

AutoCAD Architecture 2009

Network Administrator's Guide

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March 2008

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Published by:
Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903, USA

Contents

Chapter 1	Quick Start to Network Administration	1
	How to Prepare for Deployment	1
	How to Choose an Installation Type	1
	How to Choose a License Server Model	2
	How to Set Up a License Server	3
	How to Install the Network License Manager	3
	How to Install and Use the Network License Activation Utility	4
	How to Configure Your License Server	7
	How to Set Up and Distribute the Program	9
	How to Create a Network Share	9
	How to Use the Installation Wizard to Set Up a Deployment	10
	How to Deploy This Program	18
	Features That Require Design Review	19
Chapter 2	System Requirements	21
	System Requirements for This Program	21
Chapter 3	Deploy the Program	27
	Preliminary Tasks for a Network Deployment	27
	Minimize Chances of Installation Failure	29
	Create Shared Folders for Your Deployments	29

Install and Activate Tools and Utilities	30
Use the Installation Wizard to Set Up a Deployment	31
Start the Deployment Process	31
Create a Deployment	32
Enter Product and User Information	33
Specify Log File Locations	35
What Is Silent Mode?	36
Customer Involvement Program (CIP)	36
Select a License Type (optional)	36
Select the Installation Type (optional)	40
Selecting Appropriate Content Packs	44
Add an AutoCAD Profile and Desktop Shortcut	45
Specify Content Browser Library File Location	46
Specify Configurable Folders	46
Define Search Paths and File Locations (optional)	48
Install Additional Files (optional)	49
Specify User Preferences (optional)	52
Include Service Packs (optional)	53
Configure InfoCenter Communication Center (optional)	54
Allow Users to Access Online Resources (optional)	57
Final Review and Complete Setup	59
Register the Product	62
Modify a Deployment (optional)	63
Point Users to the Administrative Image	64
Uninstall the Program	64
Appendix A Use Scripts to Deploy the Program	67
Create Scripts That Install Programs	67
A Sample Installation Script	68
Use Switches and Flags in Scripts	75
Scripts for Custom Installation	76
Run Scripts	78
Appendix B Use Group Policies to Install a Deployment	79
Introduction	79
Assign a Deployment Using Group Policies	80
Advantages and Disadvantages of Using Group Policies	80
Distribute a Deployment Through Group Policies	81
Assign a Deployment to Computers	81
Verify the Installation of a Deployment	83
Verify That the Program Is Assigned to a Computer	84
Appendix C Use Microsoft Systems Management Server to Install a	
Deployment	85

Introduction	85
Tasks for Deploying Autodesk Software with SMS	86
Create a Collection for Distributing Autodesk Software	86
Create a Rule Using the Query Rule Properties Toolbar Button	87
Create a Rule Using the Direct Membership Rule Wizard	88
Set Up a Source Directory Using the Deployment Wizard	89
Create the SMS Software Installation Package	90
Create an SMS Program	91
Use the Deploy Executable Method to Create a Program	92
Use the Windows Installer Method to Create a Program	94
Create an Advertisement	97
Install Autodesk Software on the Client Computer	98
Appendix D Distribute the Product Using Imaging Software	101
Use a Master Image to Distribute Multi-Seat Stand-Alone Products to Multiple Systems	101
Use a Master Image to Distribute Network Licensed Products to Multiple Systems	102
Restore the Master Image	103
Clean a Master System and Restore the Operating System	104
Glossary	105
Index	109

Quick Start to Network Administration



Network deployment of this program requires careful planning and execution. This section gives you quick, step-by-step instructions about how to prepare for deployment, set up a license server, and set up and distribute the program.

If you are not familiar with network administration and deployment, you should read the entire *Network Administrator's Guide* before you attempt to deploy and administer the program over a network.

How to Prepare for Deployment

To prepare for a deployment, you need to choose an installation type and a license server model.

How to Choose an Installation Type

When you set up your deployment, you need to choose the type of installation to deploy. In the AutoCAD Architecture 2009 Installation wizard, you specify one of the following installation types:

Network License installation With this type of installation, you install the program to workstations with the files and registry entries that allow the program to communicate with the Network License Manager. You also define the configuration of the Network License Manager so that the licenses can be accessed. Workstations running the program based on a network installation do not require individual activation. Licensing of this program is managed by at least one license server.

The main advantage is that you can install AutoCAD Architecture on more systems than the number of licenses you have purchased (for example, purchasing 25 licenses but installing on 40 workstations). At any one time, AutoCAD Architecture runs on the maximum number of systems for which you have licenses. This means you get a true floating license.

Multi-Seat Stand-Alone installation (Stand-Alone option) Choose this type of installation for stand-alone installations where a single serial number is used for multiple seats. Multi-seat stand-alone installations do not rely upon a Network License Manager to manage product licenses; however, you can still use the AutoCAD Architecture 2009 Installation wizard to create administrative images and create deployments. Registration and activation is more automated for multi-seat stand-alone installations. After the first activation using the multi-seat stand-alone serial number, activation occurs automatically for all workstations based on this deployment, as long as your systems are connected to the Internet.

Stand-Alone installation (Stand-Alone option) Choose this type of installation for stand-alone installations where a single serial number is used for a single seat. Like a multi-seat stand-alone installation, you do not use the Network License Manager to manage product licensing, but installation, registration, and activation occurs on each workstation.

If you choose one of the Stand-Alone installation types, you can proceed to the section [How to Set Up and Distribute the Program](#) on page 9.

How to Choose a License Server Model

If you chose the Network Installation option, you need to decide which license server model to use to distribute the product licenses.

TIP If you are deploying a stand-alone or multi-seat stand-alone installation type, you do not use a license server model. Proceed to the [How to Set Up and Distribute the Program](#) on page 9 section.

For the network installation, use one of the following license server models:

- **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.
- **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.

- **Redundant license server model.** You use three servers to authenticate a single license file. One server acts as the master, while the other two provide backup if the master server fails. With this configuration, licenses continue to be monitored and issued as long as at least two servers are still functional. The license file on all three servers is the same. You must install the Network License Manager on each server.

Each of these license server models is described in detail in the *Network Licensing Guide*. It is strongly recommended that you read that guide before you deploy the program. You can find the *Network Licensing Guide* by clicking the Documentation link at the lower left corner of the AutoCAD Architecture 2009 Installation wizard and in the Help system.

How to Set Up a License Server

If you are planning to have users run the program using network licenses, you need to use the Network License Manager and the Network License Activation utility.

The Network License Manager helps you configure and manage license servers. The Network License Activation utility helps you get licenses and register them over the Internet.

How to Install the Network License Manager

The Network License Manager is used to configure and manage the license servers.

To install your Network License Manager

- 1 In the AutoCAD Architecture 2009 Installation wizard, click Install Tools and Utilities.
- 2 On the Select the Products to Install page, select Autodesk Network License Manager and click Next.

- 3 Review the Autodesk software license agreement for your country or region. You must accept this agreement to proceed with the installation. Choose your country or region, click I Accept, and then click Next.

NOTE If you do not agree to the terms of the license and want to terminate the installation, click Cancel.

- 4 On the Review - Configure - Install page, review your product selection and the current settings. If you don't want to make any changes, click Install. If you want to change the install type or installation path, click Configure.
- 5 On the Select the Installation Type page, choose Typical or Custom and accept the default installation path (*C:\Program Files\Autodesk Network License Manager*) or Browse to specify a different path. If you enter a path that does not exist, a new folder is created using the name and location you provide. Click Next.

WARNING 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 supported.

- 6 On the Configuration Complete page, click Configuration Complete to return to the confirmation page.
- 7 On the Review - Configure - Install page, click Install.
- 8 When the Installation Complete page displays, click Finish.

How to Install and Use the Network License Activation Utility

With the Network License Activation utility, you can obtain licenses over the Internet, which saves time and effort in setting up a network-licensed version of the program. In addition, you can register your product, get automated support by email if you cannot obtain a license over the Internet, and save and migrate license files automatically.

To install your Network License Activation utility

- 1 In the AutoCAD Architecture 2009 Installation wizard, click Install Tools and Utilities.
- 2 On the Select the Products to Install page, select Autodesk Network License Activation utility and click Next.
- 3 Review the Autodesk software license agreement for your country or region. You must accept this agreement to proceed with the installation. Choose your country or region, click I Accept, and then click Next.

NOTE If you do not agree to the terms of the license and want to terminate the installation, click Cancel.

- 4 On the Review - Configure - Install page, review your product selection and the current settings. If you don't want to make any changes, click Install. If you want to change the install type or installation path, click Configure.
- 5 On the Select the Installation Type page, choose Typical or Custom and either accept the default installation path (*C:\Program Files\Autodesk Network License Manager\Network License Activation Utility\enu*) or Browse to specify a different path. If you enter a path that does not exist, a new folder is created using the name and location you provide. Click Next.
- 6 On the Configuration Complete page, click Configuration Complete to return to the confirmation page.
- 7 On the Review - Configure - Install page, click Install.
- 8 When the Installation Complete page displays, click Finish.

To use your Network License Activation utility

- 1 Click Start menu ► Programs (Windows XP) or All Programs (Windows Vista) ► Autodesk ► Network License Manager ► AutoCAD Architecture 2009 Network License Activation Utility.
- 2 On the Obtain a Network License page, review how this utility works and the requirements for using it, and then click Next.
- 3 On the Server Information page, enter the product serial number.

NOTE If you are modifying an existing license file or obtaining a new license for an existing product, your previously entered information might be displayed. Make sure that the serial number that is displayed is the one you want to license. If it is not, enter the correct product serial number.

- 4 In the License Server Model section, click a license server model. For more information about each license server model, click the ? button.
- 5 In the Server Host Name box, enter a server host name or click the [...] button to locate the name of each server you plan to use.
- 6 In the Host ID box, for each server host name you entered in the previous step, click Lookup to have the utility automatically locate the host ID for the server, or enter the host ID manually.

NOTE If your server has more than one network adapter, select the one that corresponds to a physical network adapter. To determine which adapters are physical, enter **ipconfig /all** at a Windows command prompt and view the Description field above each physical address. If there is more than one physical network adapter, you can use any one of them, as long as it was listed when you ran ipconfig /all. Logical devices such as VPN adapters, PPP adapters, and modems may be listed but are not usable for licensing.

- 7 If you chose Distributed Server in step 4, the Seats box is displayed. In the Seats box, enter the number of seats for each license server, and then click Next.
- 8 On the Confirm Server Information page, review the server information you entered, and click Next.
- 9 If the Register and License Your Autodesk Product page is displayed, do all of the following, and then click Next.
 - In the This Product Is To Be Registered To option, select Company or Individual.
 - In the Select Country or Region section, select your country or region of residence.
 - In the Is This an Upgrade section, select Yes or No.
- 10 If the Registration Information page is displayed, enter your registration information, and then click Next.
- 11 If the Confirm Information page is displayed, review your registration information, and then click Next.

- 12 If the Connecting page is displayed, click Next to connect to the Internet to obtain your network license.
- 13 On the Licenses Received page, in the Save License File for [computer name] dialog box, enter the location where you want to save your license file, or click Browse to navigate to the location.

NOTE It is recommended that you save your license file to the location where you installed the Network License Manager.

- 14 If you have an existing license file from another Autodesk product, select one of the following options:
 - **Insert the New License Information Into It.** The new license information is added into the existing license file.
 - **Overwrite the Existing License File.** The entire contents of the existing license file is replaced with the new license information. Select this option *only* if you no longer require any part of the existing license file contents.
- 15 Click Next.
- 16 On the License Activation Successful page, click Print to save a printed copy of the license information, or click Done to complete the transaction and exit the Network Activation utility.

How to Configure Your License Server

You configure a license server so that you can manage the Autodesk product licenses you received when you ran the Network License Activation utility. Configure the license server with the *lmtools.exe* utility.

To configure your license server

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

- 1 Do one of the following:
 - Click Start menu ► Programs (Windows XP) or All Programs (Windows Vista) ► Autodesk ► Network License Manager ► LMTOOLS.

- Right-click the LMTOOLS icon (Windows Vista) on the desktop and click Run As Administrator.
- 2 In the Lmtools program, on the Service/License File tab, select the Configure Using Services option.
 - 3 Click the Config Services tab.
 - 4 On the Config Services tab, in the Service Name list, select a service name or do one of the following:
 - If a service name is selected, verify that it is the one you want to use to manage licenses.
 - If no service name exists, enter the service name you want to use to manage licenses.

NOTE If you have more than one software vendor using FLEXlm® for license management, the Service Name list contains more than one option.

- 5 In the Path to Lmgrd.exe File box, 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 *\Program Files\Autodesk Network License Manager* folder.
- 6 In the Path to the License File box, enter the path to your license file, or click Browse to locate the file.
- 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.
- 8 To run *lmgrd.exe* as a service, select Use Services.
- 9 To automatically start *lmgrd.exe* 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. Then click Yes.
- 11 Click the Start/Stop/Reread tab.
- 12 On the Start/Stop/Reread tab, 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 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.

13 Close *lmttools.exe*.

How to Set Up and Distribute the Program

Once you have prepared for deployment and you have used the Network License Manager and the Network License Activation utility, you are ready to set up and distribute this program by using the AutoCAD Architecture 2009 Installation wizard and choosing a deployment method.

How to Create a Network Share

A network share is an installation folder that you make available to users' computers on a network. You point users to this location to install the program. Create a network share that will be used by the AutoCAD Architecture 2009 Installation wizard during the creation of a client deployment.

NOTE You must have Full Control permissions set for your shared folder when you are creating your deployment images. Read permissions are necessary to access the network share and administrative permissions on the workstation where the program is deployed.

To create your network share

- 1 On the desktop of a network server, create a folder named *Autodesk*.
- 2 Right-click the *Autodesk* folder and click Share and Security (or Sharing).
- 3 In the *<folder name>* Properties dialog box, Sharing tab, select Share This Folder.
- 4 Specify a Share Name, such as *Autodesk* or *MyDeployments*, if necessary.
- 5 Click the Permissions button. In the Permissions dialog box make sure Full Control is active. Click OK.

In Vista, right-click the *Autodesk* folder and then click Share. In the Properties dialog box select Sharing and then Advanced Sharing to share the folder. Click the Permissions button to make sure Full Control is active. Click OK.

These steps are important when creating your deployment images.

- 6 Click OK or Close to close the Properties dialog box.
- 7 For each product you plan to install, create a subfolder in the *Autodesk* folder. Name each folder with the pertinent product name.

How to Use the Installation Wizard to Set Up a Deployment

You can create a deployment directly from the AutoCAD Architecture 2009 Installation wizard. From the deployment, users can install the program on their computers.

NOTE The following procedure illustrates just one of the ways you can set up a deployment. This procedure details a *single-server* network deployment with a *Typical* client setup type and *no* customizations. For further information about setting up deployments, see [Use the Installation Wizard to Set Up a Deployment](#) on page 31.

To use the Installation wizard to create a default deployment

- 1 In the AutoCAD Architecture 2009 Installation wizard, click Create Deployments.
- 2 On the Begin Deployment page, you need to specify the following: administrative image location, deployment name, and if your target systems are 32 or 64-bit operating system(s).
 - In the administrative image field, enter an existing shared network location where you want to create an administrative image, or click the Browse button to navigate to a location where there is a shared network location. Users install the program from this location.

NOTE If you do not know how to create a network share, see [How to Create a Network Share](#) on page 9.

- In the deployment name field, enter the new deployment's name. The name you enter here is the name of the shortcut your users will access to install the product.
- Under This Is To Be A, choose whether your deployment is going to be installed on a 32-bit or a 64-bit target operating system. This selection does not identify the system your deployment was created on; it identifies your target system.

Click Next.

- 3 On the Select the Products to Include in the Deployment page, choose the product(s) you want to deploy and click Next.

NOTE AutoCAD Design Review 2009 is not installed by default when you install AutoCAD Architecture. Some AutoCAD Architecture features require that Design Review be installed to work properly. Design Review is the replacement viewer for DWF Viewer. For more information about the affected features, see [Features That Require Design Review](#) on page 19

- 4 Review the Autodesk software license agreement for your country or region. You must accept this agreement to proceed with the installation. Choose your country or region, click I Accept, and then click Next.

NOTE If you do not agree to the terms of the license and want to terminate the installation, click Cancel.

- 5 On the Product and User Information page, enter your serial number and user information and click Next.

IMPORTANT The information you enter here is permanent and is displayed in the AutoCAD Architecture 2009 window (accessed by Menu browser ► Help ► About or Help ► About) on your computer. Because you can't change this information later without uninstalling the product, make sure you enter the correct information now.

- 6 On the General Deployment Settings page, choose if you want the deployment to create a network log and/or a client log, run the client installation in silent mode, and if you want users to participate in the Customer Involvement program.

- When you choose to create a network log file, you also have to specify where the log file is created by entering either a valid UNC (universal

naming convention) path or hard-coded path on your network. The network log file is optional.

NOTE The folder where the network log resides must be a shared folder where users who install the program have Change permissions. Otherwise, successes or failures for user installations cannot be written to the log file.

- Choose whether you want a client log file created.
- If you want to prevent users from changing installation settings when they install, select Silent mode.
- If you choose participation in the Customer Involvement program, Autodesk sends helpful information about the product.

For more information regarding log files, refer to [Specify Log File Locations](#) on page 35.

Click Next.

- 7 On the Review - Configure - Create Deployment page, click Create Deployment.
By clicking Create Deployment, an administrative image is created in the shared folder using the deployment options listed in the Current Settings field.
- 8 On the Deployment Complete page, click Finish.

