

AutoCAD® Map 3D 2010

# Citrix-Ready AutoCAD Map 3D Installation and Setup Guide

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# Installing AutoCAD Map 3D 2010 on Citrix XenApp

# 1

## Introduction

Deployment and installation of AutoCAD Map 3D 2010 on Citrix XenApp 4.5 or 5.0 requires careful planning and execution. If you are not familiar with Citrix XenApp 4.5 or 5.0, consult the *Citrix Presentation Server 4.5 Administrator's Guide* or *Citrix XenApp 5.0 Administrator's Guide for Windows 2008*. You can find information about AutoCAD Map 3D installation in the *AutoCAD Map 3D 2010 Stand-alone Installation Guide*. You can find information about AutoCAD Map 3D deployment and network administration in the *AutoCAD Map 3D 2010 Network Administrator's Guide*. You can find information on network licensing in the *Autodesk Network Licensing Guide*. Read all of these guides as well as selected white papers before you attempt to deploy and administer the program on Citrix XenApp.

## System Requirements

Before you install or deploy the program, make sure that your servers and client workstations meet or exceed the minimum recommended hardware and software requirements.

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

**System Requirements for Citrix XenApp, Autodesk Network License Server, and Client Devices**  
**Hardware and software requirements for the location of the administrative image**

Hardware/Software	Requirement	Notes
Hard disk	2.5 GB	The location where you create the administrative image must be a shared location so that end users can access the administrative image.

**Hardware and software requirements for Citrix XenApp**

Hardware/Software	Requirement	Notes
Operating System	Windows Server 2003, SP1 or SP2 (Standard Edition, Enterprise Edition, or Datacenter Edition)	Citrix XenApp does not support installation on Windows domain controllers.
Hardware		For information about system sizing, optimization, configuration, and deployment scenarios, see the <i>Advanced Concepts Guide for Citrix XenApp</i> . This guide is available from the Support area of the Citrix Web site at <a href="http://support.citrix.com">http://support.citrix.com</a> .

**Hardware and software requirements for the Autodesk Network License Server**

Hardware/Software	Requirement	Notes
Operating System	Windows Vista 32-bit Windows XP 32-bit Windows 2003 Server Edition Windows 2000 Professional Windows 2000 Server Edition	The Network License Manager supports Ethernet network configurations only. For more information, see the <i>Autodesk Network Licensing Guide</i>
Computer/processor	Pentium III or higher 450 Mhz (minimum)	See the <i>Autodesk Network Licensing Guide</i>
Network Interface Card	Compatible with existing Ethernet network infrastructure	The Network License Manager supports multiple network interface cards.

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### Hardware and software requirements for the Autodesk Network License Server

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Hardware/Software	Requirement	Notes
Communication Protocol	TCP/IP	The Network License Manager uses TCP packet types.

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### System requirements for Client Devices

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#### Hardware and software requirements for the client devices

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Hardware/Software	Requirement	Notes
Access Hardware and Software	Any computing appliance capable of executing a Citrix Presentation Server Client and a Web browser, including desktop PCs, network computers, and mobile devices	The Web Interface supports many browser/client combinations. For a complete list of supported browser/client combinations, see "Citrix XenApp Client Device Requirements" in the <i>Web Interface Administrator's Guide</i> .
Operating System	A compatible Citrix XenApp client Operating System	See "Deploying the Web Interface - System Requirements" in the <i>Web Interface Administrator's Guide</i> .
Web Browser	A compatible Presentation Server client Web browser	See "Deploying the Web Interface - System Requirements" in the <i>Web Interface Administrator's Guide</i> .
Client Software	A compatible Presentation server client (ICA)	For more information on available ICA clients, visit the Citrix Web site at <a href="http://support.citrix.com/product/ica/">http://support.citrix.com/product/ica/</a>

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## Preparing for installation

### Reference documents

To prepare for installation, thoroughly review the following documents:

- *Citrix Presentation Server 4.5 Administrator's Guide* (available at the Citrix Web site: <http://support.citrix.com/article/CTX112223>)
- *Citrix XenApp 5.0 Administrator's Guide for Windows 2008* (available at the Citrix Web site: <http://support.citrix.com/article/CTX115519>)

- *Advanced Concepts Guide for Citrix Presentation Server* (available at the Citrix Web site: <http://support.citrix.com/article/CTX107059>)
- *Citrix Presentation Server Web Interface Administrator's Guide* (available at the Citrix Web site: <http://support.citrix.com/article/CTX113743>)
- *Web Interface 5.0.1 Administrator's Guide* (available at the Citrix Web site: <http://support.citrix.com/article/CTX116590>)
- *Citrix Secure Gateway for Windows Administrator's Guide* (available at the Citrix Web site: <http://support.citrix.com/article/CTX112429>)
- *Secure Gateway 3.1 for Windows Administrator's Guide* (available at the Citrix Web site: <http://support.citrix.com/article/CTX116425>)
- *AutoCAD Map 3D 2010 Stand-alone Installation Guide*
- *AutoCAD Map 3D 2010 Network Administrator's Guide*
- *Autodesk Network Licensing Guide*

