

Education Suites 2013 Installation Guide

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Contents

Chapter 1	Overview of Education Suites and Installation	1
	Autodesk Education Suite Overview	1
	System Requirements	5
	Installation and License Types	7
	Preparing for Installation	9
	Administrative Permissions	10
	Locate Your Serial Number and Product Key	10
	Minimize Installation Failure	11
	Documentation	11
Chapter 2	Stand-Alone Installation	13
	Installing Products	13
	Uninstalling Products	14
Chapter 3	Network Licensing	15
	Network Licensing	15
	Understanding License Server Models	15
	Single License Server Model	16
	Distributed License Server Model	16
	Redundant License Server Model	17
	How Your License Works	17
	Interpreting Your License File	18
	Losing Your Connection to the License Server	21

	Install the Network License Manager	21
	Configure a License Server	22
	Windows License Server Configuration Procedure	22
	Stop and Restart the License Server	23
	Windows License Server Restart Procedures	24
	Uninstall a Windows Network License Manager	24
	FLEXnet Configuration Tools	25
	Windows Utilities for License Server Management	25
	Set Up and Use an Options File	26
	Licensing Multiple Products	26
Chapter 4	Create a Deployment	31
	About Deployments	31
	Check Deployment Readiness	32
	Create a Network Share	33
	Configure Individual Products	34
	Create an Original Deployment	35
	Modify a Deployment	36
	Direct Users to the Administrative Image	37
Chapter 5	Use Imaging Software to Distribute Products	39
	Distribute Products Using Imaging Software	39
	Distribute Multi-Seat Stand-Alone Products	39
	Distribute Network Licensed Products	40
	Restore the Master Image	41
Chapter 6	License Activation	43
	Activation	43
Chapter 7	Contacts and Technical Support	45
	Contact Information	45
	Technical Support	47
Chapter 8	Troubleshooting	49
	Licensing Issues	49
	Licensing Errors	49
	Networking Issues	51
	Deployment Issues	51
	Installation Issues	59
	Index	61

Overview of Education Suites and Installation

1

Autodesk Education Suite Overview

Autodesk® Education Suite products provide educational institutions with access to an array of products. For a single, affordable annual fee, this flexible, subscription-based license program allows educational institutions to use popular Autodesk design tools while reducing the time required for managing licensed software. The Autodesk Education Suites are as follows:

- Autodesk Education Master Suite (MS)
- Autodesk Design Academy (ADA)
- AutoCAD Design Suite Ultimate (ADS U)
- Autodesk Building Design Suite Ultimate (BDS U)
- Autodesk Entertainment Creation Suite Ultimate (ECS U)
- Autodesk Factory Design Suite Ultimate (FDS U)
- Autodesk Infrastructure Design Suite Ultimate (IDS U)
- Autodesk Plant Design Suite Ultimate (PDS U)
- Autodesk Product Design Suite Ultimate (PrDS U)

For more information about these suites, see the Autodesk web page for secondary education (<http://usa.autodesk.com/education/secondary>) or the page for post-secondary education (<http://usa.autodesk.com/education/post-secondary>).

Product Matrix

The products included in each suite are shown in the following table. Products marked with letter D are not included with the suite installer, but owners of the suite are entitled to download the product from an Autodesk website.

Autodesk Product Distribution in Education Suites

Product	MS	ADA	ADS U	BDS U	ECS U	FDS U	IDS U	PDS U	PrDS U
AutoCAD	X	X	X	X		D	X	X	D
AutoCAD Architecture	X	X		X		X			
AutoCAD Civil 3D	X	X					X		
AutoCAD Electrical	X								X
AutoCAD LT			X	X			X	X	
AutoCAD Map 3D	X						X		
AutoCAD Mechanical	X	X				X			X
AutoCAD MEP	X			X					
AutoCAD Piping & Instrumentation Design (P&ID)								X	
AutoCAD Plant 3D	X							X	
AutoCAD Raster Design	X		X				X		
AutoCAD Structural Detailing	X			X				X	
AutoCAD Utility Design	X								

Product	MS	ADA	ADS U	BDS U	ECS U	FDS U	IDS U	PDS U	PrDS U
Autodesk 3ds Max					X				
Autodesk 3ds Max Design	X	X	X	X		X	X		X
Autodesk Alias Design	X		X						X
Autodesk Design Review	X		X	X		X	X	X	
Autodesk Factory Design Utilities						X			
Autodesk Infrastructure Map Server							X		
Autodesk Infrastructure Modeler	X			X			X		
Autodesk Inventor				X		X		X	
Autodesk Inventor Professional	X	X				X			X
Autodesk Maya					X				
Autodesk Motionbuilder					X				
Autodesk Mudbox	X		X		X				X
Autodesk Navisworks Manage	X			X		X	X	X	
Autodesk Navisworks Simulate				X		X	X	X	X

Product	MS	ADA	ADS U	BDS U	ECS U	FDS U	IDS U	PDS U	PrDS U
Autodesk Quantity Take Off (QTO)	X			X					
Autodesk Revit	X			X					
Autodesk Revit Architecture		X							
Autodesk Revit Structure							X	X	
Autodesk Robot Structural Analysis Professional	X			X					
Autodesk Showcase	X		X	X		X		X	X
Autodesk Simulation Moldflow Adviser Ultimate	X								D
Autodesk Simulation Multiphysics*	X								D
Autodesk Sketchbook Designer	X	X	X	X	X			X	X
Autodesk Softimage					X				
Autodesk Vault Basic	X	X				X			X
* References to Autodesk Simulation Mechanical as seen in the product Readme and websites also apply to Autodesk Simulation Multiphysics.									

System Requirements

For best performance, ensure that the systems on which you plan to install any of the Autodesk Education Suites products meet the system requirements outlined in the following table. These apply to the Education Master Suite, and are generally applicable to the other Education Suites. But individual products can have unique requirements, and these are explained in the Exceptions table below.

Recommended Configurations

Operating System	Microsoft Windows 7 Ultimate (32 or 64 bit), Professional (32 or 64 bit), or Home Premium edition Microsoft Windows XP, SP3 or later for 32-bit version, SP2 or later for 64-bit version
Browser	Microsoft Internet Explorer 7.0 or higher
Processor	For Windows 7: Intel Pentium 4, or AMD Athlon Dual-Core with SSE2 Technology, 3 GHz or higher For Windows XP: Intel Pentium 4, or AMD Athlon Dual-Core with SSE2 Technology, 1.6 GHz or higher
RAM	4 GB minimum, 8 GB recommended.
Disk Space	500 GB minimum
Graphics Hardware	DirectX 9 or higher, 256 MB or higher graphics card memory, or as recommended at www.autodesk.com/hardware
Display Resolution	1280 x 1024 with true color
Pointing Device	Microsoft mouse-compliant pointing device

Media USB port

Exceptions to Recommended Configurations

Operating System	AutoCAD Map 3D and Autodesk Sketchbook Designer do not support Microsoft Windows Home Premium. Autodesk Infrastructure Modeler does not support Microsoft Windows XP. Non-English versions of Autodesk 3ds Max and 3ds Max Design do not support Microsoft Windows XP.
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Processor	To support 3D modeling, regardless of operating system, use one of these processors: <ul style="list-style-type: none">■ Intel Pentium 4■ AMD Athlon 3.0 GHz or higher■ Intel or AMD Dual-Core, 2.0 GHz or higher
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Disk Space	200 GB minimum for Autodesk Design Academy
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Graphics Hardware	For Autodesk Infrastructure Modeler, use a DirectX 10-capable graphics card with 512 MB video memory, supporting 2x anti-aliasing (2xAA). For Autodesk Mudbox, use an OpenGL-capable card.
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Browser	For Autodesk 3ds Max, 3ds Max Design, or Infrastructure Modeler, use Microsoft Internet Explorer 8.0 or higher.
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Pointing Device	For Autodesk 3ds Max, 3ds Max Design, or Showcase, use a 3-button mouse.
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Installation and License Types

The type of license you have purchased dictates the type of installation method to use. For products that allow you to create deployments, you will be prompted to specify one of the following installation types.

IMPORTANT For a deployment, the license type you choose on the installer's Configuration panel, network or stand-alone license, must be used for all products in the deployment. If you select products that do not support the type of license you purchased, you will not be able to activate those products.

Autodesk provides two main types of licenses:

- A **network license** supports a specific maximum number of users who are connected to a network. A software utility known as the Network License Manager (NLM) resides on a network server and issues a license to each user who starts an Autodesk product, up to the number of licenses purchased. When a user closes all Autodesk products, typically the license is returned to the NLM, and is available to other users. However, NLM can be configured to allow a user to borrow a license and disconnect from the network until a specified return date. A borrowed license is only returned to NLM on the return date, or sooner if the user chooses to return it early.
- A **stand-alone license** supports one or more Autodesk products for an individual user. This license type also has a multi-seat version that supports a specific number of users. The software can be installed on additional computers in your facility, but the number of concurrent users is limited.