To use the Installation wizard to create a configured deployment

- 1 In the AutoCAD Architecture 2009 Installation wizard, click Create Deployments.
- 2 On the Begin Deployment page, specify the following: the administrative image location, deployment name, and if your target systems are 32 or 64-bit operating system(s).
 - In the Administrative Image field, enter an existing shared network location where you want to create an administrative image, or click the Browse button to navigate to a location where there is a shared network location. Users install the program from this location.

NOTE If you do not know how to create a network share, see [How to Create a Network Share](#) on page 9.

- In the Deployment Name field, enter the new deployment's name. The name you enter here is the name of the shortcut your users will access to install the product.
- Under This Is To Be A, choose whether your deployment is going to be installed on a 32-bit or a 64-bit target operating system. This selection does not identify the system your deployment was created on; it identifies your target system.

Click Next.

- 3 On the Select the Products to Include in the Deployment page, choose the product(s) you want to deploy and click Next.

NOTE AutoCAD Design Review 2009 is not installed by default when you install AutoCAD Architecture. Some AutoCAD Architecture features require that Design Review be installed to work properly. Design Review is the replacement viewer for DWF Viewer. For more information about the affected features, see [Features That Require Design Review](#) on page 19

- 4 Review the Autodesk software license agreement for your country or region. You must accept this agreement to proceed with the installation. Choose your country or region, click I Accept, and then click Next.

NOTE If you do not agree to the terms of the license and want to terminate the installation, click Cancel.

- 5 On the Product and User Information page, enter your serial number and user information and click Next.

IMPORTANT The information you enter here is permanent and is displayed in the AutoCAD Architecture 2009 window (accessed by Menu browser ► Help ► About or Help ► About) on your computer. Because you can't change this information later without uninstalling the product, make sure you enter the correct information now.

- 6 On the General Deployment Settings page, choose if you want the deployment to create a network log and/or a client log, run the client installation in silent mode, and if you want users to participate in the Customer Involvement program.
 - When you choose to create a network log file, you also have to specify where the log file is created by entering either a valid UNC (universal

naming convention) path or hard-coded path on your network. The network log file is optional.

NOTE The folder where the network log resides must be a shared folder where users who install the program have Change permissions. Otherwise, successes or failures for user installations cannot be written to the log file.

- Choose whether you want a client log file created.
- If you want to prevent users from changing installation settings when they install, select Silent mode.
- If you choose participation in the Customer Involvement program, Autodesk sends helpful information about the product.

For more information regarding log files, refer to [Specify Log File Locations](#) on page 35.

Click Next.

- 7 On the Review - Configure - Create Deployments page, click Configure to make changes to the administrative image.
- 8 On the Select the License Type page, select a Stand-alone or Network license installation.
- 9 On the Select the Installation Type page, you can choose to make the following configuration changes:
 - Typical - Installs the most common application features.
 - Custom - Installs only the application features that you select from the Select Features To Install list:

CAD Standards	Contains tools for reviewing design files for compliance with your standards.
Database	Contains database access tools.
Dictionaries	Contains multilanguage dictionaries.
Drawing Encryption	Allows you to use the Security Options dialog box to protect a drawing with a password.

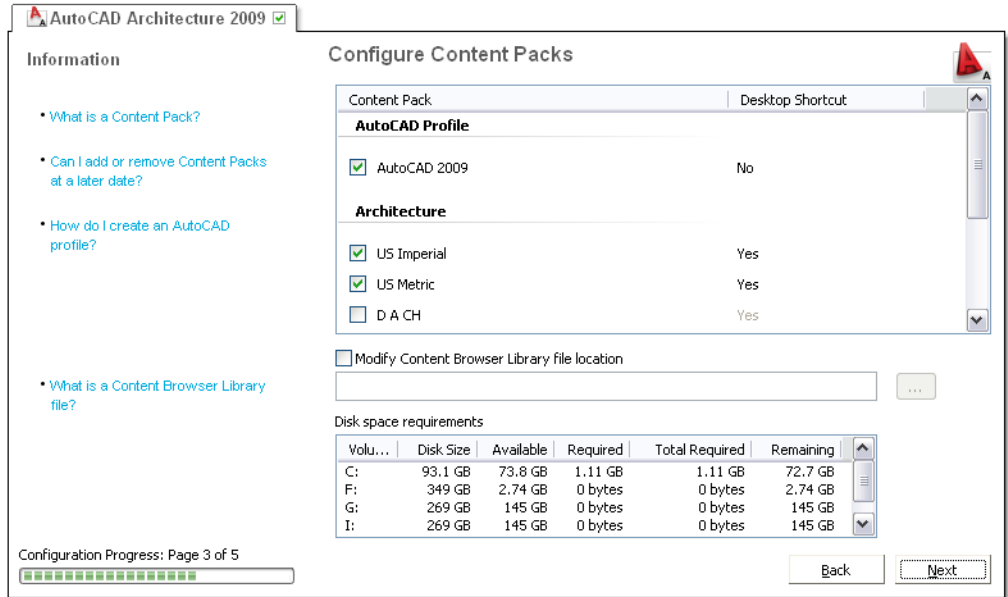
Fonts	Contains program fonts. (True Type fonts are automatically installed with the program.)
Content Search	Allows you to search for installed AutoCAD Architecture content.
Portable License Utility	Contains a tool for moving a stand-alone license between computers.
Migrate Custom Settings	Allows you to migrate custom settings and files from previous releases. For more information, see Migrate Custom Settings.
Reference Manager	Allows you to view and edit the paths of externally referenced files associated with a drawing.
Samples	Contains various feature sample files.
Tutorials	Contains product lessons.
VBA Support	Contains Microsoft Visual Basic for Applications support files.

- Product Install Path - Specifies the drive and location where AutoCAD Architecture will be installed.

Click Next to proceed with the configuration process.

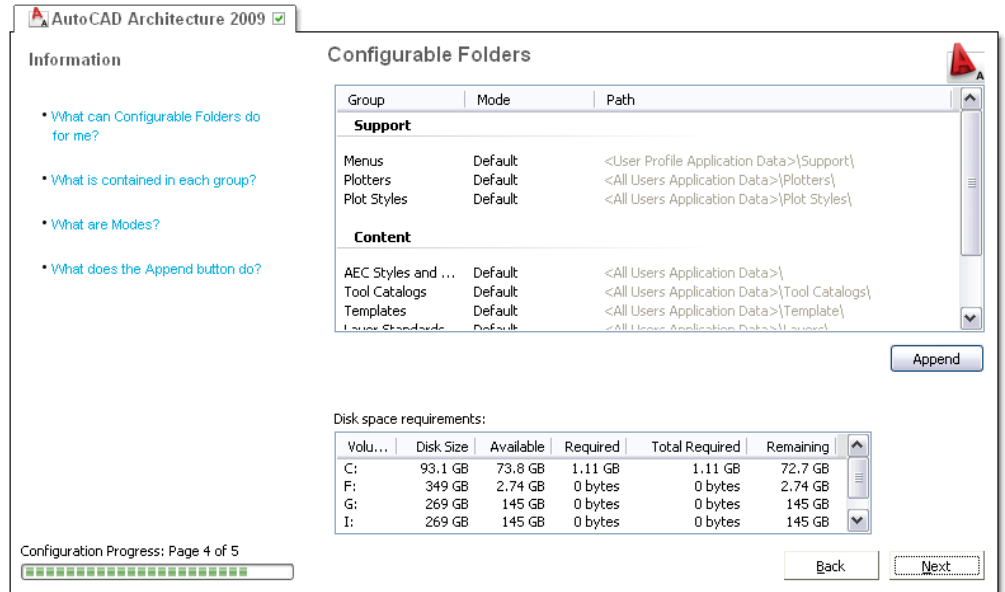
- 10 On the Configure Content Packs page, you can select Content Packs, which are collections of locale- and discipline-specific profiles and content files, to install with AutoCAD Architecture. You can opt to install an AutoCAD-only profile and desktop shortcut. You can also specify a new

location for the Content Browser library file. After making your selections, click Next.



- 11 The Configurable Folders page allows you to specify custom locations for groups of content. For example, you may wish to share layer standards

between users, allowing standards to be updated from one location. After making your selections, click Next.



- 12 On the Define Search Paths and File Locations page, define search paths, file names, and file locations, and then click Next.

WARNING Do not remove the DRV path and always add paths as secondary paths.

- 13 To include additional files in the deployment, select their location and file names on the Install Additional Files page. After making your selections, click Next.
- 14 On the Specify User Preferences page, decide if the Internet Explorer browser is required, set the default profile name, and whether or not you want a desktop shortcut. Click Next.
- 15 On the Include Service Packs page, if service packs are available for your deployment, you can select to include them.

The installer automatically checks *autodesk.com* for available updates. If updates are available, a link is displayed. If no updates are available a link is not displayed.

- 16 On the Configure InfoCenter Communications Center page, you choose to allow users access to the latest information and product discussions by enabling live updates from Autodesk, Information and CAD Manager channels and RSS feeds. After making your choices, click Next.
- 17 You can also allow users access to online tools such as DesignCenter, error reporting and InfoCenter searches on the Configure Access to Online Resources page. Make your selections, and then click Next.
- 18 On the Configuration Complete page, select another product tab to configure another product and then click Next, or click Configuration Complete to review your choices.
- 19 On the Review - Configure - Create Deployment page, click Create Deployment.
- 20 On the Deployment Complete page, click Finish.

How to Deploy This Program

You can choose from several methods of deploying the program. Network sharing is the default method.

- **Network Share.** Users launch the program with the shortcut icon that you created with the Installation wizard, in step 3 of the procedure [How to Use the Installation Wizard to Set Up a Deployment](#) on page 10. The program is installed on users' local computers, and a product icon appears on their desktop.

NOTE Users must have Read permissions to access the network share and administrative permissions on the workstation where this program is installed.

- **Scripting.** See [Use Scripts to Deploy the Program](#) on page 67.
- **Group Policy Objects (GPOs).** See [Use Group Policies to Install a Deployment](#) on page 79.
- **Imaging Software.** See [Distribute the Product Using Imaging Software](#) on page 101.

Features That Require Design Review

Design Review is a tool for reviewing and working with DWF files. DWF files are drawing files that have been converted so they can be transported over the Internet and then shared with others. In order to work with DWF files, you need to have Design Review installed.

If you want to use any of the following commands or functions with a DWF file, you need to have Design Review installed.

- PROJECT NAVIGATOR
- PUBLISH
- PLOT
- 3DDWF
- PUBLISH TO WEB
- EXPORT
- MARKUP
- DWFUNDERLAY
- AUTOPUBLISH
- SSM

System Requirements

2

This section contains the system requirements for the location of the administrative image that you create, the network license server, and the client workstation.

System Requirements for This Program

Before you begin installing the program on a network, make sure that your servers and client workstations meet the minimum recommended hardware and software requirements for a deployment.

You choose to install either the 32-bit or 64-bit version of AutoCAD Architecture, depending on your operating system.

See the following tables for administrative image, license server, and client workstation system requirements.

Hardware and software requirements for the location of the administrative image

Hardware/Software	Requirement	Notes
Hard disk	1 GB or above (recommended)	The location where you create the administrative image must be a shared location so that users can ac-

Hardware and software requirements for the location of the administrative image

Hardware/Software	Requirement	Notes
		cess the administrative image.

Hardware and software requirements for the network license server

Hardware/Software	Requirement	Notes
Operating system	Windows Vista 32-bit Windows XP 32-bit Windows 2003 Server Edition	The Network License Manager supports Ethernet network configurations only.
Computer/processor	Intel® Pentium® IV, 3.0 GHz or faster (recommended) AMD® Athlon®, 3.0 GHz or faster (recommended) Intel® Pentium® III or later (minimum)	
Network interface card	Compatible with existing Ethernet network infrastructure	The Network License Manager supports multiple network interface cards.
Communication protocol	TCP/IP	The Network License Manager uses TCP packet types.

Hardware and software requirements for client machine

Hardware/Software	Requirement	Notes
Operating system	32-Bit Windows XP Professional, SP2 (recommended) Windows Vista Ultimate	It is recommended that non-English language versions of AutoCAD Architecture be installed on an oper-

Hardware and software requirements for client machine

Hardware/Software	Requirement	Notes
	Windows Vista Enterprise Windows Vista Business Windows Vista Home Premium 64-Bit Windows XP Professional x64, SP2 Windows Vista Ultimate Windows Vista Enterprise Windows Vista Business Windows Vista Home Premium	ating system with a user interface language that matches the code page of the AutoCAD Architecture language. A code page provides support for character sets used in different languages. For more information about Windows Vista versions, please see http://www.microsoft.com/windowsvista/versions
Web browser	32-bit Microsoft® Internet Explorer 6.0, SP1 (or later) 64-bit Microsoft® Internet Explorer 6.0, SP1 (or later)	You cannot install AutoCAD Architecture if Microsoft Internet Explorer 6.0, SP1 (or later) is not installed on the installation workstation. You can download Internet Explorer from the Microsoft website: http://www.microsoft.com/downloads/
Processor	32-bit Intel® Pentium® IV, 3.0 GHz or faster (recommended) AMD® Athlon®, 3.0 GHz or faster (recommended) 64-bit AMD® Athlon® 64 AMD® Opteron® Intel® Xeon® with Intel EM64T support Intel® Pentium® IV with Intel EM64T support	Multiple processors supported Dual core supported

Hardware and software requirements for client machine

Hardware/Software	Requirement	Notes
Memory (RAM)	32-bit 2 GB (minimum), 3 GB (recommended) 64-bit 2 GB (minimum), 4 GB (recommended)	
Display Resolution	32-bit 1024 x 768 True Color (minimum) 1280 x 1024 True Color (recommended) 64-bit 1024 x 768 True Color (minimum) 1280 x 1024 True Color (recommended)	
Display Card	32-bit 128 MB Video Adaptor Card (minimum) 256 MB or greater, Direct 3D compatible 3D Video Adaptor Card (recommended) 64-bit 128 MB Video Adaptor Card (minimum) 256 MB or greater, Direct 3D compatible 3D Video Adaptor Card (recommended)	For more information about currently supported video cards, please see http://usa.autodesk.com/adsk/servlet/dl?id=23112&cid=67183&fid=920518
Hard disk	32-bit Default installation 2.0 GB Full installation 2.5 GB 64-bit Default installation 3.0 GB Full installation 3.5 GB	

Hardware and software requirements for client machine

Hardware/Software	Requirement	Notes
Pointing device	MS-Mouse compliant	For both 32-bit and 64-bit
DVD	Any speed (for installation only)	For both 32-bit and 64-bit
Optional hardware	Printer or plotter Internet access Network interface card	For both 32-bit and 64-bit

Deploy the Program

3

In this section, you'll find more detailed information about using the Installation wizard to create or modify deployments.

Preliminary Tasks for a Network Deployment

Installing this program on a network requires careful planning and execution. The deployment checklist gives you a quick summary of the type of information you should be familiar with during your deployments.

Deployment Checklist

- You have reviewed the system requirements. You must make sure that your network, servers, and client workstations meet the system requirements. See [System Requirements for This Program](#) on page 21.
- You have closed all other programs and disabled anti-virus software. See [Minimize Chances of Installation Failure](#) on page 29.
- You have identified where deployments will reside such as a shared folder for each program you plan to deploy. See [Create Shared Folders for Your Deployments](#) on page 29.
- You have installed and activated any supporting tools and utilities. See [Install and Activate Tools and Utilities](#) on page 30.

Deployment Checklist

- If your deployment plan involves using imaging software to distribute your program(s) to client workstations, you have reviewed the [Distribute the Product Using Imaging Software](#) on page 101 section.
- You have specified whether you want to create log files that contain deployment and installation data, run silent mode, and participate in the Customer Involvement Program. See [Specify Log File Locations](#) on page 35.
- You understand the type of license you've purchased. If you plan a network license deployment, you should also be familiar with the type of license server model you want to use and the license server name(s). See [Select a License Type \(optional\)](#) on page 36.
- You know which type of installation you'll perform—typical or custom. See [Select the Installation Type \(optional\)](#) on page 40.
- You may want to set search paths to custom files or file locations that may have changed in this release of software. See [Define Search Paths and File Locations \(optional\)](#) on page 48.
- You have decided if you want to include additional files with your deployment such as drawing files, AutoLISP routines, or script files. See [Install Additional Files \(optional\)](#) on page 49.
- You have checked for service packs that might be available for your product. If a service pack is available, you've downloaded it and extracted an MSP file. See [Include Service Packs \(optional\)](#) on page 53.
- You have configured access to Communication Center. Live Update notifications let you know when product updates are posted and configuring Communication Center lets users access technical information. See [Configure InfoCenter Communication Center \(optional\)](#) on page 54.
- You have set up access and participation in features like DesignCenter Online, Subscription Center, and Customer Error Reporting. See [Allow Users to Access Online Resources \(optional\)](#) on page 57.

Deployment Checklist



You know how you're going to personalize the program(s) during registration. Using consistent registration data is very important. See [Register the Product](#) on page 62.

When you have completed these tasks, you are ready to create a deployment from the Installation wizard.

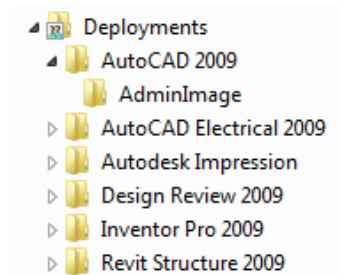
Minimize Chances of Installation Failure

The AutoCAD Architecture 2009 installation process may stop if some applications, such as Microsoft Outlook or virus checking programs, are running when you are creating a deployment. Close all running applications and temporarily disable virus checking utilities.

Create Shared Folders for Your Deployments

Shared folders are required for both network license and multi-seat stand-alone methods of installation. The shared folder (*network share*) is created before you run the Installation wizard and is where product deployments are stored.

