LicenseST User Guide for Mark* Controls Platform

June 2020
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### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSS</td>
<td>Device Manager Software Suite</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>VM</td>
<td>Virtual Machine</td>
</tr>
</tbody>
</table>
Safety Symbol Legend

**Warning**
Indicates a procedure or condition that, if not strictly observed, could result in personal injury or death.

**Caution**
Indicates a procedure or condition that, if not strictly observed, could result in damage to or destruction of equipment.

**Attention**
Indicates a procedure or condition that should be strictly followed to improve these applications.
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LicenseST is an application that allows a user to interact with licensing in ControlST®, Advanced Developer Toolkit, CIMPLICITY®, and Device Manager.

This document provides the instructions on how to use and interact with LicenseST in both Windows® and Linux® environments.
2 Installation

2.1 Computer Requirements and Recommendations

The supported Windows Operating Systems are:

- 64-bit Windows 7
- Windows 10
- Windows 2012R2
- Windows Server 2016
- Windows Server 2019

The supported Linux Operating Systems are:

- 64-bit Debian based systems, specifically Ubuntu 18.04, 19.10

2.2 Required Software

Before using LicenseST, the following software dependencies must be installed on the computer:

**Note** The specified versions are required versions, not minimum versions.

- **On Windows:**
  - VC redist v141 x64
  - Dotnet Core runtime V3.1.0 x64
  - Windows desktop runtime v3.1.0 x64

- **On Linux:**
  - Dotnet Core runtime v3.1.0 x64

2.3 Component Installation on Windows

Starting with ControlST V07.08.00C, Advanced Developer Toolkit V07.03.00C and Device Manager Software Suite (DMSS) V02.01.00C, setup.exe installs the necessary dependencies on Windows and then automatically installs LicenseST. If installing manually, ensure the dependencies are installed and then install LicenseSTWixProduct.msi. The prerequisite files can be downloaded from [https://dotnet.microsoft.com/download/dotnet-core/3.1](https://dotnet.microsoft.com/download/dotnet-core/3.1). Visual Studio can be downloaded from [https://support.microsoft.com/en-us/help/2977003/the-latest-supported-visual-c-downloads](https://support.microsoft.com/en-us/help/2977003/the-latest-supported-visual-c-downloads).

2.3.1 Extra Component Installation for VMware® Hosted Windows Machines

Any Windows Operating System hosted on VMware needs to install the PowerCLI.

➢ To install the PowerCLI

1. From the Start menu, select the Windows Powershell folder, right-click on the Windows PowerShell app and select Run As Administrator.

2. Enter the command: `Install-Module -Name VMware.PowerCLI`

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*Public Information*
2.4 Component Installation on Linux

**Note** All commands in Linux are to be done from the terminal.

- Ensure that Dotnet Core runtime v3.1.0 x64 has been installed on the machine. This prerequisite can be downloaded from [https://dotnet.microsoft.com/download/dotnet-core/3.1](https://dotnet.microsoft.com/download/dotnet-core/3.1).
- Copy the `LicenseSTLinux.tar` file into the location where you want to install it.
- If you are upgrading LicenseST, the previous version must be uninstalled.

➢➢ **To uninstall a previous version of LicenseST:** execute the following commands:

- `cd ./LicenseST`
- `sudo ./uninstall.sh`
- `cd ..`
- `rm -rf ./LicenseST`

➢➢ **To install LicenseST:** execute the following commands:

- `tar -xvf LicenseSTLinux.tar`
- `cd ./LicenseST`
- `sudo ./setup.sh`
3 LicenseST

LicenseST has a graphical user interface (GUI) that allows a user to activate, return, refresh, or view activated licenses.

Note The LicenseST GUI can only be used in Windows.

➢➢ To open the LicenseST GUI: from the Start menu, select LicenseST, and then LicenseST.

Alternatively, double-click the LicenseST Monitor icon in the system tray. This icon can be green, orange or red depending on licensing status.

LicenseST Monitor icon

3.1 Activation

To compare the license activation types, refer to the section What is the Correct Activation Type?.

3.1.1 Online Activation

If proxy settings modifications are required, refer to the instructions in the section Change Connection Settings.

➢➢ To Activate a License Online

1. After setting the proxy settings, from the LicenseST GUI, click Add License.
2. Enter the license code and click Activate.
The license information displays in the LicenseST main window. The license code is provided via email or from the distributor.

