

Autodesk
DirectConnect

Autodesk

Installation Guide

Autodesk DirectConnect 2008
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Introduction

Autodesk® DirectConnect is a family of data translators that lets you import CAD data into:

- Autodesk® AliasStudio™
- Autodesk® Maya®
- Autodesk® Showcase™
- Autodesk® ImageStudio

Each Autodesk DirectConnect translator lets you import a specific CAD file format into one or more of the Autodesk software products listed above. In addition, the software enables some CAD file formats to be exported from some products.

For information on how to use Autodesk DirectConnect translators, choose **Autodesk DirectConnect Help** from the **Help** menu of any of these products.

Finding the latest information on the Web

For the most up-to-date information on Autodesk DirectConnect (including which CAD formats are currently supported, system requirements, and how to purchase translator licenses), go to one of the following URLs:

For **Autodesk AliasStudio**:

- www.autodesk.com/aliasstudio-directconnect

For **Autodesk Maya**:

- www.autodesk.com/maya-directconnect

For **Autodesk ImageStudio**:

- www.autodesk.com/imagestudio-directconnect

For **Autodesk Showcase**:

- www.autodesk.com/showcase-directconnect



Japanese documentation is also provided at these URLs.

In this guide

This guide describes how to install and license Autodesk DirectConnect translators. It includes licensing types and requirements, and a guide to troubleshooting.

- [“Installing Autodesk DirectConnect” on page 7](#)
- [“Licensing Autodesk DirectConnect” on page 9](#)
- [“Troubleshooting” on page 24](#)

Installing Autodesk DirectConnect

Installing with host software

Autodesk DirectConnect software is installed automatically when the following Autodesk software is installed:

- Autodesk AliasStudio
- Autodesk ImageStudio
- Autodesk Maya
- Autodesk Showcase

For information on installing these software products, refer to their respective installation guides.

Installing upgrades

You can download and install newer versions of Autodesk DirectConnect as they become available on the Web.

1. Find the newest version on the Web and download its exe file.
(See the topic, [Finding the latest information on the Web.](#))
2. Remove the older version of Autodesk DirectConnect from your system.
(In Windows, select **Start > Settings > Control Panel** and click on the **Add or Remove Programs** choice.)
3. Double-click on the file you downloaded.

Supported platforms

Autodesk DirectConnect runs on the same platform as the Autodesk product it is installed with:

	Microsoft® Windows® XP Professional	Microsoft Windows 2000 Professional	Microsoft Windows XP Professional x64 Edition	Apple® Mac OS® X 10.4 or higher
Autodesk AliasStudio	✓	✓		
Autodesk ImageStudio	✓	✓		

	Microsoft® Windows® XP Professional	Microsoft Windows 2000 Professional	Microsoft Windows XP Professional x64 Edition	Apple® Mac OS® X 10.4 or higher
Autodesk Maya	✓	✓	✓ (DWG, Pro/ENGINEER, IGES, STL, and STEP formats only.)	✓ (IGES, STL and STEP formats only.)
Autodesk Showcase	✓			

Recommended system requirements

Autodesk DirectConnect requires the following amount of disk space:

- On Windows operating systems, 260 megabytes of disk space available on a system drive or destination drive
- On Mac OS X, 30 megabytes of disk space.

Because Autodesk DirectConnect is installed with other products, your system must also accommodate the host product requirements. (For the system requirements of the host product, consult its installation guide.)



Note For the most up-to-date information on hardware qualifications, go to www.autodesk.com/qual-charts.

Note to Autodesk AliasStudio users:

You must set an environment variable to use the IGES translator with Autodesk AliasStudio Version 13.0.2. For details, see the online help.

Additional software setup, Autodesk Maya

After you install your Maya software, you must load a plug-in to use Autodesk DirectConnect translators:

1. In Maya, select **Window > Settings/Preferences > Plug-in Manager**.
2. Click the DirectConnect plug-in to enable all of the Autodesk DirectConnect translators:
 - Windows: *DirectConnect.mll*
 - Mac OS X: *DirectConnect.lib*

A check mark appears in the box.