Network License

Network licensed products are recommended for classrooms and lab environments, for ease of management. You install the program to computers with the files and registry entries that allow the program to communicate with NLM. License activation is handled once for all Autodesk products on the network.

Another advantage of network licensing is that you can install products on more systems than the number of licenses you have purchased. For example, you purchased a network license for 25 seats, but you installed the product on 30 systems in the classroom. NLM allows students to run products on any one of the 30 systems as long as the maximum of number of active licenses (25) is not exceeded.

Stand-Alone License

A stand-alone installation requires you to install, register, and activate each program individually on each computer. Registration of stand-alone products occurs the first time the application is launched and registration information must be entered manually during the registration process. In a classroom or lab environment there are two ways to handle these products:

- If the systems are not networked, install the products separately on each system.
- If the systems are networked, copy the installer files or create a deployment in a shared folder on the primary server, and then install the products on each computer from the shared folder.

NOTE It is recommended to install stand-alone products directly from the distribution media. It is also recommended to create deployments for multi-seat stand-alone and network licensed products.

Multi-Seat Stand-Alone License

If your facility is not networked, but all the systems can connect to the Internet, you can opt for multi-seat stand-alone licensed products.

Multi-seat stand-alone installations are similar to stand-alone installations, except that all of your products use the same serial number for activation. Unlike network licensing, the multi-seat license specifies the maximum number of computers on which the license can be installed. With multi-seat stand-alone installation, you can create a deployment to distribute products to multiple computers more easily, and in a standard configuration.

You can request a change to the licensing you've purchased by contacting your Autodesk Authorized Education Reseller. For example, you can change from multi-seat stand-alone licensing to network licensing, and you can increase the number of seats for your existing license.

Registration information is preconfigured during the creation of a deployment image; this practice ensures consistent registration data for all the computers. As long as a product is installed using the deployment image shortcut and all the systems have Internet access, you will only be prompted to activate the first product in the suite. Products launched after your first activation will be automatically activated.

Preparing for Installation

This section provides background information about the installation of Education Suite products, prerequisite conditions that need to be met before installation, the types of installations, and a general understanding of licensing types.

Each Education Suite uses a single installer that offers three product licensing options: network licensed, multi-seat stand-alone, or stand-alone installation. The license type you use depends on which products you want to install, and the type of license you purchased. The recommended license type for classroom or lab environments is network licensed or multi-seat stand-alone. Both types recommend that you create a deployment to distribute the products to multiple computers.

Deployments are stored in a shared folder on a network and allow you to install the product on computers on the network that have access to the shared folder. For more information on creating a shared folder, see [Create a Network Share](#) (page 33). The deployment wizard can run directly from each product's installation media. For more information about deployments, see [Create a Deployment](#) (page 31).

Installation Prerequisites

Before installing any of the products in the Autodesk Education Suites package, it is recommended that you complete the following activities:

- For each product you plan to install, review the system requirements. See [System Requirements](#) (page 5).
- Understand the type of product licenses you have ordered. See [Installation and License Types](#) (page 7).
- Understand administrative permissions. See [Administrative Permissions](#) (page 10).
- Know how you are going to personalize the products during activation.
- Close all other programs and understand how to work with any anti-virus or security software on the computers to permit product installation.
- If you plan to create a deployment, create a distribution plan and a shared folder for each product you plan to install. See [Create a Deployment](#) (page 31).
- If you plan to use imaging software (also known as ghosting software) to distribute products, understand how to do this. See [Distribute Products Using Imaging Software](#) (page 39).

Administrative Permissions

To install Autodesk Education Suites products, you must have administrative privileges on each computer where the products are to be installed. If you are unsure of your permission level, see your system administrator for more information.

Locate Your Serial Number and Product Key

When you install Autodesk Education Suites products, you are prompted for your serial number and product key on the Product Information panel of the installer.

The serial number and product key are located on the outside of the product packaging, or in the Autodesk Upgrade and Licensing Information email. Have these available before you install the program so that you do not have to stop in the middle of the installation.

The serial number consists of a three-digit prefix followed by an eight-digit number. The product key consists of five characters.

The information you enter is permanently retained with the product. Because you cannot change this information later without uninstalling, take care when entering the information. To review this product information later, on the InfoCenter toolbar, click the drop-down arrow next to the Help button (the question mark). Then click About ► Product Information.

Consistent Product and User Information

It is important that the product and user information (your school, classroom or lab environment contact information) you supply when registering and activating your products is consistent across all Autodesk products. When you register and activate products, you must enter information on the online registration site, registeronce.autodesk.com. If you enter this data incorrectly or inconsistently, you can run into activation problems.

For example, suppose a teacher, Mr. Smith, works at a school and has received some Education Suite software. He installs one of the products on his personal computer and activates the product using his personal information. He then asks the system administrator to install products on the school network. The system administrator attempts to register and activate a product using the school data. Since the software license has already been registered and activated

by Mr. Smith, the software on the school network cannot be registered and activated unless Mr. Smith's exact personal information is re-used.

If you do not know your product or user data, you should contact your Autodesk Reseller or the Autodesk Business Center. See [Contact Information](#) (page 45).

Minimize Installation Failure

The installation process of many of the Autodesk Education Suites products can be interrupted by other applications, such as Microsoft Outlook or security software. Before installing products, it is recommended that you close all running applications and ensure that security software is either set to allow product installations, or temporarily disabled.

TIP If you encounter any MSI (Windows installer) errors during installation, further information can be found in the Autodesk Support Knowledge base or the Microsoft Support knowledge base.

Documentation

If you are new to the Education Suite products, please review this entire guide before beginning the installation process. To access additional documentation, select the Installation Help, System Requirements, or Readme options on the installer panels. Some products also have a series of information links located on the left side of some installer panels.

NOTE Not all products have online documentation. In products where documentation is available and links are not shown, documentation can be accessed from the installation media. It is usually located in a Docs folder at the top level of the file structure.

In addition to the installation and licensing guides, you can access extensive documentation within each Autodesk product by clicking the Help menu.

For late-breaking information, including installation information, see each product's Readme file, or check the individual product documentation sites at docs.autodesk.com. The main Autodesk support page is www.autodesk.com/support.

Stand-Alone Installation

2

Installing Products

All Autodesk Education Suites products allow for stand-alone installations.

Three installation methods are available:

- If you are an Autodesk Subscription Partner, download products from the Subscription Center: www.autodesk.com/subscriptionlogin.
- Using the product media, install the products separately on each computer.
- If the environment is networked, create a network share for the product and download the product files or copy the contents of the media to the shared folder. From each computer, run the setup.exe file from the primary server.

NOTE The following procedure provides a general outline of the installation process. In some cases, the product installers will differ. In those cases, follow the on-screen installation instructions.

To install products

- 1 In the product installation folder, run *Setup.exe* or *Autorun.exe*.
- 2 Click Install.
- 3 Review the Autodesk software license agreement for your country or region. Click I Accept, and then click Next.
- 4 On the Product Information page, enter your product language, license type, Education Suite serial number and product key, and then click Next.
- 5 On the Configure Installation panel, select the products to install. If you want to configure the settings for a product to change them from the default values, click the product box in the list to open the configuration

panel. After making all desired changes, click the product box to close the configuration panel.

- 6 Click Install. When the installation is complete, click Finish or Exit.

NOTE Some programs may prompt you to restart your system after installation. At the prompt, restart your system before you continue to install other programs.

Uninstalling Products

When you uninstall an Autodesk product, all components and product installation files are removed from your system.

To uninstall an Autodesk product

- 1 Do one of the following:
 - (Windows 7) Click Start menu ► Control Panel ► Programs ► Uninstall a program.
 - (Windows Vista) Click Start menu ► Control Panel ► Programs and Features ► Uninstall or change a program.
 - (Windows XP) Click Start menu ► Settings ► Control Panel ► Add or Remove Programs.
- 2 In the list of programs, select the individual product, and then click Uninstall/Change or Change/Remove.
- 3 Click Uninstall, and then follow any additional instructions provided for the product.

NOTE Even though the Autodesk product is removed from your system, the software license remains. If you reinstall the Autodesk product at some future time, you will not have to register and re-activate the program.

Network Licensing

3

Network Licensing

If you plan to install your products on a network, use the Network License Manager (NLM) .

NLM is a software utility that manages the distribution of suite or product licenses to computers on the network. When a user starts an Autodesk product, NLM typically issues a license to authorize the use of one or more products on that computer. When a user closes all Autodesk products on a computer, the license is returned to NLM and is available for other users. NLM works with a specified maximum number of available licenses for the network.

