Initial Setup

With Initial Setup, you can perform some basic customization and configuration before you start AutoCAD® 2010 the first time.

AutoCAD 2010 - Initial S	Setup				
AutoCAD' 2010		Welcome to Auto	CAD 2010		
		You can start customizing closely describes your wor	AutoCAD 2010's drawing environment by selecting the industry that most *.		
What are the benefits of id industry?	lentifying my	<u>A</u> rchitecture			
How is this information bei	ing used?	<u>Civil Engineering</u>			
What happens if I skip initi	ial setup?	Electrical Engineering	ng		
	AutoCAD 2010	- Initial Setup			
	AutoCAD 2010		Specify a Drawing Template File		
			A drawing template (DWT) file is used to create new drawings that share the same set of styles and settings. Specify the default drawing template file that you want to use.		
	What is a drawing template file? How do I modify drawing templates at a later time?				
			Lyse AutoCAD 2010's default drawing template file Use my gxisting drawing template file		
	What happens if I	cancel initial setup?	Browse		
			Use the default drawing template file based on my industry and unit format: Industry: Architecture Ugis: Imperial (freet and Inches) v Vou can change the settings late by clicking Options from the application menu in AutoCAD 2010 to display the Options dialog box, Click the User Preferences tab to access these settings.		

TIPS

Add task-based ribbon panels and palettes to the default workspace.

With Autodesk[®] Seek, identify the industry that best describes your work to search for online content to use in your drawings.

Specify the default drawing template to use based on the industry that best describes your work.

Change settings later in the Options dialog box.

Initial Setup

FEATURES

- Identify the industry you work in when using Autodesk Seek and Autodesk.com
- Extend your workspace by adding task-based ribbon panels and palettes
- Specify the drawing template to use when creating a new drawing



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Jser Interface

InfoCenter

Use InfoCenter to search for information by entering a phrase, display the Autodesk[®] Subscription Center panel to access subscription services, and display the Communication Center panel for product-related updates and announcements. You can also display the Favorites panel to access saved topics.



TIPS

Use key words to search for information for better search results.

If you don't want to receive Communication Center notifications, in the InfoCenter Settings dialog box, turn off Balloon Notification. Click the links on a panel to display the Help topic, article, or document.

Click the link in the balloon message to open the article or announcement.

InfoCenter



Search

Displays the results from multiple search locations such as the User Guide, Command Reference, and online discussion groups

Subscription Center

Displays information related to product enhancements, or web support from Autodesk technical experts

Communication Center

Displays product-related updates, announcements, and RSS feeds

Favorites

Displays links that are marked as favorites in the Search Results, Subscription Center, and Communication Center panels

Help

AutoCAD[®] 2010

Displays topics in Help

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User Interface

Free-Form Design

Introduce flowing, free-form elements to your designs using enhanced mesh objects that you can smooth, refine, crease, and mold dynamically.



TIPS

Start mesh level of sm can increas needed. Preserve p by refining subobjects entire obje

Start mesh primitives at a level of smoothness that you can increase or decrease as needed. Use subobject selection filters to limit selections to faces, edges, or vertices.

Preserve program resources by refining specific mesh subobjects instead of the entire object. Create composite 3D objects by converting mesh objects to 3D solid or surface objects.

Free-Form Design

FEATURES

- Create seven easily modified mesh primitive models
- · Mold mesh models with creases, splits, and smoothing
- Convert between mesh and solids or surfaces
- Take advantage of enhanced 3D surface editing



MESHSMOOTH

Converts objects such as solids and surfaces to mesh $\ensuremath{\mathsf{MESH}}$

Creates easily edited primitive mesh objects MESHSMOOTHMORE, MESHSMOOTHLESS

Adjusts the smoothness of existing mesh objects MESHCREASE, MESHUNCREASE

Adjusts the sharpness of the edges of mesh faces **MESHREFINE**

Converts underlying facets to editable faces MESHSPLIT

Divides a mesh face into separate components

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Parametric Drawing

With parametric drawing, you add constraints to 2D geometry to control how objects are placed with respect to each other. In the design phase of a project, changes made to objects can adjust other objects automatically, and restrict distances and angles. This capability provides a way to enforce requirements when experimenting with different designs or making changes.