It is recommended that you name the network share folder *Deployments* on the desktop of the system where you want deployments stored. You can then add subfolders inside the shared *Deployments* folder that clearly convey the name of product you plan to deploy. This is also beneficial if you plan to deploy multiple products.



Any subfolders that are placed inside a shared folder are automatically shared.

TIP You must have Full Control permissions set for your shared folder when you are creating your deployment images. Read permissions are necessary to access the network share and administrative permissions on the workstation where the program is deployed.

To create a shared folder

- 1 On a network server, create a folder named *Deployments*.
- 2 Right-click the *Deployments* folder and click Share and Security (or Sharing). In Vista, right-click the *Deployments* folder and then click Share. Click the Permissions button to make sure Full Control is active.
- 3 In the <folder name> Properties dialog box, Sharing tab, select Share This Folder.
In Vista, in the Properties dialog box, select Sharing and then Advanced Sharing.
- 4 Specify a Share Name, such as *MyDeployments*, if necessary.
- 5 Click the Permissions button. In the Permissions dialog box make sure Full Control is active. Click OK.
- 6 Click OK or Close to close the Properties dialog box.
- 7 For each product you plan to install, create a subfolder in the *Deployments* folder. Name each folder with the pertinent product name.

Install and Activate Tools and Utilities

Several supporting tools and utilities are necessary if you plan to have users run the program(s) with network licenses. Ancillary programs you might install include:

- Network License Manager
- Network License Activation Utility
- CAD Manager Tools
- SAMreport Lite

Refer to the *Network Licensing Guide* for detailed information about how to set up your license servers. The *Network Licensing Guide* is available on the Documentation link of the Installation wizard and in the Help system.

Use the Installation Wizard to Set Up a Deployment

The deployment process is initiated from the Installation wizard. Deployments are created from which users can install the program on their computers. You make choices during the deployment process to create various client deployment images and deployment types that meet user requirements and company needs.

The deployment process lets you do any of the following:

- Create a deployment.
- Apply a patch to a deployment.
- Customize locations for content folders.
- Add customized files to a deployment.
- Change search paths and file locations.
- Allow users access to online resources.

NOTE Because the deployment process provides you with numerous options for creating and customizing your deployments, there are many deployment pages you need to complete and choices you must make. You should set aside ample time to complete the deployment process in one sitting.

Start the Deployment Process

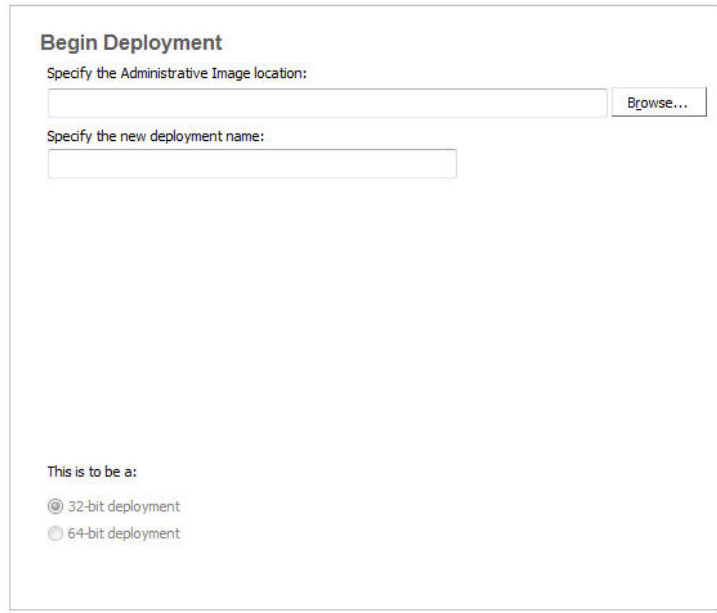
Once you start the Installation wizard, you initiate the deployment process to set up a deployment.

To start the deployment process

- In the AutoCAD Architecture 2009 Installation wizard, click Create Deployments.

Create a Deployment

A deployment contains a Microsoft Transform (MST) file that modifies the default behavior of the installation program. As you begin a deployment, you need to select the location of your Administrative image, a deployment name, and if your target systems are 32 or 64-bit operating systems.



Begin Deployment

Specify the Administrative Image location:

Specify the new deployment name:

This is to be a:

32-bit deployment

64-bit deployment

To create a deployment

- 1 In the Installation wizard, click Create Deployments.
- 2 On the Begin Deployment page, enter the location of your Administrative image or click the Browse button to locate your image. Enter your deployment's name, and if your target systems are 32 or 64-bit operating systems.

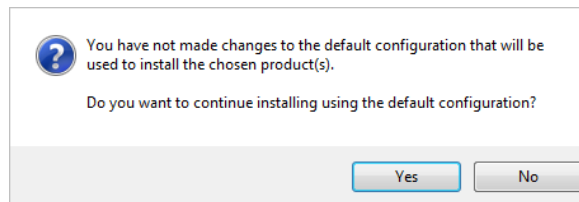
NOTE The deployment location should be a shared network folder. To create a shared folder, see [Create Shared Folders for Your Deployments](#) on page 29.

- 3 On the Select the Products to Include in the Deployment page, select the products and click Next.

- 4 Review the Autodesk software license agreement for your country or region. You must accept this agreement to proceed with the deployment. Choose your country or region, click I Accept, and then click Next.

NOTE If you do not agree to the terms of the license and want to terminate the deployment process, click Cancel.

- 5 On the Product and User Information page, enter the serial number and requested personalization data. Click Next.
- 6 On the General Deployment Settings page, choose whether or not you want to create a network log and its location, and a client log. You can also run the client's installation in silent mode and if you want users to participate in the Customer Involvement Program. Click Next.
- 7 If you do not want to make configuration changes on the Review - Configure - Install page, click Create Deployment. Then select Yes, to continue installing using the default configuration.



- 8 Select the Register products online link to register and activate your product, or click Finish and register and activate later.

Enter Product and User Information

The Product and User Information page is used to personalize the program for your company. The information you enter here is permanent and is displayed in the About AutoCAD Architecture 2009 window (accessed by Menu browser ► Help ► About) on all workstations that install your

deployment. Because you can't change this information later without uninstalling, make sure you enter the correct information now.

Product and User Information

Serial number:
123 - 12345678

First name:
MyName

Last name:
MyName

Organization:
MyOrganization

You must also enter your product serial number in order to run the product. The product serial number is located on the product packaging. The serial number must contain a three-digit prefix followed by an eight-digit number.

To enter your serial number and personal information

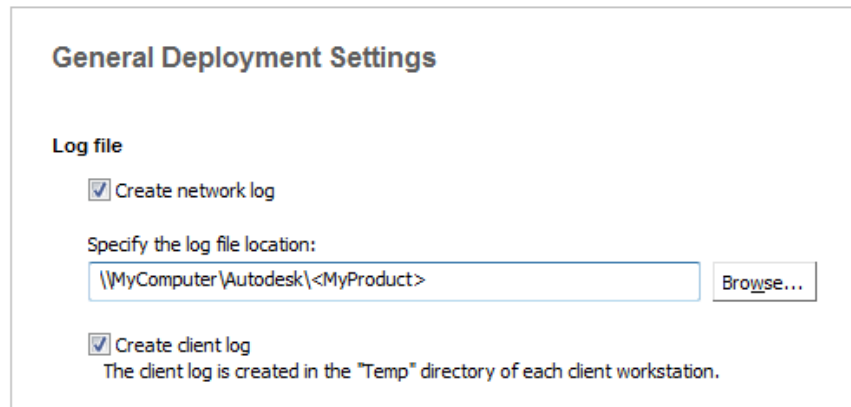
- 1 On the Product and User Information page, enter your product serial number and the requested personalization data.

NOTE Although it is required that you enter information in each box on this page, you can enter any information that you want to convey to users who install the deployment.

- 2 Click Next.

Specify Log File Locations

The program has two types of log files with which you can monitor information about deployments and installations.



General Deployment Settings

Log file

Create network log

Specify the log file location:

Create client log

The client log is created in the "Temp" directory of each client workstation.

- **Network log.** The network log file keeps a record of all workstations that run the deployment. On the General Deployment Settings page of the deployment process, you choose whether or not to create a network log file. 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 encountered during installation (for example, low disk space or inadequate permissions). The network log is named with the same name you chose for your deployment. You can specify where the log file is created by entering either a valid UNC (universal naming convention) path or hard-coded path on your network, for example `\\MyComputer\Autodesk\AutoCAD Architecture 2009`.

NOTE The folder where the network log resides must be a shared folder where users who install the program have Change permissions. Otherwise, successes or failures for user installations cannot be written to the log file.

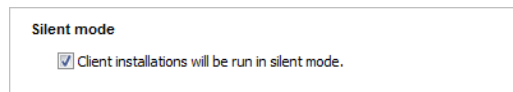
- **Client log.** The client log contains detailed installation information for each workstation. This information may be useful in diagnosing installation problems. The client log is located in the `\Temp` directory of each client workstation.

To specify a log file location

- 1 While creating a deployment, on the General Deployment Settings page, select the check box next to the Create Network Log box. Enter the name of the folder where you want the network log to be located.
- 2 If you want to create a client log, select the Create Client Log option.
- 3 Click Next.

What Is Silent Mode?

When silent mode is active and a user initiates the deployment, the installation proceeds without any explicit user input. No dialog boxes are presented that require interaction from the user.

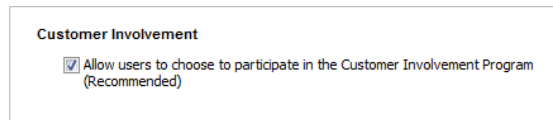


Silent mode

Client installations will be run in silent mode.

Customer Involvement Program (CIP)

If you choose to have your clients participate in the Customer Involvement Program, AutoCAD Architecture will automatically send Autodesk information about system configuration, what features you use most, any problems that you encounter, and other information helpful to the future direction of the product.



Customer Involvement

Allow users to choose to participate in the Customer Involvement Program (Recommended)

NOTE You can also enable or disable the Customer Involvement Program from the CAD Manager Control utility.

Select a License Type (optional)

When you set up your deployment, you choose the type of installation to deploy based on the type of software license you purchased: stand-alone or

network. You also select the network license server model you want to use to distribute product licenses.

Specify the license type to use during deployment

Stand-Alone license (a single serial number for a single seat) For a stand-alone license, you install, register, and activate the program on each workstation.

Network license With this type of installation, you install the program to workstations with the files and registry entries that allow the program to communicate with the Network License Manager. You also define the configuration of the Network License Manager so that the licenses can be accessed. Workstations running the program based on a network installation do not require individual activation. Licensing of this program is managed by at least one license server.

To deploy a stand-alone license

- 1 While creating a deployment, on the Select the License Type page, select Stand-alone license.



The screenshot shows a dialog box titled "Select the License Type". Inside the dialog, there are two radio button options. The first option is "Stand-alone license", which has a blue dot next to it, indicating it is selected. The second option is "Network license", which has a grey dot next to it, indicating it is not selected.

- 2 Click Next.

Specify the license server model during deployment

If you choose the Network license option, you need to decide which license server model to use to distribute your product licenses - single, distributed or redundant license server model.

If you are deploying a stand-alone or multi-seat stand-alone installation type, you do not use a license server model. For more information on server models, see [How to Choose a License Server Model](#) on page 2.

To deploy a network license using a single license server model

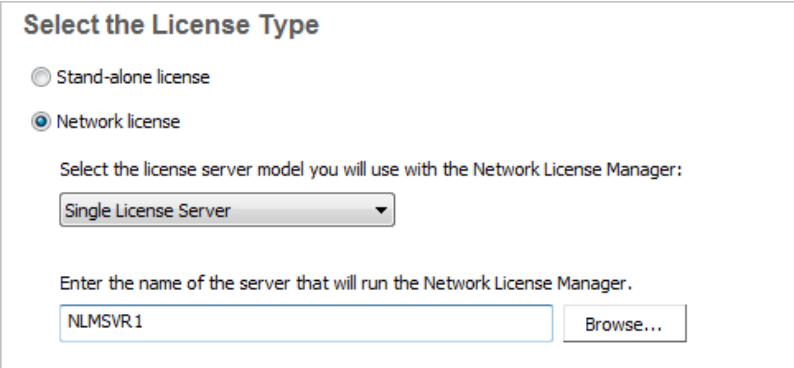
- 1 While creating a deployment, on the Select the License Type page, select the Network License option.

- 2 Select Single License Server as the license server model you want to use with the Network License Manager.

If you have already used the Network License Manager to create a license server model, you must select the same license server model in this step. If you have not yet used the Network License Manager to create a license server model, make sure that you select the same settings in the Network License Manager that you choose here.

For detailed information about license server models, see “License Server Models” in the *Network Licensing Guide*, located in the Help system and on the Documentation link of the Installation wizard.

- 3 Enter the server name of the server that will run the Network License Manager, or click the Browse button to locate the server. Click Next.



Select the License Type

Stand-alone license

Network license

Select the license server model you will use with the Network License Manager:

Single License Server

Enter the name of the server that will run the Network License Manager.

NLMSVR1

To deploy a network license using a distributed license server model

- 1 While creating a deployment, on the Select the License Type page, select the Network License option.
- 2 Select Distributed License Server as the license server model you want to use with the Network License Manager.

If you have already used the Network License Manager to create a license server model, you must select the same license server model in this step. If you have not yet used the Network License Manager to create a license server model, make sure that you select the same settings in the Network License Manager that you choose here.

For detailed information about license server models, see “License Server Models” in the *Network Licensing Guide*, located in the Help system and on the Documentation link of the Installation wizard.

- 3 Enter the name of one of the servers that will run the Network License Manager, or click the Browse button to locate the server. Click Add to add the server to the Server Pool. Once all the servers are added to the Server Pool list, use the Move Up and Move Down buttons to arrange the servers in the order you want them to be searched by a user's workstation. You must enter at least two servers. Click Next.

Select the License Type

Stand-alone license

Network license

Select the license server model you will use with the Network License Manager:

Distributed License Server

Enter the name of one of the servers that will run the Network License Manager utility, and then click Add to add the server to the server pool. Continue adding server names until all the distributed license servers are listed.

Server name: NLMSVR3

Server pool: NLMSVR2

To deploy a network license using a redundant license server model

- 1 While creating a deployment, on the Select the License Type page, select the Network License option.
- 2 Select Redundant License Server as the license server model you want to use with the Network License Manager.

If you have already used the Network License Manager to create a license server model, you must select the same license server model in this step. If you have not yet used the Network License Manager to create a license server model, make sure that you select the same settings in the Network License Manager that you choose here.

For detailed information about license server models, see “License Server Models” in the *Network Licensing Guide*, located in the Help system and on the Documentation link of the Installation wizard.

- 3 In the First Server Name field, enter a server name of one server that will run the Network License Manager, or click the Browse button to locate the server. Enter the server names for the remaining two servers that you will use in the redundant server pool. Click Next.

Select the License Type

Stand-alone license

Network license

Select the license server model you will use with the Network License Manager:

Redundant License Server

Enter the name of the three servers that will form the redundant server pool.

First server name:
NLMSVR.1

Second server name:
NLMSVR.2

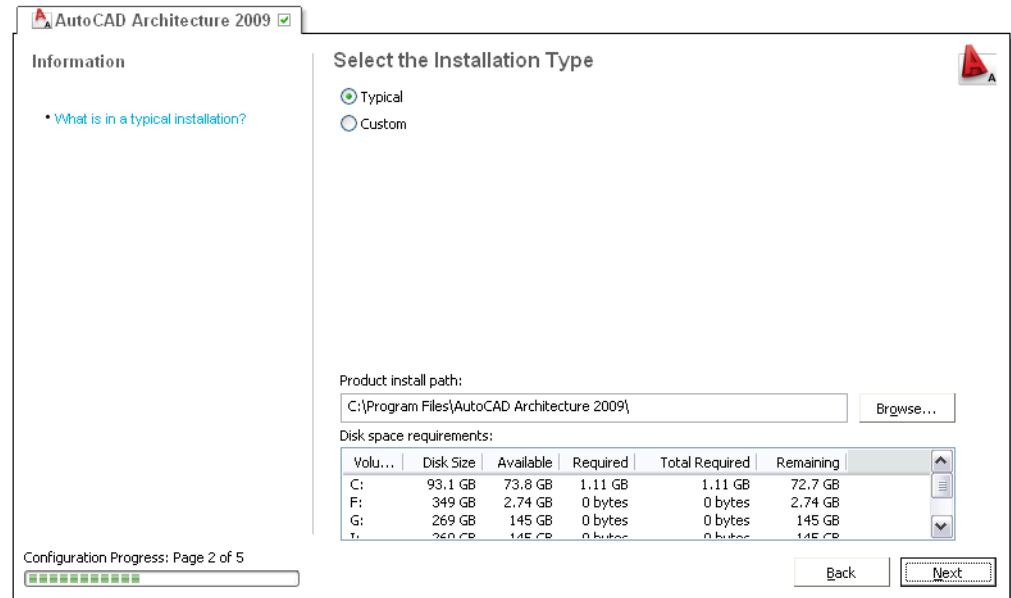
Third server name:
NLMSVR.3

NOTE If you are not sure how to obtain the server host name, see “Plan Your License Server Configuration” in the *Network Licensing Guide*. The *Network Licensing Guide* is located in the Help system and on the Documentation link of the Installation wizard.

Select the Installation Type (optional)

As part of making your deployment choices, you select the type of installation that users receive when they install the program, choose which optional tools

or features are included, and specify where the product is installed on each workstation.



■ **Typical.** Installs the most common application features. This option is recommended for most users.

■ **Custom.** Installs only the application features that you select.