For more information about network licensing, see the *Autodesk Licensing Guide*. To access the guide, select the Installation Help option on the installer. You can also view the guide from the product media by navigating to the documentation (docs) folder.

Understanding License Server Models

This section explains the three possible server models that support the Network License Manager. A server network can include Windows, Mac OS X, and Linux servers in any combination. Advantages and disadvantages of each model are presented to help you decide which one best suits your needs. When you purchase a network license, you specify which server model you will use.

Single License Server Model

In the single license server model, the Network License Manager is installed on a single server, so license management and activity is restricted to this server. A single license file represents the total number of licenses available on the server.

Advantages of the Single License Server Model

- Because all license management takes place on a single server, you have just one point of administration and one point of failure.
- Of the three license server models, this configuration requires the least amount of maintenance.

Disadvantage of the Single License Server Model

- If the single license server fails, the Autodesk product cannot run until the server is back online.

Distributed License Server Model

In the distributed license server model, licenses are distributed across more than one server. A unique license file is required for each server. To create a distributed license server, you must run the Network License Manager on each server that is part of the distributed server pool.

Advantages of the Distributed License Server Model

- Servers can be distributed across a wide area network (WAN); they do not need to exist on the same subnet.
- If one server in the distributed server pool fails, the licenses on the remaining servers are still available.
- If you need to replace a server in the distributed server pool, you do not need to rebuild the entire pool.
- Server replacement is easier than in a redundant server pool, where you must reactivate the entire pool.

Disadvantages of the Distributed License Server Model

- If a server in the distributed server pool fails, the licenses on that server are unavailable.
- This model can require more time for setup and maintenance than other models.

Redundant License Server Model

In the redundant license server model, three servers are configured to authenticate license files. Licenses can be monitored and issued as long as at least two license servers are still functional. The Network License Manager is installed on each server, and the license file on each server is the same.

In the redundant license server model, all servers must reside on the same subnet and have consistent network communications. (Slow, erratic, or dial-up connections are not supported.)

Advantage of the Redundant License Server Model

- If one of the three servers fails, all licenses that are managed in the server pool are still available.

Disadvantages of the Redundant License Server Model

- If more than one server fails, no licenses are available.
- All three servers must reside on the same subnet and have reliable network communications. The redundant server pool does not provide network fault tolerance.
- If one of the three servers is replaced, the complete redundant server pool must be rebuilt.
- If your Autodesk product supports license borrowing, and licenses are borrowed from a redundant license server pool, you must restart the license server after you stop the Network License Manager.

How Your License Works

When you start an Autodesk product, it requests a license from the license server through the TCP/IP network. If the number of available licenses has not been exceeded, the Network License Manager assigns a license to the computer, and the number of available licenses on the license server is reduced by one.

Likewise, when you exit a product, the license returns to the Network License Manager. If you run multiple sessions of an Autodesk product on an individual computer, only one license is used. When the last session is closed, the license is released.

The following three processes manage the distribution and availability of licenses:

- **License manager daemon** (*lmgrd* or *lmgrd.exe*) handles the original contact with the application, and then passes the connection to the vendor daemon. By using this approach, a single *lmgrd* daemon can be used by multiple software vendors to provide license authentication. The *lmgrd* daemon starts and restarts the vendor daemons as needed.

- **Autodesk vendor daemon** (*adskflex* or *adskflex.exe*) tracks the Autodesk licenses that are checked out and the computers that are using them. Each software vendor has a unique vendor daemon to manage vendor-specific licensing.

NOTE If the *adskflex* vendor daemon terminates for any reason, all users lose their licenses until *lmgrd* restarts the vendor daemon or until the problem causing the termination is resolved.

- **License file** is a text file that has vendor-specific license information.

Interpreting Your License File

The network license file you receive from Autodesk contains licensing information required for a network installation. You obtain license file data when you register your Autodesk product.

The license file contains information about network server nodes and vendor daemons. It also contains an encrypted digital signature that is created when Autodesk generates the file.

The license file configures network license servers to manage licenses. When creating a deployment, the network license server name(s) are specified so that each product instance knows which server(s) to contact to obtain a license. The network license server(s) must be accessible to every user who runs one or more products that require a network license.

The following table defines each license file parameter. For more information, see the *License Administration Guide*, installed with the Network License Manager.

Definitions of license file parameters			
Line	Parameter	Definition	Example
SERVER	Host Name	Host name of the server where the Network License Manager resides	LABSERVER
	Host ID	Ethernet address of the server where the Network License Manager resides	03D054C0149B
USE_SERVER	[None]		
VENDOR	Vendor Daemon	Name of the server-side Autodesk vendor daemon	<i>adskflex.exe</i>
	Port Number	Network port number reserved and assigned for use only by Autodesk products running the Autodesk vendor daemon	port=2080
PACKAGE	Name	Name of feature code group	<i>SERIES_1</i>
	Version	Internal version number reference	1.000
	COMPONENTS	List of feature codes supported in the package	COMPONENTS= "526000REVIT_9_OF\ 51200ACD_2007_OF\ 513001INVBUN_11_OF"
	OPTIONS		OPTIONS=SUITE
	SUPERSEDE	Replacement for any existing Increment line of the same feature code from any license files on the same license server that have a date earlier than the defined Issue Date	SUPERSEDE

Definitions of license file parameters

Line	Parameter	Definition	Example
	SIGN	Encrypted signature used to authenticate the attributes of the license file	SIGN=0 SIGN2=0
INCREMENT	Feature Code	Product supported by the license file	51200ACD_2007_0F
	Expiration Date	Amount of time the licenses are available	permanent
	Number of Licenses	Number of licenses supported by the license file	25
	VENDOR_STRING	License usage type and license behavior of the product that is supported by the license file	COMMERCIAL
	BORROW	Definition of the license borrowing period for the licenses defined under the same increment line. In this example, the maximum period that licenses can be borrowed is 4320 hours (180 days), unless otherwise noted. License borrowing is disabled when this parameter is absent in the license file.	BORROW=4320
	DUP_GROUP	Definition of multiple license requests when the same user and same host share the same license	DUP_GROUP=UH
	ISSUED	Date that the license file was generated by Autodesk	15-jul-2010
	Serial Number	Serial number of the Autodesk product	123-12345678

Definitions of license file parameters

Line	Parameter	Definition	Example
	SIGN	Encrypted signature used to authenticate the attributes of the license file	SIGN=6E88EFA8D44C

Losing Your Connection to the License Server

When an Autodesk product is running, it communicates with the license server at regular intervals using a method known as the “heartbeat” signal. If the heartbeat signal is lost, the server tries to reconnect. If the server cannot reconnect, the user receives a license error.

If the product stops working because it has lost a connection to the server, you must shut down the product, and then restart it. Most Autodesk products give you the opportunity to save open documents before shutting down. If the problem causing the original loss of the heartbeat signal is resolved and licenses are available on the server, you can restart your Autodesk product.

Install the Network License Manager

For Windows, install the Network License Manager from the Install Tools & Utilities panel of the Autodesk installer. If your product is available on Mac OS X and Linux, see your product appendix to this guide.

IMPORTANT Do not install the Network License Manager on a remote drive. When you install the Network License Manager files, you must provide a path to a local drive. You must specify the drive letter; the universal naming convention (UNC) is not permitted.

You can install the Network License Manager before or after you install the products that will use it. Network License Manager must configure the license servers before any products can obtain licenses and start running.

If an earlier version of the Network License Manager is already installed on the computer, you should upgrade by installing the new Autodesk Network License Manager into the folder where the old version was located.

Configure a License Server

You configure a license server to manage your Autodesk product licenses.

IMPORTANT If you have a firewall between the license server(s) and the client computers, you need to open some TCP/IP ports on the server for license-related communication. Open port 2080 for *adskflex*, and open ports 27000 through 27009 for *lmgrd*.

Configure the license server using one of the following procedures.

Windows License Server Configuration Procedure

To configure a license server with LMTOOLS

You should be logged in with Administrator rights when working with the LMTOOLS utility.

NOTE Before performing any system maintenance on your license server, see [Stop and Restart the License Server](#) (page 23).

- 1 Click Start ► All Programs ► Autodesk ► Network License Manager ► LMTOOLS Utility.
- 2 In the LMTOOLS utility, on the Service/License File tab, make sure the Configure Using Services option is active.
- 3 Click the Config Services tab.
- 4 In the Service Name list, select the service name you want to use to manage licenses.

By default, the service name is *Flexlm Service 1*. If FLEXnet[®] is managing other software on your computer in addition to Autodesk, you can change the service name to avoid confusion. For example, you can rename *Flexlm Service 1* to *Autodesk Server1*.

