

LucidShape Installation Guide

March 2017

SYNOPSIS[®]

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Chapter 1 Getting Started

This chapter lists system requirements for the LucidShape family of products and tells you how to contact LucidShape Support.

You can run LucidShape products using either a *fixed* license or a *floating* license. A fixed license allows you to run LucidShape only on the computer on which it is installed (see *Installing LucidShape with a Fixed License* on page 3). A floating license, which is installed on a network server, allows you to run LucidShape on any computer on the same network (see *Installing LucidShape with a Floating License* on page 11). The number of users that can use LucidShape concurrently is limited by the licensing software.

Although the examples in this document show and refer to the LucidShape product, the instructions apply to the entire LucidShape family of products, which includes:

- LucidShape
- LucidShape Lite
- LucidDrive - Additional setup may be needed if you are installing LucidDrive Server/Client or LucidDrive Manual versions.
- LucidShape CAA V5 Based

System Requirements

To install LucidShape to run with either a fixed or floating license, you must have:

- A personal computer with any CPU with at least four cores from the last or second-last processor generation.

To get maximum performance from multi-threaded simulations, we recommend 4 or more CPU cores. LucidShape simulations make use of multi-threading, and a high number of cores or threads will enhance ray tracing speed; however, the most beneficial feature to take into consideration is a CPU with a very high single-thread frequency (or single-thread performance).

If Intel Hyper-Threading Technology is available on your computer, enabling it will further increase multi-threaded simulation performance.

- Operating System: Windows 7, 64-bit
- Random Access Memory (RAM): 8 GB minimum, 16 GB or more recommended
- GPU:
 - With GPUTrace: NVIDIA graphics card. In general, all graphics cards with a *compute capability* at 2.0 or later are supported. To check the supported versions of your graphics card, see the NVIDIA website.
 - Without GPUTrace: LucidShape does not require a special graphics card. If you are purchasing graphics cards, contact LucidShape Support for the latest recommendations.
- Free disk space on the *system drive* (i.e., the drive on which the operating system is installed) for prerequisite software: 10 GB

Large models and complex analyses may require significantly more disk space. If LucidShape is installed on a drive other than the system drive, that drive should also have at least 10 GB free disk space.

- Free disk space as listed for the LucidShape product you are installing:

Product	Disk Space
LucidShape	1.5 GB
LucidShape Lite	380 MB
LucidDrive	1.4 GB
LucidShape CAA V5 Based	600 MB
Saved files (CAD, .lug, .lid, etc.)	10 to 50 GB

- License keys provided by Synopsys OSG via SolvNet SmartKeys.
- License dongle
- Display:
 - A high-resolution monitor (1280 x 1024 or better) with 16-bit (65536) colors or more
 - An OpenGL compliant graphics card with stable ICD driver support recommended. We recommend that you always use the latest version of the driver for your graphics card.
- A DVD drive, if installing from a DVD

If you are installing LucidShape CAA V5 Based, you must also have CATIA V5 R24

If you will be running LucidShape with a floating license, you must also have:

- TCP/IP network protocol
- OSG Floating License Manager (a Sentinel RMS license manager that has been customized for Synopsys OSG software), provided by Synopsys OSG via SolvNet.

Contacting LucidShape Support

If you need help or have questions about LucidShape products that are not answered in the documentation or online help:

- The LucidShape Support team is available from 9 a.m. to 5p.m. MEZ Time (UTC + 1).
Telephone +49-5251-681-500
Email: lucidshape_support@synopsys.com
- For customers working with distributors, please contact your local LucidShape software distributor for support. See the [Synopsys Optical Solutions Group Global Contacts](#) page for contact information.

Chapter 2 Installing LucidShape with a Fixed License

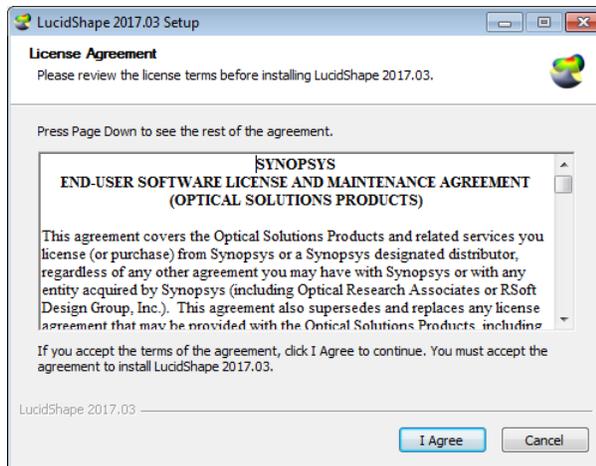
You can run LucidShape products using either a *fixed* license or a *floating* license. This chapter describes how to install the product to run using a fixed license, which allows you to run LucidShape only on the computer on which it is installed.

These instructions assume that you have already downloaded LucidShape from the Synopsys SolvNet website or that you ordered and received a LucidShape DVD. If you have not done so, see *Using Synopsys SolvNet to Obtain LucidShape Software and Licenses* on page 33.

Installing LucidShape

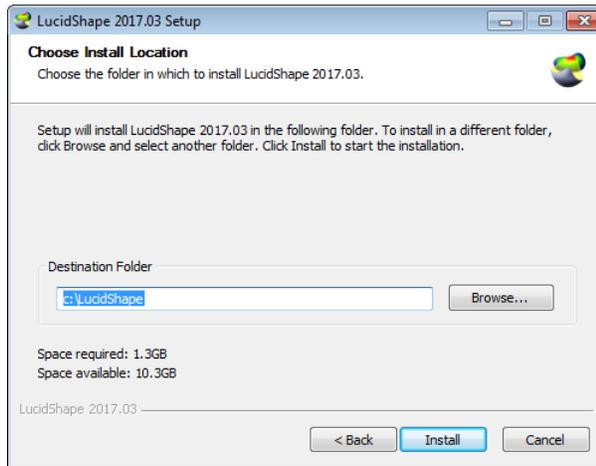
1. Log on to your computer as Administrator.
2. Navigate to the folder where the LucidShape setup file is located. If you have a DVD, insert it into the DVD drive and navigate to that drive.
3. Double-click the setup file (e.g., SetupLucidShape_ *version*.exe)
where *version* is the version number for the release (e.g., SetupLucidShape_2017.03.exe).

The Setup window is displayed at the License Agreement screen.



4. Click I Agree to continue.

The Choose Install Location screen is displayed.



5. Use the default location and click Next (for LucidShape CAA V5 Based) or click Install (for all other LucidShape products).



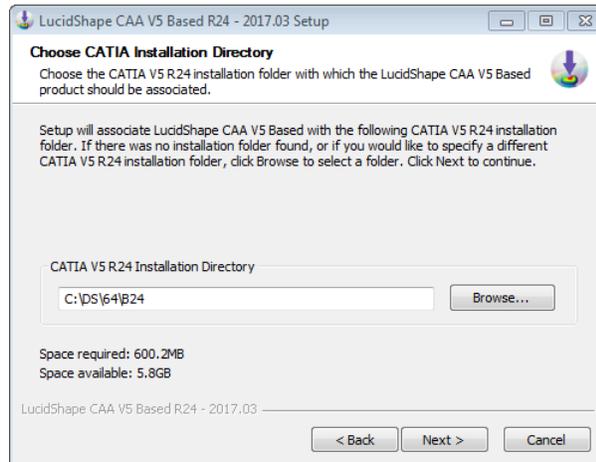
Note: If an earlier release of LucidShape was installed, the default location will be set to the path used for that release. If you want to install the program in a different folder, click the Browse button to locate and specify that folder.

If you are installing a LucidShape product *other than* LucidShape CAA V5 Based, the Setup window shows the progress of the installation; skip to step 10 on page 6.

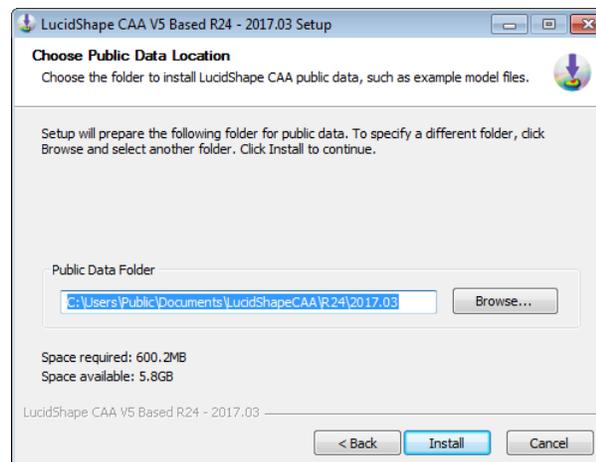
If you are installing the LucidShape CAA V5 Based product, the Choose CATIA Installation Directory screen is displayed; continue with the following steps.

The Choose CATIA Installation Directory screen allows you to associate the LucidShape CAA product with a specific CATIA installation. If a CATIA installation folder was detected, the path to that folder is displayed in the input field. If CATIA is *not* installed on the same computer, or if CATIA is managed by a third-party tool that maintains configurations and versions, the input field may be blank, and you may need to perform additional steps to complete your installation. See *Troubleshooting the LucidShape CAA V5 Based Installation* on page 45 for details.

6. If you need to specify or want to change the CATIA installation folder, edit the path or click the Browse button to navigate to it and select it.
7. Click Next to continue.

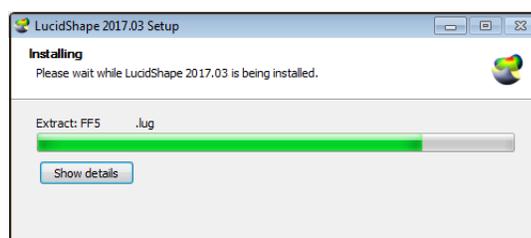


The Choose Public Data Location screen is displayed. This allows you to specify a location for installing public data, such as example model files. To allow interactive use of these files, choose a folder for which you have write permission. The default location is `C:\Users\Public\Documents\LucidShapeCAA\R24\[version]`.

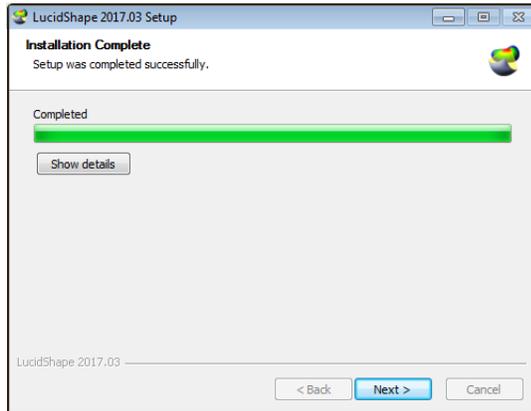


8. To specify a different folder, edit the path or click the Browse button to navigate to it and select it.
9. Click Install.

The Setup window shows the progress of the installation.



When the process is complete, Installation Complete is displayed in the Setup window.



10. For LucidShape CAA, this is the final screen in the installation wizard. Click Close and skip to step 12. For all other LucidShape products, click Next to exit the LucidShape installation wizard. The Completing the LucidShape Setup Wizard is displayed.

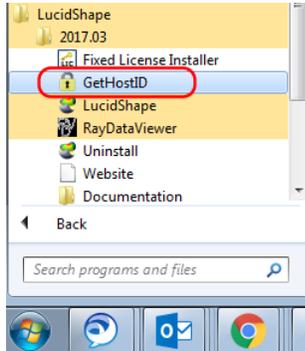


11. Click Finish.
The installation is complete.
12. If you already have a license key for this product, skip to *Installing a License Key for a Fixed License* on page 8. If you do not yet have a license key, continue with *Obtaining the Host ID for a License Dongle* on page 6.

