# AutoSketch<sup>®</sup> 10 Advanced Exercises



October 2008

© 2008 Autodesk, Inc. All rights reserved. Except as otherwise permitted by Autodesk, Inc., this publication, or parts thereof, may not be reproduced in any form, by any method, for any purpose.

Certain materials included in this publication are reprinted with the permission of the copyright holder.

#### Trademarks

The following are registered trademarks or trademarks of Autodesk, Inc., in the USA and other countries: 3DEC (design/logo), 3December, 3December.com, 3ds Max, ADI, Alias, Alias (swirl design/logo), AliasStudio, AliaslWavefront (design/logo), ATC, AUGI, AutoCAD, AutoCAD Learning Assistance, AutoCAD LT, AutoCAD Simulator, AutoCAD SQL Extension, AutoCAD SQL Interface, Autodesk, Autodesk Envision, Autodesk Insight, Autodesk Intent, Autodesk Inventor, Autodesk Map, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSnap, AutoSketch, AutoTrack, Backdraft, Built with ObjectARX (logo), Burn, Buzzsaw, CAiCE, Can You Imagine, Character Studio, Cinestream, Civil 3D, Cleaner, Cleaner Central, ClearScale, Colour Warper, Combustion, Communication Specification, Constructware, Content Explorer, Create>what's>Next> (design/logo), Dancing Baby (image), DesignCenter, Design Doctor, Designer's Toolkit, DesignKids, DesignProf, DesignServer, DesignStudio, DesignStudio (design/logo), Design Web Format, DWF, DWG, DWG (logo), DWG Extreme, DWG TrueConvert, DWG TrueView, DXF, Ecotect, Exposure, Extending the Design Team, FBX, Filmbox, FMDesktop, Freewheel, GDX Driver, Gmax, Green Building Studio, Heads-up Design, Heidi, HumanIK, IDEA Server, idrop, ImageModeler, iMOUT, Incinerator, Inventor, Inventor LT, Kaydara, Kaydara (design/logo), Kynapse, Kynogon, LandXplorer, LocationLogic, Lustre, Matchmover, Maya, Mechanical Desktop, MotionBuilder, Movimento, Mudbox, NavisWorks, ObjectARX, ObjectDBX, Open Reality, Opticore, Opticore Opus, PolarSnap, PortfolioWall, Powered with Autodesk Technology, Productstream, ProjectPoint, ProMaterials, RasterDWG, Reactor, RealDWG, Real-time Roto, REALVIZ, Recognize, Render Queue, Retimer, Reveal, Revit, Showcase, ShowMotion, SketchBook, SteeringWheels, Stitcher, StudioTools, Topobase, Toxik, TrustedDWG, ViewCube, Visual, Visual Construction, Visual Drainage, Visual Landscape, Visual Survey, Visual Toolbox, Visual LISP, Voice Reality, Volo, Vtour, Wiretap, and WiretapCentral.

The following are registered trademarks or trademarks of Autodesk Canada Co. in the USA and/or Canada and other countries: Backburner, Discreet, Fire, Flame, Flint, Frost, Inferno, Multi-Master Editing, River, Smoke, Sparks, Stone, and Wire.

The following are registered trademarks or trademarks of Moldflow Corp. in the USA and/or other countries: Moldflow

MPA, MPA (design/logo), Moldflow Plastics Advisers, MPI, MPI (design/logo), Moldflow Plastics Insight, MPX, MPX (design/logo), Moldflow Plastics Xpert.

All other brand names, product names or trademarks belong to their respective holders.

#### Disclaimer

THIS PUBLICATION AND THE INFORMATION CONTAINED HEREIN IS MADE AVAILABLE BY AUTODESK, INC. "AS IS." AUTODESK, INC., DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THESE MATERIALS.

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

# Tutorial 4 — Advanced Exercises

In this tutorial, you learn how to create 3D effects, use the Web tools called eTransmit, hyperlinks, and generate a database report.

More information about each of the concepts in this tutorial is available in the AutoSketch<sup>®</sup>Help system.