NOTE If you have more than one software vendor using FLEXnet for license management, the Service Name list contains more than one option. Make sure that only one Autodesk service is listed.

- 5 In the Path to Lmgrd.exe File field, enter the path to the Network License Manager daemon (*lmgrd.exe*), or click Browse to locate the file.

By default, this daemon is installed in the *C:\Program Files\Autodesk\Autodesk Network License Manager* folder.

- 6 In the Path to the License File box, locate or enter the path.
This is the path to the license file obtained through autodesk.com or the location where you placed the license file if you obtained it offline.
- 7 In the Path to the Debug Log File box, enter a path to create a debug log, or click Browse to locate an existing log file.
It is recommended that you save to the *C:\Program Files\Autodesk\Autodesk Network License Manager* folder. The log file must have a *.log* file extension. For new log files, you must enter the *.log* extension manually.
- 8 To run *lmgrd.exe* as a service, select Use Services.
- 9 To start *lmgrd.exe* automatically when the system starts, select Start Server at Power Up.
- 10 Click Save Service to save the new configuration under the service name you selected in step 4. Click Yes when prompted if you would like to save the settings to the service.
- 11 Click the Start/Stop/Reread tab and do one of the following:
 - If a service has not yet been defined for Autodesk, click Start Server to start the license server.
 - If a service for Autodesk is already defined and running, click ReRead License File to refresh the Network License Manager with any changes made to the license file or options file.

The license server starts running and is ready to respond to client requests.

- 12 Close LMTTOOLS.

Stop and Restart the License Server

Before you can perform any system maintenance on your license server (including uninstalling the Autodesk License Manager) you must stop the license server. When you have completed maintenance, you can restart the license server.

Windows License Server Restart Procedures

To stop a Windows license server

You should be logged in with Administrator rights when working with the LMTOOLS utility.

- 1 Click Start ► All Programs ► Autodesk ► Network License Manager ► LMTOOLS Utility.
- 2 In the LMTOOLS utility, click the Service/License File tab.
- 3 Select the Configure Using Services option.
- 4 Select the service name for the license server you want to stop manually.
- 5 Click the Start/Stop/Reread tab.
- 6 Click Stop Server.
- 7 Close LMTOOLS.

To restart a Windows license server

You should be logged in with Administrator rights when working with the LMTOOLS utility.

- 1 Click Start ► All Programs ► Autodesk ► Network License Manager ► LMTOOLS Utility.
- 2 In the LMTOOLS utility, click the Service/License File tab.
- 3 Select the Configure Using Services option.
- 4 Select the service name for the license server you want to start manually.
- 5 Click the Start/Stop/Reread tab.
- 6 Click Start Server to restart the license server.

Uninstall a Windows Network License Manager

For Mac and Linux platforms, see your product appendix to this guide.

IMPORTANT Before uninstalling the Network License Manager, you must stop the LMTOOLS utility.

To uninstall the Network License Manager on Windows

- 1 Click Start, and then in the list of programs, click Autodesk ► Network License Manager ► LMTOOLS Utility.
- 2 In the LMTOOLS utility, click the Start/Stop/Reread tab, and then click Stop Server.
- 3 Close LMTOOLS.
- 4 In the Windows Control Panel, locate Autodesk Network License Manager in the list of programs, and uninstall it by clicking Remove or Uninstall.
- 5 If prompted, restart your computer.

NOTE You must manually delete files that you created for use with the Network License Manager, such as log files, license files, and the options file. These files are not automatically deleted when you uninstall the Network License Manager.

FLEXnet Configuration Tools

The Network License Manager uses FLEXnet® license management technology from Flexera Software™. FLEXnet provides administrative tools that help to simplify management of network licenses. You can use FLEXnet tools to monitor network license status, reset licenses lost during a system failure, troubleshoot license servers, and update existing license files.

Windows Utilities for License Server Management

FLEXnet provides two utilities for managing the license server. The default location for these tools is in this folder: *C:\Program Files\Autodesk\Autodesk Network License Manager*.

LMTOOLS Utility (lmttools.exe) Provides a Microsoft® Windows graphical user interface for managing the license server.

lmutil.exe Provides a set of command-line options for managing the license server.

You can use LMTOOLS or *lmutil.exe* to perform the following server management tasks:

- Start, stop, and restart the server.
- Configure, update, and reread the license file.

- Diagnose system or license problems.
- View server status, including active license status.

Set Up and Use an Options File

With an options file, you set configuration options that determine how a license server manages licenses. An options file sets parameters that the license file reads and the *lmgrd* program executes.

The options file on each server specifies the license-handling behavior for that server. By managing the contents of the options files, you can specify the same behavior on all license servers, or implement particular differences among the servers.

NOTE For options file changes to take effect on a license server, you must save the options file, and then reread the license file.

Use the options file to set parameters for the following server-related features:

- Report log file
- License borrowing
- License timeout

You can also set up advanced license parameters, such as reserving a license, restricting license usage, or defining groups of users. To learn more about setting advanced options file parameters, see the FLEXnet documentation. This documentation is installed on the license server, in the Network License Manager directory.

Licensing Multiple Products

When you install an Autodesk product, it is issued its own license file. You can manage license files for more than one Autodesk product by combining license files. To combine multiple license files for Autodesk products, you must add lines from the new license file to the existing license file.

When combining additional licenses for the same Autodesk product, you must obtain a new license file for the total number of licenses with that feature code, not just the new ones. For example, do not combine two different AutoCAD 2013 license files into one file. Obtain one new license file that contains the required total number of AutoCAD 2013 licenses.

NOTE Products included in the Education Suites do not require that you combine license files. You can, however, combine your commercial license files with Education Suite license files if you wish.

Before you begin combining licenses, back up your existing LIC file and stop the license server. Stopping the server will ensure you have a cleaner update.

NOTE Do not configure a separate service for the new Autodesk product.

Here is an example of a completed license file for combined Autodesk product versions:

```
SERVER servername 123456789111
USE_SERVER
VENDOR adskflex port=2080
PACKAGE 64300ACD_F adskflex 1.000
COMPONENTS="57600ACD_2009_OF
\
54600ACD_2008_OF 51200ACD_2007_OF 48800ACD_2006_OF" \
OPTIONS=SUITE SUPERSEDE ISSUED=25-Jun-2008 SIGN="03EF DE18
\
8046 0124 4EA4 6953 F82D 3169 7C24 D0DE E58E 8168 FFA3 D891

\
B43B 08D8 7E7F C6ED CBCC FE2A BB0A 4566 C2AE F1C1 D373 8348

\
E6E3 884A E398 1C78" SIGN2="07AC D696 8844 D19F AB00 8B75

53A3 \
2F76 91DF AED0 3231 1506 0E6B ADC6 C3B8 1797 93B5 9756 8C0F

\
8811 56E6 B2BA 0523 FE2E 82B7 1628 076F 173B F37C 7240"
INCREMENT 64300ACD_F adskflex 1.000 permanent 2 \
VENDOR_STRING=commercial:permanent BORROW=4320 SUPERSEDE
\
DUP_GROUP=UH SUITE_DUP_GROUP=UHV ISSUED=25-Jun-2008 \
SN=399-99999999 SIGN="1CCB E88D B819 8604 06FA 9AEE 42F1
CBEA
\
37B9 3CFA A0A8 697F 9CB1 8354 6256 05ED 69D4 D2FF D512 6A2E

\
```

```

D5DD B722 EF5B 3172 BA95 4625 F8D3 DD24 BB39 6A58"
SIGN2="0DFF
\
FA6F C378 20E0 2622 BE52 B434 F99F 2681 2B93 64F2 CE0C 7F4A

\
7024 B3D1 051A 6920 72BD DE35 8920 E6A1 C8D6 AF23 7BE7 CC91

\
6916 70B1 9E80 AB07 1644"
PACKAGE 64800INVPRO_F adskflex 1.000 \
COMPONENTS="59600INVPRO_2009_0F \
55300INVPRO_2008_0F 51400INVPRO_11_0F 49000INVPRO_10_0F"
\
OPTIONS=SUITE SUPERSEDE ISSUED=25-Jun-2008 SIGN="1306 5990
\
F8A1 56FB 1D8A 9DA7 D6AE 8E9E F6EC 2862 367A 36E2 C5FB E6E1

\
4AAA 0128 8C2D 95FD 09B2 ABA1 6F98 A0A3 70DE 3220 6835 7E51

\
3849 9D81 8BDC 9DC1" SIGN2="0021 AA08 F2E7 8AEB 5345 341A

7E42 \
3001 B8C5 DFC2 6EB8 87C5 C04A AE43 A10F 1DA1 EF8A F0FA 10F5

\
AC81 1E22 789F A18D 650F 6BBB 563A BDA5 DD1C 82EC 27F6"
INCREMENT 64800INVPRO_F adskflex 1.000 permanent 2 \
VENDOR_STRING=commercial:permanent BORROW=4320 SUPERSEDE
\
DUP_GROUP=UH SUITE_DUP_GROUP=UHV ISSUED=25-Jun-2008 \
SN=399-99999966 SIGN="0BE4 51F4 570C DC48 5E66 F952 629E
EDF0
\
019C 6FF7 0509 1FF0 D4FB 3B16 1981 073F 31EC A241 8CB3 8782

\
E655 00C6 E097 D5EF B0D8 67D3 199D 699D 2E09 B16F"
SIGN2="1254
\
3E37 0CE4 F42D B7CD 858C 92FC A963 5274 770F 9354 FE29 E117