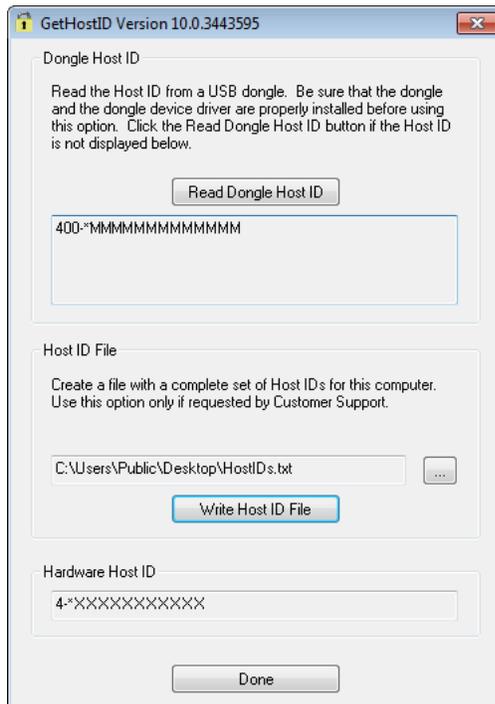
Obtaining the Host ID for a License Dongle

A license key is designed to work for only one USB dongle, so the license key is associated with a unique value encoded on the dongle called a *Host ID*. Because of this, you need to know the Host ID for the license dongle before you can retrieve a license key. The Host ID is printed on a label on the USB dongle; if you're unable to read the ID on the label, you can also obtain the Host ID by running a program that reads it from the dongle. In the LucidShape installation, the GetHostID utility is provided for this purpose. Follow these steps to run GetHostID.

1. Insert the USB dongle in an active USB port. A light glows at the end of the dongle when it's inserted correctly in an active USB port.
2. Select the Windows Start menu, expand the LucidShape group and select GetHostID, shown in the following figure.



The GetHostID utility is displayed.



In this example, the Host ID for the USB dongle is 400-*MMMMMMMMMMMMMM.

3. Copy the Host ID to use when you retrieve your license key on the Synopsys SolvNet website. See *Retrieving License Keys* on page 41 for instructions.
4. Click Done to close the GetHostID utility.

After you retrieve your license key, go to *Installing a License Key for a Fixed License* on page 8 in this guide.

Installing a License Key for a Fixed License

To install the license key for a LucidShape product, you must have:

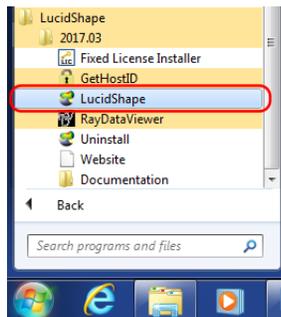
- LucidShape installed
- A license dongle
- A valid license key. This procedure assumes that you have already obtained a license key from the SolvNet SmartKeys web page. If you have not done so, see *Retrieving License Keys* on page 41 for instructions.

Follow these steps to set up licensing for the LucidShape product.

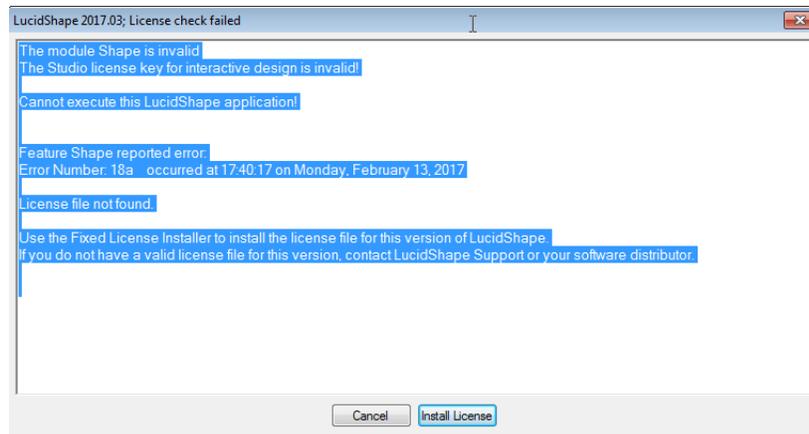
1. Insert the license dongle in an active USB port. A light glows at the end of the dongle when it's inserted correctly in an active USB port.
2. If you're installing LucidShape CAA V5 Based, select the Windows Start menu and select **All Programs > LucidShape CAA V5 Based > R24 > version > Fixed License Installer** (e.g., Start > All Programs > LucidShape CAA V5 Based > R24 > 2017.03 > Fixed License Installer). The Fixed License Installer is displayed. Skip to step 5 on page 9.

If you're installing any other LucidShape product, skip step 2 and go to step 3.

3. Start LucidShape. To do this, you can double-click the shortcut icon on the desktop or select the Windows Start menu and select **All Programs > LucidShape > version > LucidShape** (e.g., Start > All Programs > LucidShape > 2017.03 > LucidShape).

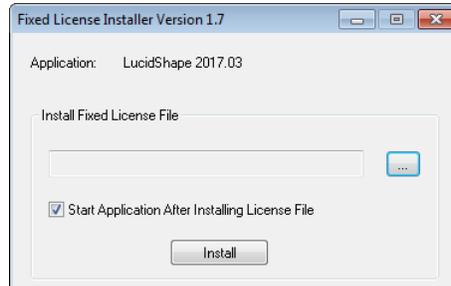


The License Check Failed dialog box is displayed, indicating that a valid license key file was not found.



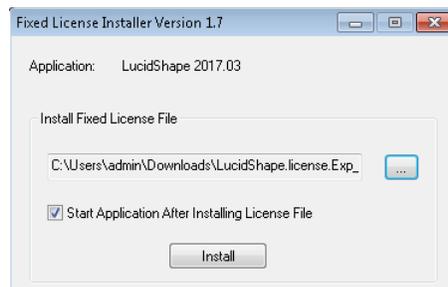
4. Click Install License.

The Fixed License Installer is displayed.



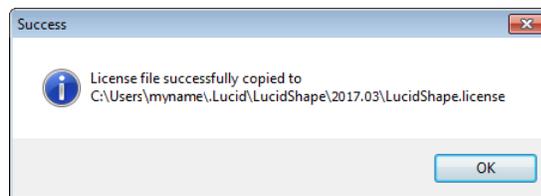
5. Click the Browse button (...).
6. In the Open dialog box, navigate to the license key file, select it, and click Open.

The Open dialog box is closed, and the path to the license key file is shown in the Fixed License Installer.



7. Click the Install button.

The license key is installed, and the Success dialog box is displayed.



8. Click OK.

LucidShape starts automatically.

Chapter 3 Installing LucidShape with a Floating License

You can run LucidShape products using either a *fixed* license or a *floating* license. This chapter describes how to install the product to run using a floating license on a network server, which allows you to run LucidShape on any computer on the same network, and describes how to install LucidShape on one or more client machines. The number of users that can use LucidShape concurrently is limited to a predetermined number by the licensing software.

The floating license capability is supported by the OSG Floating License Manager, which is a Sentinel RMS license manager that has been customized for Synopsys OSG software. If you install other Synopsys OSG software products, they will share the same license management software, and their license keys will be written to the same license key file. The applications cannot share licenses; they share only the license server software.



Note: Installing a floating license requires system-administration-level training and should be performed by someone who is familiar with your network structure. To perform this installation, you must be logged on as administrator.

The steps for installing LucidShape to run with a floating license are:

1. *Selecting a License Server* on page 11
2. *Installing the OSG Floating License Manager on the License Server* on page 12
3. *Installing a License Key for a Floating License* on page 21
4. *Installing LucidShape on Client Machines* on page 22
5. *Enabling the Floating License* on page 26
6. *Administering Floating Licenses* on page 27

Selecting a License Server

Before installing any software, you must identify the computer that will act as the license server. This must be a computer connected to a network that can grant access to one or more client machines.



Note: By default, the License Server communicates via port 5093. If you will be running LucidShape across different subnets, you will have to configure your routers or firewalls to allow two-way communication across this port.

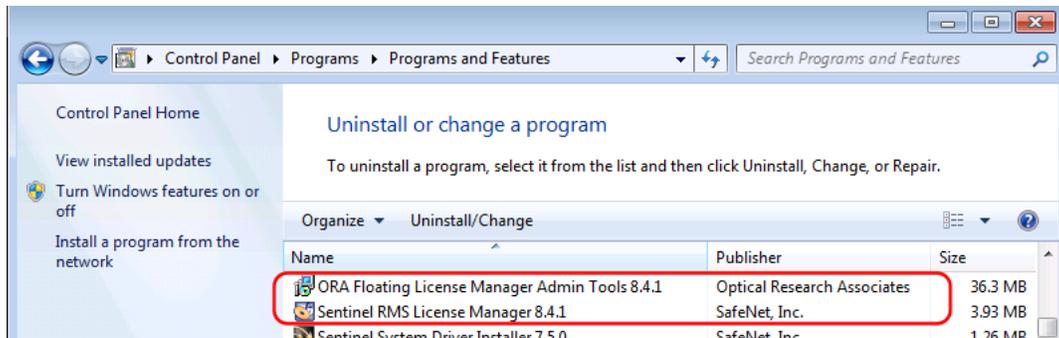
Installing the OSG Floating License Manager on the License Server

To run this version of LucidShape, you must have the OSG Floating License Manager, which is provided on the SolvNet website on the same Downloads page as the product software. (See *Using Synopsis SolvNet to Obtain LucidShape Software and Licenses* on page 33 for details.) Follow these steps to install the OSG Floating License Manager on the license server.



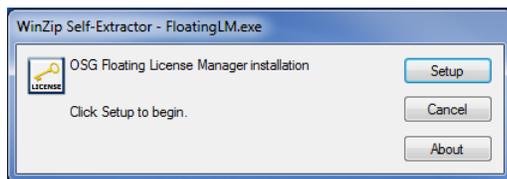
Note: If you have a different version of the Sentinel RMS software (e.g., 8.4.1, 8.6.1), you must first uninstall the older version, as described below.

Before You Begin: To uninstall an earlier version of the Sentinel RMS software, click the Windows Start menu, and click **Control Panel > Programs > Programs and Features**. Uninstall the following two programs: ORA Floating License Manager Admin Tools and Sentinel RMS License Manager, shown in the following figure. (This example shows files from version 8.4.1.)



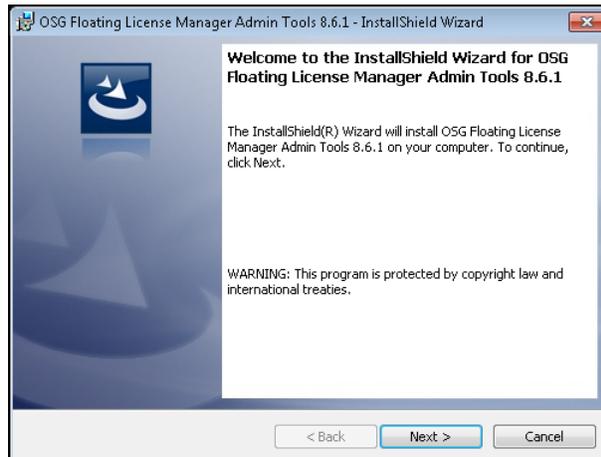
1. Log on to the license server with administrator privileges.
2. Navigate to the folder where the setup file is located.
3. Double-click the setup file FloatingLM.exe.

The WinZip Self-Extractor for the OSG Floating License Manager installation is displayed.



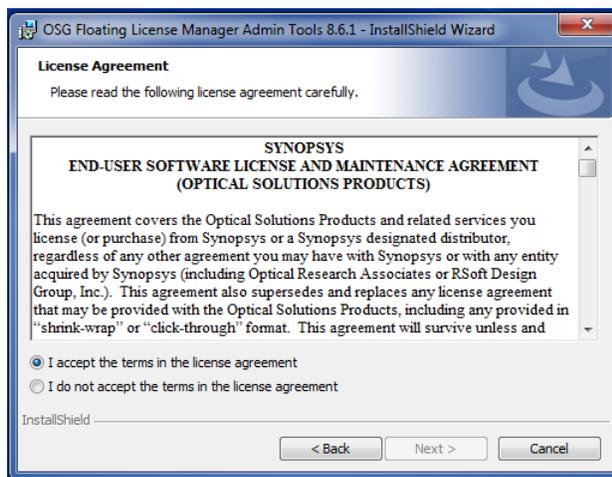
4. Click Setup.

The Welcome screen for the OSG Floating Manager Admin Tools wizard is displayed.



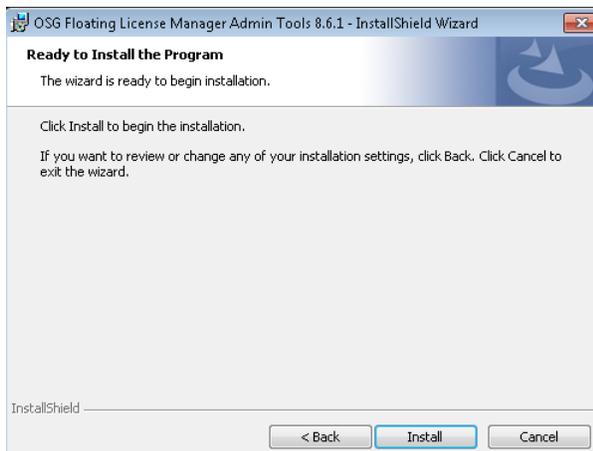
5. Click Next.

