
Version 1.00
July 2005
LonMark Certification Tool: 1.00.00



LONMARK® Certification Tool (LCT): Users' Manual

Overview

This document contains the instructions for getting started with the *LONMARK Certification Tool (LCT)*. The LCT can be licensed by Sponsors and Partner members of LONMARK International. For more information about the LCT, please visit <http://cert.lonmark.org/>.


For more information about becoming a LONMARK Sponsor or LONMARK Partner, please visit <http://www.lonmark.org/about/memcat.htm>.

LCT Usage

If your company is a LonMark Sponsor or Partner, please visit <http://cert.lonmark.org/> for pricing information and how to get authorization for your company's use of the LCT.

Steps to Register

After being approved for use of the LCT, begin by launching the utility from the front page of the **Member Area** of the LONMARK website at <http://www.lonmark.org/members/memsect.cfm>.

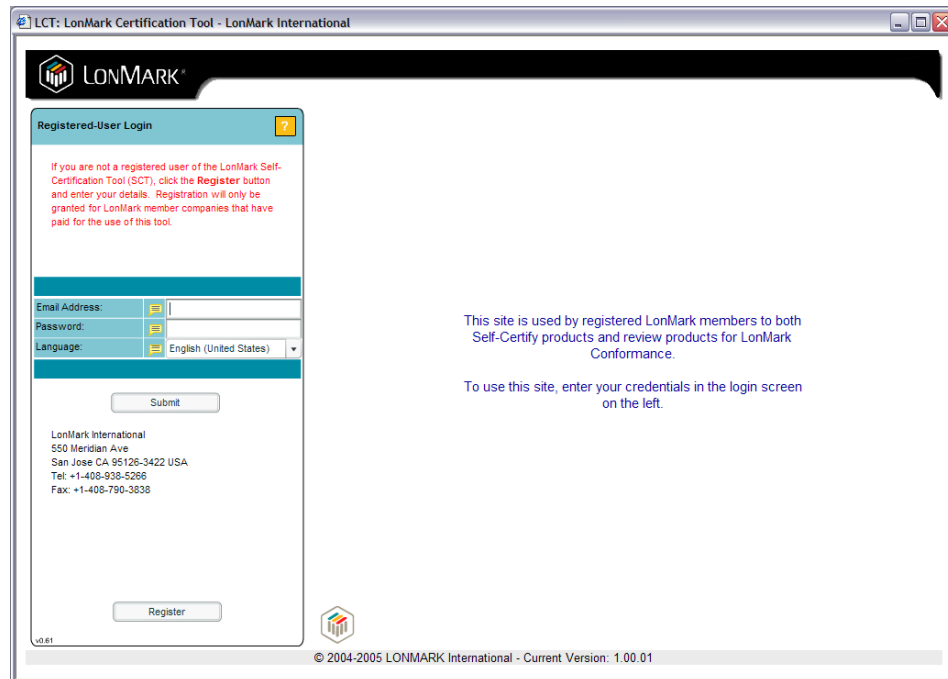
Click the  button to launch the LCT online utility.

Do not enter into the Member Forum (denoted by the ).



Note: A new Internet Explorer browser window will open. If you are using a pop-up blocker you will need to allow pop-up windows from www.lonmark.org and cert.lonmark.org to use the LCT.


The resulting window should look similar to the following:



Begin by establishing a **personal account** that is based upon your email address. The LCT is designed to allow personal accounts to be created that will allow you access to all of your “**projects**”—the term we use to describe all that is involved in the certification of a single device.





1. If English is not your preferred language, the first step is to select the language you prefer from the pull-down menu...



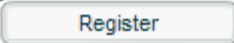
2. Once your language is selected, if this is your first visit to the website, do not fill-out the information in the blue area but instead, click on the  button to create a **personal account**...

Registered-User Login

If you are not a registered user of the LonMark Self-Certification Tool (SCT), click the **Register** button and enter your details. Registration will only be granted for LonMark member companies that have paid for the use of this tool.

