number specified through “USEPORT” Environmental variable in the client computer (where the product is loaded) is NOT blocked by Hard/Soft firewall/Antivirus program.
3. Try changing the value of the SSTLM variable in the client computer with the IP Address of Server Computer. i.e., replace the computer name “XXX-EXX-87” with the IP address “192.168.16.31” in the client computer.

Our SSTLM goes down about once a week and I'm trying to see if there is anything we can to do troubleshoot the issue. Restarting the service temporarily fixes the problem, but of course it would be better if the license manager stayed up consistently.

I've attached the log file from the server. On November 8th I tried to open CAEPIPE and it did not work. I contacted IT department and they restarted SSTLM. After that we were able to launch CAEPipe. In the log file you can see that IT in charge have restarted the service at 11:26 on November 8th and you can see that he and I were both successful with launching CAEPIPE after restarting SSTLM. But it doesn't give any indication on why SSTLM stopped working.

We checked the log file received from your end and did not see any issues reported. This means that neither SST License Manager nor CAEPIPE is triggering the issues. For your information, we have not come across the issue of SSTLM shutting down on its own.

Could you please check the following?

1. Do you have any program or anti-virus software on your server that kills a service which is not seeing any activity? If yes, then this could be the reason for SSTLM shut-down.
2. Did you notice the SSTLM shut-down on your server after the backup? If your answer is yes, then the shut-down of SSTLM might be due to change of IP in your server during back up. In such case, we suggest that you can have a batch program to automatically restart SST License Manager after completion of backup.

If the above does not solve your problem, then as a work around, we suggest you to have a batch program that restarts the SST License Manager automatically every day.

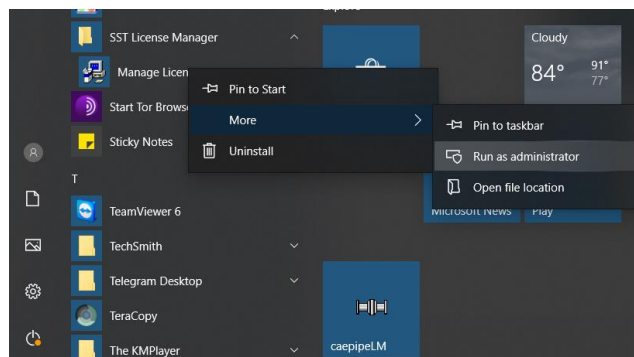
I will be connecting my laptop to different networks depending on my requirement. Every time, when I change the network, I need to restart my SST License Manager Service to listen through the New IP Address assigned due to network change. In addition, the license is not shared with any other users in the network. Is there an option for me to avoid restarting this SST License Manager Service for every change in network address?

Please see Appendix B in this Manual for details on installing “Virtual Loop back Adapter” and configuring the SST License Manager to Listen through a Static IP assigned to the Virtual Loop back Adapter.

How do we manually register the windows service for SST License Manager?

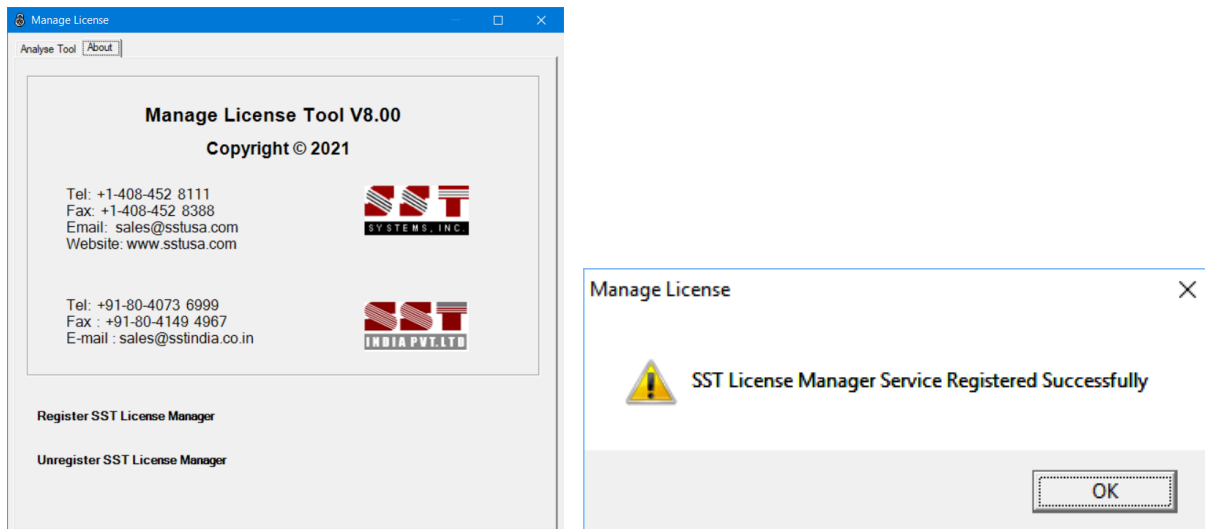
The SST License Manager program will register and start the service automatically, when you install the program. If the setup program fails to register the service automatically for any reason, then register the service manually as stated below. Please note, you need to have an Administrative permission in Windows OS to perform the task given below.