The License Agreement screen for the OSG Floating License Manager Admin Tools is displayed.



6. Click the I Accept option and click Next to continue.

The Ready to Install screen is displayed.



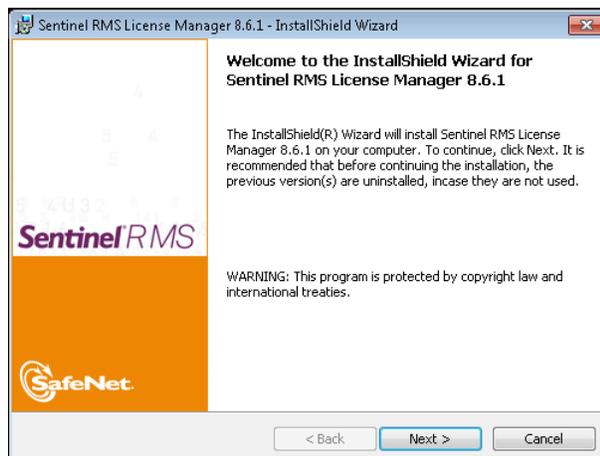
7. Click Install.

The progress screen is displayed while the software is installed.



8. Accept the default values for all questions.

The Welcome screen for the Sentinel RMS License Manager is displayed.

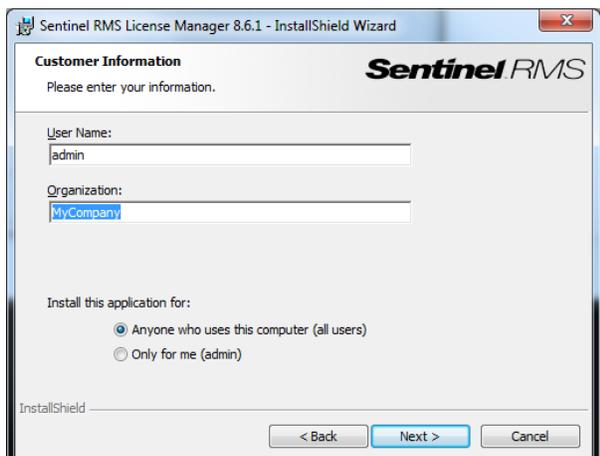


9. Click Next.

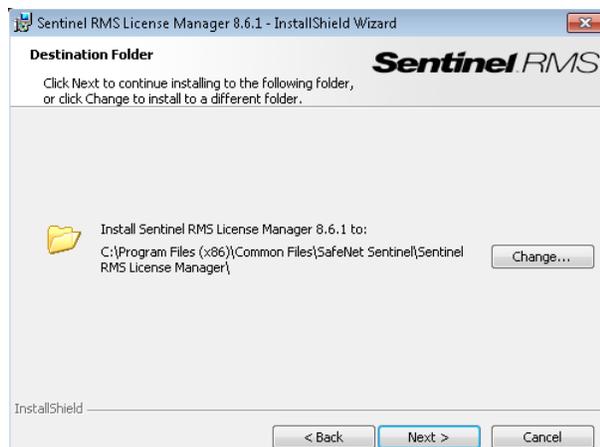
The License Agreement screen for the Sentinel RMS License Manager wizard is displayed.



10. Click the I Accept option and then click Next to continue.
The Customer Information dialog box is displayed.

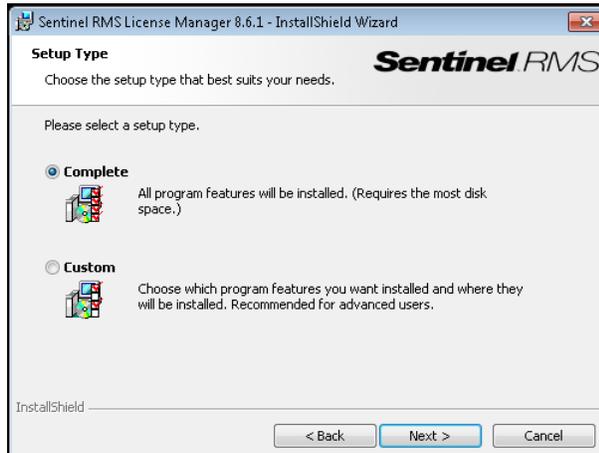


11. Click Next to accept the defaults and continue.
The Destination Folder screen is displayed.



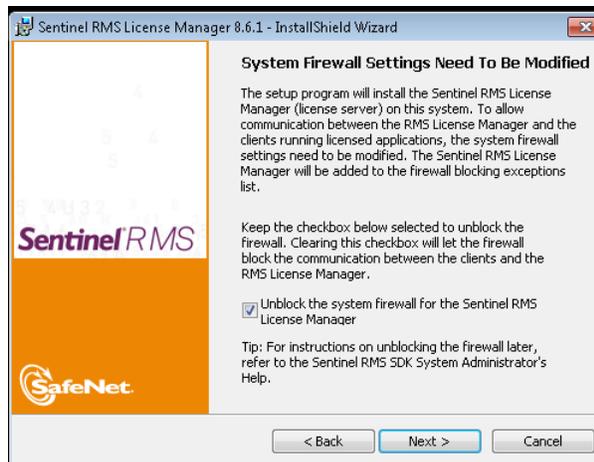
12. Click Next to accept the default and continue.

The Setup Type screen is displayed.



13. Click Next to accept Complete (recommended) and continue.

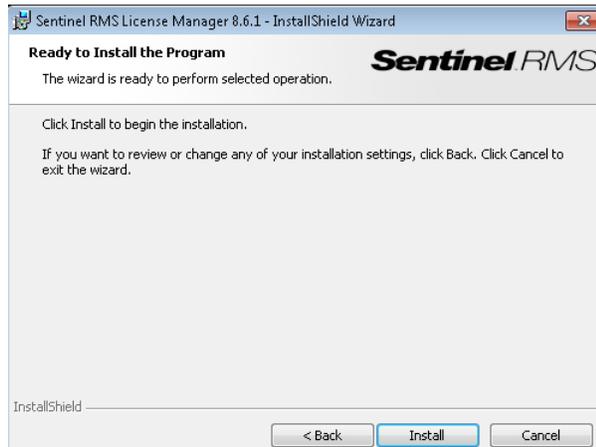
The System Firewall Settings screen is displayed.



14. Click Next (recommended).

If you choose to change the setting on this screen, see *Network Firewall Settings* on page 19 before proceeding.

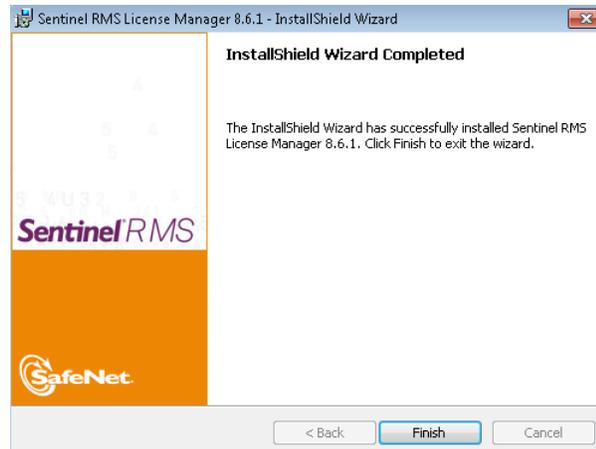
The Ready to Install screen is displayed.



15. Click Install.

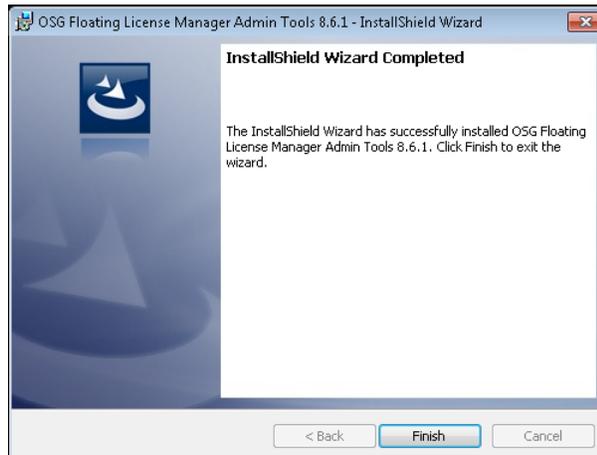
The progress screen is displayed while the software is installed.

When the installation is finished, the Completed screen for the Sentinel License Manager is displayed.



16. Click Finish.

The Completed screen for the OSG Floating License Manager Admin Tools is displayed.



17. Click Finish.

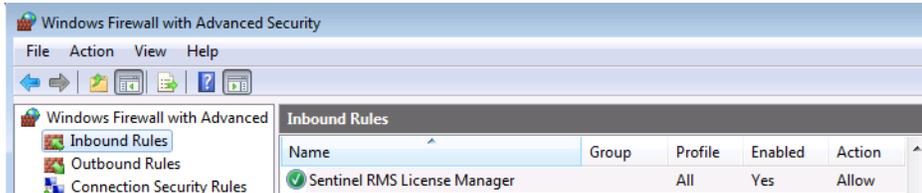
The installation is complete.

18. Reboot your computer if prompted to do so.

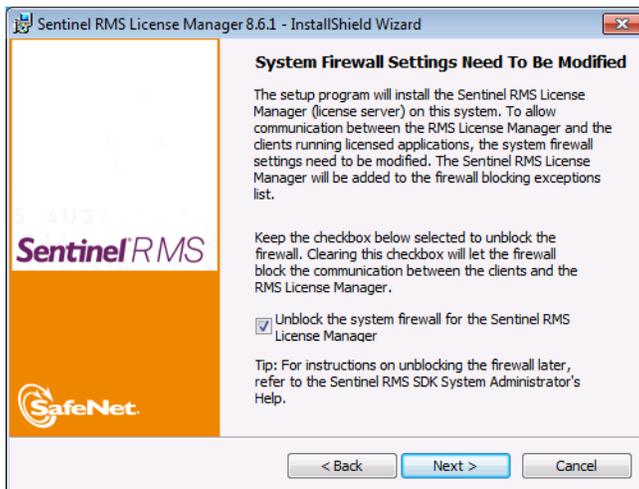
If you already have a license key for this product, skip to *Installing a License Key for a Floating License* on page 21. If you do not yet have a license key, continue with *Obtaining the Host ID for a License Dongle* on page 20.

Network Firewall Settings

By default, installing the Sentinel RMS Floating License Manager adds one or more inbound rules for the executable (lservnt.exe).



This action is enabled by the check box in the InstallShield Wizard dialog shown in the following figure. If you choose to bypass this action by deselecting this check box, LucidShape may not be able to obtain the license key needed to run.

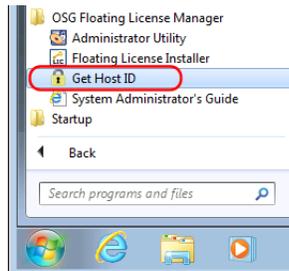


As the dialog explains, the firewall blocking exceptions can be added at a later time. Additionally, if you want strict firewall settings, you can allow communications only for port 5093 in the Ports setting of the Inbound Rules.

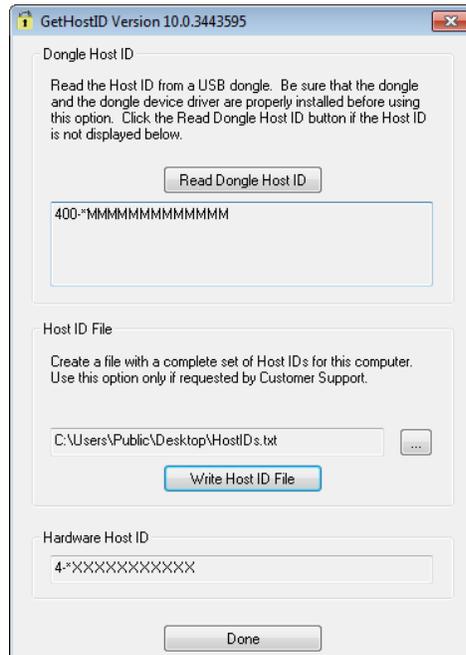
Obtaining the Host ID for a License Dongle

A license key is designed to work for only one USB dongle, so the license key is associated with a unique value encoded on the dongle called a *Host ID*. The Host ID is printed on a label on the USB dongle; if you're unable to read the ID on the label, you can also obtain the Host ID by running a program that reads it from the dongle. Because of this, you need to know the Host ID for the license dongle before you can request a license key. In the LucidShape installation, the GetHostID utility is provided for this purpose. Follow these steps to run GetHostID.