Email Address:		<input type="text"/>
Password:		<input type="password"/>
Language:		English (United States) 

LonMark International
550 Meridian Ave
San Jose CA 95126-3422 USA
Tel: +1-408-938-5266
Fax: +1-408-790-3838



3. Complete the New User Registration details following the example below—keeping in mind that there is only one language that is presently functional: “English (United States).” It is imperative that you provide your correct email account because it will be used for all verification and results. Your submitted email address will be used for no other purpose, and is kept separate from any other email addresses you may have provided us in the past for other correspondence.




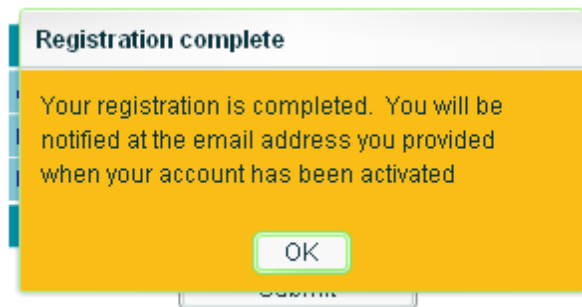
The screenshot shows a 'New-User Registration' dialog box with a light blue header and a yellow bar below it. The form contains the following fields:

Name:	John Smith
Email Address:	jsmith@mycompany.com
Password:	*****
Password (again):	*****
Company:	My Company Ltd. (dropdown)
Language:	English (United States) (dropdown)

At the bottom of the dialog are two buttons: 'Register' and 'Cancel'.

When complete, click  again.

You will receive a notification box to inform about your new account request, which you can dismiss by clicking :



4. LONMARK Staff will process the request for an account and will email back to you after activating your account. This is a one-time process to ensure that only those *allowed* to use the tool are *able* to use the tool.
If you do not receive your confirmation from cert@lonmark.org within 24 hours, please email to cert@lonmark.org for assistance.

Beginning a Certification Project

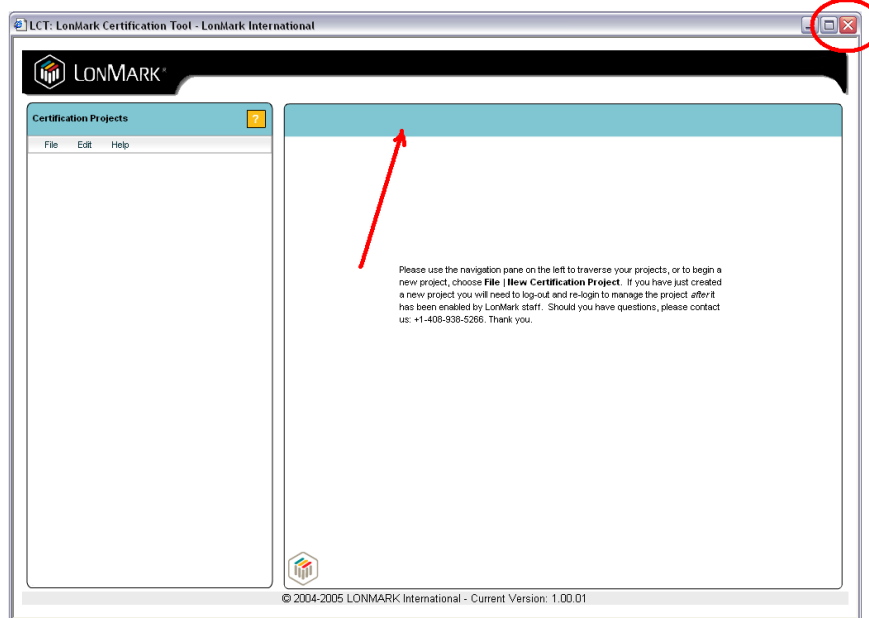
With a valid account, you can begin using the tool.