TIPS

Apply geometric constraints first, and then dimensional constraints. Use Fix constraints on objects that should not change location. Include mathematical expressions in dimensional constraints, and reference other dimensional constraints or userdefined variables.

Edit dimensional constraints with the Parameters Manager, the Properties palette, a double-click action, or grips. Control the display of geometric constraints and dimensional constraints. They can be turned on and off either individually or globally.

Parametric Drawing

FEATURES

- Maintain design specifications and requirements by constraining the geometry within a drawing
- Apply multiple geometric constraints to objects instantly
- Include formulas and equations within dimensional constraints
- Make design changes quickly by changing the value of a variable



GEOMCONSTRAINT

Establishes geometric relationships between selected objects. For example, you can constrain two lines to remain parallel to each other

DIMCONSTRAINT

Constrains objects to maintain specified distances or angles. For example, you can constrain two lines to maintain a 45 degree angle to each other

CONSTRAINTSETTINGS

Controls the display of geometric constraints in the drawing

PARAMETERS

Manages dimensional variables from a palette AUTOCONSTRAIN

Applies multiple geometric constraints to geometry automatically

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Document

Enhanced Dynamic Blocks

You can use geometric and dimensional constraints in dynamic blocks. Constraints add tabular data and regulate grip access to objects in blocks. This provides an easy method to control the size and shape of blocks representing families of parts such as fasteners, gears, structural steel, doors, and furniture.



TIPS

Constraint parameters control the size and angle of objects within a block. You can display and edit these values to change the size and shape of block references. Use construction geometry, which is hidden within a block definition, to help define the constraints in the block.

You can copy and paste data from a Microsoft Excel[®] spreadsheet when creating a block properties table. After defining the table for the block definition, you can easily modify the inserted block reference to any of the predefined values in the table.

Enhanced Dynamic Blocks

FEATURES

- · Create dynamic blocks that include constraints
- Define a table that contains parameters for a block definition
- Test new blocks without closing the Block Editor
- Organize parameters into constraint bars and action bars



BACTIONBAR

Displays or hides action bars in the Block Editor BCONSTRUCTION

Converts geometry into construction geometry

BCPARAMETER

Applies a dimensional constraint parameter to an object or between constraint points on objects

BESETTINGS

Controls fonts, colors, sizes, and other settings in the Block Editor

BTABLE

Defines a table of values of properties that determines the specified variations of a block

BTESTBLOCK

Displays a window to test a dynamic block without closing the Block Editor

PARAMETERS

Lists all the parameters in a block definition

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Document

3D Printing

3D printing is the process of creating physical models from 3D models. Autodesk[®] has partnered with several 3D printing services. Use the 3DPRINT command to prepare 3D models for printing before you send them to one of these companies.



TIPS

Visit the Au Printing we about Auto printing ser O Make sure y clearance b parts, such

Visit the Autodesk 3D Printing website to learn about Autodesk-approved 3D printing service providers. To avoid printing errors and broken parts, optimize your 3D model before printing.

Make sure you allow adequate clearance between moving parts, such as cogs or gears. If you scale a 3D model down, make sure it still meets minimum requirements for thickness.

3D Printing

FEATURES

- After you select the 3D solids you want to print, you can preview the output
- You can also set output dimensions or scale
- Save your optimized 3D model as an STL file



3DPRINT

Sends selected 3D solids and watertight meshes to a 3D printing service

3D printing service providers

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PDF Enhancements

With PDF Enhancements, you can quickly create PDFs from the ribbon. You can also attach a PDF as an underlay and snap to the PDF's vector geometry in a drawing.