![LicenseST Main Window](image)

<table>
<thead>
<tr>
<th>License Info</th>
<th>Features</th>
<th>Fields</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>License code: CST...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>License status: Authorized</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease expires: 5/26/2020 3:30 AM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>License expires: 11/26/2020 12:02 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activation type: Online</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>License type: Subscription (concurrent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Id: SR2zcDlCNoZCbnSwPdU2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Name: BARKERZ4G4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Connectivity: Connected To Cloud

[Add License] [Query Server] [Return License]
3.1.2 Offline Activation

➢ To Activate a License for Offline Use

1. From the LicenseST GUI, click Add License to display the LicenseST Activation window.
2. In the LicenseST Activation window, select the Offline Activation tab.
3. Paste the activation code into the Application License Code field and click Generate. The Activation Certificate For Webpage field should populate.
4. Select Copy to Clipboard or Export To File to save the Activation Certificate For Webpage text.
5. On a PC with Internet access, navigate to https://www.activationportal.me/selfservice/activation.aspx?Type=1&cid=7300&pid=8440&lang=en-US and paste the Activation Certificate For Webpage text into the Activation Certificate field, then click Activate.
6. Copy the text generated from the activation portal webpage to a file or to the clipboard.
7. In the LicenseST Activation window, select Paste from Clipboard or Import From File to get the text generated from the activation portal webpage into the Response Certificate From Webpage field and click Activate.

3.2 Return a License Activation

A license activation for a given product can be returned for any reason. For example, a new license activation needs to be activated for the same product or a new computer procured and want to reuse the same license from the previous computer.

➢ To Return a License Activation

1. From the LicenseST main window’s top right drop-down list, select the product license to return.
Information about the license to be returned is displayed on the License Info tab.

2. Click Return License.

If the tool detects cloud connectivity, it returns the license to the cloud. If cloud connectivity is not detected, the deactivation string of characters can either be copied to the clipboard or into a file. This deactivation string must be pasted into the deactivation portal (https://www.activationportal.me/selfservice/deactivation.aspx?Type=2&cid=7300&pid=8440&lang=en-US). On the portal page, click Deactivate to complete the return of the license activation.

3.3 Advanced Settings Tab

3.3.1 Query Server for Products

This forces a communication to the cloud to refresh the lease period for all products that are licensed in LicenseST.

➢➢ To Query Server for Products: from the LicenseST main window, click the Advanced tab, then click Query Server for Product.

3.3.2 Submit Problem Report

If there is an issue, please submit a problem report.

➢➢ To Submit a Problem Report

1. From the LicenseST main window, click the Advanced tab, then click Submit Problem Report.
2. Fill out the information and click OK to email the problem report.

If the workstation does not have Internet access, click Save to File, copy the saved file to a PC with Internet access, and email the file to swbgs@ge.com; make sure the body of the email is left blank.
3.3.3 **Clean Up License Data**

This option purges all license data from the given computer.

![Attention]

*Do not use this option unless instructed by Customer Care or by the Development Team.*

➢➢ **To Clean Up License Data:** from the LicenseST main window, click the Advanced tab, then click **Clean up License Data**.

3.3.4 **Change Logging Settings**

![Attention]

*Do not change this setting unless instructed by a Developer debugging an issue.*

➢➢ **To Change Logging Settings:** from the LicenseST main window, click the Advanced tab, then click **Change Logging Settings**.

This window also provides an easy way to get all log files by selecting **Zip Log Files**.

3.3.5 **Change Connection Settings**

➢➢ **To Change Connection Settings**

1. From the LicenseST main window, click the Advanced tab, then click **Change Connection Settings**.
2. Fill out the **Proxy Settings** and **VMWare vSphere Settings** (only available on VMware hosted OS) and click **Save**.
A validation happens.

➢ **To Validate the Proxy Settings:** from the LicenseST main window, bottom left, look at **Connectivity**. If it displays **Connected To Cloud**, the **Proxy Settings** are good.

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**Note** VMware vSphere Settings are only accessible on the VMware managed operating system. VMware vSphere Address (es) can be a list of addresses separated by semicolons ‘;’.

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### 3.3.6 Analyze Current Dongle

➢ **To Analyze Current Dongle:** from the LicenseST main window, click the **Advanced** tab, then click **Analyze Current Dongle**.

If a recognizable security dongle is there, the following will display:

The **Reload** button reloads the serial number from the dongle. This can be used when changing dongles.
4 LicenseSTCommandLine

LicenseSTCommandLine is a command line interface that allows a user to activate, return, refresh, or view activated licenses.

Note LicenseSTCommandLine can be used in Windows and Linux. All examples use the syntax for Linux command line.

4.1 Activation

To compare the license activation types, refer to the section What is the Correct Activation Type?

4.1.1 Online Activation

If proxy settings modifications are required, refer to the instructions in the section Set Connection Settings.

➢➢ To Activate a License Online: after setting the proxy, execute the following command:

```shell
<LicenseST_Path>/LicenseSTCommandLine -activation online -code "CST-XXXX-XXXX-XXXX-XXXX"
```

➢➢ To verify what is licensed: use the show products command. Refer to the section Show Licensed Products.