5. After your account has been enabled (you should receive email notification when your account has been enabled), log into your new account using the email address and password used during Registration.

Email Address:	<input type="text" value="jsmith@mycompany.com"/>
Password:	<input type="password" value="*****"/>
Language:	<input type="text" value="English (United States)"/>

Submit

The right panel should change to something similar to the image below:

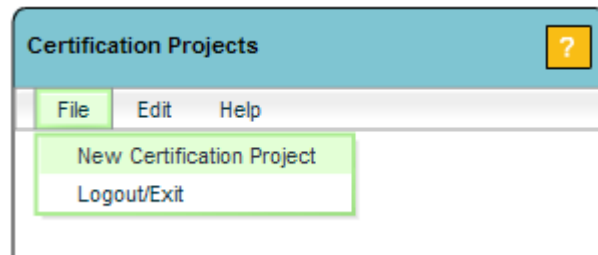


...where the blue bar (marked here with the arrow) can be seen atop the panel. If the blue bar does not appear, you may be encountering a firewall issue that prevents the LCT from fully loading. In this case, please ensure that it is indeed a firewall issue by closing the entire window (marked here with a circle) and re-launching the LCT. If the problem persists, please contact LONMARK Staff for suggestions to resolving the issue.



Note: During development, we created some projects using certified and non-certified devices. Therefore, it is possible that you will see already-existing projects for your company in your account. These are only visible by your company. No other companies will see these or any other projects you create.

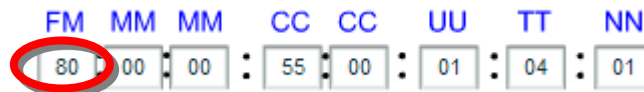
6. Begin by creating your first project by choosing **New Certification Project** from the **File** menu:



7. Enter the **Standard Program Identifier (SPID)** for your device. The SPID must begin with an '8' in the most-significant nibble of the first byte. For example...



Note: Once a project has been activated, the **Standard Program Identifier** cannot be changed. This means that all devices to be certified must have a **Standard Program Identifier** that begins with 8, A, B, C, D, E, or F (as defined by the particular Guidelines version used); and the device must use the desired Device Class. If the **Standard Program Identifier** needs to be changed, a new project must be created. For that you must contact LONMARK Technical Staff.



8. Enter the **Name of Device**, and the **Full Device Description** (be sure to include the marketing text that you wish displayed to potential buyers of your product). Optionally, you can enter the **LonMark Guidelines Version**. Do not select any of the checkboxes in the **Project Status Area** at this time.

New Project

*** Project ID: *** Manufacturer Identifier (MD):

Standard Program Identifier: **FM MM MM CC CC UU TT NN**
 : : : :

Name of Device:

Full Device Description:

LonMark Guidelines Version:

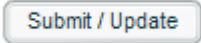
Project Status Area

Active Project? Obsolete Project?

Public and Searchable? Read Only Project?

Passed all Validation Tests?

An “Active” project is a project that is undergoing the certification process. Once it is certified, it becomes inactive, public, and read only. Manufacturers can change the “Public” and “Obsolete” status of certified projects. Anyone using the tool can search and look at your certificate document, if it is “Public and Searchable.”

9. When you have completed the information, click . You may receive an “INFO 101” message. This indicates that your project request was sent. You must wait for LONMARK Staff to activate your new project. An email will be sent to you when the project becomes activated. To see the new project listed on the left pane, logout and then login again after receiving the email notification from LONMARK.