You choose the location where program files are installed on the client workstation in the Product Install Path. To help decide where the product is installed, a chart of drives and disk space is provided.

To deploy a typical installation, choose optional tools and specify a product location

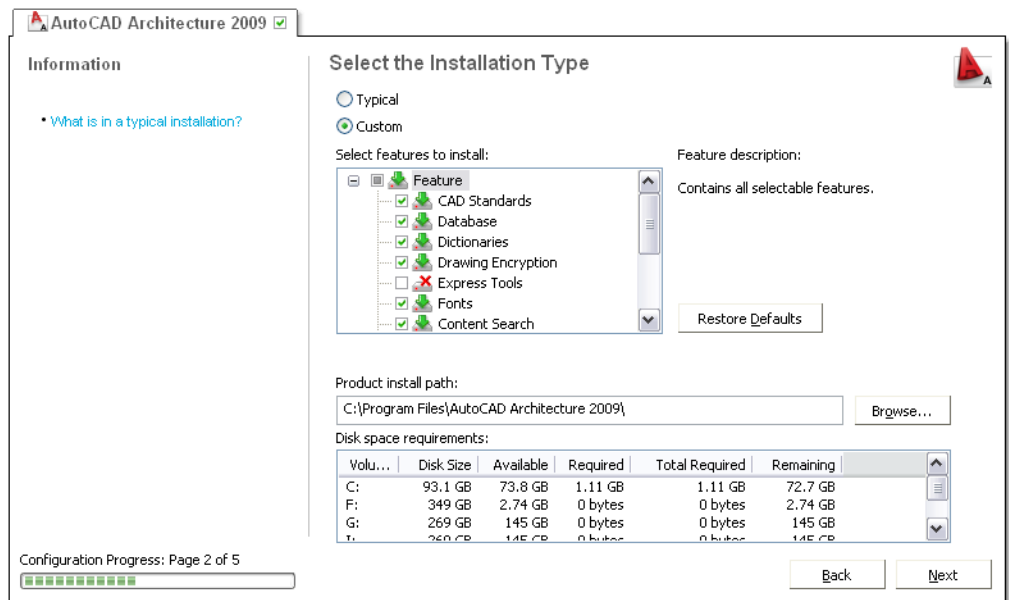
- 1 During the deployment, on the Select the Installation Type page, select Typical as the type of installation that you want.
- 2 Enter the path on the client workstation where you want to install the program, for example *C:\Program Files\AutoCAD Architecture 2009*, or click the Browse button to specify the install location.

The Disk Space Requirements chart lets you review available drives and disk space.

3 Click Next.

To deploy a custom installation, choose optional tools and specify a product location

1 During the deployment, on the Select the Installation Type page, select the Custom option as the type of installation that you want.



2 From the Select Features to Install list, select the features that you want to install.

Your choices are as follows:

CAD Standards	Contains tools for reviewing design files for compliance with your standards.
---------------	---

Database	Contains database access tools.
----------	---------------------------------

Dictionaries	Contains multi-language dictionaries.
--------------	---------------------------------------

Drawing Encryption	Allows you to use the Security Options dialog box to protect a drawing with a password.
Fonts	Contains AutoCAD fonts and True Type fonts.
Content Search	Allows you to search AutoCAD Architecture for installed content.
Portable License Utility	Contains portable license management tools.
Migrate Custom Settings	Migrates custom settings and files from a previous version of your product to this version. See Migrate Custom Settings.
Reference Manager	Allows users to view and edit the paths of externally referenced files associated with a drawing.
Samples	Contains various feature sample files.
VBA Support	Contains Microsoft Visual Basic for Applications support files.
AutoCAD Profile	Creates an AutoCAD profile and no desktop shortcut

If, after making feature changes, you decide you want the original selections, click the Restore Defaults button.

- 3 Enter the path on the client workstation where you want to install the program, for example C:\Program Files\AutoCAD Architecture 2009, or click the Browse button to specify the install location.
The Disk Space Requirements chart lets you review available drives and disk space.
- 4 Click Next.

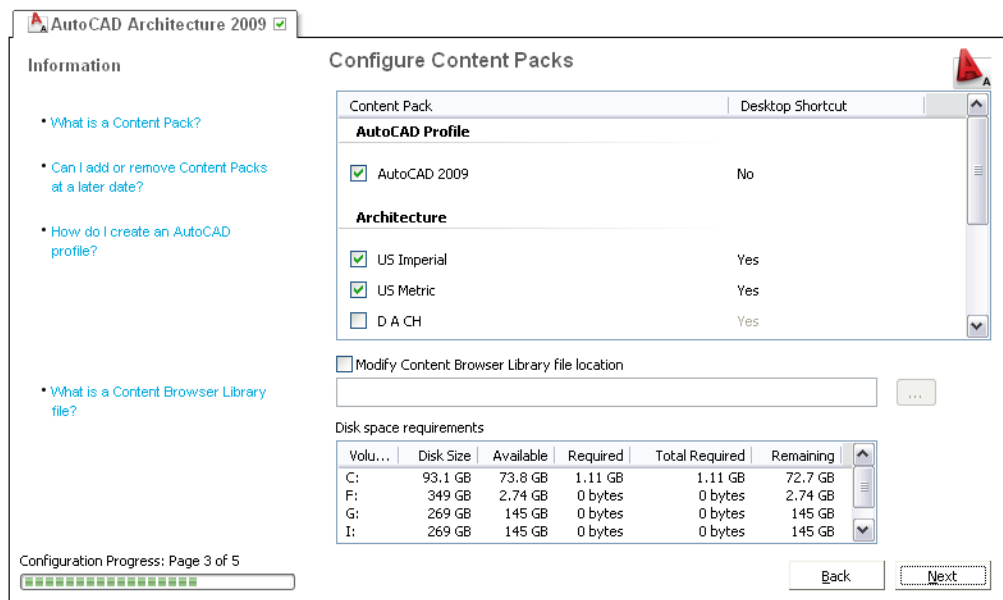
Selecting Appropriate Content Packs

On the Configure Content Packs page, you can select Content Packs, which are collections of locale- and discipline-specific profiles and content files, to install with AutoCAD Architecture. You can opt to install an AutoCAD-only profile and desktop shortcut. You can also specify a new location for the Content Browser library file.

Content files include:

- Templates
- Content Browser catalogs
- Layer standard files
- Style drawings
- Detail Component and Keynoting catalogs
- Plotter and Plot Style configuration files

Desktop shortcuts for Content Packs launch the product with the Content Pack profile. At least one Content Pack must be installed. Selecting multiple Content Packs will increase disk space requirements and install time.



The following table lists the available Content Packs, shortcut names, and profile names for AutoCAD Architecture.

Content Pack Name	Shortcut Name	Profile Name
AutoCAD Architecture		
US Imperial	AutoCAD Architecture 2009 (US Imperial)	AutoCAD Architecture (US Imperial)
US Metric	AutoCAD Architecture 2009 (US Metric)	AutoCAD Architecture (US Metric)
D A CH	AutoCAD Architecture 2009 (D A CH)	AutoCAD Architecture (D A CH)
Danish	AutoCAD Architecture 2009 (Danish)	AutoCAD Architecture (DAN)
Finnish	AutoCAD Architecture 2009 (Finnish)	AutoCAD Architecture (FIN)
Norwegian	AutoCAD Architecture 2009 (Norwegian)	AutoCAD Architecture (NOR)
Swedish	AutoCAD Architecture 2009 (Swedish)	AutoCAD Architecture (SVE)
UK	AutoCAD Architecture 2009 (UK)	AutoCAD Architecture (UK)

Add an AutoCAD Profile and Desktop Shortcut

To add an AutoCAD 2009 profile, select AutoCAD 2009 from the Content Packs list on the Configure Content Packs dialog. You can also install a desktop shortcut for this selected profile by clicking Yes in the profiles's Desktop Shortcut column.

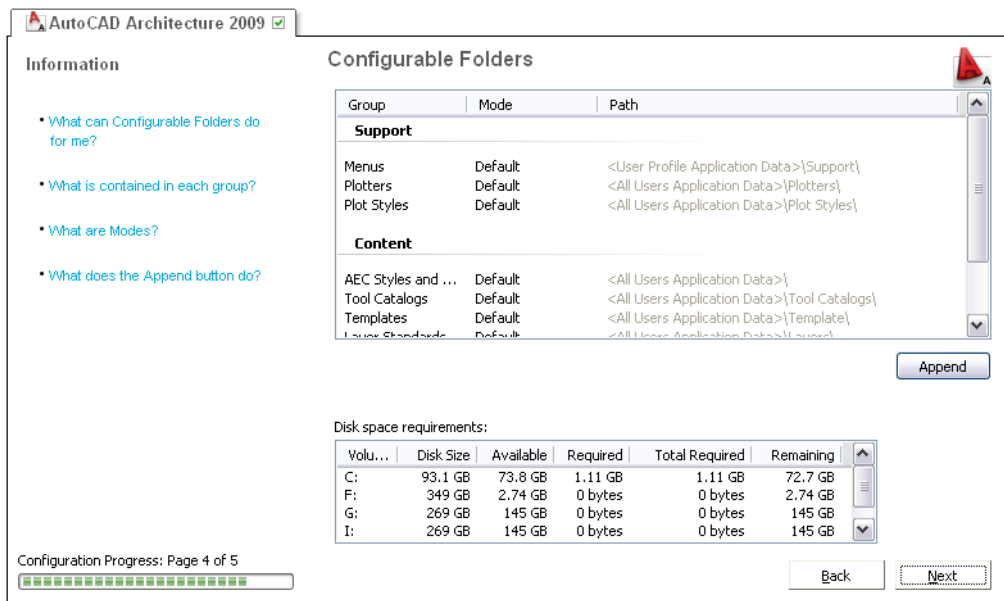
IMPORTANT You can only add an AutoCAD profile and desktop shortcut during the initial installation of AutoCAD Architecture.

Specify Content Browser Library File Location

The Content Browser Library file references Content Browser catalogs. The default location for this file is *My Documents\Autodesk\My Content Browser Library\ACD-A 2009* in Windows XP and *Documents\Autodesk\My Content Browser Library\ACD-A 2009* in Vista. You can specify another location for this file. When installing to a single machine, you can specify a filename or folder. If you are creating a deployment, you must specify an existing file.

Specify Configurable Folders

The Configurable Folders page allows you to specify custom locations for groups of content. For example, you may wish to share layer standards between users, allowing standards to be updated from one location.



Configurable Folder Groups

The following are content groups for Configurable Folders:

- Menus (menu files)

- Plotters (plotter configuration files and default location for new plotter configurations)
- Plot Styles (color- and style-based pen table settings)
- AEC Styles and DesignCenter Content (sample object styles AEC content accessed from DesignCenter and tool palettes)
- Tool catalogs (Design and Documentation tools that refer to all stock object styles and AEC design content)
- Templates (drawing templates, sample folder structures for Drawing Management, and Space Evaluation templates)
- Layer Standards drawings (various global layer standards)
- Textures (texture file library)
- AEC Details (keynote and material database files used by AEC Details, including support content)

Configurable Folder Modes

Specify one of three Configurable Folder modes for your content: Default, Local, or Shared.

Default Content. Default content files are installed on your computer in the default location in the *Document and Settings* folder in Windows XP and *ProgramData* folder in Vista. When you uninstall the program, default content files are also uninstalled.

Local Content. Local content files are installed on your computer in non-standard locations. You can install a content group to a location other than the default folder. When you uninstall the program, local content files are also uninstalled.

Shared Content. Shared content files are installed where they can be shared among multiple computers, enabling multiple users to access the same copy of AutoCAD Architecture content. If you specify the same location for a subsequent installation, you will be prompted to overwrite the existing shared content files. When you uninstall the program, shared content files are not uninstalled.

Creating a Deployment with Shared Content

If you create a deployment with shared content you will notice that the content files are written to the shared locations when the deployment is created. You

will also find that content for all Content Packs has been written to the shared locations. This is done to ensure that content is present for workstations that may, at a later date, elect to install additional Content Packs.

The Append Button

Click Append on the Configure Configurable Folders dialog to add a default folder name to a content group's path.

Define Search Paths and File Locations (optional)

On the Define Search Paths and File Locations page, you can modify the default search paths and the location of some program files. You might want to modify the default settings for the following reasons:

- If your CAD environment uses a file (such as a customization file or plug-ins) other than the default file that's installed with the program, you can point to that file now and avoid having to add it at each workstation.
- Some default file locations may have changed in this version of the program. You can use this page if you have an earlier version of the program, and you want to move the files to the same file location as your earlier version of the program.

NOTE You can also modify the search paths and file locations for individual workstations after you have installed the program. You do this by using the Options dialog box. For more information, see Specify Search Paths and File Locations in the *User's Guide*.

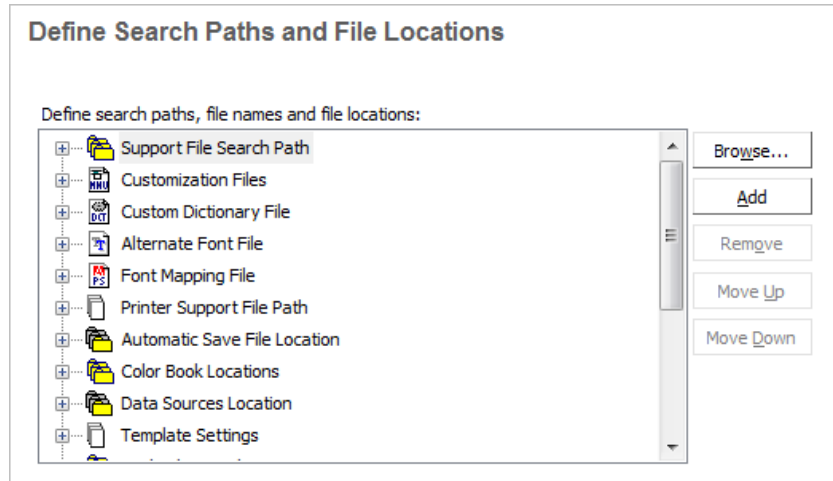
To use the default program settings for search paths and file locations

- While creating a deployment, on the Define Search Paths and File Locations page, click Next.

To modify the default program settings for search paths and file locations

- 1 While creating a deployment, on the Define Search Paths and File Locations page, in the Define Search Paths, File Names, and File Locations

list, click the plus sign (+) to the left of a search path or file location to select and expand it.



- 2 Select an item in the list and do any of the following:
 - To browse to a file location, click Browse.
 - To add a new entry to the currently selected search path or file location, click Add.
 - To remove an entry from the currently selected search path or file location, click Remove.
 - To move a selection up or down in the list, click Move Up or Move Down.

NOTE The availability of these buttons depends on the item that you selected in the previous step.

- 3 When you finish specifying search paths or file locations, click Next.

Install Additional Files (optional)

On the Install Additional Files page, when you click Browse, you can specify additional files to include with a deployment. By default, these files are

installed in the program's installation directory on client workstations when the deployment is run. You can install files to multiple directories if desired.

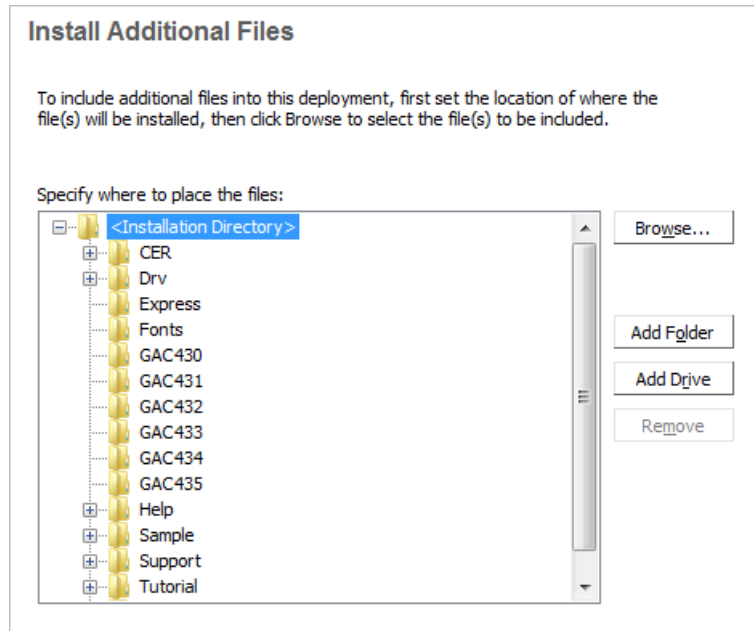
You can perform the following operations:

- Specify additional files (such as drawing files, AutoLISP® routines, or script files) to include with your deployment.
- Install different types of files to different workstation directories.
- Add subfolders under the installation folder (for example, a folder called *LSP* to contain custom AutoLISP routines).
- Add files to the same location as program files (for example, add sample drawings for a project).
- Add files to the root of the installation directory.

NOTE It is recommended that you install these files to a location within the program's directory structure. You cannot install files with the same file name as an installed program file. For example, you cannot add a file named *acad.cui*.

To install additional files

- 1 While creating a deployment, on the Install Additional Files page, set the location where file will get installed.



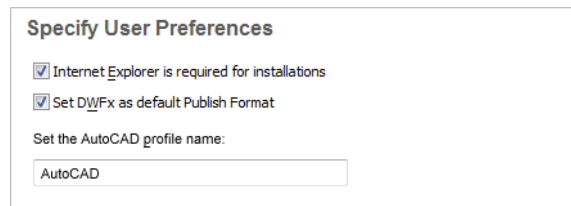
- 2 Do any of the following:
 - Click Browse to open the Add Files dialog box, where you can select files to add to the installation directory.
 - Click Add Folder to create a new folder in the installation directory.
 - Click Add Drive to add a drive name to the file location structure. The drive name must be a valid drive letter and colon, for example C: or F:. Uniform Naming Convention (UNC) paths are not supported.
 - Click Remove to delete a file, folder, or drive from the installation directory.
- 3 Click Next.

