AutoCAD® 2000 System Variables

Total number of system variables documented: **376**
Total number of the best system variables   **58**

System Variable	**Command(s) affected**

1. ACADLSPASDOC   TOOLS/OPTIONS
Type: Integer, Saved in: Registry,Initial value: 0
Controls whether AutoCAD loads the acad.lsp file into every drawing or just the first drawing opened in an AutoCAD session.
0 → Loads acad.lsp into just the first drawing opened in an AutoCAD session
1 → Loads acad.lsp into every drawing opened

2. ANGBASE   DDUNITS
Type: Real   UNITS
Type: Real, Saved in: Drawing, Initial value: 0.0000
Sets the base angle to 0 with respect to the current UCS.

3. ANGDIR   DDUNITS
Type: Integer   UNITS
Type: Integer, Saved in: Drawing, Initial value: 0
Sets the positive angle direction from angle 0 with respect to the current UCS.
0 → Counterclockwise
1 → Clockwise

4. AREA   AREA
(Read-only)   DBLIST
Type: Real   LIST
Not saved
AREA is both a command and a system variable. The AREA system variable stores the last area computed by the AREA, LIST or DBLIST commands. Because entering area at the Command prompt invokes the AREA command, you must use the SETVAR command to access the AREA system variable.

5. ATTMODE   ATTDISP
Type: Integer,Saved in: Drawing,Initial value: 1
Controls display of attributes.
0 → Off: Makes all attributes invisible
1 → Normal: Retains current visibility of each attribute: visible attributes are displayed; invisible attributes are not
2 → On: Makes all attributes visible

6. AUNITS   DDUNITS
Type: Integer   UNITS
Type: Integer, Saved in: Drawing, Initial value: 0
Sets units for angles
0 → Decimal degrees   1 → Degrees/minutes/seconds 2 → Gradiens,   3 → Radians,
4 → Surveyor's units

7. BLIPMODE   DDRMODES
Type: Integer   BLIPMODE
Type: Integer, Saved in: Registry, Initial value: 0
Controls whether marker blips are visible.
0 → Turns off marker blips
1 → Turns on marker blips

8. CELTSCALE   DDLTYPE
Type: Real   DDEMODES
Saved in: Drawing   LINETYPE
Initial value: 1.0000   STATUS
Sets the current object linetype scaling factor. Sets the linetype scaling for new objects relative to the LTSCALE command setting. A line created with CELTSCALE = 2 in a drawing with LTSCALE set to 0.5 would appear the same as a line created with CELTSCALE = 1 in a drawing with LTSCALE = 1.

9. CHAMMODE   CHAMFER
Type: Integer, Not saved, Initial value: 0
Sets the input method by which AutoCAD creates chamfers.
0 → Requires two chamfer distances
1 → Requires one chamfer distance and an angle

10. CIRCLERAD   CIRCLE
Type: Real, Not saved, Initial value: 0.0000
Sets the default circle radius. A zero indicates no default.

11. COORDS   Environment
Type: Integer, Saved in: Registry, Initial value: 1
Controls when coordinates are updated on the status line.
0 → Coordinate display is updated as you specify points with the pointing device
1 → Display of absolute coordinates is updated continuously
2 → Display of absolute coordinates is updated continuously, and distance and angle from last point are displayed when a distance or angle is requested

12. CURSORSIZE   TOOLS/OPTIONS
Type: Integer, Saved in: Registry, Initial value: 5
Determines the size of the crosshairs as a percentage of the screen size. Valid settings range from 1 to 100 percent. When set to 100, the crosshairs are full-screen and the ends of the crosshairs are never visible. When less than 100, the ends of the crosshairs may be visible when the cursor is moved to one edge of the screen.

13. EDGEMODE   TRIM
Type: Integer   EXTEND
Saved in: Registry
Initial value: 0
Controls how the TRIM and EXTEND commands determine cutting and boundary edges.
0   Uses the selected edge without an extension
1   Extends or trims the selected object to an imaginary extension of the cutting or boundary edge

Lines, arcs, elliptical arcs, rays, and polylines are objects eligible for natural extension. The natural extension of a line or ray is an unbounded line (xline), an arc is a circle, and an elliptical arc is an ellipse. A polyline is broken down into its line and arc components, which are extended to their natural boundaries.