```



```
\
205D C632 0C4E AEC0 7501 9D9E FFEB D84D F154 16A1 E120 339A
\
FDBF 3F07 4477 B8B3 5DA4"
```

To combine two or more license files

- 1 Open an ASCII text editor, such as Microsoft Notepad. Do not use a word processor because it will add extra data to the license file that will make the license invalid.
- 2 Open your product license file.
- 3 Open one of your other license files in a separate Notepad session.
- 4 In the license file, select all the text starting at the line beginning with 'INCREMENT'.
- 5 Copy the text and paste it into the product license file.
- 6 Once the license files are combined, open LMTOOLS and click the Start/Stop/Reread tab.
- 7 Click on the Server Status tab and check the status of the server to make sure it is running.
- 8 Click on the Start/Stop/Reread tab. Click the Reread License File button to make sure the changes to the license file have taken effect.
If Reread passes, you should see "Reread Server License File Completed" printed at the bottom of the LMTOOLS utility dialog. If it fails, you should see "Reread Server Failed" instead. If Reread fails, ensure that the correct .lic file is being referenced in the Config Services tab, and ensure that the license files were combined correctly.
- 9 Click File ► Exit.

Create a Deployment

4

About Deployments

A deployment provides an efficient way to install one or more Autodesk products with a standard configuration on multiple computers. The files required for the installation process are stored on the network, in an administrative image, in a folder to which all users have shared access. To install the products, users navigate to the deployment folder and double-click an installer shortcut (.LNK file).

For more detailed information about deployments, consult the *Network Administrator's Guide* for the Autodesk product.

Some essential facts about deployments:

- Deployments can be created for network licenses or multi-seat stand-alone licenses.
- Multiple deployments with different configurations can exist in the same folder, sharing the same administrative image, which is a set of installation files.
- Each deployment installs products in a single language. If you need to install products in different languages, each language requires a separate deployment.
- An existing deployment can form the basis for creating another deployment with a different configuration.
- Deployments can be configured to generate a log file for each installation. Network administrators can use these log files for troubleshooting.
- Each deployment creates a subfolder, *<deployment name>\SMS_SCCM scripts*, which contains two documents to help you with the distribution of deployments using Microsoft Systems Management Server (SMS) and System

Center Configuration Manager (SCCM): *SMS_SCCM_ReadMe.txt* and *<deployment name>_SCCM.txt*.

Deploying Language Packs

AutoCAD-based products, Inventor, and 3ds Max can use separate language packs to add one or more additional language versions to an installed product. Each language pack provides user interface strings, message text, and documentation in a specific language, without duplicating the product software. To distribute a specific language version to multiple instances of an Autodesk product, you can use the installer included with each language pack to create a language pack deployment. If you need to deploy language packs for multiple languages or multiple products, you can create a batch file to install a series of language packs on each computer.

Check Deployment Readiness

This checklist identifies preliminary tasks to complete, information to gather, and decisions to make before creating a network deployment.

TIP To review deployment settings, including details of product configuration, you can create a test deployment. After the learning process, you can delete the test deployment.

Deployment Checklist

- Review the system requirements by clicking the System Requirements link in the installer. Confirm that your network, servers, and client computers meet these system requirements.

- Understand the general process for installing the type of license you have purchased. For a network license deployment, know the license server name(s), and the type of license server model that was specified at the time of license purchase.

- Install and activate any network administrator tools and utilities. For example, if you are using a network license, install the Network License Manager from the installer.

Deployment Checklist

- Locate your product serial number and product key. These are located on the outside of the product packaging, or in an email message if you downloaded your product or upgrade from Autodesk.
- Identify a network location for deployments, and create a shared folder to contain deployments.
- If your product has language options, decide which language to use for each deployment.

NOTE Languages can be included when you initially create a deployment, or when you create a new deployment configuration, but not when you modify a deployment.

- Determine whether to create log files on individual computers, in the deployment folder, or both.
- Determine whether to run installations in silent mode.

NOTE When products are installed in silent mode, the user's system can automatically reboot without warning when the installation is complete.

- Identify other applicable configuration settings such as defined search paths, locations of support files, and whether to automatically install service packs.

Create a Network Share

After you have fully prepared for creating a deployment, you are ready to set up and distribute Autodesk products from a shared network location. A network share is an installation folder to which all users' computers have access. You create deployments in the network share, and point users to this location to install the program. Any subfolders inside a network shared folder are automatically shared.

If you select the option to create a network log file, then during installation, the user's computer writes an entry to the log file in the network share.

Therefore, this option requires that users have read-write access to the network share.

You can create a deployment folder on a network share as part of the process of creating the deployment. If you plan to create several deployments of the same product or suite, configured for different user groups, then these deployments can share the same administrative image, and the shortcuts can reside in the same folder. However, if you plan to create deployments of different products or suites, it is recommended that you create separate product folders on the network share before starting to create deployments.

For more information on how to create a network share, see the documentation for your operating system.

Configure Individual Products

When you create a deployment, you can accept the default settings for any product you choose to install, or you can configure these settings to create a custom deployment. Configuration details for each product are usually covered in a product-specific appendix to the *Network Administrator's Guide*. It is recommended that you review these appendices, and determine the right settings for each product in your deployment.

To configure product settings, on the Create Deployment page of the installer, ensure that the product is selected for installation, and then click the product in the scrolling list. The configuration panel opens.

IMPORTANT The configuration settings you choose apply to every instance of the product installed from the deployment. After the deployment is created, these settings can be changed only by modifying the deployment. For more information, see [Modify a Deployment](#) (page 36).

Most products allow you to choose an installation type, either Typical to select the most common options, or Custom to review options in more detail.

Some other common product settings are as follows:

- User preferences for product behavior
- Installation of support files, such as material libraries
- Access to online resources

Click Installation Help for further information specific to your product or suite.

Create an Original Deployment

Use this procedure to create a new deployment from the installer. In the process, you can create a **default deployment** by accepting the default configuration of each installed product, or you can create a **custom deployment** by customizing the configuration settings of one or more products in the deployment.

To create an original deployment

- 1 Close all running applications on your computer.
- 2 Start the installer.
- 3 On the first page, if language choices are available, select a language for the deployment instructions, and then click Create Deployment.
- 4 On the Configure <name> page, **Administrative Image** section, specify the following data:

- a Enter a descriptive name for the deployment that identifies the user group, platform, or other attribute to differentiate this deployment from others.
- b Enter the path or browse to the shared network folder where you want to create and store your administrative image. Users install the program from this location.

NOTE For information on how to create a network share, see [Create a Network Share](#) (page 33).

- c Select either 32-bit or 64-bit for the target operating system.
 - d Choose whether to include only the products required by this configuration.
 - If selected, the deployment cannot be modified in future to include additional products.
 - If unselected, the administrative image will include all possible products, so the current deployment can be modified in any way.
- 5 In the **Installation Settings** section, select one or more of these options:
 - **Silent mode** runs the installation in background, without prompting the user for any input.

NOTE Silent mode can automatically restart the user's computer without warning after installation.

- **Log file on each workstation** can enable users to review and troubleshoot their own installations.
- **Network log file** in a central location supports the network administrator in reviewing data for all installations.

NOTE The network log file must be in a shared folder where users of the deployment have read-write access. Otherwise, log data for user installations cannot be written to the log file.

- 6 Review and accept the Autodesk software license agreement.
- 7 On the Product Information page, select your license type, and enter your serial number and product key. If this data is valid, green check marks appear.
- 8 If you are sure that the product information is correct, click Next.
- 9 On the Create Deployment Configuration page, select the products to include in the deployment.
- 10 If you need to configure settings for a product, click the product name to open the configuration panel where you can review and change settings.

IMPORTANT The configuration settings you choose apply to every instance of the product installed from the deployment. After the deployment is created, these settings can be changed only by modifying the deployment.

Configuration settings vary widely by product. For more information, click Installation Help to see the product documentation.

- 11 Click Create to create the deployment.
After the deployment is created, the Deployment Configuration Complete page opens, presenting useful paths to the new deployment and a link for registering products online.
- 12 After you have finished using this screen, click Finish.