# In this tutorial

Ŧ

- Create 3D Effects
- Use Web Tools
- Generate a Database Report

# **Create 3D Effects**

## In this exercise, you learn to

- □ Create a 3D parallel extrusion.
- □ Use the Standard toolbar.
- □ Use the 3D Effects toolbar.

While two-dimensional drawings are the basic building blocks of most projects, you might need a three-dimensional view of a project. In AutoSketch, you can simulate three-dimensional drawings through *parallel* and *perspective* extrusion.

- 3D parallel extrusion creates a copy of the selection set that you place in the drawing. AutoSketch connects corresponding edges with lines or polygons. You learn how to create a 3D parallel extrusion in this exercise.
- 3D perspective extrusion creates a scaled copy of the selection set. You
  place the copy anywhere in the drawing, and AutoSketch connects the
  corresponding edges using lines or polygons.

### To apply parallel extrusion to an entity

1 On the File menu, click New. In the New dialog box, click Start a Drawing Immediately, and then click OK.



Now, you reset the interface to make sure your settings match the tutorial's instructions.

**2** On the View menu, click Toolbars.



- 3 In the Toolbars dialog box, in the lower-right corner, click Reset Interface.
- 4 In the warning message that is displayed, click Yes.

AutoSke	tch 🛛 🕅
⚠	This command will change the position and visibility of all of the toolbars. This will destroy any customization made to the toolbar layout. Are you sure that you want to do this?
	Yes No

Your drawing window is now opened and set up for this tutorial.



**6** On the All-In-One toolbar, click the Circle button.



ဨ

- 7 On the toolset, drag the pointer to select Center, Side Circle.
- 8 In the drawing, create two circles of roughly the same size.Your drawing should look similar to the following illustration.





**9** On the Standard toolbar, click the 3D Effects button. The 3D Effects toolbar is displayed.

<u>ö</u> 🗘 🗅		¢:	Ø	
--------------	--	----	---	--

**10** Click the circle that is closer to the bottom of the drawing.





**11** On the 3D Effects toolbar, click the 3D Parallel Extrusion button. **12** In the drawing, click the bottom circle again.



This is the first of two points that define the distance and direction that the selection set will be extruded. A rubber-band extrusion appears and moves the same distance and direction as the pointer.



- **13** Click the edge of the second circle. The selection set is extruded.
- **14** Right-click to end the command.

Your drawing should look similar to the following illustration.



- **15** On the File menu, click Close.
- **16** In the Save Changes to Drawing dialog box, click No.

# Use Web Tools

AutoSketch Web tools include Web editing tools (such as eTransmit, and hyperlinks creation).

# Use eTransmit

## In this exercise, you learn to

- □ Create a transmittal set of an AutoSketch drawing and related files.
- **□** Email the transmittal set (an Internet connection is required).
- □ Check the receipt of the transmittal set and save it (an Internet connection is required).

With eTransmit, you can create a transmittal set of an AutoSketch drawing that automatically includes all related files. You then publish the transmittal set as an email attachment.

When you use eTransmit, a report file is automatically generated that includes instructions detailing what files are included in the transmittal set and what must be done with them so that they are usable by the original drawing. You can also do the following:

- Add notes to the report and specify password protection for the transmittal set.
- Specify path options for the transmittal set and create a self-extracting executable or zip file that packages all the files.

# To create a transmittal set

1 On the File menu, click Open.



- 2 In the Open Drawing File dialog box, in the *Drawings* folder, click *Birdhouse\_final.skf*. Then, click Open. (This drawing is the completed drawing that you worked on in Tutorial 1, "Create a Birdhouse Drawing.")
- **3** On the File menu, click eTransmit.