Use of the LONMARK Certification Tool

10. To certify a project that has been activated by the LONMARK Staff; complete each of the sections, which are shown in this example, by clicking on the names for each section—using sheets (📄) and folders (📁) as the navigation concept (*e.g.*, “📄 Application Data” sheet, “📁 Checklist” folder):

▼ 📁 Widget 2000 LMI (8000005500010401)

📄 Applicant Info

📄 Publication Data

▶ 📁 Checklist

▶ 📁 Resource Files

▶ 📁 XIF File

▶ 📁 Physical Test

Applicant InfoWidget 2000 LMI (8000005500010401)

Company Details

Company Name:	My Company Ltd.
Address:	PO Box 2000
Address:	100 Main Street
City:	New York City
State:	NY
Postal Code/ZIP:	10100
Country:	US

Consultant Contact

Name:	<input type="text"/>
Alternate Name:	<input type="text"/>
Company Name:	<input type="text"/>
Title:	<input type="text"/>
Telephone:	<input type="text"/>
Fax:	<input type="text"/>
E-Mail:	<input type="text"/>

Marketing Contact

Name:	Susan Kim
Job Title:	Marketing Director
Telephone:	+1-202-555-1212
Fax:	+1-202-555-2121
E-Mail:	skim@mycompany.com

Technical Contact

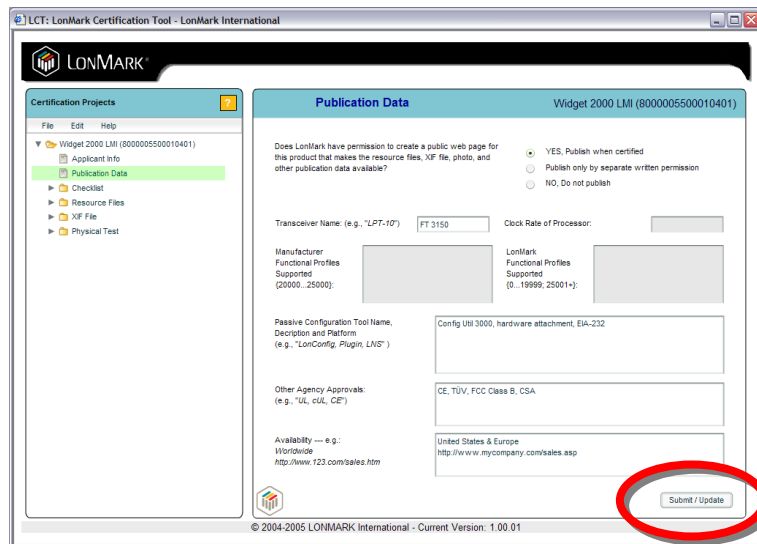
Name:	Iris Lee
Job Title:	Principal Engineer
Telephone:	+1-202-555-1200 x123
Fax:	+1-202-555-2121
E-Mail:	ilee@mycompany.com

Leave blank any information that does not apply to your project (*e.g.*, **Consultant Contact**).

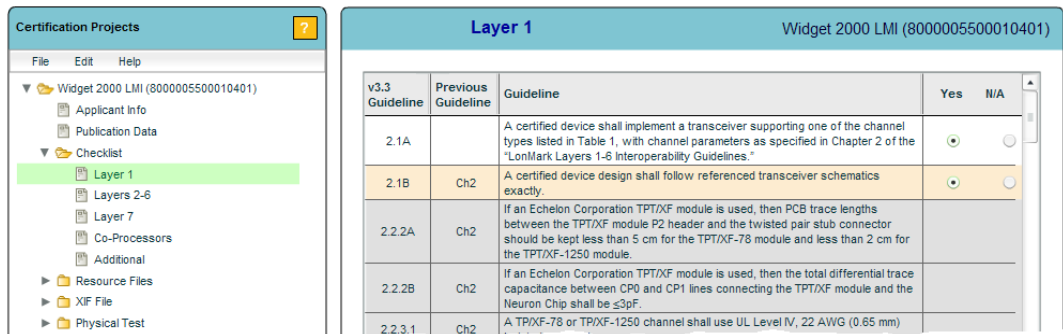
- a. Enter both the **Application Data** (shown above) then the **Publication Data**.

Always be certain to click when you are finished.





You can change the data at any time but the changes will be deleted if you do not click before you leave the page each time you make changes.