1. Insert the USB dongle in an active USB port on the license server. A light glows at the end of the dongle when it's inserted correctly in an active USB port.
2. Select the Windows Start menu, expand the OSG Floating License Manager group, and select GetHostID, shown in the following figure.



The GetHostID utility is displayed.



In this example, the Host ID for the USB dongle is 400-*MMMMMMMMMMMMMM.

3. Copy the Host ID to retrieve your license key on the Synopsys SolvNet website. See *Retrieving License Keys* on page 41 for instructions.
4. Click Done to close the GetHostID utility.

After you retrieve your license key, go to *Installing a License Key for a Floating License* on page 21.

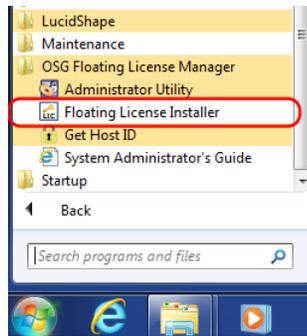
Installing a License Key for a Floating License

After you install the license server software and retrieve a license key, you need to install the license key on the license server before client machines can successfully run LucidShape. The Floating License Installer is provided for this purpose.

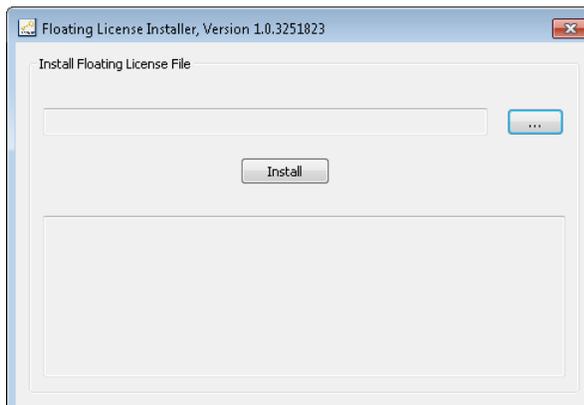
This procedure assumes that you have already obtained a valid license file from the SolvNet SmartKeys web page. If you have not done so, see *Retrieving License Keys* on page 41 for instructions.

Follow these steps to install your license key.

1. Make sure that the license dongle is inserted in an active USB port on the license server. A light glows at the end of the dongle when it's inserted correctly in an active USB port.
2. Click the Windows **Start** button on the taskbar, and select **All Programs > OSG Floating License Manager > Floating License Installer**.

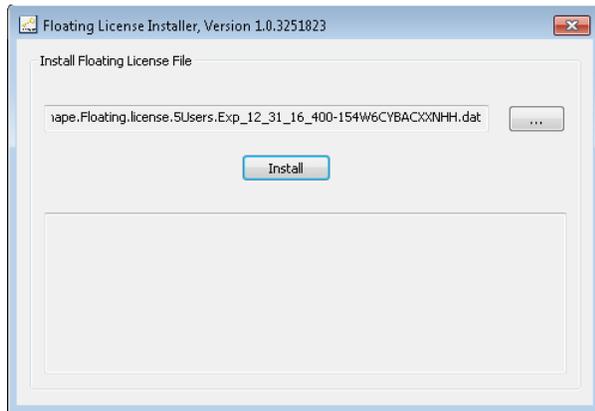


The Floating License Installer is displayed, as shown in the following figure.



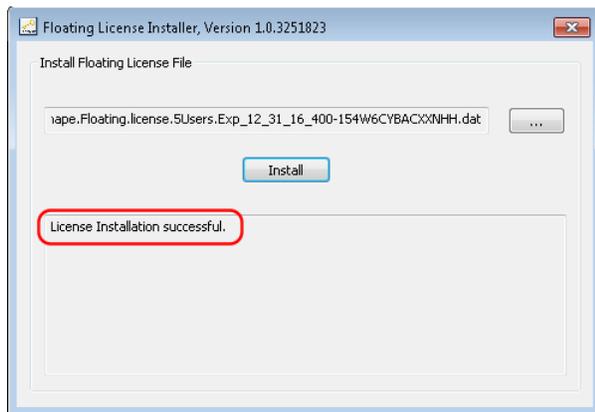
3. Click the Browse button  .
4. In the Open dialog box, navigate to the license key file, select it, and click Open.

The Open dialog box is closed, and the path to the license key file is shown in the Floating License Installer.



5. Click the Install button.

The license key is installed, and the Success dialog box is displayed.



6. To close the Floating License Installer, click the red X in the top right corner.

Continue with *Installing LucidShape on Client Machines* on page 22.

Installing LucidShape on Client Machines

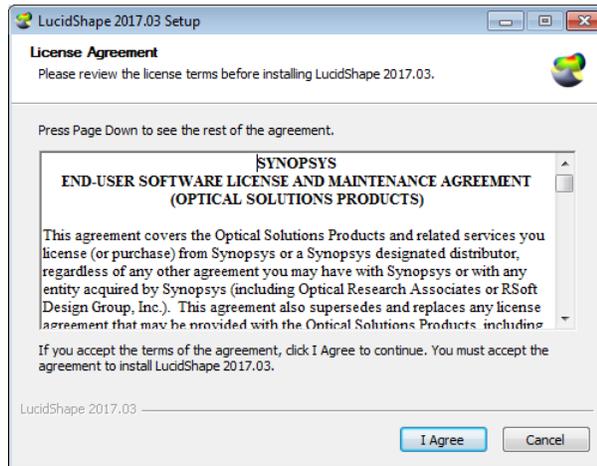
LucidShape must be installed on each client machine where it will be used.

These instructions assume that you have already downloaded LucidShape from the Synopsys SolvNet website or that you ordered and received a LucidShape DVD. If you have not done so, see *Using Synopsys SolvNet to Obtain LucidShape Software and Licenses* on page 33 for instructions.

1. Log on to your computer as Administrator.
2. Navigate to the folder where the LucidShape setup file is located. If you have a DVD, insert it into the DVD drive and navigate to that drive.
3. Double-click the setup file (e.g., SetupLucidShape_ *version*.exe)

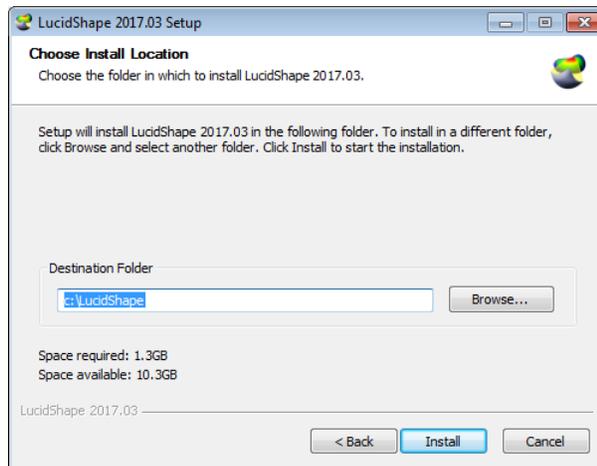
where *version* is the version number for the release (e.g., SetupLucidShape_2017.03.exe).

The Setup window is displayed at the License Agreement screen.



4. Click I Agree to continue.

The Choose Install Location screen is displayed.



5. Use the default location and click Next (for LucidShape CAA V5 Based) or click Install (for all other LucidShape products).



Note: If an earlier release of LucidShape was installed, the default location will be set to the path used for that release. If you want to install the program in a different folder, click the Browse button to locate and specify that folder.

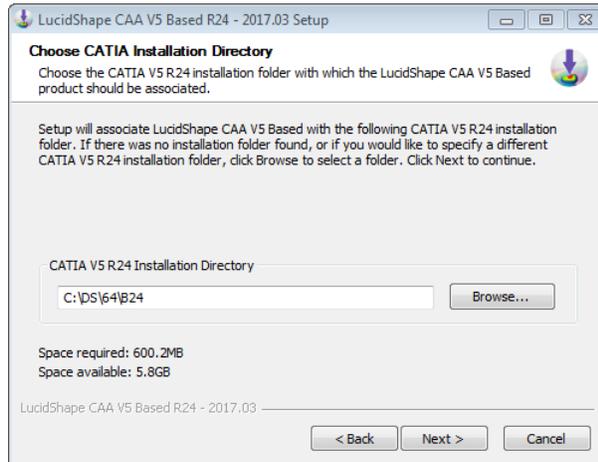
If you are installing a LucidShape product *other than* LucidShape CAA V5 Based, the Setup window shows the progress of the installation; skip to step 10 on page 25.

If you are installing the LucidShape CAA V5 Based product, the Choose CATIA Installation Directory screen is displayed; continue with the following steps.

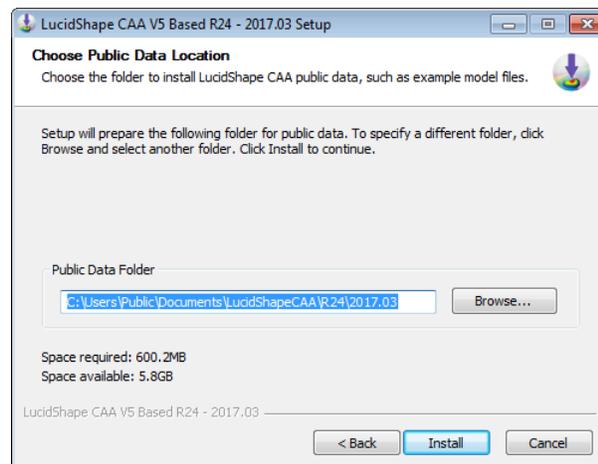
The Choose CATIA Installation Directory screen allows you to associate the LucidShape CAA product with a specific CATIA installation. If a CATIA installation folder was detected, the path to that folder is displayed in the input field. If CATIA is *not* installed on the same computer, or if CATIA is managed by a third-party tool that maintains configurations and versions, the input field

may be blank, and you may need to perform additional steps to complete your installation. See *Troubleshooting the LucidShape CAA V5 Based Installation* on page 45 for details.

6. If you need to specify or want to change the CATIA installation folder, edit the path or click the Browse button to navigate to it and select it.
7. Click Next to continue.

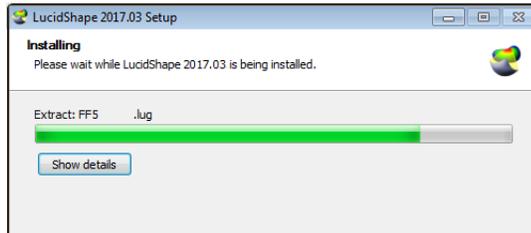


The Choose Public Data Location screen is displayed. This allows you to specify a location for installing public data, such as example model files. To allow interactive use of these files, choose a folder for which you have write permission. The default location is `C:\Users\Public\Documents\LucidShapeCAA\R24\[version]`.

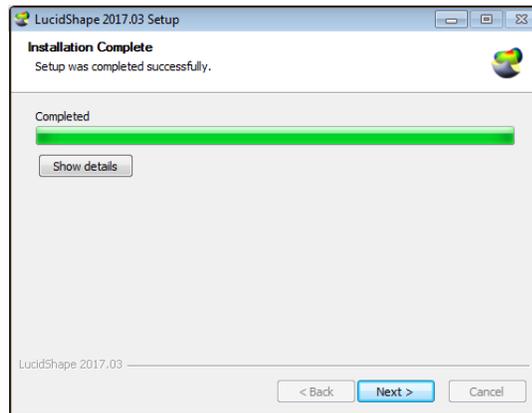


8. To specify a different folder, edit the path or click the Browse button to navigate to it and select it.
9. Click Install.

The Setup window shows the progress of the installation.