4.1.2 Offline Activation

➢➢ To Activate a License for Offline Use:

1. Execute the following command:

```shell
<LicenseST_Path>/LicenseSTCommandLine -activation offline -code "CST-XXXX-XXXX-XXXX-XXXX"
```
   A string of letters and numbers is returned.

2. Copy this string from the terminal to a PC with Internet access.

3. On a PC with Internet access, navigate to https://www.activationportal.me/selfservice/activation.aspx?Type=1&cid=7300&pid=8440&lang=en-US and paste the string into the Activation Certificate field, then click Activate.

   The activation portal displays a long string of characters.

4. Copy the string of characters to a file or to the clipboard.

5. From the console, paste the string of characters and press [Enter].

➢➢ To verify what is licensed: use the show products command. Refer to the section Show Licensed Products.

4.2 Return a License Activation

➢➢ To Return a License Activation:

1. Determine what product is licensed (for example, the first division of the activation code).
For ControlST it is CST, for Advanced Developer Toolkit it is ADT, and for GE Digital Products it is DIG.

2. Execute the following command:
   `<LicenseST_Path>/LicenseSTCommandLine -returnproduct <first_division_activation>

   **Note** If unsure of the product use XXX for `<first_division_activation>` to get a list of products.

   If the tool detects cloud connectivity, it returns the license to the cloud. If cloud connectivity is not detected, the console displays a long string of deactivation characters. These deactivation characters must be pasted into the deactivation portal (https://www.activationportal.me/selfservice/deactivation.aspx?Type=2&cid=7300&pid=8440&lang=en-US). On the portal page, click **Deactivate** to complete the return of the license activation.

### 4.3 Set Connection Settings

➢➢ **To Set Connection Settings:** execute the following command:

   `<LicenseST_Path>/LicenseSTCommandLine -setconnectionsettings -setproxyaddress http://<proxy> -setproxyport 80 -setproxyusername "<user_name>" -setproxyuserpassword "<password>" -setvsphereaddress "<address>" -setvsphereusername "<username>" -setvsphererepassword "<password>" -setcomputernameinvsphere "<compName>"

   **Note** Parameters shown in *Italic* are optional. vSphere settings are only used in VMware hosted Windows machines.

### 4.4 Get Security Dongle Serial Number

➢➢ **To ensure that the system is detecting the Security Dongle:** execute the following command:

   `<LicenseST_Path>/LicenseSTCommandLine -getdongleserial

   This reads the serial number from the dongle. This command also fixes the issue of when products are no longer licensed due to the non-detection of the security dongle. This command clears that non-detection error immediately instead of having to wait for up to an hour for the service to execute.

### 4.5 Show Licensed Products

➢➢ **To show what products are currently licensed:** execute the following command:

   `<LicenseST_Path>/LicenseSTCommandLine -showproducts`
## 5 What is the Correct Activation Type?

<table>
<thead>
<tr>
<th>Type of Activation</th>
<th>Is Virtual Machine?</th>
<th>Length of Lease(^1)</th>
<th>Operating System</th>
<th>Is Security Dongle Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>No</td>
<td>20 days</td>
<td>All</td>
<td>No</td>
</tr>
<tr>
<td>Offline</td>
<td>No</td>
<td>Until expiration date</td>
<td>All</td>
<td>No</td>
</tr>
<tr>
<td>Online(^2)</td>
<td>Yes</td>
<td>Until expiration date</td>
<td>Windows- Hyper-V or VMware Managed</td>
<td>No</td>
</tr>
<tr>
<td>Offline(^2)</td>
<td>Yes</td>
<td>Until expiration date</td>
<td>Windows- Hyper-V or VMware Managed</td>
<td>No</td>
</tr>
<tr>
<td>Offline</td>
<td>Yes</td>
<td>Until expiration date</td>
<td>Any</td>
<td>Yes</td>
</tr>
</tbody>
</table>

\(^1\) Length of Lease = Time before you will not be licensed

\(^2\) If certain information cannot be detected on the system, the Lease period is set to 500 hours by default.

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**Note** A security dongle extends the lease time for virtual machines (VM) for an offline activation. This is because VMs that are copied are identical and this dongle provides a unique identifier.
## Appendix Common Issues

The following table provides some common issues a user may encounter while using LicenseST products and how to resolve the issue.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not have cloud connectivity</td>
<td>• Ensure you are connected to the Internet</td>
</tr>
<tr>
<td></td>
<td>• If you have a proxy server, set the properties. To set the properties, follow the instructions in section <a href="#">Change Connection Settings</a> for LicenseST and <a href="#">Set Connection Settings</a> for LicenseSTCommandLine</td>
</tr>
</tbody>
</table>