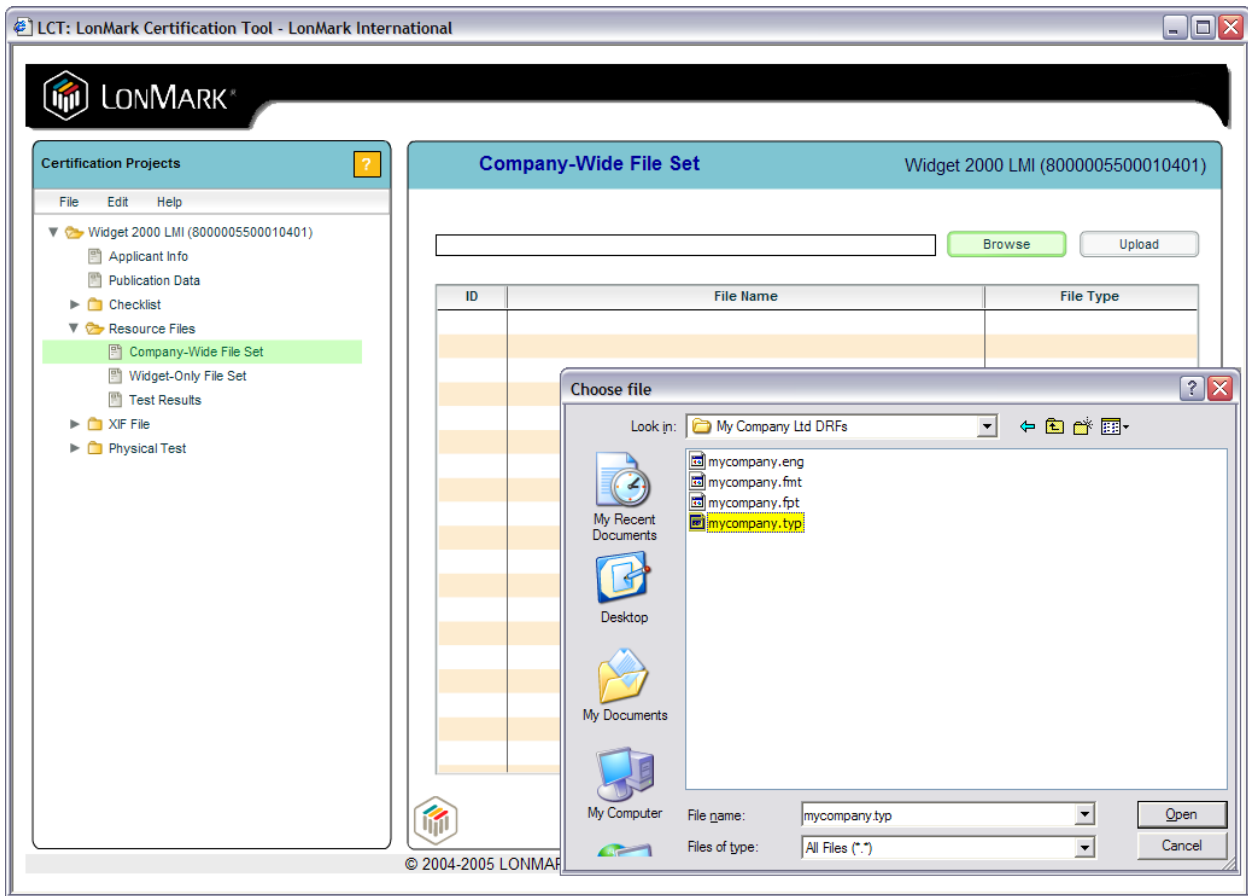


11. Use the left panel (**Certification Projects**) to navigate to the Checklist folder to enter information about you device that cannot be tested by the LCT, or that needs to be verified by the LCT.
12. Expand the Checklist folder by clicking the gray arrow to its left (“▶”), and then proceed by clicking on Layer 1. Complete all questions that are not in gray:




13. Be sure to click before leaving each set of Checklist questions.
14. When finished filling-out the Checklists, use the left panel (**Certification Projects**) to navigate to the Resource Files folder to build your resource-file sets and to upload the resource files to each file set—if your device requires resource files, or if you provide them anyway. This process must be repeated for each project:
 - a. To build a resource-file set (combination of all files of the same scope), click and then give the file set a new name. Be sure to set the proper scope for the set of files you intend to upload.
 - b. Repeat the Add process for each scope of files you intend to upload.