TIPS

Quickly create single, multipage PDF files or multiple, single-page PDF files from the ribbon.

Specify the precise dpi for your field of practice with the Precision Preset Manager. Snap to geometry in a PDF underlay.

Drag PDF files from the desktop into AutoCAD[®].

Quickly override PDF driver settings from the ribbon.

PDF Enhancements

	- 12	⇔ - 🖨 ₹						
Home	Insert	Annotate Par	ametric N	/iew Man	age Outp	out PD	F Underlay	
Contrast Fade] 100 0	Display in Monochrome	Create Clipping	Remove Clipping	Show Underlay	PDF 	External References	Edit Lavers
	Adjust		Clip	ping		Options	5	PDF Layers

PUBLISH

Publish drawings to an electronic sheet set (DWF, DWFx, and PDF files) or to named plotter

EXPORTPDF

Create a PDF file and set individual page setup overrides on a sheet-by-sheet basis

AUTOPUBLISH

Publish drawings to DWF, DWFx, or PDF files to a specified location

PDFADJUST

Adjust the fade, contrast, and monochrome settings of a PDF underlay

PDFATTACH

Attach a PDF file as an underlay to a drawing

PDFFRAME

Ο

AutoCAD[®] 201

Determine visibility of the PDF underlay frame

PDFLAYERS

Control the display of layers in a PDF underlay PDFCLIP

Clip the display of a selected PDF underlay to a specified boundary

PDFOSNAP

Snap to the geometry of the PDF underlay

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Communicate

Application Menu

Click the Application button to search for commands, browse documents, and access common tools to create, open, and publish a drawing.



AutoCAD[®] 2010

User Interface

TIPS

Use the Search field at the top of the Application menu to find text in menu commands, basic tooltips, command prompt text strings, or tags.

Create personalized tags for menu commands to make them easier to find by using the Customize User Interface (CUI) Editor.

Keep a file in the Recent Documents list by selecting the push pin next to the file.

Application Menu

FEATURES

- Search for commands on the Quick Access toolbar, in the Application menu, and on the ribbon
- View, sort, and access supported files
- Quickly create, open, or publish a drawing



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Action Recorder Enhancements

The Action Recorder has been enhanced. You can insert base points into an action macro, manage action macros, and record and modify the values of actions.



With the Action Macro Manager, you can delete one or more action macros at a time.

You can locate stored action macros using the Options button in the Action Macro Manager.

During playback, you can request a new coordinate point for each inserted base point in an action macro.

While recording, you can enter a specific value or press Enter to record the default value.

Action Recorder Enhancements

FEATURES

- Manage action macros with the Action Macro Manager
- Insert a base point to request a user-defined point when the action macro is played back
- Record the current default value or the value that is current during playback

macro_1	<u>C</u> opy
macro_2	
	<u>R</u> ename
	Modify
	Delete
Options	Close <u>H</u> elp

ACTBASEPOINT

Inserts a basepoint in an action macro ACTMANAGER

Manages action macro files

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Customize

Customization Enhancements

The Customize User Interface (CUI) Editor has been enhanced to offer new and improved ways of customizing the user interface. These enhancements include ribbon contextual tab states and a new workflow for customizing the Quick Access toolbar.



AutoCAD[°] 201

Customize

images used by your custom commands into the new CUIx package file format.

TIPS

You can control the display of tools based on the current command or selected object with ribbon contextual tab states.

Import and export custom

Manage and create Quick Access toolbars like other user interface elements with the CUI Editor.

Dashboard panels created in AutoCAD[®] 2008 can be converted to ribbon panels.

Customization Enhancements

FEATURES

- Create ribbon panels from dashboard panels
- Manage custom images for custom commands with the new CUIx package file format
- Display a specific ribbon tab when a command is active or an object is selected with ribbon contextual tab states
- Organize commands on the Quick Access toolbar (QAT) and control the placement of the QAT



CUI

201C

utoCAD

Displays the Customize User Interface (CUI) Editor

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