After the successful installation of the SST License Manager, launch the program “Manage License” with Administrative permission through Start Menu > Programs > SST License Manger as shown below from the computer where the SST License Manager is installed. The details are shown graphically below.

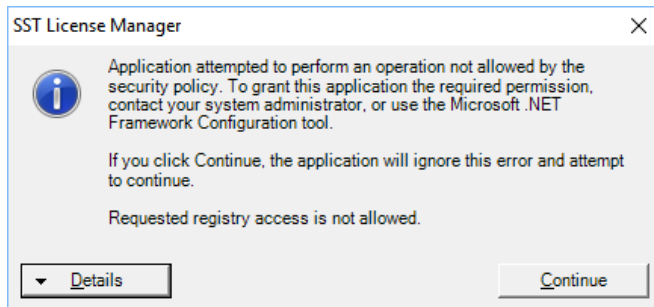


Click the option “Register SST License Manager” through “Manage License > About” to register the window service as shown in figure left below.

After registration of the service you will see a message shown in the figure right below.



Important Note: Performing this task without “Administrative” permission will result in an error message as shown below.



Appendix A

Lists the procedure for uninstalling the SST License Manager earlier than 6.0

SST License Manager Version 5.0 and 5.1

1. Launch the program "Manage License" through "Start Menu->Programs >SST License Manager".
2. From the "Tools" menu, click "Analyse Tool".
3. Return the license borrowed for different products from other computers by selecting the Product and pressing the button "Borrow License" and then the "Return License" button.
4. Now, from the "Start Menu->Settings->Control Panel, double click on "ADD or Remove Programs".
5. Select the program "SSTLM" or "SST License Manager" and click uninstall.
6. Insert the CDROM supplied recently to you. Wait for few seconds. From the dialog box, press the button "How to Install?".
7. Read the instructions appear on the screen.
8. Press the button "Install SST License Manager" and follow the instructions appear on the screen.

Note: Uninstalling the SST License Manager will not delete/affect the Product Key/Activation Key.

SST License Manager Version 4.31

1. Now, from the "Start Menu->Settings->Control Panel, double click on "ADD or Remove Programs".
2. Select the program "SSTLM" or "SST License Manager" and click uninstall.
3. Insert the CDROM supplied recently to you. Wait for few seconds. From the dialog box, press the button "How to Install?"
4. Read the instructions appear on the screen.
5. Press the button "Install SST License Manager" and follow the instructions appear on the screen.

Note: Uninstalling the SST License Manager will not delete/affect the Product Key/Activation Key.