Current Drawing: C:\Program Files\Autodesings\Birdhouse_final.SKF ieneral Files Report  Notes:  Let's create a birdhouse this weekend, based on the drawing I created in AutoSketch.  Lype: Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd:\dir\file.ext' will be stored as 'dir\file.ext' Make web page files	ansmit				?
Notes: Let's create a birdhouse this weekend, based on the drawing I created in AutoSketch. Uppe: Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd'\dri\file.ext' will be stored as 'dri\file.ext' 		Files\Autode	esings\Birdhous	e_final.SKF	
Iype:         Set of Files         Path processing:         Preserve path without drive letter         Ex: 'd:\drivfile.ext' will be stored as 'dir\file.ext'         Make web page files	Theo Tropon				
Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd:\dri\file.ext' will be stored as 'dir\file.ext' Make web page files	Let's create a birdhouse this week	kend, based (	on the drawing I o	reated in AutoSketch	r. 🔼
Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd:\dri\file.ext' will be stored as 'dir\file.ext' Make web page files					
Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd:\dri\file.ext' will be stored as 'dir\file.ext' Make web page files					
Set of Files Password [No password set] Path processing: Preserve path without drive letter Ex: 'd:\dri\file.ext' will be stored as 'dir\file.ext' Make web page files	Тире:		2 2		
Preserve path without drive letter       Ex: 'd:\dri\file.ext'       Make web page files		×	Pass <u>w</u> ord	[No password set]	
Ex: 'd:\dir\file.ext' will be stored as 'dir\file.ext'	Path processing:				
Make web page files	Preserve path without drive letter		~		
	Ex: 'd:\dir\file.ext' will be st	ored as 'dir\fil	le.exť		
	<u>M</u> ake web page files				
			(	ок	Cancel

- **4** In the eTransmit dialog box, in the Notes section, add any notes you want.
- **5** In the Type list, select Set of Files.
- **6** Clear the check box next to Make Web Page Files. You don't make a Web page in this exercise.
- 7 Click OK.
- 8 If the Choose Profile dialog box is displayed, click OK.

Choose Profile			X
Profile Name:	Outlook2	•	New
ОК	Cancel	Help	Options >>

Your default email program opens with an email that contains the files, as shown in the following illustration.

🖂 Untitled - Messa	🖂 Untitled - Message (Rich Text)						
Eile Edit View	Insert Forma	t <u>T</u> ools <u>A</u> ctions					
🔄 🔄 Send 🛛 🔛 🎒	Х 🖻 🛍	🛃 () 🔯 🕵					
Verdana	• 10 •	<u>Α</u> Β Ι <u>U</u>					
O This message has n	ot been sent.						
To							
<u></u> c							
Subject:							
ан III. 11	Ø	8					
Birdhouse_final.txt a (741 B)	arial.ttf (304 KB)	Birdhouse_final.SKF (122 KB)					

- 9 In your email program, enter your own email address, and send the email.
- **10** Check your email inbox, and save the transmitted files.
- 11 In AutoSketch, on the File menu, click Close. Do not save your work.

# **Create a Hyperlink**

# In this exercise, you learn to

- □ Assign a hyperlink to a Web site.
- □ Open the Web site (an Internet connection is required).

You can assign hyperlinks to entities in your drawings that point to Web pages, or to other files stored on local servers or on the Internet.

# To assign a hyperlink to a Web site

1 On the File menu, click Open.



**2** In the Open Drawing File dialog box, in the *Drawings* folder, click *Jig.skf*. Then, click Open.

The drawing you opened should match the following illustration.



**3** Click and drag your pointer from the top left portion of the illustration on the left to the lower-right corner of that illustration. When all of the entities in the illustration on the left are selected, release the mouse.



The drawing should match the following illustration.

**4** With the entity still selected, right-click, and then click Group. Do not right-click again, because you want the entity to remain selected.

The individual entities are now grouped into a single entity. Now, assign a hyperlink to this grouped entity.

- **5** On the Database menu, click Edit.
- **6** In the Edit Hyperlink dialog box, in the Hyperlink (File or URL) text box, enter **www.autodesk.com**, and then click OK.

Edit Hyperlink	?
Hyperlink (File or URL):	Browse OK
www.autodesk.com	Cancel

The entity you grouped is now hyperlinked to the Autodesk Web site.



**7** Anywhere in the grouped entity, right-click, and then click Jump to Hyperlink.

If you have an Internet connection, the Web site now opens.

# **Generate a Database Report**

# In this exercise, you learn to

- □ View a symbol's properties.
- □ Select a database report.
- □ Run a report.
- □ Print a report.

The office plan you use for this exercise is a simple office plan, much like the office layout you created in an earlier tutorial. This drawing contains several symbols, each of which represents individual office items that can be ordered from a manufacturer. Using the database feature in AutoSketch, you can create a database report to run when the time comes to order the items.