Licensing Autodesk DirectConnect

Determining if you need a license

Each Autodesk DirectConnect translator lets you exchange data from one specific CAD file format with supported Autodesk software. **Only certain Autodesk DirectConnect translators require licenses.**

Refer to the DirectConnect online help (**Help > Autodesk DirectConnect Help** from supported Autodesk software) to find out more about:

- file formats currently supported by Autodesk DirectConnect
- the Autodesk products that support them
- which file formats require additional Autodesk DirectConnect licenses on which products.

Or, go to the Web for the most up-to-date information. (See the topic [Finding the latest information on the Web.](#))

Purchasing and installing a license

1. Purchase the Autodesk DirectConnect license if required.

For more information on how to purchase a license, go to the Autodesk DirectConnect Web site for your product. (See the topic [Finding the latest information on the Web.](#))

2. From the Windows **Start** menu, select **Programs > Autodesk > DirectConnect > Licensing** and follow the instructions.
3. To verify the license is installed, try to import a file.

In most cases, the licensing procedure should be straightforward. For details on more complex licensing procedures (including how to use hardware locks and how to install floating licenses), refer to the rest of this section.

Introduction to advanced licensing procedures

To find out if you need a license ...

Only certain Autodesk DirectConnect translators require licenses. To find out if you need a license, go to:

["Determining if you need a license" on page 9](#)

If you are a new customer ...

If you are a new customer and you only have a serial number, go to:

["Activating the software from a serial number \(Windows only\)" on page 12](#)

If you have a license...

If you already have a license for your Autodesk software, go to:

["Activating the software from a license \(Windows only\)" on page 16](#)

To set up a floating license server ...

To set up a license server, go to:

["Set up the license server \(Windows\)" on page 20](#)

What licensing does...

A *license* is a coded record of your software purchase. The license resides in a *license file* on your machine.

When you need a license

You must go through the process of obtaining and installing a license if:

- Your Autodesk software requires a license (See the topic, ["Determining if you need a license" on page 9](#)).
- You are relocating Autodesk software to a different computer.

Some definitions

Serial Number

A record of what you purchased from Autodesk, required for obtaining a license through Online Product Activation. Here is a sample of what a serial number might look like:

VCF030-B-3322-0933-7182-1111-0000

or it might look like:

342-52134876

If you did not receive a serial number when you purchased the Autodesk product, contact your local Autodesk sales office or your reseller.

Hardware ID (Host ID)

An alphanumeric code that identifies the machine that is authorized to run the software, required for Online Product Activation. This number can be an ethernet ID (also known as a MAC Address) or a hardware key (dongle).

Online Product Activation (OPA)

An automated activation process where you submit an online form with your serial number and hardware ID, and a license is automatically generated and sent back.

Product Configuration Wizard

A tool that uses Online Product Activation to allow you to request and install your license easily.

Node-locked license

A license for a single computer. It lets you run Autodesk DirectConnect only on the computer where the license is installed. (Or, in the case of hardware locks, on the computer where the hardware lock is attached.)

Nodelocked licenses look similar to the following sample:

```
FEATURE ABC sgiawd 3.000 09-jan-2006
\ uncounted 7CD390F11000 HOSTID=123456789012
```

Floating license

A license to be shared by various computers on a network. The Autodesk software is installed on many computers, each with a license file that accesses the floating licenses installed on a server. Floating licenses require client and server setup. Also called a *site license*.

Floating licenses look similar to the following sample:

```
SERVER pc-server 123456789012 7111
VENDOR sgiawd
FEATURE ABCf sgiawd 2.000 10-nov-2006 1
\          FC29A6FBF000
```

License file

A file with encrypted data that enables an Autodesk DirectConnect translator to run on your machine. A license is required to generate a license file.

Client

In floating license configurations, the machine that requests a license from the license server

Server

In floating license configurations, the machine that provides licenses as requested by users on client machines.

Activating the software from a serial number (Windows only)

Use these instructions if:

You **only have a serial number** and ...

- You are a new customer installing Autodesk software for the first time.
- You are upgrading Autodesk software to a new version.
- You are relocating Autodesk software to a different computer.