Modify a Deployment

After a deployment is created, it may be necessary to modify the deployment for some client workstations. You can apply a patch or select various custom files that are not part of the base administrative image. You can also perform

modifications such as changing the installation directory from drive C to drive D.

Inside each deployment folder is a Tools folder that contains a shortcut (.LNK file) named Create & Modify a Deployment. You can use this shortcut to

- Create a new deployment configuration
- Create a new deployment configuration that uses an existing deployment as a template
- Modify the configuration of an existing deployment

The installer pages guide you through the process, similar to when creating an original deployment. If your original administrative image was set to include only products required by the deployment configuration, then your options for creating or modifying the deployment are limited. In particular, you cannot add products to the deployment that are not in the original administrative image. Conversely, if your original administrative image was not set to include only the required products, then it includes all product files. As a result, you can add products when you modify this deployment or when you create new deployment configurations.

To modify a deployment

- 1 Open the shared network folder that contains the deployment.
- 2 In the Tools folder, double-click the Create & Modify a Deployment shortcut.
The installer opens at the Modify Deployment page.
- 3 Click through the deployment configuration pages, and select the required options.
- 4 Click Create Deployment.

Direct Users to the Administrative Image

After you have created the deployment, users can install the program using the shortcut (.LNK file) located in the deployment folder with the administrative image. The shortcut name matches the deployment name that you specified when creating the deployment. Notify users of the shortcut name and location. Instruct them to double-click the shortcut to start the installation. If the deployment uses silent mode, advise users to keep other applications closed during the installation, because their computers might restart automatically after products are installed.

Use Imaging Software to Distribute Products

5

Distribute Products Using Imaging Software

You can use imaging software, such as Norton Ghost, to create a master image to distribute Autodesk products. Once created, the master image can be replicated to other computers throughout your facility.

IMPORTANT Autodesk does not recommend or support the distribution of products using imaging software. However, if you plan to use this method of distribution, please review the following instructions carefully.

The use of imaging software can result in conflicts with product licensing, incomplete installations, and problems with activation.

NOTE If you experience licensing instability in a SATA RAID environment, using imaging software to distribute Autodesk products can cause product activation problems, such as an "Activation code limit exceeded" situation.

Distribute Multi-Seat Stand-Alone Products

You can use a master image to distribute a multi-seat stand-alone product to multiple computers.

NOTE When using Norton Ghost, you must use the *-ib* switch to include the boot sector in your master image. Consult your imaging software for more details on including the boot sector as part of the master image.

Master images should not be created if you have previously run Autodesk products on the master computer. Cleaning the system may be necessary. For more information, see [Clean a Master System and Restore the Operating System](#).

To distribute a multi-seat stand-alone product to multiple computers using a master image

- 1 Create a network deployment for a multi-seat stand-alone product. For more information, see [Create an Original Deployment](#) (page 35).
- 2 Install the Autodesk product from the deployment onto the master computer.
- 3 On the master computer, create a master image, including the boot sector. Test the product on a machine other than the master computer before distributing the product. Launch the product on the other machine, and then register and activate it. Users have a trial period to register and activate the product on their machines.
- 4 Apply the master image to the target computers.

Distribute Network Licensed Products

You can use a master image to distribute network licensed products.

To distribute a network licensed product to multiple computers using a master image

- 1 Create a network deployment for a network licensed product. For more information, see [Create an Original Deployment](#) (page 35).
- 2 Install the product from the deployment onto the master computer.
NOTE A license server must be running, and each computer must be connected to the network in order for the product to obtain a license.
- 3 After the product has been installed, use imaging software to create a master image of the system's hard drive.
- 4 Apply the master image to the target computers.

Restore the Master Image

The following procedure assumes that you have saved a copy of each computer's *AdLM* folder (and *Product Licenses* folder, if present) to either another computer or a disc before you reformat the computer.

To restore a product using a master image

- 1 Exit the application. Do not run the application again until after you have completed this procedure.
- 2 In Windows Explorer, copy the *AdLM* folder from the appropriate path shown below to a location other than the disc that will be restored.
C:\Documents and Settings\All Users\Application Data\FLEXnet
- 3 Reformat the computer and restore the master image.
NOTE Do not perform a low-level format of the hard drive.
- 4 Copy the *AdLM* folder that you created in step 2 to its original location on the reformatted computer.

NOTE When you restore the disc image, any files that were altered are put back in their original state and ready to use again. The license files are preserved, and no reactivation of products is necessary.

License Activation

6

Activation

Activation is the process of verifying the serial number and product key of an Autodesk product, and licensing it to run on a specific computer or network. If a license administrator registers products with Autodesk before they are used, then activation occurs automatically as users start the products.

For most Autodesk products, you must register and activate the software licenses within 30 days of installation. When registering, specify whether you are requesting activation codes for network or stand-alone use (or both, the total not to exceed the total designated in your contract).

The majority of products in your Autodesk Education Suite share the same serial number and product key, and are not preregistered. If you install products from a deployment, the products will be activated at first launch. For network licensed installations, you will be also be asked to input your server name. Make sure the network license server is started.

If you perform a stand-alone installation of several products from their media, the first time you launch one of the products, you will be asked to activate it by entering your Autodesk Education Suite serial number and product key. When the first product is successfully activated, all other suite products on the computer are activated for use.

Activation cannot occur if the serial number and product key combination is invalid, or if the user is disconnected from the Internet. In such cases, the user must contact Autodesk to resolve the situation. Some products provide instructions for offline registration. This can involve generating a request code, sending it to Autodesk, and then receiving an activation code to enter on a product screen to complete the activation process.

If you upgrade your product from an earlier version, you may need to provide your old serial number. For more information on activation, go to [Autodesk Licensing](#) and select the FAQ link.

You can activate products online through the RegisterOnce pages of the installer (<https://registeronce.autodesk.com>). The web page prompts you to create a RegisterOnce account. If you have problems with this process, use the following contacts to register and activate products manually.

- Email: authcodes@autodesk.com
- Local software activation phone and email information:
www.autodesk.com/educationsuites

Contacts and Technical Support

7

Contact Information

Autodesk Education Team

Education Website www.autodesk.com/education

Student Community Website www.autodesk.com/edcommunity

Autodesk Education Suites

Manager educationsuites.manager@autodesk.com

Website www.autodesk.com/educationsuites

Autodesk Customer Service

Activation Codes Activate your products online through the Register Once pages of the Installer. If you have problems with this online process, you can use the following contacts to register and activate products manually.

- Online: <https://registeronce.autodesk.com>
- By email: authcodes@autodesk.com

- Visit www.autodesk.com/educationsuites for your local software activation phone and email information.
- By phone: 800-551-1490

Autodesk Business Center	<p>Obtain a contract number, shipping information, a serial number, and a contract renewal date.</p> <p>Your Autodesk reseller is your primary contact for information and technical support. You can also visit www.autodesk.com/educationsuites for additional resources and contact information.</p> <ul style="list-style-type: none"> ■ Subscription customers: You can log a Support Request through the Autodesk Subscription Center. ■ Non-subscription customers: Please use the Contact Us link for Americas. ■ Outside of North and South America: Please contact your local reseller.
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Autodesk, Inc.

Website	www.autodesk.com
Technical Support	<p>www.autodesk.com/support</p> <p>View a list of support resources; find valuable technical solutions. Your Autodesk reseller can also provide support, and other valuable services to meet your needs.</p>
Shipping Address	Visit www.autodesk.com/educationsuites to find the Autodesk shipping location nearest you.

Technical Support

Technical support for installation and licensing is included with your Autodesk Education Suites. This 30-day support program is automatically set up in the name of the person registering the product. The registering party receives a system notification to set up a login to access the support program.

Configuration support is available for setting up peripheral devices to work with your Autodesk software. Support includes setting up product and system variables to make the best use of the product on your system.

In addition, your authorized Autodesk reseller provides training, support, and other valuable services. For more information, contact your reseller.

For country-specific Autodesk product support contact information and hours of availability, visit www.autodesk.com/educationsuites.

Additional Resources

- **Product E-Lessons.** These self-paced online lessons for Autodesk product users answer training needs for critical application functions and industry practices. Available free on the student community website: www.autodesk.com/edcommunity.
- **Autodesk Instructor Development Training.** In partnership with Autodesk resellers, Instructor Development hands-on seminars help educators learn practical methods for teaching the design process using the latest Autodesk software. For a list of upcoming seminars, visit www.autodesk.com/educationsuites.
- **Software Trial Versions.** Download free, trial versions of Autodesk's newest software releases. Go to www.autodesk.com/educationsuites and follow the supplied link to the software download site.