SST License Manager Version 4.3 and earlier than 4.3

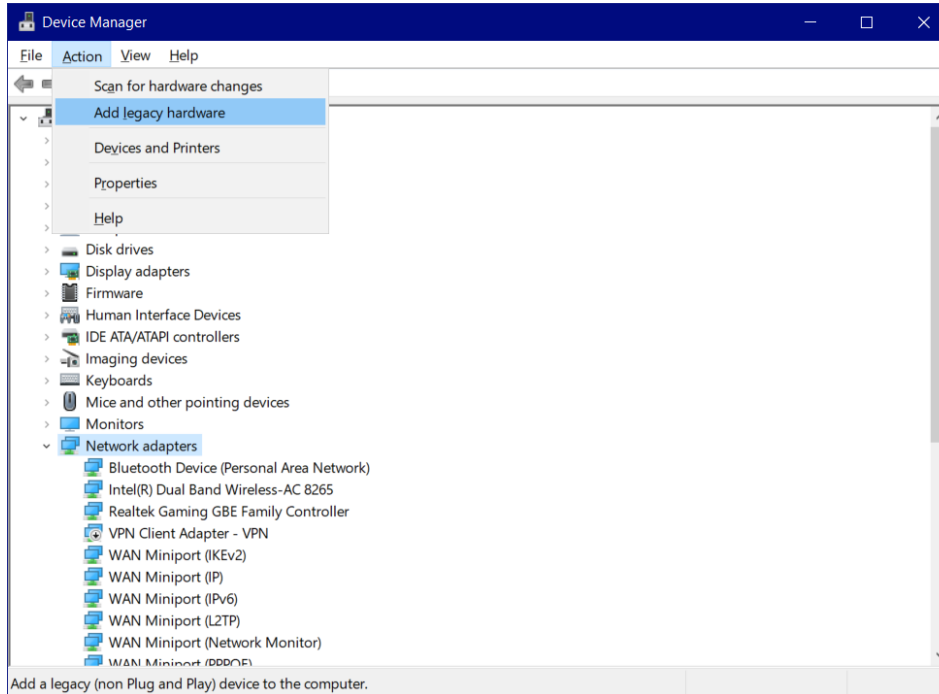
9. Launch the program "Install.exe" through "Start Menu->Programs->SST License Manager".
10. From the "Tools" menu, click "Unregister SSTLM".
11. After successful execution, program will report to the user as "SSTLM unregistered successfully".
12. Now, from the "Start Menu > Settings > Control Panel, double click on "ADD or Remove Programs".
13. Select the program "SSTLM" or "SST License Manager" and click uninstall.
14. Insert the CDROM supplied recently to you. Wait for few seconds. From the dialog box, press the button "How to Install?"
15. Read the instructions that appear on the screen.
16. Press the button "Install SST License Manager" and follow the instructions that appear on the screen.

Note: Uninstalling the SST License Manager will not delete/affect the Product Key/Activation Key.

Appendix B - Installing a virtual network adapter in Windows 10 or Later

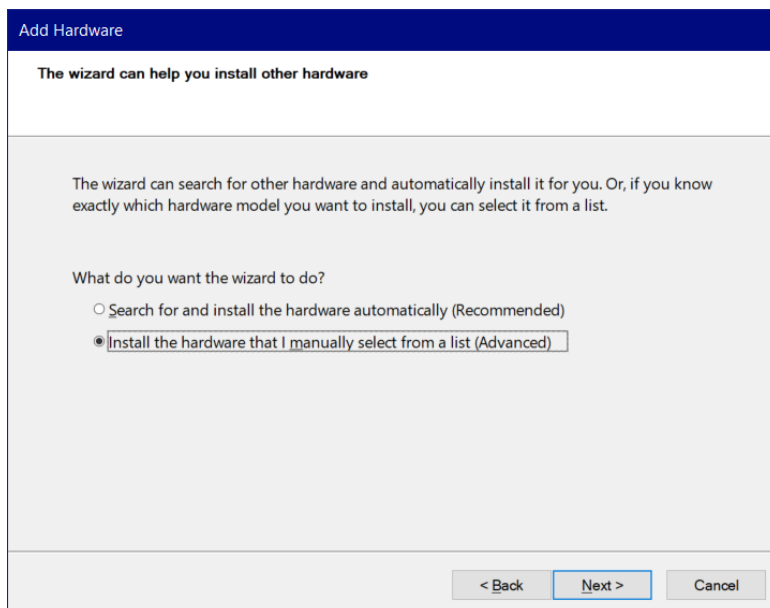
Step 1:

Add a Microsoft Virtual adapter through Windows Device Manager by selecting the Network Adapter > Add legacy hardware as shown in the snapshot below.



