



Echelon® Software Licensing Troubleshooting Procedure

Overview

A number of Echelon's software products use a licensing mechanism to prevent unauthorized copying and enforce the use of commissioning credits. These software products are:

- Echelon Software License Generator
- LNS® Application Developer's Kit for Windows
- LNS DDE Server
- LNS Redistribution Kit for Windows
- LNS Server redistributable
- LonMaker™ Integration Tool

The licensing mechanism included in these products is intentionally sensitive to tampering. Sometimes, the licensing software will interpret such activities as changing the time or restoring a software backup as tampering. Occasionally, software errors may prevent the licensing mechanism from working properly. This document describes how inadvertent licensing problems can be fixed, as well as problems due to software errors. It does not provide guidelines for bypassing the license.

For the purposes of description in the table below, all of the above listed products will be referred to as "Software".

Troubleshooting Hints

Problem	Solution
My Software was working fine until I defragmented my hard disk. Now the Software reports a license failure.	<p>Certain after-market disk defragmenters such as Symantec's Norton Utilities Speed Disk or Executive Software's Diskeeper can break the Software license if the disk defragmentation software is not configured properly. Other disk utilities that bypass the operating system's file system can also break the license. The disk defragmenters built into Windows 98, Windows 2000, and Windows XP do not break the license.</p> <p>Prior to defragmenting your disk using an after-market disk defragmenter, configure it not to move files with extensions</p>

	<p>*.ENT, *.KEY, and *.RST. How this is done depends on the after-market disk defragmenter you are using. If the after-market disk defragmentation program is not configurable, either use the disk defragmentation built into Windows, or use after-market disk defragmentation software that is configurable.</p> <p>If the Software license is damaged due to running a disk defragmenter, contact Echelon Support to get the Software re-authorized. See <i>Re-Authorization Procedure</i> below.</p>
<p>My Software was working fine until I installed other applications not from Echelon.</p>	<p>First, try re-installing your Echelon Software and then rebooting.</p> <p>If this doesn't solve the problem, then contact Echelon Support to get the Software re-authorized. See <i>Re-Authorization Procedure</i> below.</p> <p>Contact the manufacturer of the other software applications and report the improper behavior of their software.</p>
<p>My Software was working fine until I changed the system time more than 1 hour and 15 minutes from the time that I installed the Software.</p>	<p>First, try re-setting the system local time back to the time that the Software was installed under.</p> <p>If this doesn't fix the problem, then contact Echelon Support to get the Software re-authorized. See <i>Re-Authorization Procedure</i> below.</p>
<p>I have the LNS Application Developer's Kit for Windows on a computer, and I can't use Visual Basic 6 in Design Mode.</p>	<p>Run the Register LNS Application Developer's Kit wizard from the Echelon LNS Application Developer's Kit program folder. Follow the instructions to register the product.</p>
<p>My license wizard utility reports an LNS license access failure.</p>	<p>See <i>Re-Authorization Procedure</i> below and contact Echelon support.</p>
<p>My custom LNS application, developed by LNS Application Developer's Kit for Windows, reports a license access failure.</p>	<p>See <i>Re-Authorization Procedure</i> below and contact Echelon support.</p>

Re-Authorization Procedure

Follow the re-authorization procedure below for the particular Software that needs to be re-authorized.

Echelon Software License Generator

1. If your computer has no other Echelon Software products listed above except the Echelon Software License Generator, the first step is to request a copy of the checklic program from Echelon Support.
2. If you have licensed LonMaker Administrator Credits and are therefore redistributing LonMaker Credits to your end-users, execute the following command from the Windows Command Prompt (assuming that the LONWORKS[®] folder is available at \LonWorks):