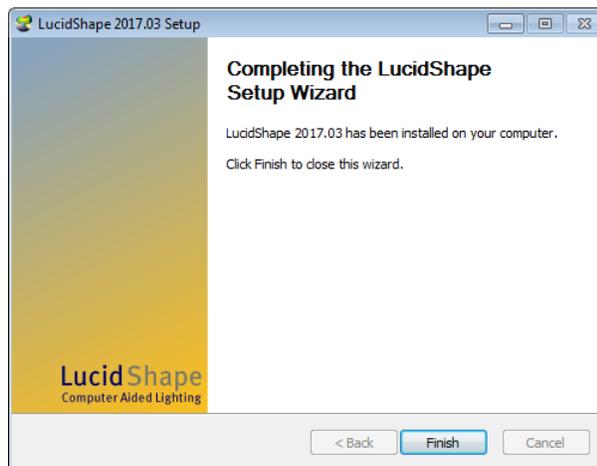


When the process is complete, Installation Complete is displayed in the Setup window.



- For LucidShape CAA, this is the final screen in the installation wizard. Click Close and skip to step 12. For all other LucidShape products, click Next to exit the LucidShape installation wizard.

The Completing the LucidShape Setup Wizard is displayed.



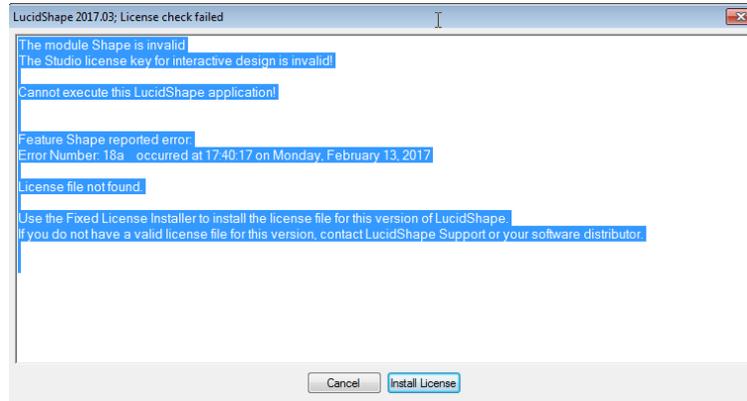
- Click Finish.
- To enable the floating license for this product, see *Enabling the Floating License* on page 26.

Enabling the Floating License

To enable the floating license to work for your LucidShape installation, you need to specify the name of your license server in a LucidShape initialization file, as described in these steps.

1. Start LucidShape.

The License Check Failed dialog box is displayed.

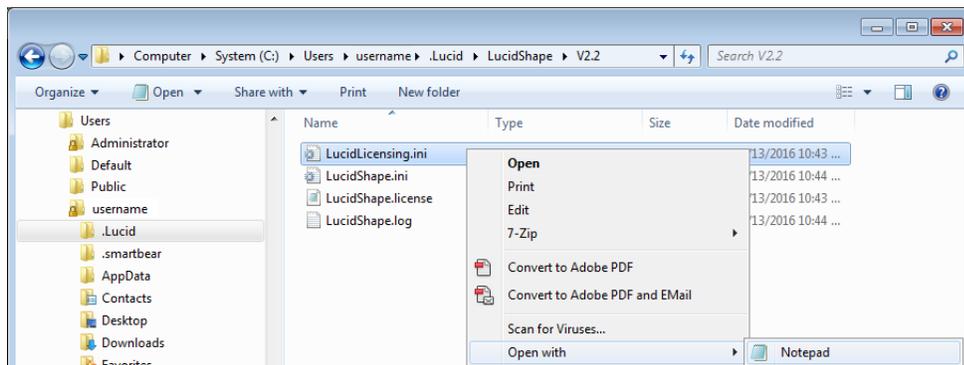


2. Click Cancel to close the dialog box.
3. Open Windows Explorer and navigate to this location:

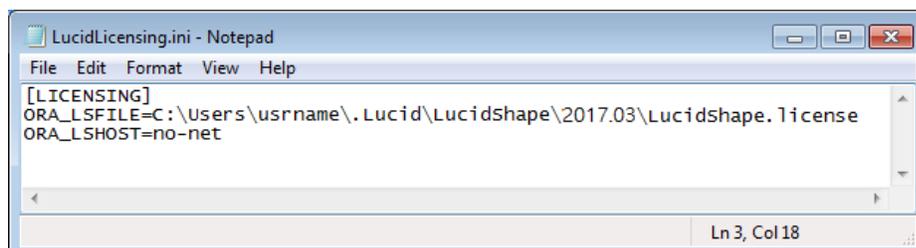
`C:\User\username\.Lucid\LucidShape\version`

where *username* is your user name, and *version* is the version of the software you are installing (e.g., 2017.03).

4. Right-click the file `LucidLicensing.ini` and select Open with > Notepad.



The initialization file is displayed.



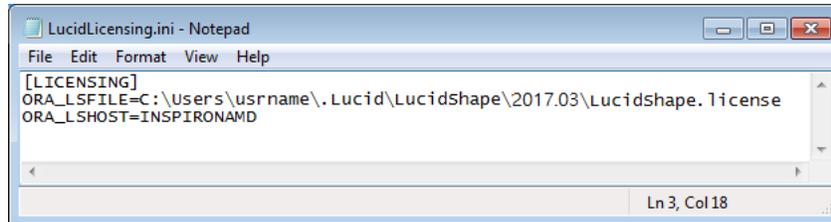
5. Change the value for ORA_LSHOST from this:

```
ORA_LSHOST=no-net
```

to this:

```
ORA_LSHOST=[server machine name].
```

where *server machine name* is the name of the computer on which the Floating License Manager is installed (see *Installing the OSG Floating License Manager on the License Server* on page 12). Make sure there are no spaces before or after the equal sign.



6. Select the menu File > Save in Notepad.
7. Click the red X in the top right corner to close Notepad.
8. Restart LucidShape.

Administering Floating Licenses

In general, there is nothing that you need to do to administer the floating licenses. As long as the floating license server machine is operational, connected to the network, and is running the Sentinel service, licenses are available to clients.

Monitoring License Use

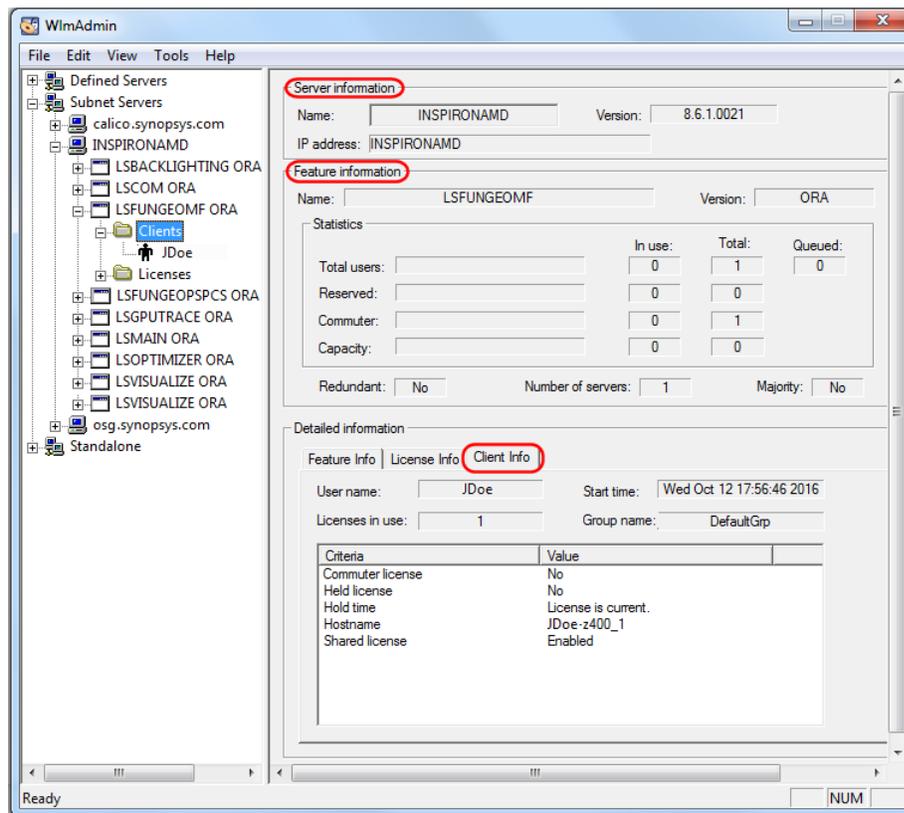
It is possible for all available licenses to be in use, which would prevent additional clients from running LucidShape. In such cases, a system administrator can use the Sentinel Administrator Utility (WlmAdmin) to determine to whom the module licenses have been allocated.



Note: To use the Administrator Utility utility, you must be the person who started the license server, or you must have administrator privileges.

1. To start the utility, click the Windows **Start** menu and select **Programs > OSG Floating License Manager > Administrator Utility**.
2. Expand the list of modules below the license server hostname.

The details presented in the dialog box indicate which client machine and username have checked out the licenses. The example below shows that from the license server machine *INSPIRONAMD*, a LucidShape license is checked out to a user named *JDoe*, who is using a client machine named *JDoe-z400_1*.



You can also use the Administrator Utility utility to obtain other licensing activity information, such as license servers detected, details on active licenses, etc. For more information about how to use the Administrator Utility utility, see the *Sentinel System Administrator's Guide*. After the Sentinel software is installed, this manual is available by selecting the Windows **Start** menu and selecting **Programs > OSG Floating License Manager > System Administrator's Guide**.



Note: Not all functions described in the *Sentinel System Administrator's Guide* are supported by LucidShape.

Improving Access to LucidShape Licenses with the Sentinel License Manager

By default, LucidShape licenses are available to anyone on your server on a first-come, first-served basis. Therefore, you can use LucidShape immediately without using the OSG Floating License Manager. However, if you want to control access to these licenses based on work priorities, you can use the Sentinel Administrator Utility to reserve copies for or deny access to specific users.

Before using the Administrator Utility, consider how you want to organize your groups, keeping in mind the following points:

- Anyone on your server can use a license that has not been explicitly reserved.
- After you create a group, you can specify the status of individual members as *Included* (access allowed) or *Excluded* (access denied).
- You can exclude all members of a group from using licenses (called license *tokens*) by specifying 0 licenses for that group.

For example:

- Organize by department:

If you have departments in your organization, enter each department as a separate group, assign the appropriate number of license tokens to each group, and designate each group member as Included or Excluded. You can change this designation for members as needed, according to work priorities.

- Organize by priority:

Create a group for preferred users and another group for everyone else. In the preferred user group, designate all members as Included and assign to them as many licenses as you can allow. For the second group, you enter everyone else in the company, assign the remaining license tokens, and designate which people are Included and which are Excluded. You can change the Included and Excluded designations as the work load changes.

When you are ready to implement this arrangement, you can use the Administration Utility provided with the OSG License Manager to create a *reservation* file, as described in the following steps.

1. On the license manager server, start the license manager Administration Utility from the Windows Start button:

Start > All Programs > OSG Floating License Manager > Administrator Utility

The WlmAdmin dialog box is displayed.

2. From the menu at the top of the WlmAdmin window, select **Edit > Reservation File**.

The Wlsgmgr dialog box is displayed.

3. To set up a new members group, select **File > New**.

4. Follow these steps to select a feature.
 - a. Select **Feature > Add**.

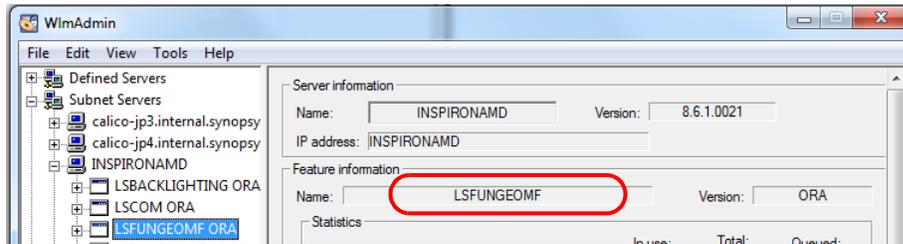
The Add License Reservation Wizard is displayed.

- b. Click **Next** to continue.

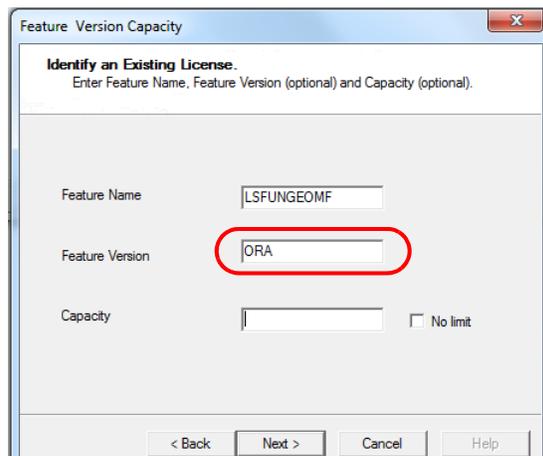
The Feature Version Capacity dialog box is displayed.