- c. When complete, click .
- d. Using the **Certification Projects** panel, the  Resource Files folder should now be expanded. Select the  New FileSet Name, (now with a new name) and then  for the individual files (TYP, FPT, FMT, and at least one language file, like ENG or ENU) that you wish to add in the **New FileSet Name** –titled page that appears on the right side.
- e. Upload each file.





ID	File Name	File Type
1062	mycompany.typ	TYP
1063	mycompany.fpt	FPT
1064	mycompany.fmt	FMT
1065	mycompany.eng	LANG

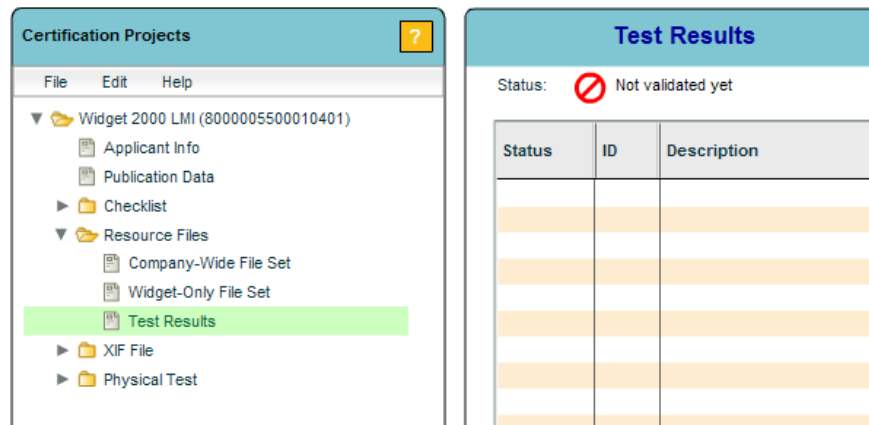
15. Navigate to the external-interface file  XIF File folder, upload your .XIF file:

- a.  for the desired file, then





- b.  the file to the LCT for testing.

ID: File Name:  

16. Return to the  Resource Files folder, and click on  Test Results. You will see the following:



The screenshot shows two side-by-side panels. The left panel, titled 'Certification Projects', displays a tree view for 'Widget 2000 LMI (8000005500010401)'. The 'Test Results' item is highlighted in green. The right panel, titled 'Test Results', shows a status of 'Not validated yet' with a red prohibition icon. Below this is a table with columns 'Status', 'ID', and 'Description'. The table contains several empty rows with a light orange background.

17. Validate the uploaded files using the  button in the **Test Results** page. Confirmation email will be sent to you with the results.
18. Repeat the same action for the XIF file: Click on  Test Results (under  XIF File).
19. Validate your XIF file using the  button. Confirmation email will be sent to you with the results of the validation.



Note: Once a project's XIF file has been Validated, you will receive a confirmation email message. *You must retain that message.* You will need the **Token** contained in the message. The Token will be used to complete the Physical Test portion of the certification. Without the Token, you will not be able to complete the certification. If your confirmation email does not arrive, please contact LONMARK Technical Staff.

20. If **no errors** are found in the Checklist, Resource Files, and XIF File, **then** you can proceed to the Physical Test of the device. The physical tests *cannot* be performed before all errors are resolved with the Checklist, Resource Files, and XIF File.

Physical Device Testing

The LCT contains a client-side application that will communicate with the device under test. This small EXE application communicates with Echelon Corporation's OpenLDV™ driver to communicate with Echelon Corporation-branded network-interface products.