Troubleshooting

8

Licensing Issues

How can I get my Network License Manager to administer licenses for my 2012-based products as well as my 2013-based products?

You can do this by first updating your Network License Manager to the most recent version. See [Install the Network License Manager](#) (page 21) in this guide.

Why should I not use Microsoft Word to edit my license file?

When you save a .lic file after editing it with a word processor, like Microsoft Word, extra data gets saved with the file. This results in an invalid .lic file. You should always use an ASCII text editor like Notepad to ensure that no extraneous data is saved with the file.

Licensing Errors

Some license errors require you to reactivate your product. If you need to reactivate your product, the Product Activation wizard is displayed when you try to run the product. To reactivate your product, follow the instructions in the Product Activation wizard.

The following topics offer more details regarding specific errors.

Errors Caused by Hardware Changes

If you replace or reconfigure hardware on the computer where your Autodesk product license resides, the stand-alone license might fail. You will not be able to use your product.

To prevent damage to your product license, before making hardware changes, use the License Transfer utility to export your license file. After the hardware change, import the license file back. For instructions about using the License Transfer utility, see "Transfer Your Stand-Alone License" in the *Licensing Guide* for any of the major Autodesk products.

NOTE If you get a license error when you change your hardware, you may have to reactivate your license.

Errors Caused by Reinstalling an Operating System

If you reinstall your operating system on the computer where your Autodesk license resides, the license might fail. You will not be able to use your product.

To resolve a license error in this case, you must reactivate your product. See [Activation](#) (page 43) in this guide.

To prevent a license error when you reinstall an operating system

NOTE If using Norton Ghost or another imaging utility, do not include the Master Boot Record.

- 1 Locate one of the following folders and make a backup copy:
 - For Windows 7, *C:\ProgramData\FLEXnet*
 - For Windows XP, *C:/Documents And Settings/All Users/Application Data/FLEXnet*
- 2 Reinstall the operating system and then reinstall the Autodesk product.
- 3 Paste the license folder to the same location from which you originally copied the folder in step 1.
You can now run your Autodesk product.

Errors Caused by Changing the System Date and Time

Your product license allows for time changes to the system clock within two days of the current time. If you set your system clock back more than two days, the next time you start your product, you will receive a message that gives you the option of correcting the system clock. If you do not correct the system clock, you receive a license error. To prevent this situation, ensure that your computer's system date is accurate when you install and activate any Autodesk products.

Networking Issues

This section outlines common issues and their solutions related to performing a network installation or configuring your network license server(s).

When installing tools and utilities, which selections apply to a stand-alone or multi-seat stand-alone installation?

Since stand-alone licensed products do not rely upon a license server to manage or activate the license, the only tool that is beneficial is the Autodesk CAD Manager tool. You need the CAD Manager tool if you want to make changes to CAD Manager Channels.

For a network license, where can I find my server name?

When installing a network licensed product, you must specify the name of each server that will run the Network License Manager. If you don't know the server name, you can quickly find it by opening a Windows command prompt on the server. At the prompt, enter `ipconfig /all` and note the Host Name entry.

How can I avoid problems with license file formats?

Incorrect line spacing in the license file can cause problems. If the file is saved in ANSI format, blank lines may be created at the start of the file. These must be removed so that the license file can be read correctly and can allow the license server to start. But if the hostname contains double-byte characters, the UTF-8 format may be required. In this case, the first line of the license file must be blank. When you open the license file and save it as UTF-8, you may need to add a blank line at the beginning so that the file will work correctly.

Deployment Issues

If I choose to create a log file, what kind of information does the file contain?

There are two types of log files that can be generated that monitor information about deployments and installations.

The **Network** log file keeps a record of all workstations that run the deployment. The log lists the user name, workstation name, and the status of the installation. Refer to this file for status information and details about problems that users may have encountered during installation. The default

location for the network log file is in a Log subfolder where the administrative image is located.

The **Client** log file contains detailed installation information for each workstation. This information may be useful in diagnosing installation problems. The client log is located in the \Temp directory of each client workstation.

When specifying user workstation settings, I can specify a profile. What are profiles?

Profiles can contain configuration settings for just about anything that is not a drawing based system variable. For example, a profile can contain things like support paths, grip settings, and plot settings. Profiles are created on the Profiles tab of the Options dialog box.

When you specify a profile on the Specify User Preferences page during the deployment process, it ensures that all workstations that use that deployment to install the product will be configured the same way.

Can I create custom desktop shortcuts?

You can choose to create custom desktop shortcuts that use command line switches to specify several options when you start the program. For example, command line switches can be set to run a script during program launch, create a drawing based on a template or prototype drawing, or designate a workspace that should be restored on startup.

What is the difference between appending and merging service packs?

When you **append** a service pack, the service pack is applied to the current deployment only. Multiple service packs may be appended to a deployment. The service pack file is included in the deployment and the service pack is applied after the product is deployed.

When you **merge** a service pack, the service pack is merged into the administrative image. Once merged, a service pack may not be removed from the administrative image. Multiple service packs may be included in a single administrative image.

What is the effect of selecting all products for an administrative image, and can I add products later?

If you include all products in your deployment, the administrative image will be larger. You should select all products only when you create multiple

deployments from this image and prefer not to use the installation media. If there are products you rarely or never use, and you do not expect to create additional deployments, you should only select a subset of products.

You can still create a deployment at a later date, and include additional products, but you need to create a new administrative image. You need the installation media to do so.

What are the default search paths and file location settings?

Some Autodesk products use a deployment configuration setting on the Select Installation Folders for Support Content panel of the deployment wizard. Here you can choose where your support content gets installed by specifying a folder other than the user profile folder. Support files include drivers, menus, and optional, user-defined settings such as dictionary and customization files.

When an install path for support content is specified, it will be populated into the corresponding search paths on the Define Search Paths and File Locations page.

Support File Search Path	Specifies the folders in which the program should look for text fonts, customization files, plug-ins, drawings to insert, line-types, and hatch patterns that are not in the current folder.
Customization Files	Specifies the names and locations of various types of files. Main Customization File: Specifies the default location of the main customization file (<i>acad.cui</i>). Enterprise Customization File: Specifies the location of an enterprise customization file. Custom Icon Location: Specifies the location for custom icons used in customization files.
Dictionary and Font Files	Specifies a number of optional settings. Custom Dictionary File: Specifies a custom dictionary to use, if you have one. Alternate Font File: Specifies the location of the font file to use if the original

font cannot be located and an alternate font is not specified in the font mapping file.

Font Mapping File: Specifies the location of the file that defines how to convert fonts that cannot be found.

Printer Support File Path	Specifies search path settings for printer support files. Printer Configuration Search Path: Specifies the path for printer configuration files (PC3 files). Printer Description File Search Path: Specifies the path for files with a <i>.pmp</i> file extension, or printer description files. Plot Style Table Search Path: Specifies the path for files with a <i>.stb</i> or <i>.ctb</i> extension, or plot style table files (both named plot style tables and color-dependent plot style tables).
Automatic Save File Location	Specifies the path for the file created when you select Automatic Save on the Open and Save tab.
Color Book Locations	Specifies the path for color book files that can be used when specifying colors in the Select Color dialog box. You can define multiple folders for each path specified. This option is saved with the user profile.
Data Sources Location	Specifies the path for database source files. Changes to this setting do not take effect until you close and restart the program.
Template Settings	Specifies the drawing template settings. Drawing Template File Location: Specifies the path to locate drawing tem-

plate files used by the Start Up wizard and New dialog box.

Sheet Set Template File Location:

Specifies the path to locate sheet set template files used by the Create Sheet Set wizard.

Default Template File Name for QNEW:

Specifies the drawing template file used by the QNEW command.

Default Template for Sheet Creation and Page Setup Overrides:

Specifies the default template file that is used for creating new sheets and for storing page setup overrides that can be applied to Publish operations from the Sheet Set Manager.

Tool Palettes File Locations	Specifies the path for tool palette support files.
Log File Location	Specifies the path for the log file created when you select Maintain a Log File on the Open and Save tab.
Plot and Publish Log File Location	Specifies the path for the log file that is created if you select the Automatically Save Plot and Publish Log option on the Plot and Publish tab of the OPTION command.
Temporary Drawing File Location	Specifies the location to store temporary files. This program creates temporary files and then deletes them when you exit the program. If you plan to run the program from a write-protected folder (for example, if you are working on a network or opening files from a disk), specify an alternate location for your temporary files. The folder you specify must not be write-protected.

Temporary External Reference File Location	Specifies the location of external reference (xref) files. This location is used for the copy of the xref when you select Enabled with Copy in the Demand Load Xrefs list on the Open and Save tab.
Texture Maps Search Path	Specifies the folders to search for rendering texture maps.
i-drop Associated File Location	Specifies the location of data files associated with i-drop content. When the location is not specified, the location of the current drawing file is used.
Action Recorder Settings	Specifies the file locations for storing recorded files and reading additional actions.
DGN Mapping Setups Location	Specifies the location of the <i>DGNSetups.ini</i> file, which stores DGN mapping setups.