Specify User Preferences (optional)

On the Specify User Preferences page, you can specify whether installations based on this deployment can proceed if Microsoft Internet Explorer is not installed, specify a default profile name, choose to display the product shortcut icon on the desktop, or create a custom desktop shortcut.

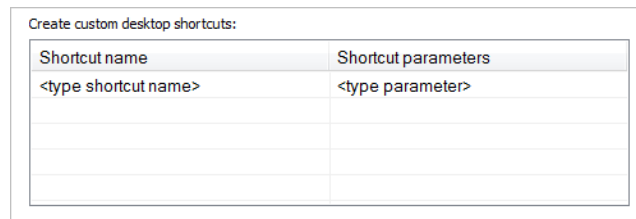
To specify user preferences settings

- 1 While creating a deployment, on the Specify User Preferences page, clear the check box for the Internet Explorer option if you do not require Microsoft Internet Explorer to be installed before AutoCAD Architecture is installed.



The screenshot shows a dialog box titled "Specify User Preferences". It contains two checked checkboxes: "Internet Explorer is required for installations" and "Set DWG as default Publish Format". Below these is a text input field labeled "Set the AutoCAD profile name:" with the text "AutoCAD" entered.

- 2 In the Default Profile Name box, specify a default profile name that will be current for all users who run the deployment and the default text editor.
- 3 If you want to create a custom desktop shortcut, specify a shortcut name and any parameters, such as switches that will call profiles, startup scripts, and so on.



The screenshot shows a table titled "Create custom desktop shortcuts:". The table has two columns: "Shortcut name" and "Shortcut parameters". The first row contains the placeholders "<type shortcut name>" and "<type parameter>". There are three empty rows below the first row.

Shortcut name	Shortcut parameters
<type shortcut name>	<type parameter>

- 4 Click Next.

Include Service Packs (optional)

During the deployment process, you can choose to include service packs that have been posted for your product. The installer automatically checks *autodesk.com* for available updates. If no updates are available, the link is disabled. If updates are available, click on the link and download the patch from *autodesk.com* to a location specific to your deployment. You can append or chain the patch. For more information, see [To include a service pack with the deployment](#) on page 54.

Include Service Packs

If service packs are available for your product, you may download them from Autodesk and include them with the product's deployment.

Updates are available

To include service packs, you must extract and save the MSP file. Then, you must browse to locate the MSP file(s) and add them to the list below.

Service packs included in this deployment:

Browse...

Remove

Service pack options:

Append the service packs onto the deployment.

Merge the service packs into the administrative image MSI file.

When you include a service pack, you can also specify how it will be handled. You can choose from the following;

- **Append the Service Packs onto the Deployment.** 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.
- **Merge the Service Packs into the Administrative Image MSI File.** 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.

To extract an MSP file from a service pack

- 1 Download the service pack from the Autodesk product support site.
- 2 Review the service pack *Readme* file for information about patch usage.
- 3 Open a Windows command prompt and enter the patch file name followed by the /e switch and a target file name, such as:

```
ProductSP1.exe /e ./ProductSP1.msp
```

where <ProductSP1.exe> is the name of the downloaded patch and <ProductSP1.msp> is the name of the extracted file. Using './' in front of the extraction file name places the extracted file in the same folder as the original executable.

NOTE To find out if a service pack is available, visit the Autodesk Product Support page at <http://support.autodesk.com/>.

To include a service pack with the deployment

To include a service pack with a deployment, an MSP file must be extracted from the downloaded service pack executable.

- 1 On the Include Service Packs page, click the Browse button.
- 2 In the Open dialog box, locate the service pack you want to include with the deployment.
- 3 Select the MSP file and click Open.
- 4 Specify whether you want to append the service pack on to the deployment or merge the service pack into the administrative image.
- 5 Click Next.

Configure InfoCenter Communication Center (optional)

The Communications Center is accessed through InfoCenter. Products are updated with Live Update, which downloads patches to your product using

Communication Center. Beyond Live Update, other information channels and feeds can be displayed by the Communication Center.

Configure InfoCenter Communication Center

Communication Center Panel

- Enable live updates
 - Receive Live Updates from Autodesk
 - Local patch list location: Browse...
- Enable Information Channels
- Enable CAD Manager Channel
 - Feed location: Browse...
 - Display name:
- Enable RSS feeds
 - Allow user to add RSS feeds

The Communication Center settings you can make include

- **Enable Live Updates.** Users can use Live Update to check for updates when a web connection is established. If a product patch is available, notification of its availability is received on the program's status bar, and the patch can be either downloaded directly from an Autodesk server or modified first before being copied to users' workstations. If you don't want users to receive updates or announcements, you can turn off Live Update.

NOTE You can also turn Live Update options on or off in the CAD Manager Control utility. See *How to Install and Start the CAD Manager Control Utility*

- **Enable Information Channels.** When active, information channels notify users with various pieces of information such as subscription announcements and product support information.
- **Enable CAD Manager Channel.** Controls the display of the CAD Manager Channels in InfoCenter. Aside from being able to toggle CAD Manager

Channels, you can also define the CAD Manager feed location and set the display name for the CAD Manager Channel.

- **Enable RSS Feeds.** Users can subscribe to any number of RSS feeds. Each feed is contained within a discrete InfoCenter category. Additionally, you can specify whether users can add RSS feeds.

To configure Communication Center

- 1 When creating a deployment, on the Configure InfoCenter Communication Center page, make the following Live Update settings:

- **Enable Live Updates.** Users can receive product updates or support announcements from Autodesk servers.
- **Receive Live Updates from Autodesk.** Users can receive product updates and support announcements from Autodesk servers with Live Update.
- **Receive Live Updates from Internal Server.** You can maintain a patch list on a local server. If you select this option, the Local Patch List Location box is available. Use the Browse button to locate the path to a server location where you want a patch list. More information about how to use a local patch list is available by installing Autodesk CAD Manager Tools 4.0, running the CAD Manager Control utility, and then clicking Help in the CAD Manager Control utility window.

NOTE You can name a file to use for patch information. By naming a file and using an *.npl* extension now, you are creating a placeholder file, not creating the file itself. In the location that you specify in the Local Patch List Location box, you must create a text file with the same name you specify here.

- 2 Specify whether Information channels should be enabled.
- 3 Specify whether CAD Manager channels should be enabled. When active, you can make the following settings:
 - **Feed Location.** Defines the location of the CAD Manager channel RSS feed. RSS feeds are in XML format.
 - **Display Name.** Sets the display name of the CAD Manager channel.
- 4 Specify whether RSS Feeds are enabled and if users are allowed to add feeds.
- 5 Click Next.

Allow Users to Access Online Resources (optional)

On the Configure Access to Online Resources pages, you can specify whether users can access online resources such as receiving live updates from Autodesk, enabling information or CAD Manger channels, or subscribing to RSS feeds. You can also allow access to the DesignCenter and Subscription Center, specify Customer Error Reporting and InfoCenter settings.

Configure Access to Online Resources

Specify the ability to access online tools:

- Enable DesignCenter(DC) Online
- Allow access to Subscription Center from within the Autodesk product (recommended)

Specify the Customer Error Reporting (CER) settings:

- Allow users to receive notifications of resolution
- Include computer name in error reports

Specify the Customer Involvement Program settings:

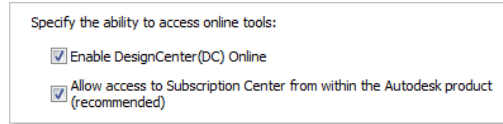
- Allow users to choose to participate in the Customer Involvement Program(recommended)

DesignCenter and Subscription Center

The DC Online tab in DesignCenter® provides access to predrawn content such as blocks, symbol libraries, manufacturers' content, and online catalogs. This content can be used in common design applications to assist users in creating drawings. If you turn off DC Online, the DC Online tab is removed from all installations that are based on this deployment. The Enable DC Online option is active by default.

Subscription Center provides Autodesk subscription members access to resources such as e-Learning (self-paced, interactive lessons) and web support

(where customers can submit technical questions online to Autodesk support staff).



Specify the ability to access online tools:

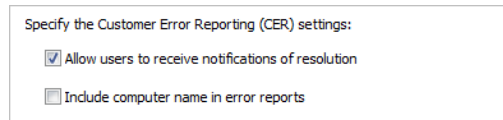
- Enable DesignCenter(DC) Online
- Allow access to Subscription Center from within the Autodesk product (recommended)

You can determine whether users who are entitled to subscription resources can access them by using Help and clicking a Subscription resource. Users who do not have such access can still learn about subscription resources by using the same option on the Help menu.

NOTE You can also enable or disable DesignCenter Online and Subscription Center access from the CAD Manager Control utility.

Customer Error Reporting (CER)

If AutoCAD Architecture closes unexpectedly, users have the opportunity to send an error report directly to Autodesk, which helps Autodesk to determine and resolve the error. You can determine whether users can also receive notification from Autodesk when their reported errors are resolved.



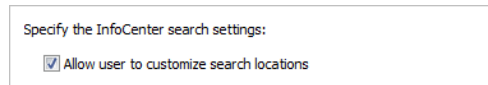
Specify the Customer Error Reporting (CER) settings:

- Allow users to receive notifications of resolution
- Include computer name in error reports

NOTE You can also turn Customer Error Reporting notification on or off in the CAD Manager Control utility.

Configure InfoCenter Search Settings

The Search Results tab of InfoCenter can be configured to display content from various sources, such as the product Help system, CAD Manager Channels, or the Internet.



Specify the InfoCenter search settings:

- Allow user to customize search locations

You can specify whether users who install from the deployment can customize access to their InfoCenter search locations.

To configure access to online resources

- 1 While creating a deployment, on the Configure Access to Online Resources page, do one of the following to configure DesignCenter Online:
 - To disable DesignCenter Online, make sure that the check box next to Enable DC Online is cleared.
 - To enable DesignCenter Online, select the check box next to Enable DC Online.
- 2 To allow access to the Subscription Center, select or clear the check box next to Allow Access to Subscription Center from Within the Autodesk Product (Recommended). This option is enabled by default.
- 3 If you want to receive notification of problem resolutions, do the following:
 - Select the check box next to Allow Users to Receive Notification of Resolution so that users are made aware of resolutions to issues and can download applicable updates provided by Autodesk. This option is enabled by default.

NOTE Users must have administrative permissions to install an update provided by Autodesk.

 - Select the check box next to Include Computer Name to include the user's computer name in error reports. The computer name is included in notifications to the user and in reports available to subscription administrators. This option is disabled by default.
- 4 Lastly, specify whether users have the option to customize their InfoCenter search locations. This option is enabled by default.
- 5 Click Configuration Complete.

Final Review and Complete Setup

To complete your deployment setup, confirm the settings you selected.

To confirm and complete the setup of a network deployment

- 1 After making all your deployment settings, on the Review - Configure - Create Deployments page, scroll the list of current settings and verify your installation selections.

Review - Configure - Create Deployments

The basic information required to install the products has been provided by you and is shown in the box below. The remaining configurations are currently set to the default values; also shown below. If you would like to make configuration changes, select the appropriate product from the drop down list and click the Configure button.

Select a product to configure:

<MyProduct>

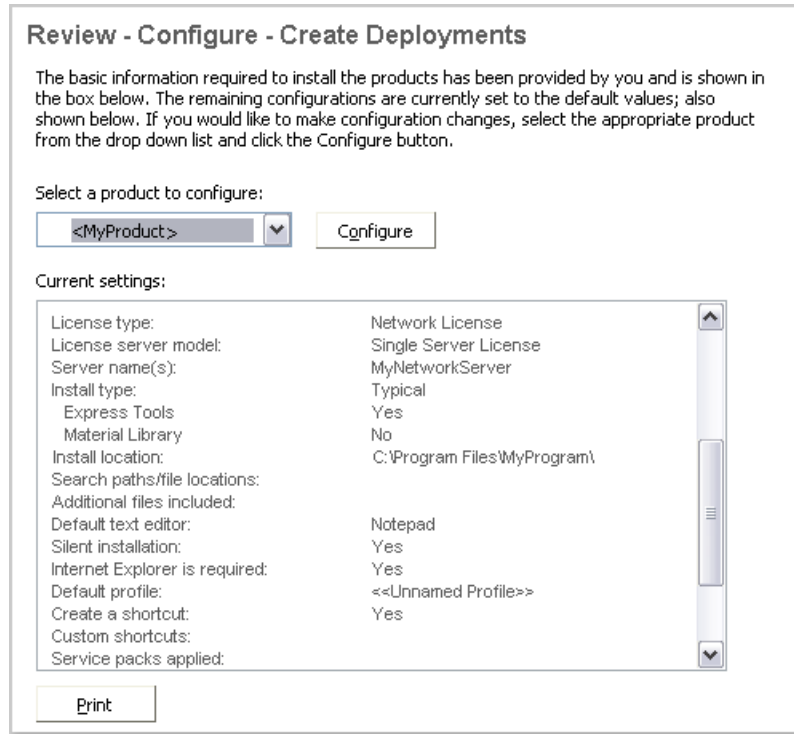
Current settings:

License type:	Network License
License server model:	Single Server License
Server name(s):	MyNetworkServer
Install type:	Typical
Express Tools:	Yes
Material Library:	No
Install location:	C:\Program Files\MyProgram\
Search paths/file locations:	
Additional files included:	
Default text editor:	Notepad
Silent installation:	Yes
Internet Explorer is required:	Yes
Default profile:	<<Unnamed Profile>>
Create a shortcut:	Yes
Custom shortcuts:	
Service packs applied:	

- 2 If you want to change any selections you made for the deployment, click the Configure button.
- 3 If you want a hardcopy of the installation information displayed on this page, click the Print button.
- 4 If you are ready to complete the deployment, click Create Deployment.
- 5 On the Deployment Complete page, click Finish.

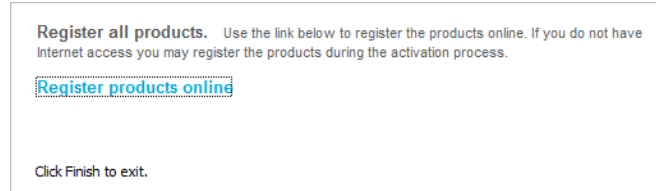
To confirm and complete the setup of a multi-seat stand-alone deployment

- 1 After making all your deployment settings, on the Review - Configure - Create Deployments page, scroll the list of current settings and verify your installation selections.



- 2 If you want to change any selections you made for the deployment, click the Configure button.
- 3 If you want a hardcopy of the installation information displayed on this page, click the Print button.
- 4 If you are ready to complete the deployment, click Create Deployment.

- 5 On the Deployment Complete page, click Register Products Online.



Registration at this stage ensures that consistent data is being used to streamline product activation. When a user installs from this deployment and runs the product, registration data is automatically referenced and the product gets activated. See [Register the Product](#) on page 62.

- 6 Click Finish.

You have created an Autodesk product deployment with precise options that are specific to your group of users. You can now inform those using this deployment where the administrative image is located so that they can install the program.

Register the Product

It is very important that the registration data (for example, your company name and contact information) you supply when registering and activating your products is consistent across all Autodesk products that you install. If you enter this data incorrectly or inconsistently, you can run into activation problems.

The way products are registered depends upon the type of license you selected while creating the deployment. In order to receive an activation code, your product must be registered.

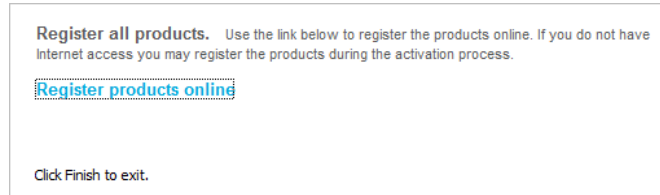
To register a network licensed deployment

- 1 On the Start menu (Windows), click All Programs (or Programs) ► Autodesk ► Network License Manager ► AutoCAD Architecture 2009 Network License Activation Utility.
- 2 On the Obtain a Network License page, review how this utility works and the requirements for using it, and then click Next.

- 3 Follow the on-screen instructions to complete the registration and activation.

To register a multi-seat stand-alone licensed deployment

- 1 On the Deployment Complete page, click Register Products Online.



The Register Today page is displayed. You complete Register Today at this point so that all users have the same default registration information.

- 2 In the Register Today wizard, follow the on-screen instructions to complete the registration.

NOTE This process only registers the product. If users are connected to the Internet, activation occurs automatically when the product is started.

Modify a Deployment (optional)

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.

To modify a deployment

- 1 Open the shared network folder where you originally chose to place your product deployment.
- 2 In the Tools folder, double-click the Create & Modify a Deployment shortcut.
This re-opens the Installation wizard.
- 3 Click through the deployment pages and make the necessary changes.

- 4 After all the modifications have been made, click Create Deployment.

Point Users to the Administrative Image

When you have completed the deployment process, you are ready to have users install the newly created or modified deployment. You need to notify your users of the shortcut that was created in the administrative image. The shortcut is the same name that you chose in [Create a Deployment](#) on page 32.

To point users to the administrative image

- The simplest method of notifying users how to install the deployment is to email them with instructions about using the shortcut. At a minimum, the instructions need to include the location of the deployment and instructions about double-clicking the shortcut to the deployment.

NOTE For more advanced ways of using the shortcut and installing the deployment, see [Use Scripts to Deploy the Program](#) on page 67, [Use Group Policies to Install a Deployment](#) on page 79, or Distribute the Product Using Imaging Software.