- c. Enter the appropriate Feature Name.

You must enter feature names as they appear in the WlmAdmin dialog box, shown in the following example.



d. For the Feature Version, enter ORA (upper case).

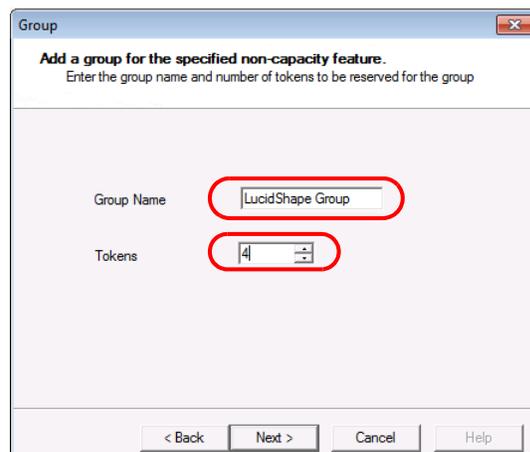


e. Click Next.

The Group dialog box is displayed.

5. To establish a user group, follow these steps.

a. Enter a name that identifies the user group for which you want to allow or deny access.



b. In the Tokens field, enter the number of licenses to reserve for that group.

c. Click Next.

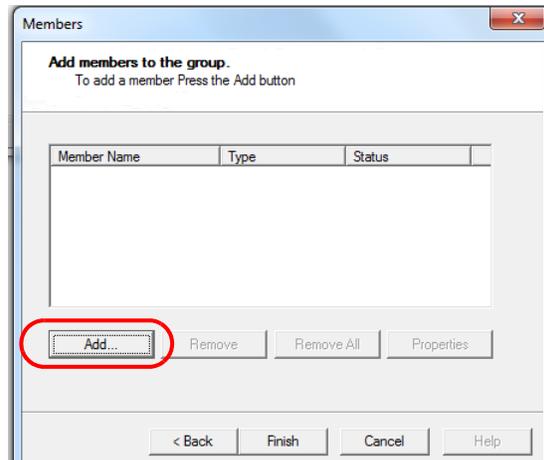
The Members dialog box is displayed.

6. To add members to the group, follow these steps.



Note: You can add members who will be allowed access, as well as members who will be denied access.

- a. Click the Add button.



The Member dialog box is displayed.

- b. Keep the User option selected, shown in the following figure, and enter the member's name in the Name of the Member field. You can define members only by user name and not by Machine.



- c. Click Included for members who are allowed access or Excluded for members who are denied access.
- d. Click OK on the Member window and repeat the process to add each user in the group.
- e. Click Finish on the Members window to apply the changes and close the window.
7. Repeat the process of selecting a feature, establishing a group, and adding members for each group (steps 4, 5, and 6, above).
8. Select **File > Save As** and navigate the directory where the license manager is installed.

By default, the license manager is installed in C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\WinNT.

The file *lsreserv* is created and saved at this location. The license manager references this file to determine which users have access to each feature.

9. Restart the Sentinel RMS License Manager, as described in the following steps.
 - a. Click the Windows Start button and select Control Panel.
 - b. Click Administrative Tools.
 - c. Double-click Services.
 - d. In the Services dialog box, locate and right-click the Sentinel RMS License Manager and select the Restart option on the pop-up menu.

Appendix A Using Synopsys SolvNet to Obtain LucidShape Software and Licenses

Software and license keys for the LucidShape family of products are available for download from the Synopsys SolvNet website. This appendix describes how to use the website to download these software products and the license keys required to use them.



Note: For customers working with distributors, please contact your local LucidShape software distributor to obtain your software and license. See the [Synopsys Optical Solutions Group Global Contacts](#) page for contact information.

Although the examples in this document show and refer to the LucidShape product, the instructions apply to the entire LucidShape family of products, which includes:

- LucidShape
- LucidShape Lite
- LucidDrive
- LucidShape CAA V5 Based

Special terms used in these instructions are explained in the *Glossary* on page 47.

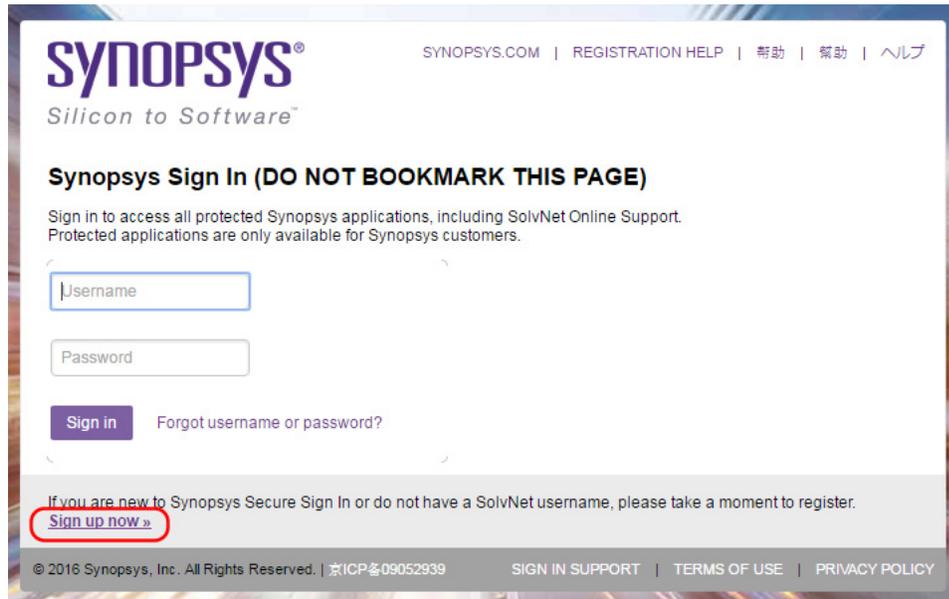
The process is described in the following procedures.

1. *Signing Up for a SolvNet Account* on page 34
2. *Downloading LucidShape Software from SolvNet* on page 35
or
Ordering Media (CDs/DVDs) on page 37
3. *Installing LucidShape* on page 39
4. *Retrieving License Keys* on page 41

Signing Up for a SolvNet Account

Before you can download LucidShape software and license keys, you must sign up for a Synopsys SolvNet account. If you already have a SolvNet account, you can skip to *Downloading LucidShape Software from SolvNet* on page 35.

1. Go to <https://solvnet.synopsys.com> and click the **Sign Up Now** link.



2. Follow the instructions for New User Registration.

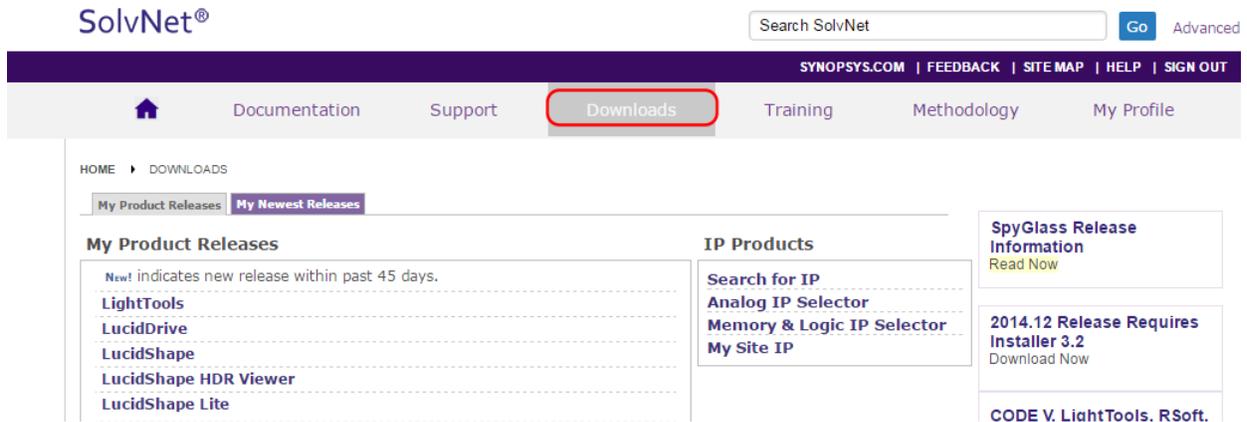
During the registration process, you will need to enter your company's Site ID. If you do not know your company's Site ID, please contact solvnetfeedback@synopsys.com to request it. Be sure to include your company name and address in the email request.

SolvNet will send you a confirmation email. Follow the link in the email to complete the registration process.

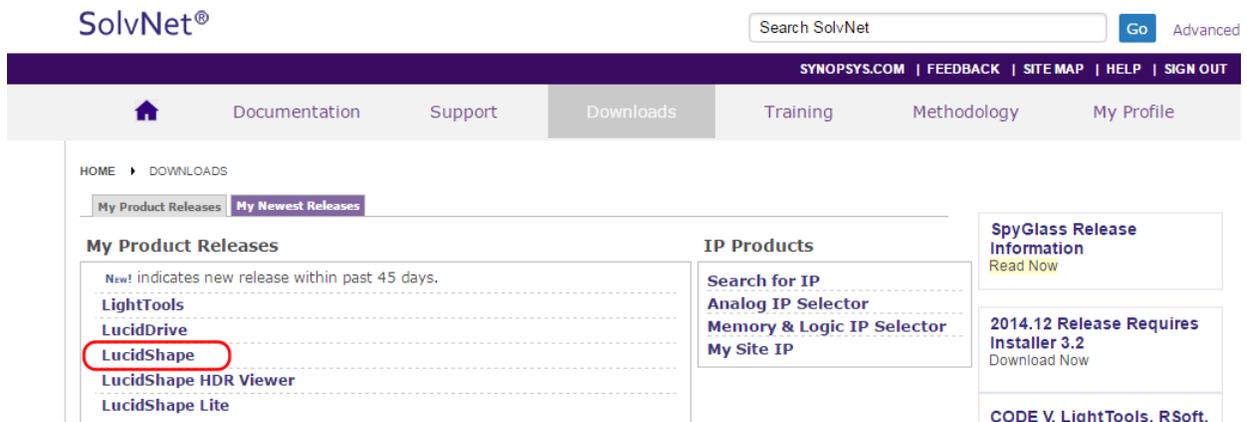
Downloading LucidShape Software from SolvNet

Follow these steps to download any of the software products in the LucidShape family of products. If you are unable to download software, you can order a CD or DVD instead. See *Ordering Media (CDs/DVDs)* on page 37 for instructions.

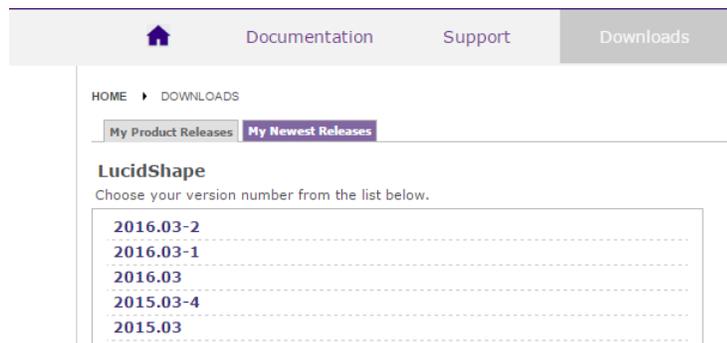
1. Go to <https://solvnet.synopsys.com> and enter your User Name and Password to sign in.
2. Click Downloads.
3. All Synopsys products currently licensed at your company will be listed.