14. EXPLMODE   EXPLODE
Type: Integer, Not saved, Initial value: 1
Controls whether the EXPLODE command supports nonuniformly scaled (NUS) blocks.
0 → Does not explode NUS blocks
1 → Explodes NUS blocks

15. FILEDIA   Environment
Type: Integer, Saved in: Register, Initial value: 1
Controls the display of dialog boxes that read and write files. If you prefer to enter file names on the command line, set FILEDIA to off (0). If FILEDIA is set to off and you want to use the dialog box, enter a ~ (tilde) at the file name prompt.
FILEDIA controls the display of file listing dialog boxes. Set FILEDIA to 1 to enable these dialog boxes.
0   Command line, 1   Dialog Box

16. FILLETRAD   FILLET
Type: Real, Saved in: Drawing, Initial value: 0.5000
Stores the current fillet radius.

17. FILLMODE   DDRMODES
Type: Integer, Saved in: Drawing, Initial value: 1
Specifies whether multilines, traces, solids, all hatches (including solid-fill), and wide polylines are filled in.
0   Objects are not filled, 1   Objects are filled

18. GRIDMODE   DDRMODES
Type: Integer, Saved in: Drawing, Initial value: 0
Specifies whether the grid is turned on or off.
0   Turns the grid off, 1   Turns the grid on

19. GRIDUNIT   DDRMODES
Type: 2D point, Saved in: Drawing, Initial value: 0.5000,0.5000
Specifies the grid spacing (X and Y) for the current viewport.

20. GRIPS   DDGRIPS
Type: Integer, Saved in: Registry, Initial value: 1
Controls the use of selection set grips for the Stretch, Move, Rotate, Scale, and Mirror Grip modes.
0   Turns off grips, 1   Turns on grips

To adjust the size of the grips and the effective selection area used by the cursor when you snap to a grip, use GRIPSIZE.

21. GRIPSIZE   DDGRIPS
Type: Integer, Saved in: Registry, Initial value: 10
Sets the size of the grip box in pixels. The valid range is 1 to 255.

22. HIGHLIGHT   DDRMODES
Type: Integer, Not saved, Initial value: 1
Controls object highlighting; does not affect objects selected with grips.
0   Off & 1   On

23. HPANG   HATCH
Type: Real, Not saved, Initial value: 0
Specifies the hatch pattern angle.

24. ISOLINES   Display
Type: Integer, Saved in: Drawing, Initial value: 4
Specifies the number of isolines per surface on objects. Valid integer values are from 0 to 2047.
0   Minimum, 4   Default, & 2047 Maximum

25. LASTANGLE   ARC
(Read-only), Type: Real, Not saved
Stores the end angle of the last arc entered relative to the XY plane of the current UCS for the current space.

26. LASTPOINT   Most commands
Type: 3D point, Not saved, Initial value: 0.0000,0.0000,0.0000
Stores the last point entered, expressed as a UCS coordinate for the current space; referenced by the at symbol (@) during keyboard entry.

27. LIMCHECK   Most commands
Type: Integer, Saved in: Drawing, Initial value: 0
Controls the creation of objects outside the drawing limits.
0   Objects can be created outside the limits
1   Objects cannot be created outside the limits

28. LIMMAX   LIMITS
Type: 2D point, Saved in: Drawing,Initial value: 12.0000,9.0000
Stores the upper-right drawing limits for the current space, expressed as a world coordinate.
LIMMAX is read-only when paper space is active and the paper background or paper margins are displayed.

29. LIMMIN   LIMITS
Type: 2D point, Saved in: Drawing, Initial value: 0.0000,0.0000
Stores the lower-left drawing limits for the current space, expressed as a world coordinate.
LIMMIN is read-only when paper space is active and the paper background or paper margins are displayed.

30. LUNITS   DDUNITS
Type: Integer, Saved in: Drawing, Initial value: 2
Sets linear units.
1   Scientific, 2   Decimal, 3   Engineering, 4 Architectural
5   Fractional

31. LWDISPLAY   LWEIGHT
Type: Integer, Saved in: Drawing, Initial value: 0
Controls whether the lineweight is displayed on the Model or Layout tab. The setting is saved with each tab in the drawing.
0   Lineweight is not displayed
1   Lineweight is displayed

32. LWUNITS   LWEIGHT
Type: Integer
Saved In: Registry
Initial value: 1
Controls whether lineweight units are displayed in inches or millimeters.
0   Inches
1   Millimeters

33. MODEMACRO *Environment*

Type: String, Not saved, Initial value: ""

Displays a text string on the status line, such as the name of the current drawing, time/date stamp, or special modes.