Uninstall the Program

When you uninstall AutoCAD Architecture 2009, all components are removed in the process. This means that even if you have previously added or removed components, or if you have reinstalled or repaired the program, uninstalling removes all program installation files from your system.

NOTE If you plan to modify an administrative image at a later date (for example, by adding a patch to it), do not remove that image.

To uninstall the program

- 1 In the Windows Control Panel, click Add or Remove Programs.
- 2 In the Add/Remove Programs window, select AutoCAD Architecture 2009, and then click Change/Remove.

- 3 When the Installation wizard opens, choose Uninstall AutoCAD Architecture 2009.
- 4 On the Uninstall AutoCAD Architecture 2009 page, click Next to remove AutoCAD Architecture from the system.
- 5 When informed that the product has been successfully uninstalled, click Finish.

NOTE Autodesk programs that you use with the program (such as Autodesk Design Review 2009) are not removed automatically when you uninstall AutoCAD Architecture. You must uninstall them separately using Add or Remove Programs.

Use Scripts to Deploy the Program



A script executes a command or a set of commands. Scripts are similar to batch files but are more flexible. Installation scripts are most useful for stand-alone installation of programs on computers that are connected to a network. Scripts are also useful for installing service packs, extensions, and object enablers on a network.

In order for AutoCAD Architecture to run properly, the following software and prerequisites must be installed and met on the computer where the program is being installed:

- Microsoft Internet Explorer version 6.0, SP1 or later (You can download Microsoft Internet Explorer from the Microsoft website by visiting www.microsoft.com)
- Microsoft Scripting Engine
The sample scripts in this section are based on Microsoft Scripting Engine 5.6, which works with both VBScripts and JavaScript. If you don't have the scripting engine installed, you can download it for free from the Microsoft website at www.msdn.microsoft.com/scripting. Sample scripts and Help files are also available there for download.
- Administrative permissions

Create Scripts That Install Programs

You create a script by using a text editor such as Notepad and then saving it in ASCII format in a file with the file extension *.vbs*. The script consists of one or more commands, as well as command switches that specify options, and flags that modify the options. An installation script also contains path names.

An installation script points to the location of the product's *setup.exe* file. You must point to the *setup.exe* file on your product DVD. For example:

A Sample Installation Script

The sample script in this section installs the program in a typical configuration. To make it easy to copy this sample script and substitute your own information, the same names are used throughout for variable items. The log file name is based on the product being installed. You can either use the log file name in the script or change it to something else.

Serial number prefix: 123

Serial number: 12345678

First name: Your First Name

Last name: Your Last Name

Organization: Your Company Name

A sample script for a silent installation of this program uses the syntax shown in this section.

Scripted installation for AutoCAD Architecture 2009

```
' Scripted installation for AutoCAD Architecture 2009
option explicit
'

' Create variables
dim x64bit
dim shell
dim productType
dim featuresToInstall
dim strADSKFirstName
dim strADSKLastName
dim strADSKOrganization
dim strADSKSercurity
dim strADSKSerialIsvalid
dim strADSKAccept
dim strADSKEula
dim strADSKReInstall
dim strADSKRemove
dim strADSKSNPrefix
dim strADSKSNNumber
dim strInstallLevel
dim strACADStandaloneNetworkType
dim strADSKLicenseServerType
dim strADSKLicenseType
dim strADSKServerFmtPath
dim strADSKServerPath
dim strADSKServerHostID
dim strADSKPath
dim strSourcePath
dim strAdditionalStuff
'

' Script initialization
Set shell = CreateObject("WScript.Shell")

productType = "acad"
'
```

```
' Name and Organization information
strADSKFirstName = "Your First Name"
strADSKLastName = "Your Last Name"
strADSKOrganization = "Your Organization Name"
'
' Serial Number information
strADSKSNPrefix = "123"
strADSKSNNumber = "45678901"
```

```

'
' Source to install from (e.g. D: is assumed to be Install Media)

strSourcePath = "D:\"
' Destination to install to
strADSKPath = Shell.ExpandEnvironmentStrings("%ProgramFiles%") +
"\AutoCAD Architecture 2009"
'
' Features to install
' ACS - AutoCAD Architecture Samples
' CADStandards - CAD Standards
' ContentSearch - Content Search
' Database - Database (DBCONNECT)
' DCS - DesignCenter Samples
' DigSig - Digital Signatures
' Dictionaries - Dictionaries
' DrawingEncryption - Drawing Encryption
' Fonts - Fonts
' Materials - Materials Library
' Migrate - Migrate Custom Settings
' NFW - New Features Workshop
' PLM - Portable License Utility
' RefMan - Reference Manager
' System_Files - Required system files (must be installed by de
fault- in this script)
' TM - Texture Maps
' VBA - Visual Basic for Applications
' VLS - Visual LISP Samples
' VLT - Visual LISP Tutorials
'
' Sample is below - Note the leading comma
featuresToInstall = ",DigSig,TM,CADStandards,Con
tentSearch,Database,Dictionaries,DrawingEncryption,Fonts,NFW,Mi
grate,RefMan,Samples,ACS,DCS,VBA,Materials,PLM,VLS,VLT"
strInstallLevel=3 ' 5 installs everything - 3 installs typical -
0 uses featuresToInstall

```

```

'''''' Uncomment the relevant version of your installation - De
fault is Standalone
' For Standalone
RunStandaloneInstall()
'
' For Single Network License Server
'RunSingleLicenseServerInstall()
'
' For Redundant Network License Servers
'RunRedundantLicenseServerInstall()
'
' For Distributed Network License Servers
'RunDistributedLicenseServerInstall()
'
' End of Script
Wscript.quit()
'

Function RunStandaloneInstall
shell.run DefaultCommand(),2,1
end function
'

Function RunSingleLicenseServerInstall
' Update with the correct information for the license server
strACADStandaloneNetworkType = "3"
strADSKLicenseServerType = "Single Server License"
strADSKLicenseType = "Network License"
strADSKServerPath = "myFlexServer"
' HOSTID or MAC address
strADSKServerHOSTID = "000000000000"
'
' Consolidate the two values
strADSKServerPath = strADSKServerPath & " " & strADSKServerHOSTID
shell.run MakeCommand(),2,1
end function
'

```

```

Function RunRedundantLicenseServerInstall
' Update with the correct information for the license servers
strACADStandaloneNetworkType = "3"
strADSKLicenseServerType = "Redundant Server License"
strADSKLicenseType = "Network License"
'
' Format is SERVERNAME1 MACADDR1 PORT1;SERVERNAME2 MACADDR2 PORT2;
SERVERNAME3 MACADDR3 PORT3; - Only 3 permitted for redundant
servers
strADSKServerPath = " myflex1 000000000000 27005; myflex2
000000000000 27005; myflex3 000000000000 27005;"
shell.run MakeCommand(),2,1
end function
'

Function RunDistributedLicenseServerInstall
' Update with the correct information for the license servers
strACADStandaloneNetworkType = "3"
strADSKLicenseServerType = "Distributed Server License"
strADSKLicenseType = "Network License"
'
' Format is @SERVERNAME1;SERVERNAME2;SERVERNAME3;
strADSKServerPath = "@ myFlexServer;@ myFlexServer2;@ myFlexServ
er3;"
'
shell.run MakeCommand() & "ACAD_LICENSESERVER_DISTRIBUTED=1",2,1
end function
'

```

```

Function DefaultCommand
dim retString
' /q for silent install ' /c [key] override parameters for the key

retString = "" & strSourcePath & "D:\setup.exe" & "" & " /t
/q /c " & productType & ": "
retString = retString & "INSTALLDIR=" & "" & strADSKPath & ""
& " "
retString = retString & "ACADSERIALPREFIX=" & strADSKSNPrefix & "
"
retString = retString & "ACADSERIALNUMBER=" & strADSKSNNumber & "
"
retString = retString & "ACADFIRSTNAME=" & "" & strADSKFirstName
& "" & " "
retString = retString & "ACADLASTNAME=" & "" & strADSKLastName
& "" & " "
retString = retString & "ACADORGANIZATION=" & "" & strADSKOrga
nization & "" & " "
if strInstallLevel = 0 then
retString = retString & "ADDLOCAL=" & "" & "System_Files" &
featuresToInstall & "" & " "
else
retString = retString & "InstallLevel=" & strInstallLevel & " "
DefaultCommand = retString & " "
end if
DefaultCommand = retString & " "
end function
'

Function MakeCommand
dim retString
retString = DefaultCommand() & " "
retString = retString & "ACADSTANDALONENETWORKTYPE=" & "" &
strACADStandaloneNetworkType & "" & " "
retString = retString & "ACADLICENSESERVERTYPE=" & "" & strAD
SKLicenseServerType & "" & " "
retString = retString & "ACADLICENSETYPE=" & "" & strADSKLicense
Type & "" & " "
retString = retString & "ACADSERVERPATH=" & "" & strADSKServer
Path & "" & " "
MakeCommand = retString
end function

```


Use Switches and Flags in Scripts

The following table lists all of the switches and flags that are relevant to installation.

NOTE You must set the installation switch to `INSTALLDIR=`. If this is not done, programs that run outside AutoCAD Architecture (such as the Portable License utility) are not installed.

Switches in Installation Scripts

Switch	Description
<code>INSTALLDIR=</code>	Specifies the location to install the product.
<code>ACADSERIALPREFIX=</code>	Specifies the numbers that precede the hyphen in the serial number.
<code>ACADSERIALNUMBER=</code>	Specifies the serial number.
<code>INSTALLLEVEL=</code>	Specifies the type of installation: 3=Typical
<code>ACADFIRSTNAME=</code>	Specifies the first name personalization.
<code>ACADLASTNAME=</code>	Specifies the last name personalization.
<code>ACADORGANIZATION=</code>	Specifies the company name.
<code>ADDLOCAL=</code>	Used for customized installations where you designate specific features to install. See Scripts for Custom Installations.

User Interface Flags

Flag	Description
<code>q</code>	Designates that the installation is performed in silent mode.

Scripts for Custom Installation

To create a script for custom installation, use the syntax `ADDLOCAL="..."`.

The following example shows how component flags are used in the `DefaultCommand` section of a script.

```
Function DefaultCommand
    dim retString
    ' /q for silent install ' /c [key] override parameters for the
    key
    retString = strSourcePath & "\setup.exe /t /q /c " & productType
    & ": "
    retString = retString & "INSTALLDIR=" & """" & strADSKPath &
    """" & " "
    retString = retString & "ACADSERIALPREFIX=" & strADSKSNPrefix &
    " "
    retString = retString & "ACADSERIALNUMBER=" & strADSKSNNumber &
    " "
    retString = retString & "ACADFIRSTNAME=" & """" & strADSKFirst
    Name & """" & " "
    retString = retString & "ACADLASTNAME=" & """" & strADSKLastName
    & """" & " "
    retString = retString & "ACADORGANIZATION=" & """" & strADSKOR
    ganization & """" & " "
    retString = retString & "InstallLevel=" & strInstallLevel & " "

    ' retString = retString & "ADSK_LAUNCH_MODE=Standalone" & " "
    if strInstallLevel = 3 then
        retString = retString & "ADDLOCAL=" & """" & "Sys
        tem_Files,ACS,Impression,NFW" & featuresToInstall & """" & "
        "
    end if
    retString = retString & strAdditionalStuff ' Specifically for
    Impression Toolbar
    DefaultCommand = retString & " "
```

The table below lists all the component flags you can use.

Component Flags	
Flag	Component
ACS	AutoCAD Architecture Samples

Component Flags	
Flag	Component
CADStandards	CAD Standards
Database	Database (DBCONNECT)
DCS	DesignCenter Samples
DigSig	Digital Signatures
Dictionaries	Dictionaries
DrawingEncryption	Drawing Encryption
Fonts	Fonts
Migrate	Migrate Custom Settings
NFW	New Features Workshop
PLM	Portable License Utility
RefMan	Reference Manager
Samples	Sample files
System_Files	Required system files
TM	Texture Maps
Tutorials	Tutorials
VBA	Visual Basic
VLS	Visual LISP Samples

Component Flags	
Flag	Component
VLT	Visual LISP Tutorials

Run Scripts

After creating a script, you move it to a server or use a mapped drive letter or a UNC (universal naming convention) path. If you place it on a server for users to run, create a share on the server, and then add users to the share with the rights they need. Because all that users need to do is run the script, provide read-only access to the share directory.

Next (on the same server or on a different server), create a directory for each product you want to install. Choose a location for this directory that won't be changed so that you can point to the MSI files in your scripts. Copy the product CD(s) to that directory. You may also want to create directories for service packs, extensions, and your own customization tools.

You can use any of the following methods to run an installation script:

- Run the script manually at each individual workstation. To run the installation, paste the script into the Run dialog box or run it from the Windows command prompt.
- Send an email with the UNC path to each user who should run the script. To run the script, the user follows your instructions.
- Email the script to each user with instructions for use.
- Set up the script so that it runs on login.

Use Group Policies to Install a Deployment

B

With group policies, you can advertise this program by assigning the deployment to computers.

In order for AutoCAD Architecture to run properly, the following software must be installed on the computer where the program is being installed:

- Microsoft .NET 3.0 (available on the product DVD)
- Microsoft Internet Explorer version 6.0, SP1 or later (You can download Microsoft Internet Explorer from the Microsoft website by visiting www.microsoft.com).
- Microsoft Installer Package (MSI) 3.1
- Microsoft Windows Media Format 9.5 (prerequisite for 64-bit)
- Macromedia Flash Player 9.0 (not installed by default)
- Autodesk Design Review 2009 (not installed by default)
- VC runtimes for x86 and x64 for 64-bit deployments
- MSXML 6 and DirectX 9.0c

Introduction

With group policy objects, this program can be advertised to any Windows XP or Windows Vista computer that is part of a Windows 2003 Server Active Directory environment.

Assign a Deployment Using Group Policies

Assign a deployment that was created during the deployment process by the Installation wizard to a computer. Assigning a deployment to a computer installs the program the next time the computer is restarted.

A deployment that is assigned to a computer can be used by any user of that computer. Generally, you should assign the program to a computer if the computer is used by a large number of users.

NOTE Autodesk products are designed to be installed on a computer so that any user who logs on to the computer can run the software. If you attempt to assign this program for a specific user rather than a computer, you may encounter problems when a second specified user tries to install or uninstall a copy of the program.

Advantages and Disadvantages of Using Group Policies

The following table outlines the advantages and disadvantages of using group policies.

Advantages and disadvantages of group policies

Advantage	Disadvantage
■ Works well with the deployment functionality of the Installation wizard.	■ Cannot pass command-line parameters to MSI executable. The solution is to use scripts.
■ Easy to add custom files through the deployment functionality of the Installation wizard.	■ Cannot customize application settings other than what is set while creating a deployment with the Installation wizard.
■ Deployed to workstation.	
■ Simple to implement.	

Distribute a Deployment Through Group Policies

There are three main steps to distributing this program through group policies.

- 1 **Create an application distribution share point.** The application distribution share point is created using the Deployment wizard. Follow the steps outlined in [Use the Installation Wizard to Set Up a Deployment](#) on page 31 to create a deployment.
- 2 **Assign the program to a computer.**
- 3 **Verify the installation.** Make sure that the program has been correctly installed.

Assign a Deployment to Computers

When the program is assigned to a computer, it is available to all users of the computer. The following procedures must be run from the server that has access to the Windows 2003 Server Active Directory for assigning this program to computers.

To assign a deployment to a computer

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► Administrative Tools ► Active Directory Users and Computers.
- 2 In the Active Directory Users and Computers window, right-click the organizational unit where you want to create the group policy object. Then click Properties.

The Properties dialog box for the organizational unit you selected is displayed.

NOTE In order for the group policy object to take effect, the computer objects must be located in the organizational unit you have selected.

- 3 In the Properties dialog box, on the Group Policy tab, click New. Enter a name for the group policy object. For example, enter AutoCAD Architecture Computer Assigned Installation.

The group policy is created and is added to the Group Policy Object Links list.

- 4 In the Group Policy Object Links list, right-click the policy you just created, and then click Edit.
- 5 In the Group Policy Object Editor window, under Computer Configuration, click the plus sign (+) next to the *Software Settings* folder to expand it.
- 6 Under *Software Settings*, right-click Software Installation, and then click Properties.
- 7 In the Software Installation Properties dialog box, on the General tab, click Browse.
- 8 In the Browse for Folder dialog box, locate the application distribution share point created in the Deployment wizard, and select the *AdminImage* folder. Then click OK.

The Software Installation Properties dialog box displays (in UNC format) the default package location, the server name, the shared folder that you selected, and *AdminImage*. For example:

`\\server123\Deployment\AdminImage\x86` or `x64` depending on the process type

- 9 On the General tab, under New Packages, click Advanced to specify a method to be used when a new package is created. This method also allows the transform file created by the Deployment wizard to be selected.
- 10 Click OK to close the Software Installation Properties dialog box.
- 11 In the Group Policy Object Editor dialog box, under *Software Settings*, right-click Software Installation, and click New ► Package.
- 12 In the Open dialog box, make sure the Windows Installer Packages file (*aca.msi*) is selected, and click Open. This default selection is the application distribution share point that you set earlier.
If you created the administrative image in a location different from the application distribution share point, find the administrative image location, and click *aca.msi*.
- 13 In the *<product name>* Properties dialog box, click the Deployment tab. Under Deployment Type, verify that Assigned is selected.
- 14 On the Modifications tab, click Add.

- 15 In the Open dialog box, click the transform package file (.mst) created by the Deployment wizard, and then click Open.
If you created the administrative image in a location different from the application distribution share point, find the administrative image location and select the transform package file (.mst).
- 16 In the <product name> Properties dialog box, on the Modifications tab, the transform package you selected is added to the Modifications list. Click OK.