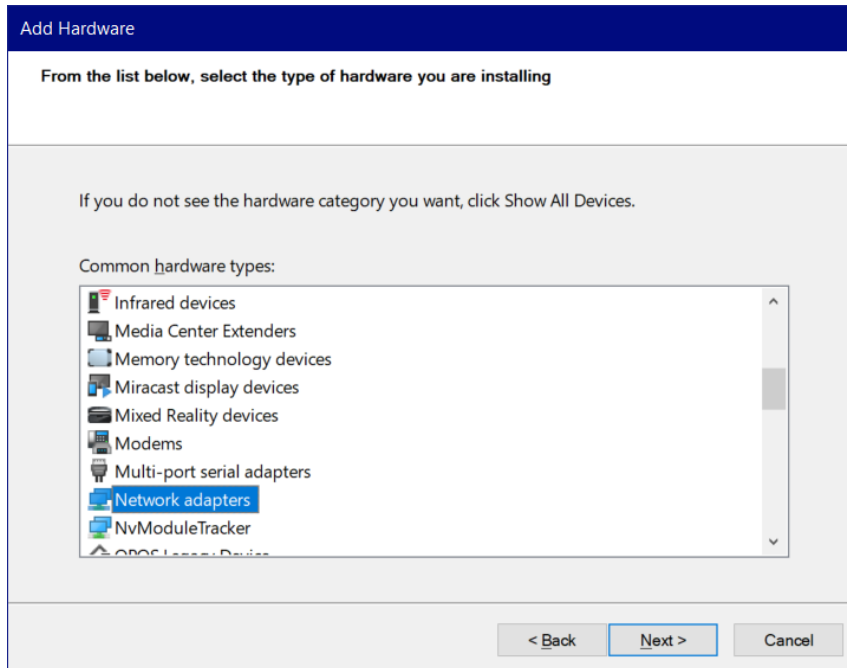
Step 2:

Select the option “Install the hardware that I manually select from a list (Advanced)” and press the button “Next >” as shown below.



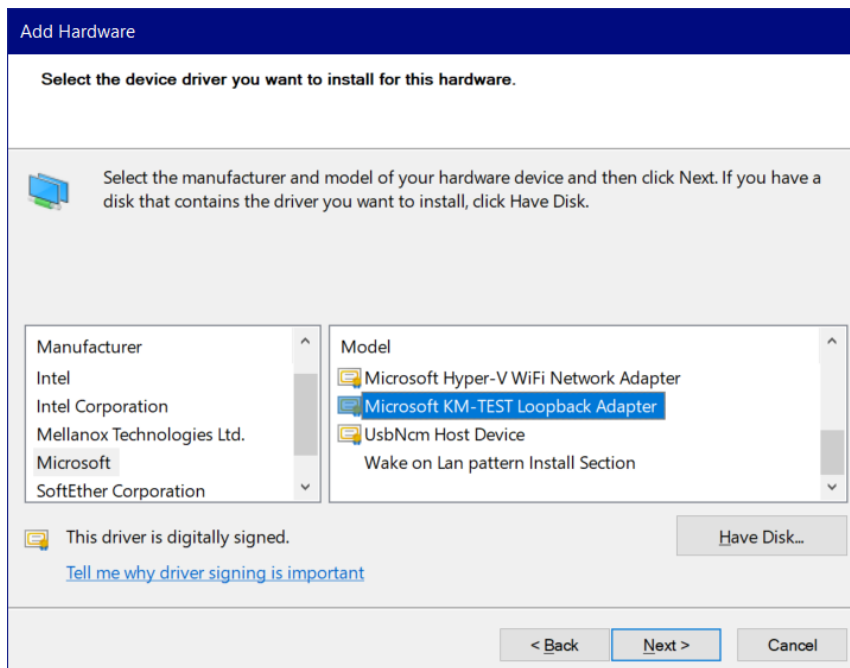
Step 3:

From the list, select “Network Adapters” and press the button the “Next >” as shown below.



Step 4:

Select the Manufacturer as “Microsoft” and then select the model as “Microsoft KM-TEST Loopback Adapter” and press the button “Next >” as shown below.

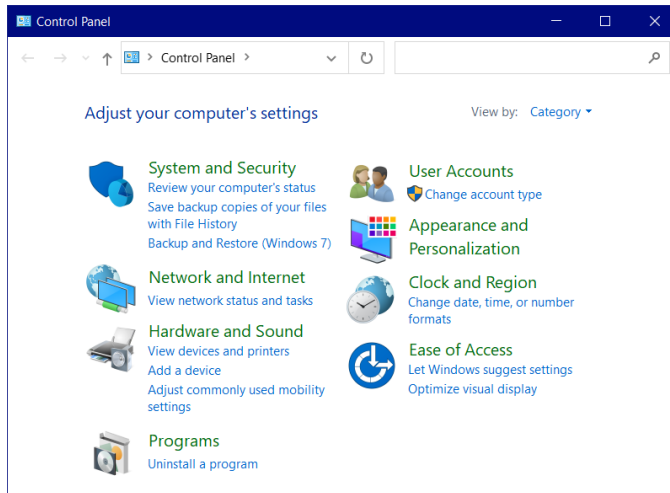


Step 5:

Click on Next to confirm the installation and then Finish.