How will changing the support file locations affect my search paths?

When a different install path for support content is specified, it will be populated into the correspondent search paths on the Define Search Paths and File Locations page. If one is not specified, the first search path will replace the install path. The table below outlines the specific search paths that can be affected by resetting your support file install paths.

Support content	Search paths and file locations
Support	<ul style="list-style-type: none"> ■ Support file search path ■ Customization files ► Main customization files ■ Custom dictionary file ■ Font mapping file ■ Color book locations ■ Tool palette file locations

Support content	Search paths and file locations
	<ul style="list-style-type: none"> ■ Action Recorder settings and file location ■ DGN mapping setup locations
Plotter	<ul style="list-style-type: none"> ■ Printer support file path ■ Printer configuration search path ■ Printer description file search path ■ Plot style table search path
Data link	<ul style="list-style-type: none"> ■ Data source location
Template	<ul style="list-style-type: none"> ■ Template settings ■ Drawing template file location ■ Sheet Set template file location ■ Default templates for sheet creation and page setup overrides
Rendering	<ul style="list-style-type: none"> ■ Texture maps search path. All three paths should be replaced by the install path values with proper subfolders.

Along with defining search paths and file location, can files be added?

Using the Add button, you can set paths to folders where files are stored. You cannot add specific files.

Where can I check if service packs are available for my software?

Visit the Autodesk support page at <http://autodesk.com/servicesandsupport>.

How do I extract an MSP file?

A Microsoft Patch (MSP) file is usually contained in a Service Pack executable that you download from Autodesk Education Suites Support website. To extract the MSP file from the executable, run the patch program from the Windows command prompt using the /e switch.

Pay particular attention to the location where the files are extracted. For details about using the patch file, review the Readme file for that patch.

Can Online Resource settings be modified later?

Yes. If you want to change the state of online resources after a product is installed, you can do that from the CAD Manager Control utility. The CAD Manager Control utility is installed separately from Autodesk Education Suites.

From the installer, select Install Tools and Utilities and then select the CAD Manager Control utility. After installation is complete, you can open the utility from the Start menu. The general path is All Programs ► Autodesk ► CAD Manager Tools ► CAD Manager Control Utility.

Where can I learn about InfoCenter?

With some Autodesk products, you can use InfoCenter to enter a question for help, display the Communication Center panel for product updates and announcements, or display the Favorites panel to access saved topics. For more information, refer to the Installation Help for a product that uses InfoCenter, such as Inventor, Navisworks, or 3ds Max.

What are information channels?

The Communication Center component of InfoCenter allows you to receive announcements from various information channels, such as the following:

- Product Support information, including maintenance patch notifications.
- Subscription Center announcements and subscription program news, as well as links to e-Learning Lessons, if you are an Autodesk subscription member.
- Notifications of new articles and tips posted on Autodesk websites.

What are the benefits of enabling CAD Manager Channels?

CAD Manager Channels allow access to Internet-based content and information feeds from a specified feed location.

What are RSS feeds and how do they benefit my installation?

An RSS feed is a live link you initiate by subscribing to someone's website. Once subscribed, the primary benefit is a constantly updating stream of content that is delivered to your system in the form of summarized articles, forum threads, blog posts, and so on. RSS stands for Rich Site Summary or Really Simple Syndication.

Where can I learn about InfoCenter search locations?

You can use InfoCenter to search multiple sources (for example, Help and specified files) at one time, or choose to search a single file or location.

How do I set or customize search locations?

InfoCenter Search and Communication Center settings can be set in the InfoCenter Settings dialog box or in the CAD Manager Control utility. You must use the CAD Manager Control utility to specify CAD Manager Channel settings.

Installation Issues

This section outlines common issues and their solutions regarding adding and removing features, reinstalling or repairing your installation, and uninstalling products.

Is it possible to change the installation folder when adding or removing features?

Once your product is installed, you cannot change the installation path from the Add/Remove Features page. Changing the path while adding features results in program corruption, so it is not an option.

When should I reinstall the product instead of repairing it?

You should reinstall your product if you accidentally delete or alter files that are required by the program. Missing or altered files adversely affect the performance of your product and cause error messages when you try to execute a command or find a file.

If an attempt to repair an installation fails, reinstalling is the next best option.

Do I need the original disk or USB drive to reinstall my software?

Yes, for a reinstallation of the product, you must have the original media on hand. Installation data is cached locally on your drive and that data is reused when reinstalling.

After repairing my installation, is it possible to recover my settings?

Custom settings can be exported and later re-imported to the same system in case you have to repair the installation of your program.

Do I need to be concerned about breaking my software licenses if I have to re-image our facility?

When you create your master image, you need to make sure you have a clean boot sector.

If you're going to re-image frequently, be sure to back up your authorization data. Copy the license files to a different system before re-imaging, and then copy them back after you restore the master image. This ensures that the application will run without re-activation. Refer to [Restore a Master Image](#) (page 41).

When I uninstall my software, what files are left on my system?

If you uninstall the product, some files remain on your system such as files you created or edited (drawings or custom menus).

Your license file also stays on your computer when you uninstall your product. If you reinstall on the same workstation, the license information remains valid and you do not have to reactivate the product.

Index

A

- activate license 43
- administrative image
 - shortcut 37
- adskflex (Autodesk vendor daemon) 17
- Autodesk Support 11

C

- CAD Manager 51
- configuration 34
- configuring
 - license servers 22
 - options file 26
 - Windows 22
- contacts 45, 47
- customer service 45
- customized deployments 34, 35

D

- daemons
 - license manager daemons 17
 - vendor daemons 17
- deployment 9
- deployments
 - checklist 32
 - create 35
 - customized 34
 - distributing 39
 - imaging software 39
 - modifying 36
 - overview 31
 - troubleshooting 51
- distributed license server 16

E

- education team 45, 47

F

- firewall 22
- FLEXnet tools 25
 - options file 26

G

- graphic cards 5

H

- hardware requirements 5
- heartbeat signals 21
- Help files 11

I

- imaging software deployments 39
- install preparation 9
- installation
 - customizing 34
 - imaging software 39
 - network 15
 - network deployment 32
 - repairing damaged installations 41
 - stand-alone 13
- installing Network License Manager 21

L

- license activation 43
- license file 26, 49, 59
- license files
 - understanding 18
- license manager daemon 17
- license server
 - Windows 24

- license server models 15
 - distributed 16
 - redundant 17
 - single 16
- license servers
 - configuring 22
 - options file 26
 - Windows 22
 - losing connection 21
 - stopping and restarting 23
 - Windows management utilities 25
- License Transfer utility 49
- license types 7
- licenses
 - assigning 17
 - behaviors (term limits) 26
 - borrowing 26
 - FLEXnet tools 25
 - functional overview 17
 - license files 18
 - license servers 22
 - timeout 26
- licensing 49
- licensing errors 49
- lmgrd (license manager daemon) 17
- LMTOOLS utility 22, 25
- lmttools.exe utility 25
- lmutil.exe utility 25
- log files 26

M

- master images 39, 40, 41
- Microsoft Windows
 - configuring license servers 22
- MSP file 51
- multi-seat stand-alone installations 39
- multi-seat stand-alone license 7

N

- network installations
 - imaging software deployments 40
- network license 7
- network license installations
 - imaging software deployments 40

- license behaviors 26
- Network License Manager 15
 - assigning licenses 17
 - installing 21
 - uninstalling on Windows 24
 - upgrading 21
- network shares
 - creating 33
- NLM 15
- Norton Ghost 39

O

- operating systems supported 5
- options file (FLEXnet tools) 26

P

- product key 10
- product list 1

R

- re-imaging 59
- Readme 11
- redundant license server 17
- reinstallation issues 59
- reinstalling operating system 49
- repairing an installation 59
- restart Windows license server 24
- restore
 - damaged installation 41

S

- SATA RAID environments 39
- search paths 51
- serial number 10
- server name 51
- servers
 - license servers 22
 - Windows configuration 22
 - stopping and restarting 23
- service packs 51
- shortcut to administrative images 37

- single license server 16
- stand-alone installations
 - imaging software and 39
- stand-alone license 7
- suite contents 1
- support 45, 47
- system requirements 5
- system time and date 49

T

- trial software 47

U

- uninstalling Network License Manager on Windows 24

- uninstalling stand-alone 14
- upgrading Network License Manager 21
- user profile 51
- UTF-8 license file 51

V

- vendor daemons 17

W

- Windows
 - configuring license servers 22