Warning: The LCT has also been tested to work with at least one LOYTEC network interface with a few modifications to the Windows Registry. If you are interested in that option, please contact LonMark Technical Staff for details. Please note that modification of the Registry can have potentially devastating effects on your operating system and should only be performed by those comfortable with the risk and with making the changes. LonMark International will not be held responsible for modifications made to the Registry using Regedit or any other manual Registry-editing tool.




Note: The device under test does not need to be physically tested by the same PC that is running the other tests. LONMARK realizes that some companies have restrictions as to what can be connected to the Internet; therefore, OpenLDV can be downloaded and installed on a different PC. Likewise, the LCT's EXE can be downloaded and installed on the PC that contains the OpenLDV installation. The results of the tests can then be moved to the Internet-connected PC for sending back to the LCT for validation.

21. If you do not have the OpenLDV driver for your Echelon network-interface card, please obtain it free-of-charge from this location in Echelon's "LonWorks Download Center":

<http://www.echelon.com/openldv/>

You may need to enter Echelon user-account information to gain access. If you do not have an account, you can obtain one by following the instructions on that website page.

22. After installing the OpenLDV driver on the PC to be used for the physical testing, you can download and install the LCT's EXE to that same PC. Please read above *Note* for more details.

- a. Again, login to the LCT—if you had exited the LCT for installation purposes.
- b. Click  Physical Test to show the **Physical Test** page.
- c. Obtain the LCT EXE application by choosing



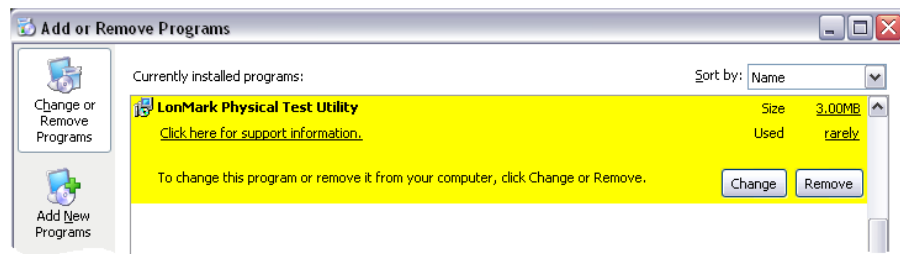
- d. Install the EXE on *both* the Internet-connected PC and the one that will be connected to the device under test. If the Internet-

connected PC is the same PC that will be connected to the device under test, then only one installation of the Physical Test Utility need take place.

- ❑ Installation involves the download of the **PhysicalTest.zip** file, and the subsequent unzipping of the files it contains.
 - ❑ **Save** the ZIP file to your hard drive when prompted.
23. After decompressing the ZIP file, you should see five (5) files. Run the **Setup.Exe** application. If you have installed a previous version, you will receive this message:

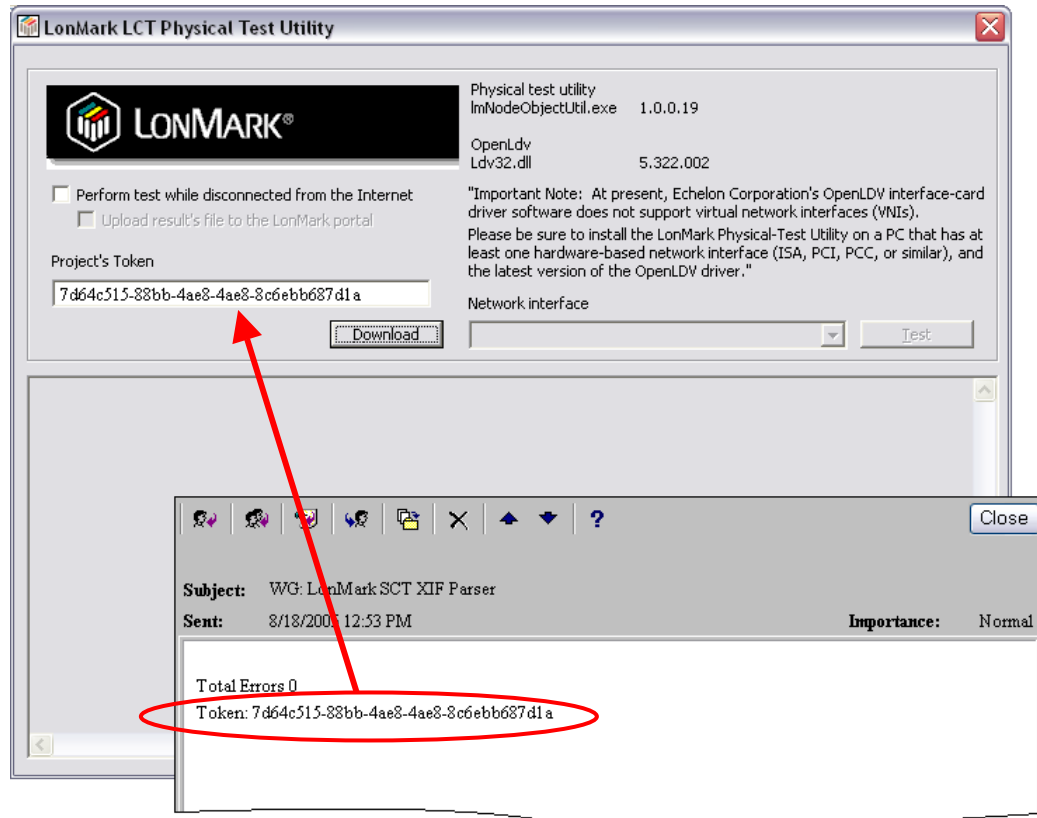


In this case, please uninstall the previous version before installing the new version.

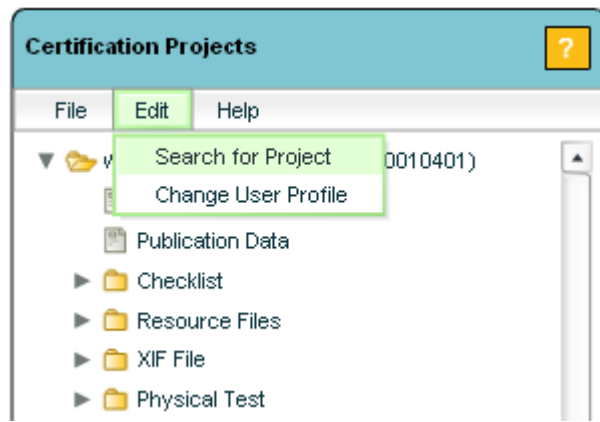


Note: The application does not create an “All Programs” menu item under the “Start” button but instead, creates a link on the Desktop only: **LonMark Physical Test Utility**.

24. At this time, you should run the application that was installed using the Desktop link. From the “LonMark LCT XIF Parser” email you received, copy the generated **Token**, and paste the token into the **LonMark LCT Physical Test Utility Project’s Token** field:



25. Click on the “Download” button to get this project’s verification information.
26. Select the network interface, and then click the “Test” button.
The tool will upload the results back to the server (if on the same machine). After which, the utility can be closed. A local text file is also available for you to submitting back to the LCT (if testing was on a different PC).
27. If the device under test passes the tests, and all other errors are resolved within the LCT testing, clicking the button on the [Results](#) page of Results (under Physical Test) will complete the certification process.
28. After Certify is pressed, the Project will “disappear” from the left panel. It can be found again by using the Search for Project feature...



...but only if you had agreed to allow LONMARK International to publish your certified device when certification completed.

For technical or administrative assistance, please feel free to contact us:

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San Jose CA 95126 USA
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Fax: +1-408-790-3493
<mailto:cert@lonmark.org>

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