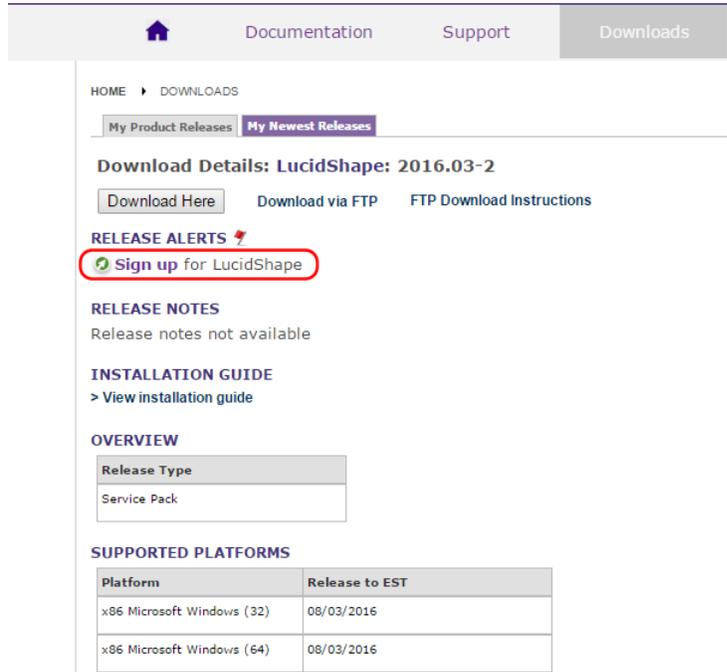
4. Select the product you want to download.



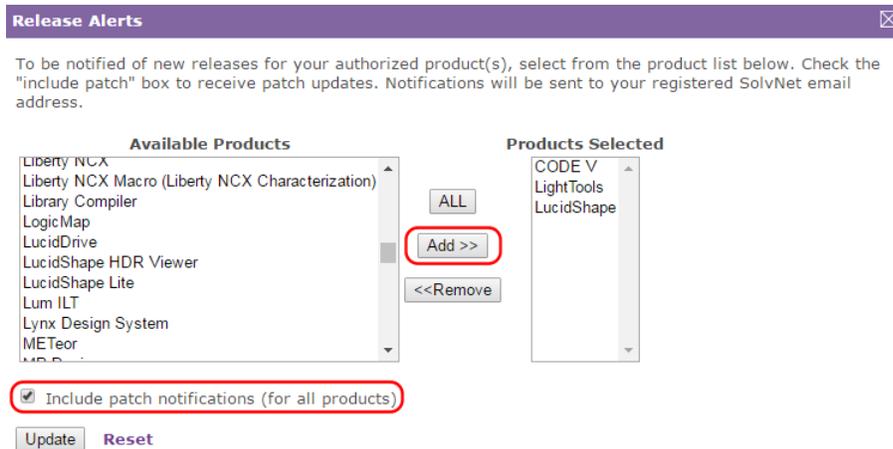
5. Select the version you would like to download.



The **Downloads** page is displayed.



6. Click the **Release Alerts** link to display a **Release Alerts** options that allow you to subscribe to Release Notification emails from SolvNet. These emails let you know when a new version of LucidShape is available for download.



- a. Click the product name for which you would like to receive notifications or click **ALL** to receive notifications for all products in the list.
 - b. Click the **Add** button.
 - c. Click the **Include patch notifications** check box. This allows you to receive notifications of LucidShape service releases.
 - d. Click the **Update** button.
- You are returned to the **Downloads** page.
7. On the **Downloads** page, click **Download Here**.

8. On the Electronic Software Transfer (EST) page, click YES, I AGREE TO THE ABOVE TERMS to continue.
9. Click the **Download** button, shown in the following figure, to begin downloading the software. If you will be using a floating license, you also need to download the Floating License Manager (FloatingLM.exe).
10. Floating license customers: if you are a system administrator setting up a floating license server, you can also click the **Download** button for the FloatingLM.exe to download the OSG Floating License Manager at this time. See *Installing LucidShape with a Floating License* on page 11 for installation instructions.

Synopsys Electronic Software Transfer(EST)

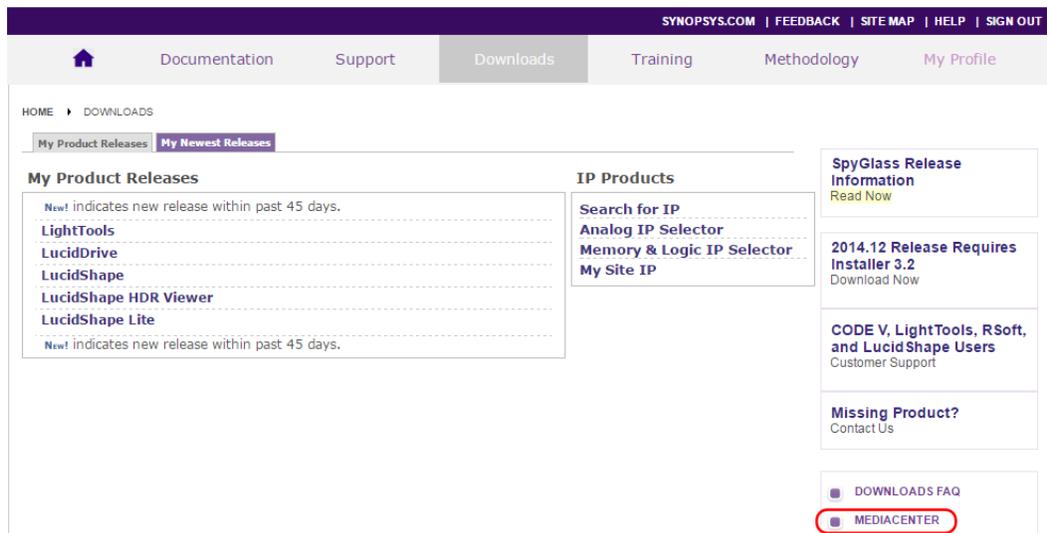
Product Listing: LucidShape ▾ Other Products
 Version: lucidshape_v2016.03-2.auth ▾
 HTTP may be used for downloads from the rev, rev_o, rev_a, ip, exp, la and auth directories.
[Explanation of EST directories](#)
 For downloads from the /pub directory use FTP connection <ftp.synopsys.com>

Action	File	Size
Download	SetupLucidShapeGPU_v2.1.2.exe	File size : 590 MB
Download	SetupLucidShape_v2.1.2.exe	File size : 499 MB
Download	LushSpoolerClient_v2.1.2.exe	File size : 135 MB
Download	checksum_info.txt	File size : 248 Bytes

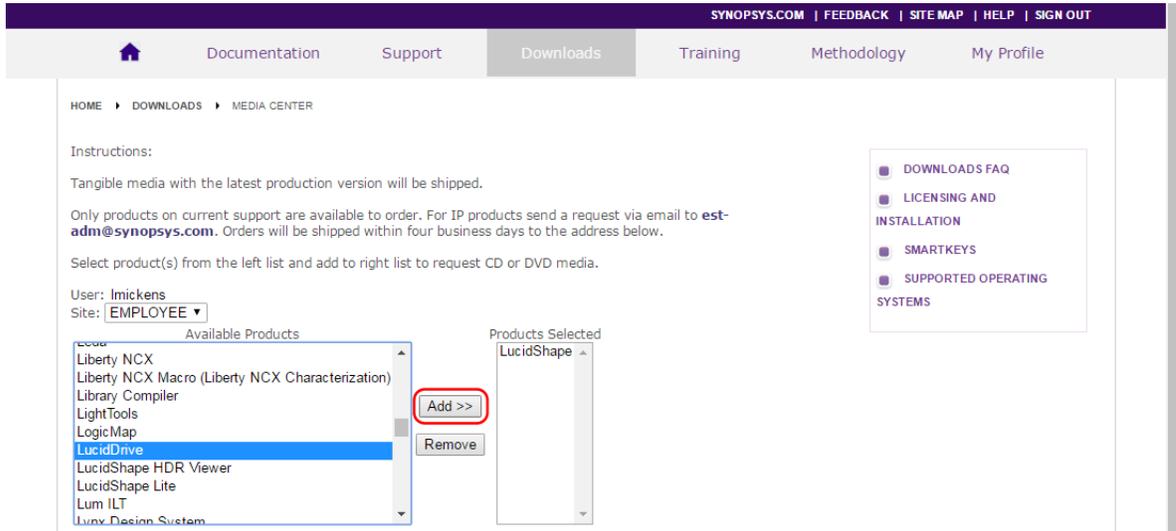
Ordering Media (CDs/DVDs)

If you unable to download software and would like to order media (CD or DVD) instead, you can do this directly on the Synopsys SolvNet website. Follow these steps to order media.

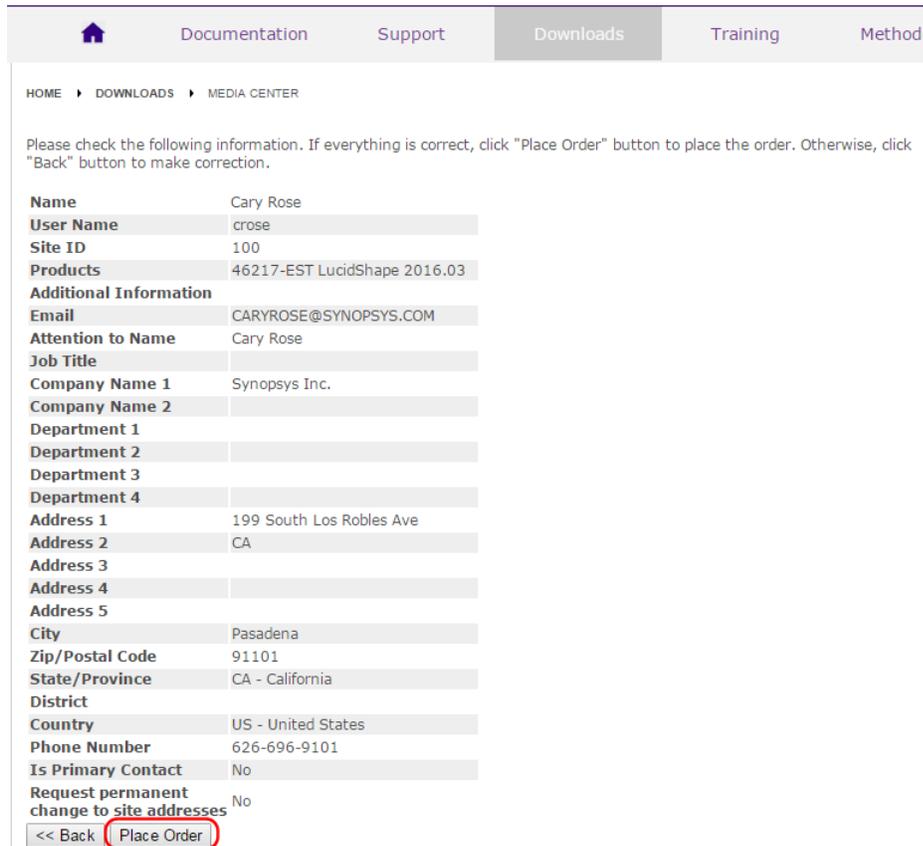
1. Go to <https://solvnet.synopsys.com> and enter your User Name and Password to sign in.
2. Click Downloads.
3. Click the **MediaCenter** link in the lower right corner.



4. On the **Media Center** page, select the product (e.g., LucidShape, LucidDrive, etc.) and click the **Add** button.



5. Complete the Shipping Address information and click **Continue**.
6. Review the shipping request, shown in the following figure, and click **Place Order**.



Installing LucidShape

Instructions for installing LucidShape products and license keys are provided in the following chapters:

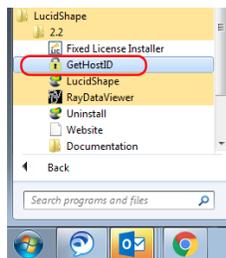
- *Getting Started* on page 1 - lists LucidShape system requirements and tells you how to contact LucidShape Support.
- *Installing LucidShape with a Fixed License* on page 3 - With a fixed license, you install the product, the license dongle, and the license key on the computer where you want to run LucidShape.
- *Installing LucidShape with a Floating License* on page 11 - With a floating license, you install the license dongle and license key on a network server and the product on one or more client machines where you want run LucidShape; you also install the OSG Floating License Manager on the network server to manage the licenses.

After you install the LucidShape product, continue with *Retrieving License Keys* on page 41.