Use MODEMACRO to display a string of text, or use special text strings written in the DIESEL macro language to have AutoCAD evaluate the macro from time to time and base the status line on user-selected conditions. For details, see chapter 5, "Using DIESEL — String Expression Language," in the Customization Guide .

34. ORTHOMODE *Environment*

Type: Integer, Saved in: Drawing, Initial value: 0

Constrains cursor movement to the perpendicular. When ORTHOMODE is turned on, the cursor can move only horizontally or vertically relative to the UCS and the current grid rotation angle.

0 → Turns off Ortho mode

1 → Turns on Ortho mode

35. OSMODE All drawing and modify commands

Type: Integer, Saved in: Registry, Initial value: 4133

Sets running Object Snap modes using the following bitcodes.

0 → NONe, 1 → ENDpoint, 2 → MIDpoint, 4 → CENter, 8 → NODe, 16 → QUAdrant,

32 → INTersection, 64 → INSertion, 128 → PERpendicular, 256 → TANgent, 512 → NEArest,

1024 → QUIck, 2048 → APParent Intersection, 4096 → EXTension, 8192 → PARallel

To specify more than one object snap, enter the sum of their values. For example, entering 3 specifies the Endpoint (bitcode 1) and Midpoint (bitcode 2) object snaps. Entering 16383 specifies all object snaps.

When object snaps are switched off using the Osnap button on the status bar, a bitcode of 16384 (0x4000) is returned, in addition to the normal value of OSMODE. With this additional value developers can write applications for AutoCAD, and distinguish this mode from Object Snap modes that have been turned off from within the Drafting Settings dialog box. Setting this bit toggles running object snaps off. Setting OSMODE to a value with this bit off toggles running object snaps on.

36. OSNAPCOORD Environment

Type: Integer, Saved in: Registry, Initial value: 2

Controls whether coordinates entered on the command line override running object snaps.

0 → Running object snap settings override keyboard coordinate entry

1 → Keyboard entry overrides object snap settings

2 → Keyboard entry overrides object snap settings except in scripts

37. PERIMETER AREA

(Read-only) LIST

Type: Real DBLIST

Not saved

Stores the last perimeter value computed by the AREA, DBLIST, or LIST commands. Displays on the command line.

38. PSVPSCALE Display

Type: Real

Not Saved

Initial Value: 0.000000000

Sets the view scale factor for all newly created viewports. The view scale factor is defined by comparing the ratio of units in paper space to the units in newly created model space viewports. The view scale factor you set is used with the VPORTS command. A value of 0 means the scale factor is Scaled to Fit. A scale must be a positive real value.

39. SAVEFILE   Environment
(Read-only)
Type: String
Saved in: Registry
Initial value: ""
Stores the current automatic save file name.

40. SAVEFILEPATH   Environment
Type: String
Saved in: Registry
Initial value: "C:\TEMP\"
Specifies the path to the directory for all automatic save files for the AutoCAD session. You can also change the path on the Files tab in the Options dialog box.

41. SCREENSIZE   Environment
(Read-only)
Type: 2D point
Not saved
Stores current viewport size in pixels (X and Y).

42. SHORTCUTMENU   Environment
Type: Integer
Saved in: Registry
Initial value: 11
Controls whether Default, Edit, and Command mode shortcut menus are available in the drawing area. SHORTCUTMENU uses the following bitcodes:
0   Disables all Default, Edit, and Command mode shortcut menus, restoring R14 legacy behavior.
1   Enables Default mode shortcut menus.
2   Enables Edit mode shortcut menus.
4   Enables Command mode shortcut menus. In this case, the Command mode shortcut menu is available whenever a command is active.
8   Enables Command mode shortcut menus only when command options are currently available from the command line.

To enable more than one type of shortcut menu at once, enter the sum of their values. For example, entering 3 enables both Default (1) and Edit (2) mode shortcut menus.

43. SKETCHINC   SKETCH
Type: Real
Saved in: Drawing
Initial value: 0.1000
Sets the record increment for the SKETCH command. It can be any value greater than zero but a very small number will use a lot of memory.

44. SKPOLY   SKETCH
Type: Integer
Saved in: Drawing
Initial value: 0
Determines whether the SKETCH command generates lines or polylines.
0   Generates lines
1   Generates polylines

45. SNAPANG   All drawing and modifying commands
Type: Real   DDRMODES
Saved in: Drawing
Initial value: 0
Sets the snap and grid rotation angle for the current viewport. The angle you specify is relative to the current UCS.
Changes to this variable are not reflected in the grid until the display is refreshed. AutoCAD does not redraw automatically when system variable settings are changed.