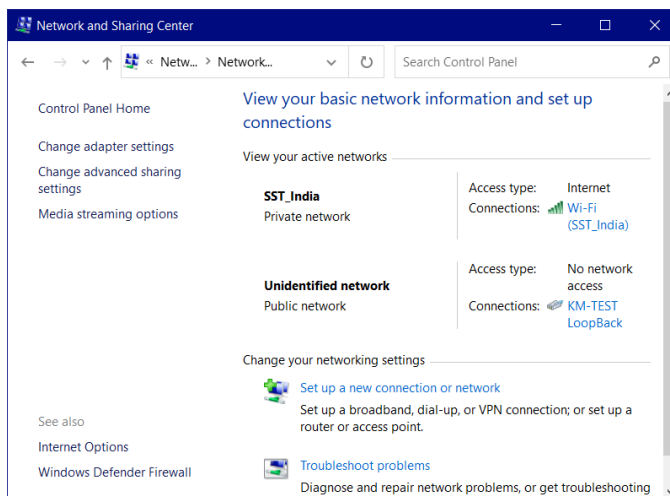
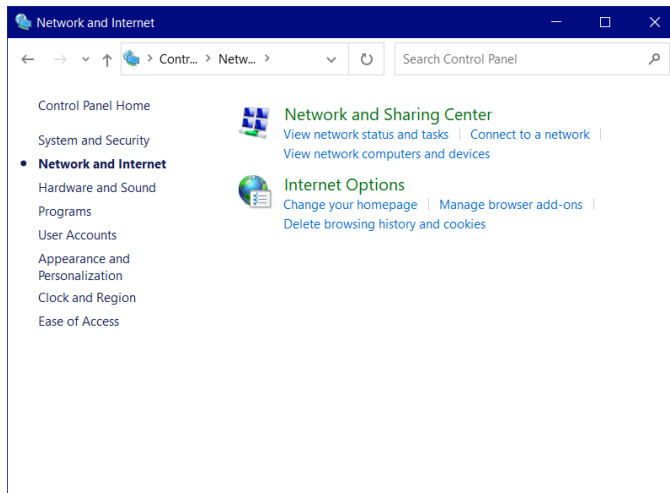
Step 6:

Select the option “Network and Internet” through Start > Windows System > Control Panel.



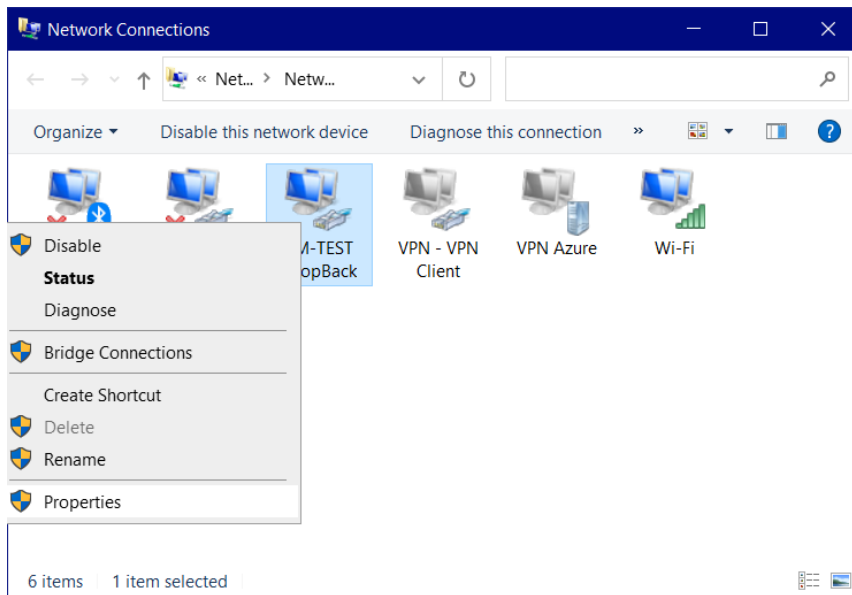
Step 7:

Select the option “Network and Sharing Center” and then “Change Adapter Settings”.