### **Preliminary tasks**

Installing AutoCAD Map 3D on Citrix XenApp involves several steps. Check to see that you have gathered the information and met the prerequisites in the following list:

### **Installation checklist**

- You have read the required reference documentation to perform the different tasks required to set up and deploy the software. See [Reference documents](#) (page 3).
- You have reviewed the system requirements. You must make sure that your network, servers, and clients meet the system requirements. See [System Requirements](#) (page 1).
- You have access to an account with Administrative rights on Citrix XenApp.
- You have installed and activated any Citrix Resources required in the Citrix Access Management Console, including the Web Interface.
- You have the appropriate ICA Clients downloaded and installed on client computers.
- You have installed the Autodesk Network License Manager and AutoCAD Map 3D 2010 Network License Activation Utility on your network license server.

When you have completed these tasks you are ready for installation.

## How to Install AutoCAD Map 3D on Citrix XenApp

To install AutoCAD Map 3D on Citrix XenApp 4.5 or 5.0, perform a network installation directly from the installation DVD or downloaded installation files. A network installation is nearly identical to a stand-alone installation, with the exception that you must configure network licensing rather than use the default stand-alone license.

For detailed information on installation of AutoCAD Map 3D, see the *AutoCAD Map 3D 2010 Stand-alone Installation Guide*. For detailed information on network administration of AutoCAD Map 3D, see the *AutoCAD Map 3D 2010 Network Administrator's Guide*. For detailed information on network licensing of AutoCAD Map 3D, see the *Autodesk Network Licensing Guide*.

When the installation starts, a Citrix dialog box will appear telling you to click Next> after the installation. This After Installation dialog box is part of the Citrix setup and configuration for new programs. Do not click the Next> button until the installation is complete. The After Installation dialog box will remain open for the duration of the installation process.

After the installation is complete and the installation dialog boxes close, click the Next> button. The dialog box closes and the Finish Admin Install dialog box appears. Click Finish to complete the installation.

### Overview of Network Installation of AutoCAD Map 3D 2010 on a Citrix XenApp server

The installation instructions that follow are intended as an overview only. You must read the installation documentation for detailed installation instructions.

- 1 First, install the Network Licensing Utilities on your network license server: In the AutoCAD Map 3D 2010 Installation Wizard, click Install Tools and Utilities, then install the Network License Manager and the Network License Activation Utility.
- 2 From the Citrix XenApp console, run the installation setup program for AutoCAD Map 3D 2010.
- 3 In the AutoCAD Map 3D 2010 Installation Wizard, click Install Products.
- 4 Select AutoCAD Map 3D 2010 and follow the instructions in the Installation Wizard.

- 5 On the Review - Configure - Install page, click the Configure button.
- 6 On the Select the License Type page, select Network License, then select the appropriate license server model and name. For detailed information on network licensing, see the *Autodesk Network Licensing Guide*.
- 7 When you have finished configuring your network license information, click through to Configuration Complete, then click Install on the Review - Configure - Install page.
- 8 When the installation is complete, click the Next> button in the After Installation dialog box. The Finish Admin Install dialog box appears.
- 9 Click Finish.

# Setting Up AutoCAD Map 3D 2010 on XenApp

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## Post-installation Configuration of AutoCAD Map 3D 2010

After you install AutoCAD Map 3D under an administrative user account, you can only run it from that account. If you wish to run the application from a user account that does not have administrator privileges, complete the extra configuration steps described in this section for each user.

The issues and recommendations contained in this document are specific to the installation of AutoCAD Map 3D 2010 only. This document does not include any investigation of licensing issues, nor is it meant to represent or claim full testing of the AutoCAD Map 3D application in XenApp environment.

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**NOTE** Remapped drives are not supported.

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## Configuring the Registry

The per-user registry settings under *HKEY\_CURRENT\_USER\Software\Autodesk* contains user-specific path information. For example:

[HKEY\_CURRENT\_USER\Software\Autodesk\AutoCAD\R18.0\ACAD-7002:409]

- *"LocalRootFolder"="C:\Documents and Settings\admin\Local Settings\Application Data\Autodesk\AutoCAD Map 3D 2009\R18.0\enu\"*

- `"RoamableRootFolder"="C:\Documents and Settings\admin\Application Data\Autodesk\AutoCAD Map 3D 2009\R18.0\enu\"`

#### To configure the registry

- 1 Log in as the Installation user.
- 2 Save the registry key `HKEY_CURRENT_USER\Software\Autodesk\` to a .reg file. For example, `c:\templates\admininstall.reg`.
- 3 Copy the Install user .reg file to a new user.reg file. For example, copy `c:\templates\admininstall.reg` to `c:\templates\user1.reg`.
- 4 Edit the new user.reg file and use search-and-replace to replace the installation user name with the new user name. We recommend searching for `\<Installation User>\` and replace with `\<New User>\`. For example, search for `\admin\` and replace with `\user1\`.
- 5 Log-in as the new user, run regedit, and import the modified .reg file.