NOTE You must select the transform package file created by the Deployment wizard when you created the group policy object. You cannot add or remove transform package files after the group policy object has been created. If you fail to select a transform package file, the program cannot be installed on the client computer.

- 17 In the Group Policy Object Editor window, under Computer Configuration, click Software Installation. The newly created program package is displayed in the right pane.
- 18 Close the Group Policy Object Editor window and any other open Active Directory windows.

This program is assigned to all computers that are members of the organizational unit for which the group policy object has been created. The next time a computer in the organizational unit is restarted, the program will be installed and will be available for all users of the computer. See [Verify the Installation of a Deployment](#) on page 83 to validate that the group policy has been created correctly.

Verify the Installation of a Deployment

As a computer is restarted, the operating system displays messages about group policy, generally just before or after the Windows Login dialog box is displayed. These messages include the following:

- Windows starting up
- Applying computer settings
- Installing managed software <application>
- Applying software installation settings

- Loading your personal settings
- Applying your personal settings

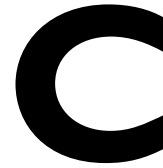
From a Windows XP or Windows Vista workstation, users log in under the organizational unit or computer for which the group policy has been created.

NOTE If problems arise, an entry is logged in the system's Event Viewer under Applications.

Verify That the Program Is Assigned to a Computer

To verify that this program has been correctly assigned to a computer, restart a computer that is in the organizational unit for which the group policy was created. The program is installed before the login prompt is displayed. After logging in, double-click the program icon on the desktop. A second-time installation begins. At the completion of the installation, the program starts.

Use Microsoft Systems Management Server to Install a Deployment



This appendix provides details for deploying Autodesk software using Microsoft Systems Management Server (SMS). The benefits of using SMS to deploy software include software distribution to target computers that are dynamically evaluated based on a set of administrator-defined rules, and hardware and software that is inventoried to verify that target computers meet setup requirements.

Introduction

To deploy Autodesk® software, you must have SMS 3.0 with Service Pack 1 or later. You should also be familiar with the SMS 3.0 software distribution process. You can find more information about this topic in the following resources:

- *Microsoft® Systems Management Server Administrator's Guide*
- *Microsoft Systems Management Server 2.0 Administrator Help*
- *Microsoft Systems Management Server 2003 Administrator's Companion*
- *Microsoft Systems Management Server Resource Guide*

Tasks for Deploying Autodesk Software with SMS

To deploy Autodesk software with SMS, you must complete the following tasks:

- 1 Create a collection for distributing Autodesk software.
- 2 Set up a source directory using the Deployment wizard.
- 3 Create the SMS software installation package.
- 4 Create an SMS program.
- 5 Create an advertisement.
- 6 Install the Autodesk software on the client computer.

Create a Collection for Distributing Autodesk Software

A collection is a set of administrator-defined rules that determine which computers Autodesk software can be installed on. You can use SMS to create and maintain collections. Collections gather resources into logical, manageable groups in ways that help you manage your SMS site. Collections can reflect the structure and organization of your network by putting resources in groups such as users, clients, and routers. SMS uses collections as targets during software distribution to clients.

To create a collection for distributing Autodesk software

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► System Management Server ► SMS Administrator Console.
- 2 In the SMS console window, in the Tree pane, click the *Systems Management Server* folder, and then click the plus sign (+) next to the *Site Database* folder.
- 3 In the Tree pane, click the *Collections* folder.
The Name pane displays all the collections that are currently defined.

- 4 Right-click the *Collections* folder. On the shortcut menu, select New ► Collection.
- 5 In the Collection Properties dialog box, on the General tab, enter a name for the collection; for example, Autodesk software computers. In the Comment box, enter any comments you want to add.

You now need to create rules to define what resources will be included in the collection. You can do this by using either the Query Rule Properties toolbar button or the Direct Membership Rule wizard.

Create a Rule Using the Query Rule Properties Toolbar Button

The Query Rule Properties toolbar button adds to a collection all resources that match a set of criteria specified by the query.

To create a rule using the Query Rule Properties toolbar button

- 1 In the Collection Properties dialog box, on the Membership Rules tab, enter a name for the query; for example, All computers with Autodesk software.
- 2 Click the Query Rule Properties toolbar button.
- 3 In the Query Rule Properties dialog box, click Import Query Statement. A list of available queries is displayed.
- 4 Select the appropriate query. Start by selecting All Systems, and then click OK.
In the Query Rule Properties dialog box, you can create or modify a query statement by clicking Edit Query Statement. Under Collection Limiting, you can limit the queries assigned to a collection by clicking Limit to Collection.
- 5 Click OK.

Your new rule is displayed in the Rules list in the Collection Properties dialog box.

Create a Rule Using the Direct Membership Rule Wizard

The Direct Membership Rule wizard helps you create direct membership rules for your collection. In contrast to query-based membership rules, which add all resources that match a set of criteria, the direct membership rules add specific resources to the collection. To create direct membership rules, you locate and select the resources you want to add as direct members of the collection.

To create a rule using the Direct Membership Rule wizard

- 1 In the Collection Properties dialog box, on the Membership Rules tab, click the Create Direct Membership Rule Wizard toolbar button.
- 2 In the Create Direct Membership Rule Wizard dialog box, click Next.
- 3 In the Search for Resources dialog box, in the Resource Class list, select System Resource. In the Attribute Name list, select Operating System Name and Version. In the Value box enter Microsoft Windows %Workstation%. Click Next.
- 4 In the Collection Limiting dialog box, click Browse. A list of available collections is displayed. Select your collection and click OK.
- 5 In the Collection Limiting dialog box, click Next.
- 6 In the Select Resources dialog box, a list of all the resources that meet the criteria of the collection is displayed. Click Select All or select the resources you want to include. Future resources that meet the criteria of the collection will be added. Click Next.
- 7 In the Completing the Create Direct Membership Rule Wizard dialog box, click Finish.
The new rule is displayed in the rules list in the Collection Properties dialog box.

Now you must set the start time for the collection.

To set the start time for the collection

- 1 In the Collection Properties dialog box, on the Membership Rules tab, click Schedule.

- 2 In the Schedule dialog box, set the start time for the collection and select the Recurrence Pattern that will be supplied. Click OK.
- 3 In the Collection Properties dialog box, click Apply to apply the settings. Click OK.
- 4 In the SMS console window, select the *Collections* folder in the Tree pane. The new collection is displayed in the Name pane.

Set Up a Source Directory Using the Deployment Wizard

When you use SMS to deploy Autodesk software, you set up the source directory using the Deployment wizard. Using the Deployment wizard is an easy way to create a source directory, and it also ensures that you can upgrade the setup package in the future. The Deployment wizard creates an administrative installation image that is used by SMS to deploy the Autodesk software to the client computers. It also creates a transform file, also known as the *deployment*, which must be used during the installation of AutoCAD Architecture® and AutoCAD Architecture-based products on any client computers.

In SMS, the location where you perform the administrative installation becomes the location of the package source directory. When using the Deployment wizard to create the source directory, you can include additional files, such as template files, AutoLISP routines, and custom menus. The Deployment wizard also installs the Deploy executable file (*Deploy.exe*) that is used to deploy the software.

To learn more about setting up the source directory for Autodesk software, see [Use the Deployment Wizard](#).

It is strongly recommended that you test the deployment created by the Deployment wizard before trying to configure SMS to deploy the program. By testing the deployment created by the Deployment wizard, you ensure that there are no problems with the administrative image and deployment.

To test the Deployment wizard deployment

- 1 Log on to a Windows XP Professional or a Windows Vista workstation as a user who has administrative privileges.

- 2 Navigate to the source directory where the deployment was created. Use Windows Explorer or Start ► Run.
- 3 Double-click the deployment shortcut created by the Deployment wizard. The program is installed or an error is written to the network log file.

Create the SMS Software Installation Package

After creating the source directory using the Deployment wizard, you create the SMS software installation package. An SMS package contains the files and instructions that SMS uses to distribute the program to SMS clients. The Deployment wizard creates the files and instructions, but SMS must be configured to use these files.

To create a software installation package

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► System Management Server ► SMS Administrator Console.
- 2 In the SMS console window, in the Tree pane, click the *Systems Management Server* folder, and then click the plus sign (+) next to the *Site Database* folder.
- 3 In the Tree pane, click the *Packages* folder.
The Name pane now displays all the installation packages that are currently defined.
- 4 Right-click the *Packages* folder. On the shortcut menu, click New ► Package.

NOTE On the shortcut menu, you cannot select Package from Definition because the program is not creating a package definition file (PDF or SMS files).

- 5 In the Package Properties dialog box, on the General tab, enter the following information:
 - In the Name box, enter a name for the SMS package; for example, AutoCAD Architecture.
 - In the Version box, enter the version of the product you are installing; for example, 2009.

- In the Publisher box, enter Autodesk, Inc.
 - In the Language box, enter the language of the product you are installing; for example, English.
 - In the Comment box, enter any comments that are specific to your environment.
- 6 Click the Data Source tab.
 - 7 On the Data Source tab, select the This Package Contains Source Files option. Click Set.
 - 8 In the Set Source Directory dialog box, select the Network Path (UNC Name) option.
 - 9 Click Browse. Navigate to the source directory created in the Deployment wizard. Click OK.
The server name and shared folder that you selected are displayed in the source directory.

NOTE The administrative image you created with the Deployment wizard should be displayed in the source directory.

- 10 In the Set Source Directory dialog box, click OK.
- 11 In the Package Properties dialog box, click OK.
- 12 In the Tree pane, click the *Packages* folder.
The Name pane displays the package you created.

Although the package to install the program on SMS client computers has been created, it still cannot be installed. You must first create the SMS program for the package.

Create an SMS Program

This section details the configuration options you must use when you create an SMS program for your Autodesk software. Program configuration options for deploying software are specified in the Program Properties dialog box in SMS.

There are two methods for defining the Program configuration options with Autodesk software. The first method uses the Deploy executable file created

by the Deployment Wizard for AutoCAD Architecture and AutoCAD Architecture-based products. The second method uses Windows Installer.

Use the Deploy Executable Method to Create a Program

The Deployment wizard used to create the administrative image and source directory for deploying Autodesk software contains an executable file called *Deploy.exe* in the *AdminImage* folder under the Deployment wizard share.

Deploy.exe is a wrapper for Windows Installer (an executable file that performs the checks before Windows Installer starts), but it also performs several other important checks and functions for installing AutoCAD Architecture and AutoCAD Architecture-based products. *Deploy.exe* checks the operating system to ensure that it meets the minimum requirements for installing AutoCAD Architecture. *Deploy.exe* also checks to ensure that Windows Installer is version 3.1. If it is not, Windows Installer 3.1 is installed on the client computer. *Deploy.exe* is also responsible for writing successful installations and failures to the network log file specified in the Deployment wizard. It is strongly recommended that you use this method when deploying AutoCAD Architecture or AutoCAD Architecture-based products to SMS client computers.

NOTE The Macromedia Flash Player 8 plug-in (which is installed with AutoCAD Architecture 2009) may cause the SMS 2003 installer to hang.

To create a program using *Deploy.exe*

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► System Management Server ► SMS Administrator Console.
- 2 In the SMS console window, in the Tree pane, click the *Systems Management Server* folder, and then click the plus sign (+) next to the *Site Database* folder.
- 3 In the Tree pane, click the plus sign (+) next to the *Packages* folder to expand it. The defined packages are displayed in the Tree pane. Click the package you created earlier. In the Name pane, the *Access Accounts*, *Distribution Points*, and *Programs* folders are displayed.
- 4 In the Name pane, right-click the *Programs* folder. On the shortcut menu, click New ► Program.

- 5 In the Program Properties dialog box, on the General tab, enter the following:
 - In the Name box, enter a name for the program. The name of the program must be unique because it is used when defining advertisements. On client computers, the name is displayed in the Control Panel, in the *Advertised Programs* folder.
 - In the Comment box, enter any comments you want to add. Text in the Comment box is displayed on client computers in the Advertised Programs Monitor dialog box, or in the Advertised Programs wizard Control Panel applets.
 - For the Command Line box, click Browse. Navigate to the source directory where the deployment was created by the Deployment wizard. Right-click the deployment shortcut and click Properties. On the Shortcut tab, in the Target box, select all of the text. Right-click and click Copy. Click Cancel to exit the Deployment Properties dialog box. Click Cancel to exit the Open dialog box. In the Program Properties dialog box, in the Command Line box, right-click, and click Paste. Your text is displayed.
 - In the Run list, select Normal.
 - In the After Running list, select No Action Required.
- 6 Click the Requirements tab. In the Estimated Disk Space box, specify at least 750 MB. Select the This Program Can Run Only on Specified Platforms option. Select the following platforms from the list:
 - All x86 Windows XP Professional
 - x86 Windows Vista
- 7 Click the Environment tab. In the Program Can Run list, select Only When a User Is Logged On (In SMS 3.0, you then select the User Input Required option). Under Run Mode, select the Run with Administrative Rights option if your users do not have administrative privileges on their computer. Under Drive Mode, select Runs with UNC Name.
- 8 Click Apply, and then click OK. In the SMS console window, in the Tree pane, click the *Programs* folder to see your new program in the Name pane.

Use the Windows Installer Method to Create a Program

When using the Windows Installer method to configure general program options for Autodesk software, you must specify command line syntax. The executable program that interprets packages and installs products is *Msiexec.exe*. When using the Windows Installer, no entry is written to the network log file.

NOTE Before you can deploy Autodesk software on your client computers, you must ensure that the Windows Installer program (*Msiexec.exe*) is version 3.1 or later. The Windows Installer 3.1 setup program is included on your Autodesk product DVD.

In Windows Installer, in the Program Properties dialog box, on the General tab, enter the following on the command line:

```
msiexec options < package> .msi
```

For AutoCAD Architecture, <package> is *aca.msi*. The following table lists several command-line options you will use when deploying the AutoCAD Architecture package (*aca.msi*). The command-line options are case sensitive. For a complete list of options, together with their explanations, consult Microsoft Windows Installer Help.

Windows Installer Command-line Options

Option	Action
/I	Installs or configures a product.
/x	Uninstalls a product.
/lev Logfile	Specifies the path to log file. The flags indicate which information to log. e - All error messages v - Verbose output
/qb-	Sets the user interface level.
	qb - Basic UI

For example, for AutoCAD Architecture use the following syntax: `msiexec /I acad.msi`

In addition to using the command-line options, you must use Windows Installer properties. Properties are global variables used during an installation. You will need to use the TRANSFORMS property to take advantage of the transform file created by the Deployment wizard. When used, properties must be specified as follows:

`msiexec options <package>.msi PROPERTY=VALUE`

The following table lists several command-line properties. The command-line options are case sensitive. For a complete list of properties and an explanation of each, see Microsoft Windows Installer Help.

Windows Installer Command-line Properties

Property	Action
TRANSFORMS=	List of transforms to be applied to the installation database (<i>aca.msi</i>).
ACAD_SILENT_LICENSE=YES	Silent License Agreement.
INSTALLDIR=	

For AutoCAD Architecture, use the following syntax for command-line options and properties:

`msiexec /I <path>\aca.msi TRANSFORMS=<path>\<transform name>.mst /qb-`

To use *Msiexec.exe* to deploy AutoCAD Architecture packages

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► System Management Server ► SMS Administrator Console.
- 2 In the SMS console window, in the Tree pane, click the *Systems Management Server* folder, and then click the plus sign (+) next to the *Site Database* folder.
- 3 In the Tree pane, click the plus sign (+) next to the *Packages* folder to expand it. The defined packages are displayed in the Tree pane. Click the package you created earlier. In the Name pane, the *Access Accounts*, *Distribution Points*, and *Programs* folders are displayed.

- 4 In the Name pane, right-click the *Programs* folder. On the shortcut menu, click New ► Program.
- 5 In the Program Properties dialog box, on the General tab, enter the following:
 - In the Name box, enter a name for the program. The name of the program must be unique because it is used when defining advertisements. On client computers, the name is displayed in the Control Panel (Windows), in the *Advertised Programs* folder.
 - In the Comment box, enter any comments you want to add. Text in the Comment box is displayed on client computers in the Advertised Programs Monitor dialog box, or in the Advertised Programs wizard Control Panel applets.
 - In the Command Line box, enter a command using Windows Installer command-line syntax. For AutoCAD Architecture, use the following syntax:


```
Msiexec /I <path>\aca.msi TRANSFORMS=<path>\<deployname>.mst/qb-
```

 Replace <path> with the source directory or location of your administrative image that you created with the Deployment wizard. You must use the UNC naming convention. Replace <deployname> with the name of the deployment you created with the Deployment wizard. You must use the *.mst* file extension.
- 6 Click the Requirements tab. In the Estimated Disk Space box, specify at least 750 MB. Select the This List Can Run Only on Specified Platforms option. Select the following platforms from the list:
 - All x86 Windows XP Professional
 - x86 Windows Vista
- 7 Click the Environment tab. In the Program Can Run list, select Only When a User Is Logged On. Under Run Mode, select the Run with Administrative Rights option if your users do not have administrative privileges on their computer. Under Drive Mode, select Runs with UNC Name.
- 8 Click Apply, and then click OK. In the SMS console window, in the Tree pane, click the *Programs* folder to see your new program in the Name pane.

The package program has now been created. Next, you must create an advertisement for the package.

Create an Advertisement

SMS uses advertisements to distribute SMS programs to SMS client computers. You create and maintain advertisements by using the SMS Administrator console window.