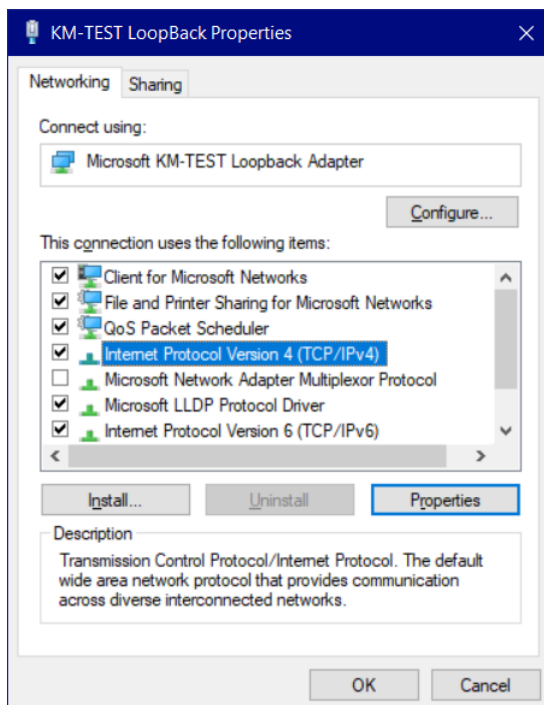
Step 8:

Select the newly added “Virtual Adapter” and then select the option “Properties” through Mouse Right Click.



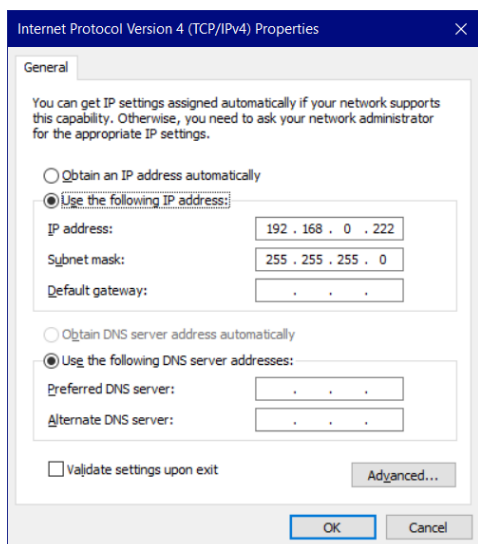
Step 9:

Select the option “Internet Protocol Version 4 (TCP/IPv4)” and then click the button “Properties”



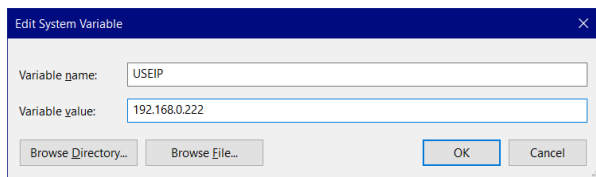
Step 10:

Assign the IP address you wish. As an example, enter “192.168.0.222” and “255.255.255.0” under IP Address and Subnet mask fields respectively as shown below.



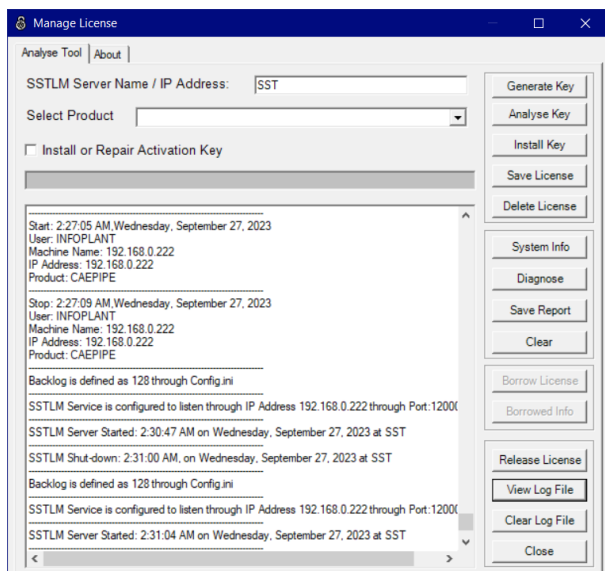
Step 11:

Define an Environmental Variable under “System Variables” as “USEIP” and set its value as the IP Address defined above and press “OK”



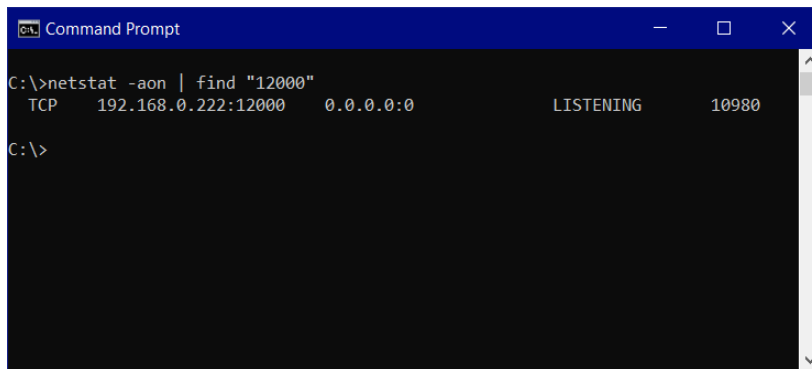
Step 12:

Restart the SST License Manager through Windows Services. To confirm that the SST License Manager is listening through the IP Address defined above, launch “Manage License” tool and press the button “View Log” as shown below.



Step 13:

Alternatively, you can confirm the above through the “Command” window by entering the following command **Netstat -aon | find “12000”** as shown below.



```
Command Prompt
C:\>netstat -aon | find "12000"
TCP    192.168.0.222:12000    0.0.0.0:0              LISTENING       10980
C:\>
```

Appendix C - Details on command line Switches available for SSTLM Installation

Lists the command line switches available for SSTLM installation.

Install Options

</package | /i> <Product.exe>
Installs or configures a product

/a <Product.exe>
Administrative install - Installs a product on the network

/j<u|m> <Product.exe> [/t <Transform List>] [/g <Language ID>]
Advertises a product - m to all users, u to current user

</uninstall | /x> <Product.exe | ProductCode>
Uninstalls the product

Display Options

/quiet
Quiet mode, no user interaction

/passive
Unattended mode - progress bar only

/q[n|b|r|f]
Sets user interface level
n - No UI
b - Basic UI
r - Reduced UI
f - Full UI (default)

/help
Help information

Restart Options

/norestart
Do not restart after the installation is complete

/promptrestart
Prompts the user for restart if necessary

/forcerestart
Always restart the computer after installation

Logging Options

/[i|w|e|a|r|u|c|m|o|p|v|x|+|!]* <LogFile>
i - Status messages
w - Nonfatal warnings
e - All error messages
a - Start up of actions

- r - Action-specific records
- u - User requests
- c - Initial UI parameters
- m - Out-of-memory or fatal exit information
- o - Out-of-disk-space messages
- p - Terminal properties
- v - Verbose output
- x - Extra debugging information
- + - Append to existing log file
- ! - Flush each line to the log
- * - Log all information, except for v and x options

/log <LogFile>

Equivalent of /! * <LogFile>

Update Options

/update <Update1.msp>[;Update2.msp]

Applies update(s)

/uninstall <PatchCodeGuid>[;Update2.msp] /package <Product.exe | ProductCode>

Remove update(s) for a product

Repair Options

/f[p|e|c|m|s|o|d|a|u|v] <Product.exe | ProductCode>

Repairs a product

p - only if file is missing

o - if file is missing or an older version is installed (default)

e - if file is missing or an equal or older version is installed

d - if file is missing or a different version is installed

c - if file is missing or checksum does not match the calculated value

a - forces all files to be reinstalled

u - all required user-specific registry entries (default)

m - all required computer-specific registry entries (default)

s - all existing shortcuts (default)