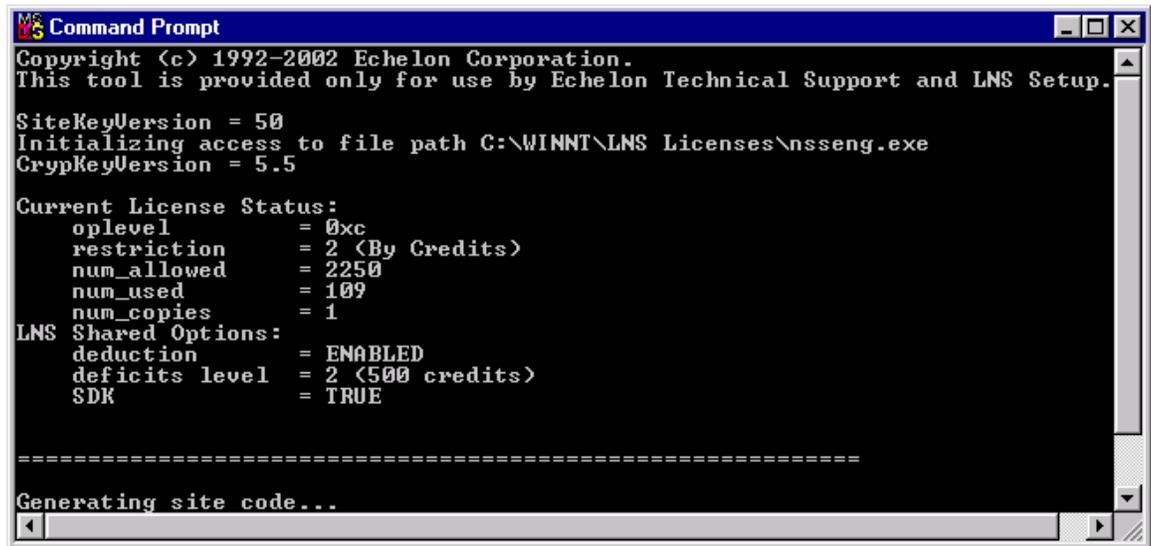
```
cd \LonWorks\bin
checklic dist_lmw.vsl >dist_lmw.txt
```
3. If you have licensed LNS Administrator Device Credits and are therefore redistributing LNS Device Credits to your end-users, execute the following commands from the Windows Command Prompt. (assuming that the LONWORKS folder is available at \LonWorks):

```
cd \LonWorks\bin
checklic dist_nss.vsl >dist_nss.txt
```
4. Open an email message and attach the **dist_lmw.txt** or **dist_nss.txt** file as appropriate.
5. If there are any errors, take screen shots of the error messages (with the ALT+PRINT SCREEN keystroke), and then paste them into a document using an application such as the Windows Paint program (**Start>Programs>Accessories>Paint** on most computers). Save the file. You can reduce the file size by saving it as a black and white bitmap. For example, using Windows Paint, click the **Save As** command on the **File** menu and set **Save As Type** to **Monochrome Bitmap**. The resulting file will be very small. Attach the error dialog screen shot file(s) to your open email message.
6. If you do not have screen shots of the errors, type the error codes and descriptions into your email message.
7. Send the message to your local LonSupport[™] location (available from www.echelon.com/support) with an explanation of what changed on the computer (if anything changed) before the LonMaker Administrator Credit or LNS Administrator Device Credit license (as appropriate) became broken.

LNS Application Developer's Kit for Windows

1. Execute the following commands from a Windows Command Prompt (assuming that the LONWORKS folder is available at \LonWorks):

```
cd \LonWorks\bin
checklic nsseng.exe >nsseng.txt
```



```
MS-DOS Command Prompt
Copyright (c) 1992-2002 Echelon Corporation.
This tool is provided only for use by Echelon Technical Support and LNS Setup.

SiteKeyVersion = 50
Initializing access to file path C:\WINNT\LNS Licenses\nsseng.exe
CrypKeyVersion = 5.5

Current License Status:
 oplevel          = 0xc
  restriction     = 2 <By Credits>
  num_allowed     = 2250
  num_used        = 109
  num_copies      = 1
LNS Shared Options:
  deduction       = ENABLED
  deficits level  = 2 <500 credits>
  SDK             = TRUE

=====
Generating site code...
```

Sample checklic output for a valid LNS development license

2. Open an email message and attach the nsseng.txt file .
3. If there are any error dialog boxes, take screen shots of the error messages (with the ALT+PRINT SCREEN keystroke), and then paste them into a document using an application such as the Windows Paint program (**Start>Programs>Accessories>Paint** on most computers). Save the file. You can reduce the file size by saving it as a black and white bitmap. For example, using Windows Paint, click the **Save As** command on the **File** menu and set the **Save As Type** option to **Monochrome Bitmap**. The resulting file will be very small. Attach the error-dialog screen shot file(s) to your open email message.
4. If you do not have screen shots of the errors, type the error codes and descriptions into your email message.
5. Send the message to your local LonSupport location (available from www.echelon.com/support) with an explanation of what changed on the computer (if anything changed) before the LNS license became broken.