Do not use these instructions if:

- You already have a license. Go to [“Activating the software from a license \(Windows only\)” on page 16](#).
- You want to set up a floating license server. Go to [“Setting up a floating license” on page 18](#)

What is a serial number?

A serial number is a record of what you purchased from Autodesk, required for obtaining a license through Online Product Activation (OPA).

What do serial numbers look like?

Here is a sample of what a serial number might look like:

VCF030-B-3322-0933-7182-1111-0000

or it might look like:

342-52134876

New customers receive a serial number in one of the following ways:

- emailed or otherwise sent directly from the reseller where you obtained your copy of the software.
- emailed directly from Autodesk.
- on the outside of the CD holder within your software package (available from selected resellers).

If you did not receive a serial number, contact your local Autodesk sales office or your reseller to obtain one.

What are hardware IDs?

A hardware identifier is an alphanumeric code that identifies the machine that is authorized to run the software. It is required along with a serial number to generate license data.

What if I use hardware lock devices (dongles)?

Hardware lock devices are available for using Autodesk DirectConnect running on 32-bit Windows operating systems.

If you are using a hardware lock device to license Autodesk DirectConnect, you must choose its hardware identifier from the list of hardware IDs.

The hardware lock's hardware ID is typically a FlexLM key beginning with the letter F. The hardware lock for computers is typically an Ethernet address beginning with the letter E.

If the hardware key does not appear in the list of hardware IDs, the hardware lock device may not be properly attached, or its driver may not be installed.

What if I'm using a notebook (laptop)?

If you are licensing your software to run on a laptop, OPA may detect two or more hardware IDs, usually indicating a peripheral device is attached to the machine. In the case of a notebook (laptop), the multiple hardware IDs may indicate the notebook is attached to a dock.

To ensure you choose the correct hardware ID, **disconnect all peripheral devices from the machine**, including the dock attached to the notebook.

It is **not recommended** to use a notebook for a floating license server because it may frequently be off the network.

How does activation work?

The easiest and fastest way to activate your software is to send your serial number and hardware ID to Autodesk via the Internet. This process is called Online Product Activation.

After you fill out an Internet form, you are provided with license data you can use to activate your software.

What if my machine isn't connected to the Internet?

If no computer in your organization has access to the Internet, proceed to use the Product Configuration Wizard as shown in the following pages. When you come to the panel where you need to choose the method for submitting your serial number and hardware identifier, request your license by phone or fax (rather than the internet).

If you can access the Internet from some machine in your organization (but not the machine you're licensing):

1. On the computer that is being licensed, follow the activation steps in the next topic, but request the phone, fax, or email option (rather than the Web option). You will be provided with all the data you need to license the computer (hardware ID, serial number, and so on). Record or print this data.
2. On another computer that is connected to the Internet, go to the following URL: www.autodesk.com/opa/
3. Enter the serial number, hardware ID, and other information you recorded for the computer you want to obtain a license for. Once the license is returned, install it on the computer you want to license.

I'd prefer to request licenses by phone, fax, or email ...

To submit your request by e-mail, phone, or fax (rather than from the Internet), follow the licensing windows through to the panel, **How would you like to submit your request?**

In this panel, click on **Show all ways of making an activation request** and follow the instructions to provide the information Autodesk needs to process your license request.

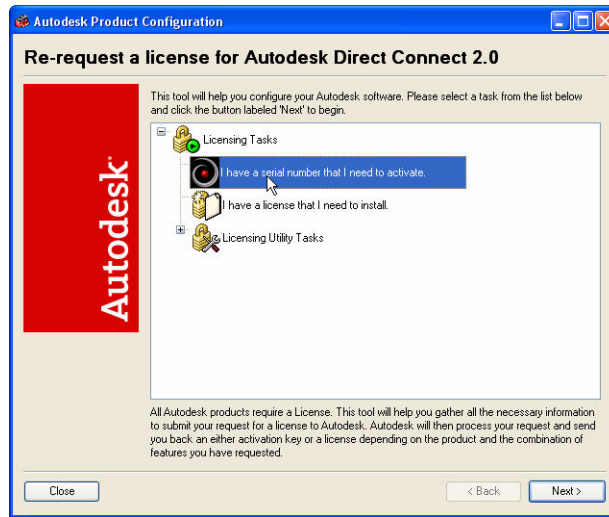
Note that these alternative activation methods will take several days or longer to be processed.