Repeat this procedure for each new user account for which you want to provide the AutoCAD Map 3D application.

## Configuring User Profiles

AutoCAD Map 3D requires the installation of some files in a user profile directory to function properly. Example directories:

- `C:\Documents and Settings\<username>\Local Settings\Application Data\Autodesk`
- `C:\Documents and Settings\<username>\Application Data\Autodesk`

When you first install AutoCAD Map 3D on XenApp, these files are only installed for the installation user. You must copy them for each new user's profile.

#### To configure user profiles

- 1 Log-in as the Installation User.
- 2 Save the Local Settings and Application Data Autodesk folders to a folder that is read/write accessible to new users.
- 3 Log-in as the New User.

- 4 Copy both folders to the new user profile directories.

## Using Scripts to Configure the Registry and User Profiles

There are two Windows scripts that you can use to make it easier to apply the post-installation registry and user profile changes.

### To use scripts to configure the registry settings and user profiles

- 1 Extract the files in AutoCADMapOnXenApp.zip to a local directory. You can find AutoCADMapOnXenApp.zip on your AutoCAD Map 3D 2010 installation DVD, or on the Citrix Web site:  
<http://community.citrix.com/display/Autodesk+AutoCAD+Map+3D+2010+on+XenApp+post+installation+script>
- 2 Log-in as the Installation User, either through the console or remotely.
- 3 Ensure that AutoCAD Map 3D is running on XenApp as expected.
- 4 By default, the SaveAutoDeskTemplate script stores template files in *C:\Autodesktemplate*. Create this directory to use the default template settings. If you wish to store template files in another directory, such as a shared network location, you can edit the *saveAutoDeskTemplate.bat* file to point to your desired location. Make sure that the new users have read/write access to this folder.
- 5 At the Command Prompt, run *saveAutoDeskTemplate.bat*. By default a log file named *AutoDeskForCitrix.log* is created in the user profile directory.
- 6 Log-in as the new (non-administrative) user, then run *applyAutodeskTemplate.bat* at the Command Prompt. If your template files are not in *C:\Autodesktemplate*, update the *applyAutodeskTemplate.bat* file with the folder path where you stored your template files in the previous step. The script will automatically check if the script has been run before by checking if *%userprofile%\application data\autodesk* folder exists. If not, it will read saved data from the template directory and apply the necessary changes. By default a log file named *AutoDeskForCitrix.log* is in the user profile directory.

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**NOTE** Repeat this procedure every time you update your software and whenever you change the files in these directories.

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**NOTE** You can also run the applyAutoDeskTemplate script as part of your logon script by adding a shortcut to the script in the Startup folder of each user.

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## Publishing the Application to End Users

For end users to have access to the published application, they must be able to connect to XenApp (through the Citrix Secure Access Client, for example). For more information about the Citrix Secure Gateway, see the *Citrix Secure Gateway for Windows® Administrator's Guide*. The end user must also have client access software installed, such as an appropriate ICA client. For more information, refer to the *Citrix Presentation Server Web Interface Administrator's Guide* or the *Web Interface 5.0.1 Administrator's Guide*.

For detailed instructions on publishing AutoCAD Map 3D to end users, see "Using the Application Publishing Wizard" in the *Citrix Presentation Server 4.5 Administrator's Guide* or the *Citrix XenApp 5.0 Administrator's Guide for Windows 2008*.

# Glossary

## AutoCAD Map 3D 2010 and Citrix XenApp Terms

You should be familiar with the following useful terms when installing AutoCAD Map 3D on a Citrix Presentation 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. You can apply service packs (patches) to an administrative image using the Deployment wizard.

**client** The end user's computer. The client obtains applications and data from the server.

**computing appliance** A workstation or client device consisting at minimum of an operating system and a connectivity program that can access software applications from a server across a network.

**CPS** Citrix Presentation Server (now known as XenApp).

**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.

**ICA** Independent Computing Architecture. The central technology of Citrix Presentation Server that enables a server to run applications for multiple users simultaneously. The technology sends only the changes in the user interface to the client.

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

**installation user** The user who performs the initial installation. The Installation User must have domain administrative rights.

**new user** The non-administrative end user who uses AutoCAD Map 3D.

**Secure Gateway** A gateway that allows customers to simply and securely deploy business-critical applications to employees, business partners, and customers through the Internet while maintaining manageability, scalability, reliability, and control.

**system optimization** Modifications that improve the efficiency and speed of the system. The system could be a single computer on the network or a cluster of computers.

**system sizing** The process of establishing the requirements of a system to determine an effective level of service for end users and processes.

**UNC** Uniform Naming Convention. A path that specifies the name of a computer and directory or resource. The name of the computer is preceded by two back slashes, the directory is preceded by one back slash. For example, \\servername\directory.

**URL** Uniform Resource Locator. A complete address that defines a route to a resource or files on a network. It contains the protocol, the domain, and the name of the resource or file.

**XenApp** The product formerly known as Citrix Presentation Server.

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