LNS DDE Server

1. Execute the following commands from a Windows Command Prompt (assuming that the LONWORKS folder is available at \LonWorks):

```
cd \LonWorks\bin
checklic lnsdde.exe >lnsdde.txt
```
2. Open an email message and attach the lnsdde.txt file.
3. If there are any errors, take screen shots of the error messages (with the ALT+PRINT SCREEN keystroke), and then paste them into a document using an application such as the Windows Paint program (**Start>Programs>Accessories>Paint** on most computers). Save the file. If possible, use **Save As** and set **Save As Type** to **Monochrome Bitmap**. The resulting file will be very small. Attach the error-dialog screen shot file(s) to the open email message.
4. If you do not have screen shots of the errors, type the error codes and descriptions into your open email message.
5. Send the message to your local LonSupport location (available from www.echelon.com/support) with an explanation of what changed on the computer (if anything changed) before the LNS DDE Server license became broken.

LNS Redistribution Kit for Windows

The LNS Redistribution Kit for Windows license uses the same license as the LNS Application Developer's Kit for Windows product. Follow the procedure in *LNS Application Developer's Kit for Windows*, above.

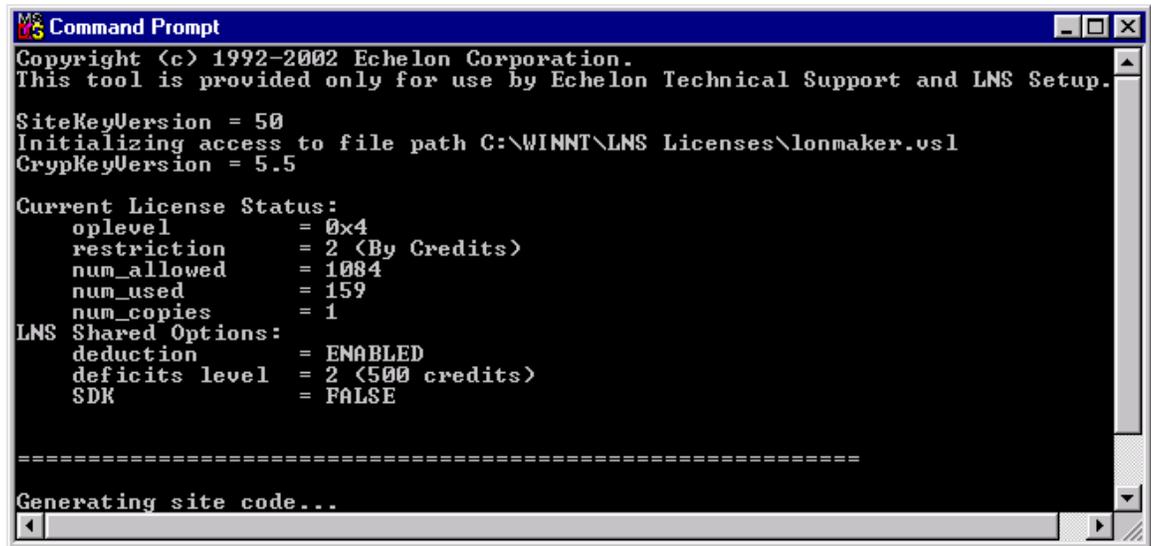
LNS Server Redistributable

The LNS Server redistributables license uses the same license as the LNS Application Developer's Kit for Windows product. Follow the procedure in *LNS Application Developer's Kit for Windows*, above.

LonMaker Integration Tool

1. Execute the following commands from a Windows Command Prompt (assuming that the LONWORKS folder is available at \LonWorks):

```
cd \LonWorks\bin
checklic lonmaker.vsl >lonmaker.txt
```



```
MS-DOS Command Prompt
Copyright (c) 1992-2002 Echelon Corporation.
This tool is provided only for use by Echelon Technical Support and LNS Setup.

SiteKeyVersion = 50
Initializing access to file path C:\WINNT\LNS Licenses\lonmaker.vsl
CrypKeyVersion = 5.5

Current License Status:
  oplevel      = 0x4
  restriction   = 2 <By Credits>
  num_allowed  = 1084
  num_used     = 159
  num_copies   = 1
LNS Shared Options:
  deduction    = ENABLED
  deficits level = 2 <500 credits>
  SDK          = FALSE

=====
Generating site code...
```

Sample checklic output for a valid LonMaker license

2. Open an email message and attach the `lonmaker.txt` file.
3. If any errors are reported, take screen shots of the error messages (with the ALT+PRINT SCREEN keystroke), and then paste them into a document using an application such as the Windows Paint program (**Start>Programs>Accessories>Paint** on most computers). Save the file. If possible, use **Save As** and set **Save As Type** to **Monochrome Bitmap**. The resulting file will be very small. Attach the error-dialog screen shot file(s) to your open email message.
4. If you do not have screen shots of the errors, type the error codes and descriptions into your open email message.
5. Send the message to your local LonSupport location (available from www.echelon.com/support) with an explanation of what changed on the computer (if anything changed) before the LonMaker license became broken.