Activate your translator from a serial number

1. Install the Autodesk software you want to use with Autodesk DirectConnect, if you haven't already.

Autodesk DirectConnect is installed automatically with software such as Autodesk Maya, Autodesk AliasStudio, Autodesk ImageStudio and Autodesk Showcase.
2. From the **Start** menu, choose **Programs > Autodesk > DirectConnect > Licensing**.

The Autodesk **Product Configuration** window appears.
3. Choose **I have a serial number I need to activate** for the translator you are installing the license for and click **Next**.



(If you don't see this choice, click the **(+)** symbol next to **Licensing Tasks** to expand the choices.)

4. Continue to follow the instructions in the Product Configuration windows to activate your software. You are prompted to:
 - Type in or paste your serial number
 - Select your hardware identifier
 - Submit your serial number and hardware ID to Autodesk (using the Web is recommended)
 - Choose your preferred web browser
 - Fill out a form on the Autodesk Product Activation web site with requested information. It then provides you with the license.
 - Copy and paste the license to activate your software.

An email is also sent to the email address you specified. **Keep this email for future reference.**

What if I close the Product Configuration window accidentally?

If you close the Product Configuration Wizard accidentally, go to the Windows **Start** menu and select **Programs > Autodesk > DirectConnect > Licensing**.

If you've already requested a license from the Internet, select **I have a license that I need to install** from the list of entries and proceed to install your license.

5. If the license installation is successful, a license file is created and the Product Configuration window reports, "Installation complete."

License files typically have the following names and locations:

- For node-locked (single) licenses, C:\FlexLM\aw.dat
- For floating licenses, C:\FlexLM\aw_servername.dat (where *servername* is the name of the license server).

You should now be able to import the CAD file you have licensed into your Autodesk software.

Next steps (if the licensing is successful)

- If you are a node-locked (single machine) user, your software is now activated and ready to use. From your Autodesk software, try to import a file for the CAD file format you just licensed.
- If you are setting up a floating server and a network of clients, go to the topic [“Setting up a floating license” on page 18](#)

If the licensing is not successful

If the license installation is not successful, a window appears reporting **Installation Incomplete**.

1. Click the **Show Installation Log** button to read a log to find out what went wrong.
2. Go to "Troubleshooting" on page 24 for more details on what to look for.

Activating the software from a license (Windows only)

Use these instructions if:

- You have already obtained a node-locked license from Autodesk and need to install it to activate your software.

Do not use these instructions if:

- You have a serial number but have not yet received a license. Go to the topic, [“Activating the software from a serial number \(Windows only\)” on page 12](#).
 - You want to set up a floating license server on a machine not running Windows XP or Windows 2000. Go to [“Setting up a floating license” on page 18](#)
-

If you have obtained license data from Autodesk, you can use the Product Configuration Wizard to automatically create the license file that is required to use the software.

A **license file** is created from the license data provided to you by Autodesk. This data may have been provided to you in an email, a license file, a fax or even read to you over the phone.

What do licenses look like?

Nodelocked licenses look similar to the following sample:

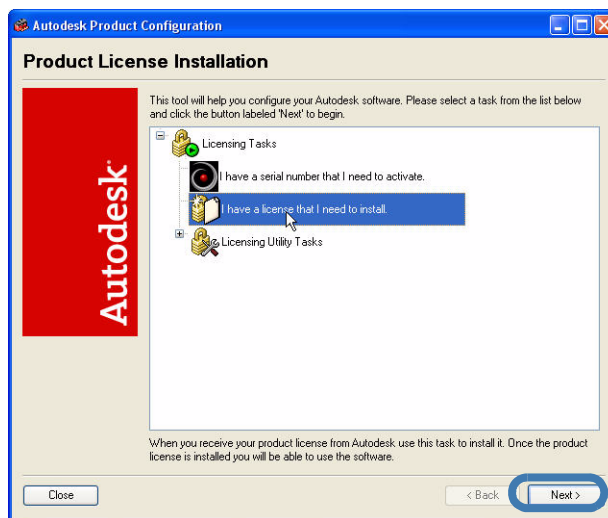
```
FEATURE ABC sgiawd 3.000 09-jan-2006 uncounted 7CD390F11000  
HOSTID=123456789012
```