To create an advertisement for the package

- 1 On the Start menu, click Programs (Windows XP) or All Programs (Windows Vista) ► System Management Server ► SMS Administrator Console.
- 2 In the SMS console window, in the Tree pane, click the *Systems Management Server* folder, and then click the plus sign (+) next to the *Site Database* folder.
- 3 In the Tree pane, click the *Advertisements* folder.
The advertised programs are displayed in the Name pane.
- 4 In the Tree pane, right-click the *Advertisements* folder, and on the shortcut menu, click All Tasks ► Distribute Software.
- 5 On the Welcome to the Distribute Software Wizard page of the Distribute Software wizard, click Next.
- 6 On the Package page, select the Distribute an Existing Package option (in SMS 2003, select the Select an Existing Package option), and then, in the Packages list, select AutoCAD Architecture. Click Next.
- 7 On the Distribution Points page, under Distribution Points, select the server(s) where the package will be distributed from, and then click Next.
- 8 On the Advertise a Program page, under Do You Want to Advertise a Program to a Collection, select Yes, and then verify that the program you created earlier is displayed in the Programs list. Click Next.
- 9 On the Select Program to Advertise page, under Programs, select a program, and then click Next.
- 10 On the Advertisement Target page, select Advertise the Program to an Existing Collection, and then click Browse. In the Browse Collection dialog box, select the collection you created earlier, and then click OK. On the Advertisement Target page, click Next.
- 11 On the Advertisement Name page, in the Name box, enter a name for the advertisement. In the Comment box, enter any comments you want

to add. The name and comments are displayed on the client computer. Click Next.

- 12 On the Advertise to Subcollections page, you can specify whether the advertisement should also be applied to subcollections. Select the option for your advertisement, and then click Next.
- 13 On the Advertisement Schedule page, select Yes or No, depending on whether or not you want the advertisement to expire. Select the expiration date and time, if applicable. Click Next.
- 14 On the Assign Program page, select Yes or No, depending on whether you want to assign the program. An assigned program runs automatically if it has not already been run on the SMS client. If you select Yes, you must enter a date and time for when the program becomes assigned. Click Next.
- 15 On the Completing the Distribute Software Wizard page, click Finish. In the SMS console window, in the Tree pane, click the *Advertisements* folder to see your new program in the Name pane.

The Autodesk software is ready to be installed on an SMS client computer.

Install Autodesk Software on the Client Computer

To install the Autodesk software, log on to a computer with the SMS client software installed. The computer must be part of the domain being serviced by the SMS server. If you did not select Run with administrative rights when creating the program, you need to log on to the computer as an administrator.

You can verify that the computer has the SMS client software installed by checking for three Control Panel applets: Systems Management, Advertised Programs, and Advertised Programs Monitor.

NOTE In Windows XP, you will not see these applets until you switch Control Panel to Classic View.

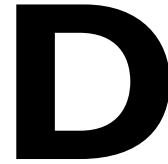
To install the program on the SMS client computer

- 1 On the Start menu, click Control Panel.
- 2 In the Control Panel, double-click Advertised Programs.
The Advertised Programs wizard is started.

- 3 On the Welcome to the Advertised Programs Wizard page, click Next.
- 4 On the Select Programs to Run page, under Advertised Programs, select the advertised Autodesk program, and then click Next.
- 5 On the Run Programs Now or Later page, select the Run the Selected Program Now option, and then click Next.
- 6 On the Completing the Advertised Programs Wizard page, click Finish.

The Autodesk software program has been installed with SMS. To explore other methods for installing Autodesk software using SMS, and to read more about the advanced features of SMS, consult the SMS documentation.

Distribute the Product Using Imaging Software



The following information is provided for those who use imaging software, such as Norton Ghost, to create a master image to distribute Autodesk products. Once created, the master image is then replicated to other computers throughout your facility.

Care needs to be taken since the use of imaging software can result in the following situations:

- Conflicts with the product licensing
- Incomplete installations and problems with activation

NOTE If you are experiencing licensing instability in a SATA RAID environment, using imaging software to distribute Autodesk products can cause product activation problems, such as “Activation code limit exceeded” when you attempt to activate.

Use a Master Image to Distribute Multi-Seat Stand-Alone Products to Multiple Systems

You can distribute the product using a master image for a multi-seat stand-alone product.

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’ve previously run Autodesk products on the master computer. Cleaning the system may be necessary. See [Clean a Master System and Restore the Operating System](#) on page 104.

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 [Use the Installation Wizard to Set Up a Deployment](#) on page 31.
- 2 Install the Autodesk product from the deployment onto the master computer.
- 3 Do one of the following 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 register and activate it. Users have a 30-day grace period to register and activate the product on their machines.
 - Launch and customize the product as necessary. Create a master image and distribute it to users. If users' computers are connected to the Internet, the product is automatically activated. Users whose computers are not connected to the Internet have a 7-day grace period to register and activate the product.
- 4 Apply the master image to the target computers.

Use a Master Image to Distribute Network Licensed Products to Multiple Systems

You can distribute the product using a master image for a network licensed product.

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 [Use the Installation Wizard to Set Up a Deployment](#) on page 31.
- 2 Install the Autodesk 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 Autodesk 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 workstation's *Software Licenses* folder (and *Product Licenses* folder, if present) to either another workstation or a DVD before you reformat the workstation.

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 *Software Licenses* folder from the appropriate path shown below to a location other than the disk that will be restored.

C:\Documents and Settings\All Users\Application Data\Autodesk\Software Licenses

- 3 Reformat the workstation and restore the master image.

NOTE Do not perform a low-level format of the hard drive.

- 4 Copy the *Software Licenses* folder that you created in step 2 to its original workstation and location on that workstation.

NOTE When you restore the disk 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.

Clean a Master System and Restore the Operating System

If you have already run the Autodesk product on the master computer, the master computer should be properly cleaned first.

To clean a master computer and restore the operating system

- 1 Clean the hard drive, including the boot sector.
For example, if you use Norton's GDISK utility, use the following command:

```
gdisk 1 /diskwipe
```

Where *1* is the hard disk that is being wiped.

NOTE If you use a utility other than Norton Ghost, make sure that it cleans the boot sector; otherwise, you will not be able to activate Autodesk products.

- 2 Create a new partition and use the restore CD or product CD to install the operating system.

Glossary

activate Part of the Autodesk software registration process, it allows you to run a product in compliance with the product's end-user license agreement.

Active Directory A directory service from Microsoft that is part of Windows 2000 and Windows 2003 Server.

administrative image A collection of shared file resources created by the Deployment wizard and used by deployments to install the program to network workstations. Service packs (patches) can be applied to an administrative image using the Deployment wizard.

advertising A pull technology that notifies users of an updated software product that is available for installation. Users typically double-click a shortcut (or do a similar operation) to complete the installation of the advertised product.

AutoCAD Architecture startup accelerator (*acstart17.exe*) A runtime process that can accelerate the initial startup of AutoCAD Architecture.

deploy The process of installing an Autodesk product to one or more computers on a network.

deployment A link to a unique MST (Microsoft Transform) file that serves as a basis for an installation. Using the Deployment wizard, administrators can create multiple deployments that result in different types of installations for users.

directory service A network service that identifies all resources on a network and makes them accessible to users and applications. Resources include email addresses, computers, and peripheral devices such as printers. Ideally, the directory service should make the physical network topology and protocols transparent so that a user on a network can access any resource without knowing where or how it is physically connected. Virtually all directory services are based on the X.500 ITU standard.

FLEXlm License management technology from Macrovision Software, Inc. FLEXlm provides administrative tools that help to simplify management of

network licenses. FLEXlm can be used to monitor network license status, reset licenses lost to a system failure, troubleshoot license servers, and update existing license files.

group policy Microsoft server technology that provides a way to do push installations and advertising-based installations using standard Microsoft 2000 Server administration components.

installation image A deployment that consists of an MSI file, any associated transforms, additional user-specified custom files, and profile and registry settings.

MSI Microsoft installer that supports a variety of parameters that can be scripted.

MSP Microsoft patch file (see patch).

MST Microsoft transform file. Modifies the components installed by the MSI file. For example, the Deployment wizard creates an MST file with the settings that you specify. The deployment created by the Deployment wizard uses the MST file in conjunction with the MSI file and MSIEEXEC to install the program on local workstations.

multi-seat stand-alone installation A type of installation where multiple stand-alone seats of the program are installed using a single serial number.

partial profile A profile that contains partial registry information corresponding to a subset of the options available from the Files tab of the Options dialog box.

patch A software update to an application.

power user A user with rights to access and write to the *Program Files* folder and the *HKEY_Local_Machine* folder of the registry.

pull technology An installation technology that requires user interaction to complete the installation.

push technology An installation technology that installs files to a remote desktop without any user interaction.

scripting The process of using scripting languages such as VB Script to facilitate the deployment of software packages.

service pack Autodesk terminology for an application patch.

silent installation An installation that proceeds without any explicit user input. No dialog boxes are presented that require interaction from the user.

SMS Microsoft Systems Management Server. A tool that helps administer networked machines by allowing remote configuration, push deployments, and user administration. SMS is an expensive technology that must be purchased as an additional server.

transform See MST.

Index

A

- activating programs 4, 62
- Active Directory 105
- administrative images 21, 53, 64
 - merging service packs into 53
 - shortcuts to 64
 - system requirements 21
 - uninstalling programs 64
- administrator permission
 - requirements 67
 - scripts 67
- advertising deployments 79, 97
 - SMS packages 97
- assigning deployments 80–81
- AutoCAD Architecture Desktop
 - Shortcut 45
 - Add 45
- AutoCAD Profile 45
 - Add 45
- Autodesk Channels 55
- Autodesk Design Review 19
 - features requiring 19
- Autodesk products 62
 - registering 62
- AutoLISP (LSP) applications 89
 - installing 89

B

- browsers 21

C

- CAD Manager Channel 55, 58
- CER (Customer Error Reporting) 58
- CIP (Customer Involvement Program) 36
- cleaning 104
 - hard drives 104
- client log files 35

- client workstations 21, 31, 80–81, 84, 101, 103
 - assigning deployments 80–81
 - deploying software 31
 - imaging software deployments 101
 - repairing installations 103
 - system requirements 21
 - verifying deployments 84
- collections (of Autodesk software distribution rules) (SMS) 86–88
 - creating 86
 - direct membership rules 88
 - resource definition rule 87
 - start time for 88
- Communication Center 54
 - enabling 54
- communication protocols 21
- computers 21
- Configurable Folders 46
 - Append 46
 - Content Groups 46
 - Modes 46
 - Specify 46
- Content Browser Library File 46
 - Location 46
- custom menus 89
 - installing 89
- Customer Error Reporting
 - notification 58
- Customer Involvement Program 36
- customizing 40
 - installation 40

D

- Deploy.exe file 89, 91–92
- Deployment wizard 89
- deployments 1, 9–10, 18, 21, 27, 31–32, 63–64, 67, 79–81, 83, 101
 - about 1, 27
 - assigning 80–81

- checklist 27
- creating 32
- distributing 9, 81, 101
- group policies 79
- imaging software 101
- Installation wizard 10, 31
- methods 18
- modifying 63
- preliminary tasks 27
- scripts 67
- shortcuts to administrative images 64
- system requirements 21
- uninstalling programs 64
- verifying installation 83
- deployments of Autodesk products 89, 97
 - advertising 97
 - SMS packages 97
 - testing 89
- DesignCenter Online 57
 - installation settings 57
- desktop shortcut icon 52
- Direct Membership Rule wizard 88
- direct membership rules (for SMS collections), creating 88
- directories 49
 - adding to installations 49
- directory services 105
- distributed license server model 2, 37
 - selecting 2, 37
- distributing 81, 101
 - deployments 81, 101

E

- editing 63
 - deployments 63
- errors 58
 - reporting 58
- Ethernet network configurations 22
- Express Tools 41

F

- files 48–49, 89
 - adding to installations 49
 - installing additional files 89
 - locations 48
 - MST files 89
- flags 75
- FLEXlm tools 105
- folders 29, 49, 89
 - adding to installations 49
 - shared folders 29
 - source directory 89

G

- group policies 79–81, 83
 - advantages and disadvantages 80
 - advertising deployments 79
 - distributing deployments 81
 - verifying deployments 83

H

- hard disks 21, 104
 - cleaning 104
 - system requirements 21
- hardware 21
 - network system requirements 21
- Help 58
 - InfoCenter 58

I

- imaging software deployments 101
- InfoCenter 54, 58
 - installation options 54
 - settings 58
- installation 1, 27, 31, 40–41, 49, 62, 64, 67, 75, 79, 83, 101, 103–104
 - adding files to 49
 - advertising deployments 79
 - customizing 40
 - deployment shortcuts 64
 - Express Tools 41

- group policies 79
- imaging software 101
- Installation wizard 31
- Materials Library 41
- network deployment 27
- registration and activation 62
- repairing damaged installations 103
- restoring operating systems 104
- scripts 67
- software deployments 1, 27
- switches and flags 75
- types of 1
- typical 40
- uninstalling 64
- verifying deployments 83
- Installation wizard 10, 31
- installing files 89
 - additional files 89
- Internet 58
 - search settings 58
- Internet Explorer (Microsoft) 21, 52

J

- JavaScript 67

L

- license servers 2–3, 7, 21, 37
 - configuring 3, 7
 - system requirements 21
 - types of 2, 37
- licenses 2, 36
 - license servers 2
 - selecting type 36
- Live Update maintenance 54
- log files 35
 - deployment 35

M

- master images 101, 103
- master systems 104
- Materials Library 41

- memory (RAM) 21
 - system requirements 21
- Microsoft Installer (MSI) files 94
 - command line options 94
- Microsoft Internet Explorer 21, 52
- Microsoft Scripting Engine 67
- Microsoft Transform (MST) files 89
- Microsoft Transform files (MST) 32
- Microsoft Windows operating systems 21
- modifying 63
 - deployments 63
- monitors 21
- MSI files (Microsoft Installer) 53
- Msiexec.exe file 94–95
 - deploying SMS packages 95
- MSP files (Microsoft patch) 53
- MST (Microsoft Transform) files 89
- MST files (Microsoft Transform) 32
- multi-seat stand-alone installations 2, 36, 101

N

- network adapters 21
- network administration 1, 3, 79
 - about 1
 - group policies 79
 - license servers 3
- network installations 1, 21, 27, 36, 67, 79, 102
 - checklist 27
 - deployment 27
 - group policies 79
 - imaging software deployments 102
 - license types 36
 - scripting 67
 - system requirements 21
 - types of 1
- Network License Activation utility 4
- network license installations 1, 30, 36, 102
 - imaging software deployments 102
 - selecting 1, 36
 - tools and utilities 30

- Network License Manager 3, 22, 36
 - installing 3
 - selecting license types 36
 - system requirements 22
- network log files 35
- network shares 9, 18, 29, 89
 - creating 9, 29, 89
 - deploying products with 18
- Norton Ghost 101
- notification 58
 - resolved errors 58

O

- online resources 57
- OpenGL driver 21
- operating systems 21, 104
 - restoring 104
 - system requirements 21
- optional tools 41

P

- partial profiles 106
- patches (service packs) 53
- permission requirements 67
 - scripts 67
- personal information 33
- pointing devices 21
 - system requirements 21
- power users 106
- preferences 52
- processors 21
- profiles 106
 - partial profiles 106
 - profiles (user) 52
 - user preferences 52
- pull technology 106
- push technology 106

Q

- Query Rule Properties toolbar button 87

R

- RAM 21
 - system requirements 21
- redundant license server model 3, 37
 - selecting 3, 37
- registering programs 62
- repairing 103
 - damaged installations 103
- reporting errors 58
- resolving reported errors 58
- restoring 103–104
 - damaged installations 103
 - operating systems 104
- RSS feeds 56

S

- SATA RAID environments 101
- scripts 67–68, 75, 78
 - creating 67
 - deploying program with 67
 - flags and 75
 - running 78
 - sample scripts 68
 - switches and 75
 - system requirements 67
- search paths 48
 - specifying 48
- searching 58
 - InfoCenter 58
- serial numbers 33
 - deployments 33
- service packs 53
- shared folders 29
- shortcuts 52, 64
 - administrative images 64
 - desktop shortcut icon 52
- silent mode 36, 68
- single license server model 2, 37
 - selecting 2, 37
- SMS (Systems Management Server) 85–86, 98, 107
 - benefits 85
 - defined 107
 - information resources 85

- installing the program with 98
- preliminary tasks 86
- SMS packages 90–92, 94–95, 97
 - advertising 97
 - creating 90
 - deploying 95
 - installation program for,
 - creating 91–92, 94
 - software deployments 1
 - software installation packages 32, 89
 - MST files 32, 89
 - software installation requirements 21
 - source directories (network shares) 89
 - creating 89
 - stand-alone installations 2, 36, 67, 101
 - imaging software and 101
 - license types 36
 - scripting 67
 - selecting 2
 - startup accelerator 105
 - Subscription Center 57
 - system requirements 21, 67
 - network deployments 21
 - scripts 67

T

- TCP/IP protocol 22
- testing 89
 - deployments 89
- transform files (MST files) 89
- transform files (MST) 32
- TRANSFORMS property (Windows Installer) 95
- troubleshooting installation 29
- typical installation 40

U

- uninstalling programs 64
- user preferences 52

V

- VBS files (installation script) 67
- VBScripts 67
- verifying group policy deployments 83
- video monitors 21

W

- web browsers 21
- websites 58
 - search settings 58
- Windows Installer 94–95
 - command-line options 94
 - command-line properties 95
 - creating an SMS package installation program 94
 - TRANSFORMS property 95
- Windows operating systems 21
 - system requirements 21
- workstations 21, 31, 80–81, 84, 101, 103–104
 - assigning deployments 80–81
 - deploying software 31
 - imaging software deployments 101
 - repairing installations 103
 - restoring master systems 104
 - system requirements 21
 - verifying deployments 84