46. SNAPBASE   All drawing and modifying commands
Type: 2D point   DDRMODES
Saved in: Drawing
Initial value: 0.0000,0.0000
Sets the snap and grid origin point for the current viewport relative to the current UCS.

Changes to this variable are not reflected in the grid until the display is refreshed. AutoCAD does not redraw automatically when system variable settings are changed.

47. SNAPISOPAIR   All drawing and modifying commands
Type: Integer   DDRMODES
Saved in: Drawing
Initial value: 0
Controls the isometric plane for the current viewport.
0   Left Isometric
1   Top Isometric
2   Right Isometric

48. SNAPMODE   All drawing and modifying commands
Type: Integer   DDRMODES
Saved in: Drawing
Initial value: 0
Turns the Snap mode on and off.
0   Snap off
1   Snap on for the current viewport

49. SNAPSTYL   All drawing and modifying commands
Type: Integer   DDRMODES
Saved in: Drawing
Initial value: 0
Sets the snap style for the current viewport.
0   Standard (rectangular snap)
1   Isometric snap

50. SNAPTYPE   All drawing and modifying commands
Type: Integer   DDRMODES
Saved in: Registry
Initial Value: 0
Sets the snap style for the current viewport.
0   Grid, or standard snap.
1   Polar snap. Snaps along polar angle increments. Use polar snap with polar and object snap tracking.

51. SNAPUNIT   All drawing and modifying commands
Type: 2D point   DDRMODES
Saved in: Drawing
Initial value: 0.5000,0.5000
Sets the snap spacing for the current viewport. If SNAPSTYL is set to 1, AutoCAD adjusts the X value of SNAPUNIT automatically to accommodate the isometric snap.
Changes to this system variable are not reflected in the grid until the display is refreshed.
AutoCAD does not redraw automatically when system variable settings are changed.

52. SPLFRAME   Display
Type: Integer   EDGE
Saved in: Drawing
Initial value: 0
Controls the display of splines and spline-fit polylines.
0   Does not display the control polygon for splines and spline-fit polylines. Displays the fit surface of a polygon mesh, not the defining mesh. Does not display the invisible edges of 3D faces or polyface meshes.
1   Displays the control polygon for splines and spline-fit polylines. Only the defining mesh of a surface-fit polygon mesh is displayed (not the fit surface). Invisible edges of 3D faces or polyface meshes are displayed.

53. SPLINESEGS   SPLINE
Type: Integer
Saved in: Drawing
Initial value: 8
Sets the number of line segments to be generated for each spline-fit polyline generated by the Spline option of the PEDIT command.
Valid settings range from −32768 to 32767. If you set SPLINESEGS to a negative value, AutoCAD generates segments using the absolute value of the setting, and then applies a fit-type curve to those segments. Fit-type curves use arcs as the approximating segments. Using arcs yields a smoother generated curve when few segments are specified, but the curve can take longer to generate.

54. SPLINETYPE   PEDIT
Type: Integer
Saved in: Drawing
Initial value: 6
Sets the type of curve generated by the Spline option of the PEDIT command.

5   Quadratic B-spline
6   Cubic B-spline

55. TRACKPATH   POLAR SNAP
Type: Integer   OBJECT SNAP
Saved in: Registry   TRACKING
Initial value: 0
Controls the display of polar and object snap tracking alignment paths.
0   Displays full screen object snap tracking path
1   Displays object snap tracking path only between the alignment point and From point to cursor location
2   Does not display polar tracking path
3   Does not display polar or object snap tracking paths

56. TRIMMODE   CHAMFER
Type: Integer   FILLET
Saved in: Registry
Initial value: 1
Controls whether AutoCAD trims selected edges for chamfers and fillets.
0   Leaves selected edges intact
1   Trims selected edges to the endpoints of chamfer lines and fillet arcs

57. WHIPARC   Display
Type: Integer
Saved in: Registry
Initial value: 0
Controls whether the display of circles and arcs is smooth.
0   Circles and arcs are not smooth, but rather are displayed as a series of vectors.
1   Circles and arcs are smooth, displayed as true circles and arcs.

58. ZOOMFACTOR   Display – Intellimouse support
Type: Interger
Saved in: Registry
Initial value: 10
Accepts an integer between 3 and 100 as valid values. The higher the number, the more incremental the change applied by each mouse-wheel's forward/backward movement.