Floating licenses look similar to the following sample:

```
SERVER pc-server 000000000000 7111  
VENDOR sgiawd  
FEATURE ABCf sgiawd 2.000 10-nov-2006 1 \  
FC29A6FBF000
```

Activate the software from a license

1. From the Windows **Start** menu, select **Programs > Autodesk > DirectConnect > Licensing**.
2. Select **I have a license that I need to install** and click **Next**.



(Click on the + icon beside **Licensing Tasks** if you don't see the list of licensing options.)

3. Continue to follow the instructions in the Product Configuration windows to activate your software.

You will need to select the method to install your license (either from a text file on your computer, or by pasting or typing from emails or faxes). A message lets you know if the data is valid or not.

4. After you enter valid license data or select a valid license file, the Product Configuration Wizard reports "Installation Complete" and a license file is created.

License files typically have the following names and locations:

- For node-locked (single) licenses, C:\FlexLM\aw.dat
- For floating licenses, C:\FlexLM\aw_servername.dat (Where *servername* is the name of the license server.

5. Click **Done** to exit the wizard.

You should now be able to run the Autodesk DirectConnect software.

Next steps (if the licensing is successful)

- If you are a node-locked (single machine) user, your software is now activated and you can use it. From your Autodesk software, try to import a file for the CAD file format you just licensed.
- If you are setting up a floating server and a network of clients, go to the topic: [“Setting up a floating license” on page 18](#)

If the licensing is not successful

If the license installation is not successful, the following window appears, reporting "Installation Incomplete."

1. Click the **Show Installation Log** button to read a log to find out what went wrong.
2. Go to [“Troubleshooting” on page 24](#) for more details on what to look for.

Setting up a floating license

Use these instructions if:

- You have a floating license that you want to use on one or more networked machines.

Do not use these instructions if:

- You have a node-locked (single) license.
-

Floating licenses can be used by any networked computer if it has the Autodesk software installed. These computers, known as *clients*, must have a license file installed that accesses the floating license that is located on one machine, known as the *server*. Each floating license can be used by only one client machine at a time.

Floating license setup overview

1. Acquire the floating server license.
[“Acquire the floating server license” on page 19](#)
2. Set up the license server.

[“Set up the license server \(Windows\)” on page 20](#)

[“Set up the license server \(other platforms\)” on page 21](#)

3. Install the software on each client machine. Then copy over to each client an edited license file that points to the server.

[“Set up the client computers” on page 22](#)

Acquire the floating server license

You may wish to run the software on the server machine, in which case you can install the software using Online Product Activation:

[“Activating the software from a serial number \(Windows only\)” on page 12](#)

[“Activating the software from a license \(Windows only\)” on page 16](#)

In some cases, you may want to set up a dedicated license server that does not run the software. In this case:

1. Go to the following Web site: www.autodesk.com/opa

2. Fill out the required fields.

For information on serial numbers and hardware IDs, see:

[“Introduction to advanced licensing procedures” on page 10](#)

3. You will receive a license file by email.

4. Copy this license file and rename it to:

- For Windows, `C:\FlexLM\aw_servername.dat` (where *servername* is the name of the license server).
- For UNIX platforms, `/var/flexlm/aw_servername.dat` (where *servername* is the name of the license server).

If you do not have Internet access ...

If you do not have Internet access, you need to phone in or fax a SPAR form with the hardware ID for your server machine. Contact your Autodesk representative for details.