v - runs from source and re-caches local package

Setting Public Properties

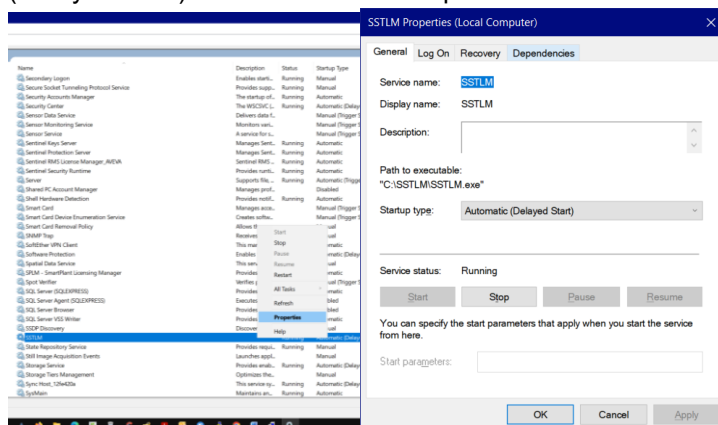
[PROPERTY=PropertyValue]

Appendix D – Configuring SSTLM and Client Program(s) with UDP Port Option

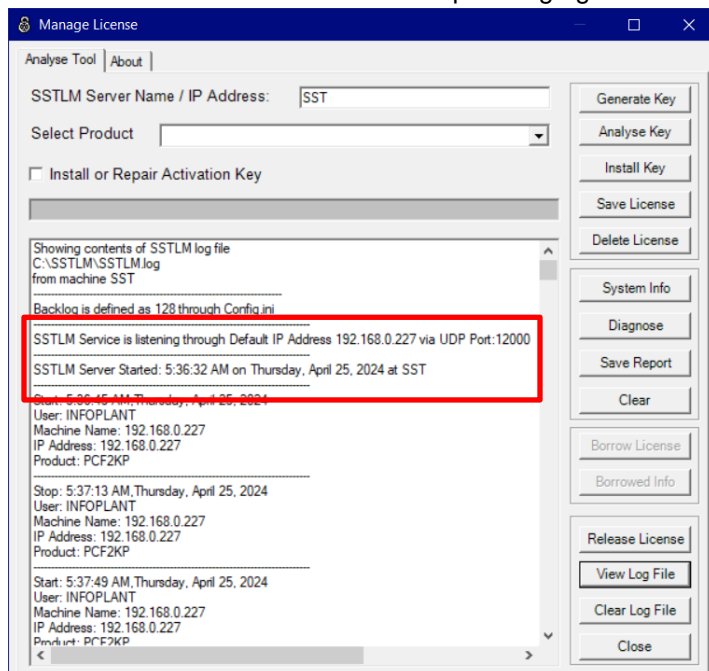
Information provided in this section is valid for SST License Manager Version 10.00 or later with Client program such as CAEPIPE, CAEPIPE 3D+, checkSTRESS and dataTranslators version 12.30 or later.

SST License Manager Installation

1. Setup the Environmental Variable “PORT_TYPE” with its value as “UDP” under “System Variables”.
2. Open UDP Port 12000 from Firewall for both Incoming and Outgoing Traffics.
3. Run Setup.exe using the option “Run as Administrator”.
4. After installation, navigate to Windows Services and then to the Service “SSTLM”.
5. Right click the mouse and select “Properties” and then set the option “Startup type” as “Automatic (Delayed Start)” as shown below and press the button “OK”.



6. Launch “ManageLicense” tool through Start > SST License Manager > ManageLicense.exe.
7. Click the button “View Log file” and ensure that the SST License Manager is listening through the UDP Port 12000 as shown in the sample image given below.



8. For Generating the Product Key and Activating the License for the product, refer to the Section titled “Product Key generation and Activation Key installation” in SSTLM User’s Manual.

Client Program Installation

In this section, client program is assumed to be CAEPIPE 3D+.

1. Setup the following Environmental Variables under “System Variables”.
 - a. SSTLM with its value as the Name or IP Address of the machine where the SSTLM is installed.
 - b. PORT_TYPE with its value as “UDP”.
2. Run the program “Setup.exe” using the option “Run as Administrator”.
3. Open UDP Port 12000 from Firewall for both Incoming and Outgoing Traffics.
4. Launch CAEPIPE 3D+ by running the file “CAEPIPE3D.exe” or by selecting the shortcut “CAEPIPE 3D+ > CAEPIPE” through Windows Start menu.
5. If the product is configured correctly with license installed, then CAEPIPE 3D+ will display the Main Frame dialog as shown below.