# To create a database report

1 On the File menu, click Open.

🕅 Open Drawing	g File				? 🔀
Look jn:	🛅 Drawings		✓	here a subserve -	(iews ▼ Tooļs ▼
History History My Documents Favorites Favorites Desktop	Name demodb. dassembly Birdhouse GasSite3. Home2.Si jg.skf Office5he padde do Dipid.skf Speaker.3 Castes.5 Caste	1.SKF .SKF _final.SKF SKF .SKF II.SKF ne.SKF kf	Si ▲ 221 k 720 k 39 k 208 k 171 k 62 k 39 k 29 k 282 k 138 k 80 k 122 k 192 k ↓	Preview         Image: Show Preview	
	File <u>n</u> ame:	Office_db.SKF			V Open V
	Files of <u>type</u> :	AutoSketch (*.SKF)			Cancel
					Options

**2** In the Open Drawing Files dialog box, in the *Drawings* folder, click *Office\_db.skf*. Then, click Open.

The drawing you opened should match the following illustration.



**3** In the drawing window, right-click the chair, and then click Symbol Properties to display the Symbol Properties dialog box.

Symbol Properties		? 🔀
<b>-</b> -		Inquire Again
Property Basepoint Scale Factor Aspect Angle Extent Size	Value 109.50", 78.00" 1.00, 1.00 1.00 135.00° 24.89", 24.89"	Close
Color Style Width Layer	0: Black (By-Layer) Solid (By-Layer) Hairline (By-Layer) 1	
UID Manufacturer (String) Vendor (String) Employee (String) Price (Number) Purchase Date (String) Symbol Name Symbol Name Symbol Description	5 Herman Miller Western Off. Equip, Beth Morgan 438.50 09-22-32 ChairOperator seating operator's chair	

The chair symbol contains a lot of information. Viewing the Symbol Libraries dialog box, you can find out this symbol's properties and values, such as its basepoint, scale factor, color, width, layer, name, and manufacturer. This information can be extracted to a database report.

- 4 In the Symbol Properties dialog box, click Close.
- **5** In the drawing, press CTRL-A to select all entities.
- **6** On the Database menu, click Report.



In the Database Report dialog box, you can see that one report, "Employee Inventory," is selected.

7 Click Report.

The Employee Inventory report is generated, as shown in the following illustration.

mployee Inventory						? 🔀
🖬 🎒 🖻 😫	Σ					Close
Manufacturer	SymName	Vendor	Price	UID	Employe	Update
Compag	CompKeyboard	CompuWa	89.47	47	Beth Mor	
Compag	CompCaseDesk	CompuWa	2940.76	46	Beth Mor	
Herman Miller	WrkSurfCrnr 24	Western 0	690.81	6	Beth Mor	
Herman Miller	WrkSurf 72x24	Western 0	488.92	11	Beth Mor	
Herman Miller	WrkSurf 24x24	Western 0	358.12	9	Beth More	
Herman Miller	FileL-4dr 18x30	Western 0	712.05	12	Beth More	
Herman Miller	ChairOperator	Western 0	438.50	5	Beth Mor	
Herman Miller	ChairConference	Western 0	554.20	13	Beth More	
NEC	CompMon 16	ABC Comp	822.90	15	Beth More	
<					>	



In the Employee Inventory window, on the toolbar, click the Print button. In the Report Print Options dialog box, click Print to print the Employee Inventory report.

Report Print Option	Report Print Options 🛛 👔 🏹					
Report <u>T</u> itle: Employee Inventory ✓ Print <u>C</u> olumn Heading	js	Print Cancel				
Columns to Print: Column Title Manufacturer SymName Vendor Price UID Employee Purchase Date	Print? V V V V V V V	Footer ✓ Page Number User Text ✓ Date/Time				
Printer Adobe PDF Properties						

Nice work! You have completed all of the tutorials offered in *Getting Started*. Now, you can become more proficient with CAD, explore AutoSketch, and use the program for your drawing needs.

To find out how to perform tasks not highlighted in these tutorials, or to learn more conceptual information, see the AutoSketch Help system.