Install the license server (Windows)

1. Install the software on the server machine:

[“Installing Autodesk DirectConnect” on page 7](#)

2. License the server using Online Product Activation:

[“Activating the software from a serial number \(Windows only\)” on page 12](#)

[“Activating the software from a license \(Windows only\)” on page 16](#)

Set up the license server (Windows)

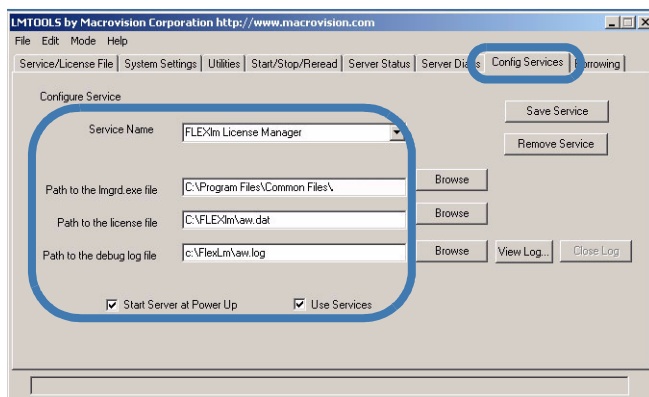
1. You will need to launch the LMTools application (**lmtools.exe**) to configure and start the floating license server:

Select **Start > Programs > Alias > Common Utilities > FlexLM License Utilities**.

2. Configure the license server from the LMTools window:
 - Click on the first tab, **Service/License File**.
 - Click **Configuration using Services**.
 - Click on the tab, **Config Services**. Verify the following settings:

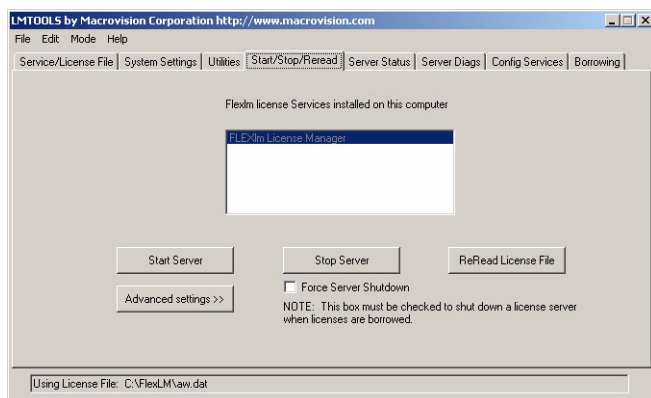
Configuration Services Settings

Path to the lmgrd.exe file	C:\Program Files\Common Files\ Alias Shared\Licensing\etc\lmgrd.exe
Path to the license file	C:\FlexLM\aw_servername.dat (where <i>servername</i> is the name of the license server)
Path to the debug log file	C:\FlexLM\aw.log
Start Server at Power Up	Checked
Use Services	Checked



3. Start the License Server from the LMTools window:

Click on the **Start/Stop/Reread** tab, then the **Start Server** button, then the **ReRead License File** button.



There should be a message in the LMTools status bar at the bottom of the window confirming the license file is being used.

4. Confirm that the server is working from the LMTools window:

Click on the **Server Status** tab and click on the button **Perform Status Enquiry**.

The message in the message area should indicate that the server is working. The message will look like the sample below.

```

-----
Status
-----
Flexible License Manager status on Tue 4/23/2006 14:39
[Detecting lmgrd processes...]
License server status: 7111@PC-GAIA
  License file(s) on PC-GAIA: C:\FlexLM\aw.dat:
  PC-GAIA: license server UP (MASTER) v9.2
Vendor daemon status (on PC-GAIA):
  sgiawd: UP v9.2
Feature usage info:
Users of ABCf: (Total of 4 licenses available)

```

Your server licensing process is complete. Proceed to setting up each client computer. (See the next section.)

Set up the license server (other platforms)

In some cases, you may want to set up a floating license server on platforms other than the Microsoft Windows operating system.

1. Go to www.autodesk.com/licensetools (You may have to register.)
2. From the Web site, open the installation instructions for the server machine's operating system. From these instructions, find out how to locate the hardware ID for the server machine. Copy or write down this hardware ID.
3. Download and install the license tool software on the server machine, if required.