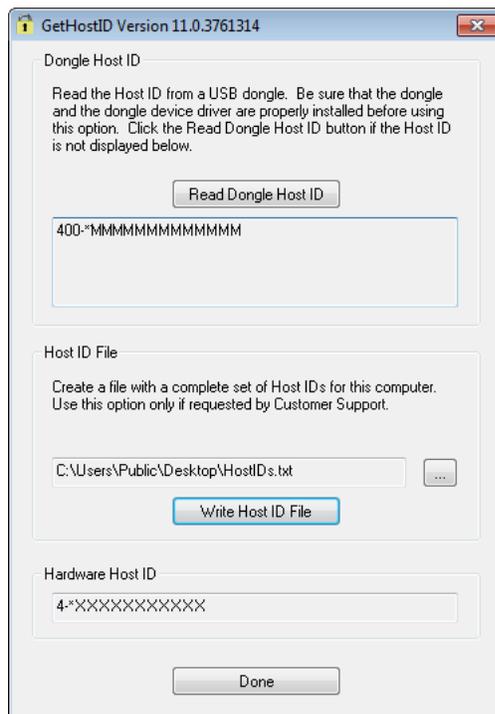
Obtaining the Host ID for a License Dongle

A license key is designed to work for only one USB dongle, so the license key is associated with a unique value encoded on the dongle called a *Host ID*. Because of this, you need to know the Host ID for the license dongle before you can retrieve a license key. In the LucidShape installation, the GetHostID utility is provided for this purpose. Follow these steps to run GetHostID.

1. Insert the USB dongle in the USB port.
2. Select the Windows Start menu, expand the LucidShape group, and select GetHostID, shown in the following figure.



The GetHostID utility is displayed.



In this example, the Host ID for the USB dongle is 400-*MMMMMMMMMMMMMM.

3. Copy the Host ID and go on to *Retrieving License Keys* on page 41.

Retrieving License Keys

A license key is a file containing licensing information for your specific USB dongle. You can obtain license keys using the SmartKeys web page on the Synopsys SolvNet website. Follow these steps to obtain your license keys.

1. Navigate to the SmartKeys page on SolvNet.

You can go to SmartKeys directly using this link: <https://solvnet.synopsys.com/SmartKeys>, or you can navigate there from the SolvNet Downloads page by clicking the **SmartKeys** link in the lower right corner.

The screenshot shows the Synopsys SolvNet website interface. At the top, there is a search bar and navigation links for SYNOPSIS.COM, FEEDBACK, SITE MAP, HELP, and SIGN OUT. Below this is a main navigation bar with links for Home, Documentation, Support, Downloads (active), Training, Methodology, and My Profile. The main content area is divided into several sections: 'My Product Releases' (listing LucidDrive, LucidShape, LucidShape HDR Viewer, and LucidShape Lite), 'IP Products' (listing Analog IP Selector, Memory & Logic IP Selector, and My Site IP), and a right-hand sidebar with links for SpyGlass Release Information, Synopsys Test Case Packager, CODE V, LightTools, RSoft, and LucidShape Users, Missing Product?, and a list of resources including Downloads FAQ, Mediacenter, Licensing and Installation, **SmartKeys** (highlighted with a red circle), and Supported Operating Systems.

2. On the SolvNet SmartKeys Home page, click the **Key Retrieval** link.

The screenshot shows the Synopsys SolvNet SmartKeys Home page. At the top, there is a search bar and navigation links for SYNOPSIS.COM, FEEDBACK, SITE MAP, HELP, and SIGN OUT. Below this is a main navigation bar with links for Home, Documentation, Support, Downloads, Training, Methodology, and My Profile. The main content area features a navigation bar with links for SmartKeys Home, **Key Retrieval** (highlighted with a red circle), and Monthly TSL Key Redemption, along with a Links dropdown menu. Below the navigation bar, there is a personalized greeting: 'Welcome Cary Rose'. The main content area contains a section titled 'Key Retrieval' with the text: 'This function enables license key retrieval of unexpired keys for all Host IDs tied to a specific Site ID.'

The SmartKeys Key Retrieval page is displayed.

You can retrieve a license key for a single USB dongle, or you can retrieve license keys for all Host IDs at your company.

3. To obtain a license key for a single USB dongle, enter the Host ID of your LucidShape USB dongle in the Host ID (Optional) field. If you do not know the Host ID value for your USB dongle, see *Obtaining the Host ID for a License Dongle* on page 39.

To obtain license keys for all products and all Host IDs at your company, leave the Host ID (Optional) field blank and go on to step 4.

4. Click **Retrieve Key**, shown in the following figure.

Your LucidShape license key will be delivered as a text file attached to an email from the SmartKeys system. If you did not enter a Host ID in step 3, you will receive a separate email with a single license key attached for each Host ID at your company. The email will include the Host ID for which the license key is valid.

5. Save the license key to a convenient location on your computer. You need to access this file to activate LucidShape.
6. See one of the following procedures for instructions on installing the license key to activate your LucidShape product.
 - *Installing a License Key for a Fixed License* on page 8
 - *Installing a License Key for a Floating License* on page 21

Appendix B Troubleshooting the Floating License Installation

If a security problem occurs when you use a LucidShape floating license, a dialog box displays an error message. Below are a few common security errors with their causes and resolutions. If you are unable to correct the problem, contact a LucidShape representative at lucidshapeinfo@synopsys.com.

Problems Installing the License Key Using the Floating License Installer

Problem: *Invalid locking code. Check dongle.*

Cause: This could indicate that the license dongle has not been inserted in the USB port, the USB port is not active, or that the dongle is not valid.

Solution: Restart the Sentinel RMS License Manager service. To do this, select Start > Control Panel, click Administrative Tools and then double-click Services. Locate and right-click Sentinel in the dialog box, and select the Restart option on the pop-up menu. Then, insert a valid license dongle in an active USB port (a light glows at the end of the dongle when it's inserted correctly in an active USB port) and repeat the steps for installing the license key. (See *Installing a License Key for a Floating License* on page 21 for instructions).

Problem: *Sentinel: Error [19]: Failed to add license code ...*

Cause: This general error message indicates that the license key was not applied successfully in the license manager. This can occur if the file containing the license keys has been corrupted or if license keys that have already been successfully entered are entered a second time.

Solution: Verify that the license key file contains license keys for the version of LucidShape being installed, and not for an earlier version; the version number is listed in the comments of the license key file. Also, verify that the license key file has not become corrupted, which could occur if the license key file has been edited (i.e., lines containing license keys are changed or become line wrapped incorrectly).

Problems Starting LucidShape

Problem: *Error #18b - No valid license code for version x.x.x found.*

Cause: Valid license keys have not been entered for this version of LucidShape.

Solution: See *Installing a License Key for a Fixed License* on page 8 for instructions on installing license keys.

Problem: *Error #0xC800100D - License code for LucidShape version x.x.x has expired.*

Cause: The license keys for LucidShape have expired, or the PC date is before the start date of the license.

Solution: Verify that the date on the computer is correct. Install the license keys for this version of LucidShape on the license sever machine according to the instructions in *Installing a License Key for a Floating License* on page 21. If new license keys are needed, contact your local distributor or a LucidShape representative at lucidshapeinfo@synopsys.com.

Problem: *Error #8001008 - License manager is not responding. Verify license manager host is available and license manager process is running.*

Cause: The Floating License Manager program has been disabled.

Solution: Restart the license manager program. To do this, select Start > Control Panel, click Administrative Tools and then double-click Services. Locate and right-click Sentinel in the dialog box, and select the Restart option on the pop-up menu.

Cause: The license manager machine is unavailable.

Solution: Verify that the license manager machine is available on the network.

Cause: The name of the license server machine has not been correctly specified.

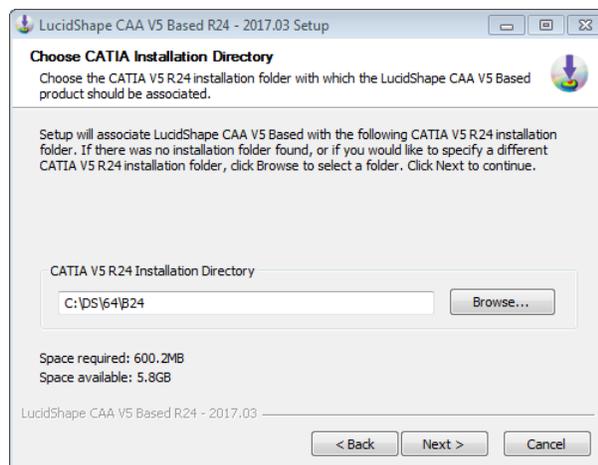
Solution: In order for LucidShape to use a floating license, you must specify the name of the license server machine in an initialization file on the client machine (i.e., the machine on which LucidShape is installed). For instructions on specifying the license server machine to enable your floating license, see *Enabling the Floating License* on page 26.

Appendix C Troubleshooting the LucidShape CAA V5 Based Installation

You may run into configuration issues when you install LucidShape CAA V5 Based installations if CATIA is *not* installed on the same computer or if CATIA is managed by a third-party tool that maintains configurations and versions. The following steps are recommended if you encounter problems associating your LucidShape CAA installation to the appropriate CATIA installation.

Choose the CATIA Installation Directory in the Setup Wizard

During the installation process, you are prompted to choose the installation folder with which to associate the LucidShape CAA product. If a CATIA installation folder was detected, the path to that folder is displayed in the input field; however, if CATIA is *not* installed on the same computer, or if CATIA is managed by a third-party tool that maintains configurations and versions, the input field may be blank.



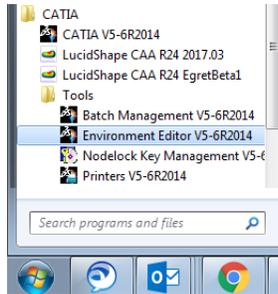
Edit the path or click the Browse button to navigate to the appropriate directory and select it; then, complete the installation instructions. If LucidShape CAA is not correctly associated with the CATIA, see *Manually Create a New CATIA Environment* on page 45.

Manually Create a New CATIA Environment

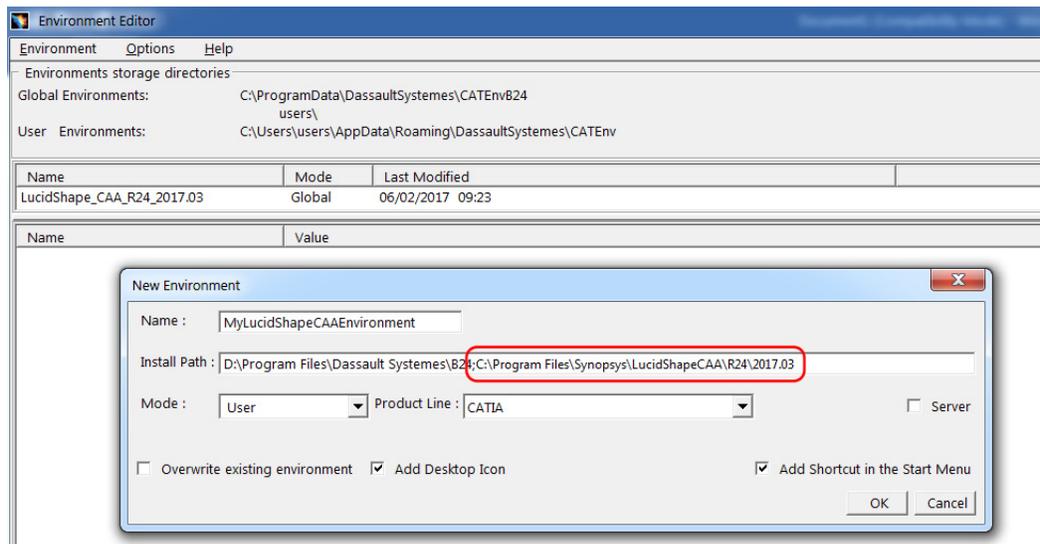
If LucidShape CAA is not correctly associated with the CATIA after using the LucidShape Setup wizard, you may need contact the CATIA administrator in your IT department to manually add LucidShape CAA to a different environment, as described in the following steps.

APPENDIX C Troubleshooting the LucidShape CAA V5 Based Installation

1. To open the CATIA Environment Editor, click the Windows Start menu and select CATIA > Tools > Environment Editor



2. In the Environment Editor, select Environment > New.
3. In the New Environment dialog box, append the LucidShape CAA installation path to the Install Path and press OK.



If these steps do not resolve the issue, please contact LucidShape CAA support at lucidshape_support@synopsys.com.

Glossary

Host ID	A hexadecimal value encoded on the USB dongle. The Synopsys SmartKeys site and delivery email reference the Host ID value when license keys are requested and delivered.
License Key	A file containing the encoded license information needed to run LucidShape for a specific USB dongle.
Site ID	A unique number used to identify a specific company. Every company that uses LucidShape and other Synopsys software has a unique site ID.
SmartKeys	The SolvNet page where you submit license key requests.
SolvNet	The Synopsys customer portal (https://solvnet.synopsys.com). This is where you go to download LucidShape software as well as license keys.

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