4. Submit your license request at www.autodesk.com/opa/.
To submit your license request, you need to provide the serial number for the floating license you purchased, along with the hardware ID for the machine that will be the floating server.
5. Follow the installation instructions from the Web site to set up and configure the server and its clients.

Set up the client computers

Client computers must have Autodesk DirectConnect installed and must have a client license file that points to the license server.

To set up the client computer:

1. Install the Autodesk software on every client computer you are going to set up.
["Installing Autodesk DirectConnect" on page 7](#)
2. On the server machine, make a copy of its server license file, located at:
 - For Windows, `C:/FLEXLM/aw_servername.dat`
 - For UNIX, `/var/flexlm/aw_servername.dat`

Place the copy at another location (for example, your desktop) and rename it `aw_clientname.dat`.



Note Only the original file, `aw_servername.dat`, should remain in the server's FlexLM folder.

Tip ...

Make sure that **Hide known File Extensions** is not checked as one of your View options for this folder, or the file may be called `aw_clientname.dat.txt` but you will only see it as `aw_clientname.dat`.

`aw_clientname.dat.txt` will not work as a license file. (You will have to rename it to `aw_clientname.dat`.)

3. Edit the file you copied in a text editor (for example, Notepad).
4. Keep the lines beginning with "SERVER" and "VENDOR".
5. Remove all the rest of the lines in the file.
6. Add a line reading, "USE_SERVER".

Example ...

The original file might look like the following:

```
SERVER PC-GAIA 000000000000 7111
VENDOR sgiawd
FEATURE ABCF SGIAWD 3.000 3-NOV-2006 4 \
      000000000000
```

The edited file should look like the following:

```
SERVER PC-GAIA 000000000000 7111
VENDOR sgiawd
USE_SERVER
```

7. Save the `aw_clientname.dat` file and copy it to the `C:\FlexLM` folder on all client machines. Rename the file on each client to reflect the client's machine name (but leave the contents of the file the same on all client machines).
8. Make sure the client is on the network and can access the server.
9. Verify that you can launch the software on each client machine. From your Autodesk software, try to import a file for the CAD file format you just licensed.

Troubleshooting

Checklist

- For information about issues concerning Autodesk DirectConnect software, go to one of the Web sites (see "Finding the latest information on the Web" on page 5).
- For the latest qualification charts, see www.autodesk.com/qual-charts and select Technical Support and then Qualified Hardware
- For information about Windows software issues, see www.microsoft.com
- For information about licensing and hardware locks, see www.macrovision.com
- For details on installation and performance issues concerning graphics cards, check the Web site of your graphics card manufacturer
- Bookstores provide an array of helpful books on Windows for various types of users and administrators

How to contact Global Support Services

For more information on how to contact Autodesk support, go to www.autodesk.com/aliasstudio-support.

When you make a support call, it is helpful to have available your system profile information and screenshots of any problems.

Get system profile information (for Windows 2000)

1. From the **Start** menu, select **Run**.
2. In the Run window, type: `winmsd`
3. Click **OK**.
4. Right-mouse click on **System Information** and select **Save As Text File**.
(Ensure you select **System Information**, *not* **System Summary**.)

Get system profile information (for Windows XP)

1. From the **Start** menu, select **Run**.
2. In the Run window, type: `winmsd`
3. Click **OK**.
4. Select the **System Summary** category. Then click **File > Export**.
5. Name and **Save** the file.

Get system profile information (for Macintosh)

1. Select **About This Mac** from the Apple menu (in the top, left corner of the screen).

2. Click on the **More Info...**

The Apple System Profiler opens. You can use it to browse through available hardware, software, and network resources.

Take screen captures

1. Press the **Print Screen/SysRq** key on your keyboard.
2. Launch Print (**Start > Programs > Accessories > Paint**).
3. Choose **Edit > Paste**.
4. Save the image.
5. Zip the saved image file up (using WinZip® or another program). You may be asked to send this file when you make your support call.

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