Bricsys®

System variable reference

Product Documentation

Bricsys®

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1. System variable reference

The System variable reference gives an overview of all the system variables in BricsCAD.

System variables and preferences variables are used to save BricsCAD settings and user preferences. They can be accessed through the Settings dialog box. Many system variables correspond to other CAD software. When a variable is BricsCAD specific, this is indicated as well.

Note: The AUTOCOMPLETEMODE system variable value defines whether system and/or preference variables are recognized when typing in the Command line.

1.1 System variable data types

- **Boolean**: the value is either 1 or 0 (True or False, Yes or No).
- **Short**: integer value in the range of −32,768 to +32,767.
- **Long**: integer value in the range of −2,147,483,648 to +2,147,483,647.
- **Real**: floating point numbers with a period for a decimal point and no thousands separator.
- **String**: text.
- **String Standard**: text according to a specific format, for example a folder path.

  Note: String Standard system variables support multiple folder paths. Use semicolons (;) to separate the file paths.

- **3D point**: specifies a point in a 3D space.
- **2D point**: specifies a point in the XY-plane.
- **Bit flag variables**: integer variable controlled by bit codes. The value of this variable changes by adding or removing options.

Entity snap mode	0x0007 (7)
1	☑ Endpoint
2	☑ **Midpoint**
4	☑ **Center**
8	☐ Node
16	☐ Quadrant
32	☐ **Intersection**
64	☐ Insertion
128	☐ Perpendicular
256	☐ Tangent
512	☐ Nearest
1024	☐ Geometric center
2048	☐ Apparent intersection
4096	☐ Extension
8192	☐ Parallel
16384	☐ Turn off all snaps

1.2 System variables save location

- Windows **registry** (or **config** file for macOS and Linux): the value is saved in a user profile. When you start BricsCAD, the values of the current user profile are loaded. The values apply to all drawings in the current BricsCAD session. The current user profile is set in the **User Profile Manager** dialog box. Launch the PROFILEMANAGER command to open this dialog box.
- **Drawing**: the value is saved in the drawing and applies to that drawing only.

- **Preference**: the value is saved in a user profile. When you start BricsCAD the values of the current user profile are loaded. The values apply to all drawings in the current BricsCAD session.
- **NOT saved**: the default value is hard-coded, and the new value is not saved when BricsCAD is restarted.
- **Workspace**: the value is saved in the current workspace.

Note: The distinction between system and preference variable is strictly about whether the setting is marked as a system variable (save="reg") or user preference (save="prf") in settings.xml.

1.3 Editing system variables

The system variables have a default value which can be edited:

- Through the **Settings** dialog box.
- By typing it in the Command line.

In the **Settings** dialog box, you can also filter variables that are no longer set to their default value.

1.4 Searching for variables

You can use the SETVAR command to search for a variable.

2. _

2.1 _QUADTABFLAGS system variable

2.1.1 Quad tab flags

Temporary setting used while new Quad tab layout is implemented.

The value is stored as a bitcode using the sum of the values of all selected options.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 31
Default value:	12
Possible options:	1: Fixed width tabs 2: Center tab labels 4: Tab borders 8: Double tab height 16: Show 3D Solid mass properties

2.2 _VERNUM system variable

2.2.1 Version number (Read Only)

Shows the program version number.

Type:	String
Saved in:	Not saved

3. 2

3.1 2DCONSTRAINTFLAGS system variable

3.1.1 2D Constraint Flags

Controls behavior during solving 2D constraints.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Keeps directions of segments and arcs. 1: Disables segments.

4. 3

4.1 3DCOMPAREMODE system variable

4.1.1 Compare mode

Controls the visualization for the 3DCOMPARE command.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	3
Possible values:	0: First model on the left, second model on the right. 1: First model with differences on the left, second model on the right. 2: First model on the left, second model with differences on the right. 3: First model with differences on the left, second model with differences on the right. 4: Both models with all differences in one viewport. 5: Both models with all differences in one viewport. 6: Both models with all differences in one viewport. 7: Both models with all differences in one viewport.

4.2 3DOSMODE system variable

4.2.1 3D entity snap mode

Controls the 3D entity snap types.

Type:	Long
Saved in:	Registry
Range:	0 to 33023
Default value:	11

Possible values:	1: Turn off all 3D snaps 2: 3D Entity Vertices and Control Vertices of Splines 4: Midpoint of edge 8: Center of face 16: Spline Knot 32: Perpendicular to face 64: Nearest to face 128: Pointcloud nearest Point 32768: Intersection with face

4.3 3DSNAPMARKERCOLOR system variable

4.3.1 3d snap marker color

Controls the color of 3D snap markers. Values between 1 and 255 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	5

5. A

5.1 ACADLSPASDOC system variable

5.1.1 on_start.lsp for each doc

Loads the on_start_default.lsp, on_start.lsp, on_doc_load.lsp and on_doc_load_default.lsp files, for every new drawing.

If off, only loads these files for the first drawing.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Do not load on_start.lsp with every drawing On (1): Load on_start.lsp with every drawing

5.2 ACADPREFIX system variable

5.2.1 Program folder path (Read only)

List of support paths, with path separators if necessary.

Type:	String
Saved in:	Not saved

5.3 ACADVER system variable

5.3.1 AutoCAD version (Read Only)

Shows the AutoCAD compatible program version number.

Type:	String
Saved in:	Not saved

5.4 ACISHLRRESOLUTION system variable

5.4.1 Hidden line removal resolution

Controls the smallest distance used for Hidden Line Removal calculation.

Negative value is Auto-calibration based on the size of the model (recommended). For very small entities the value can be set to 0.001 or smaller.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	-1.0

5.5 ACISOUTVER system variable

5.5.1 Acisout version

Controls the ACIS version of the SAT files for the ACISOUT command.

Type:	Short
Saved in:	Not saved
Default value:	70

5.6 ADAPTIVEGRIDSTEPSIZE system variable

5.6.1 Adaptive grid step size

Controls the snap spacing for 'Adaptive Grid Snap' mode of SNAPTYPE system variable, in pixels. Also Controls the step size of the Manipulator ruler.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	4.0

5.7 AFLAGS system variable

5.7.1 Attribute options

Sets the default options for attribute creation.

Type:	Short

Saved in:	Not saved
Default value:	0
Possible options:	0: No mode selected 1: Invisible 2: Constant 4: Verify 8: Preset 16: Lock position 32: Multiline

5.8 ALLOWBREAKLINECROSSINGS system variable

5.8.1 Allow breakline crossings

If on, intersections between breakline segments are calculated and added as points to the TIN surface.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

5.9 ALLOWEDBENDANGLES system variable

5.9.1 Allowed bend angles

Sets allowed bend angles for MEP elements.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	1
Possible values:	1: Any 2: 90 4: 60 8: 45 16: 30

5.10 ALLOWTABEXTERNALMOVE system variable

5.10.1 Move tabs externally (Mac & Linux)

Allows a tab to be moved to another tab control, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't allow a tab to be moved externally On (1): Allow a tab to be moved externally

5.11 ALLOWTABMOVE system variable

5.11.1 Move tabs (Mac & Linux)

Allows a tab to be dragged horizontally, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't allow tabs to be moved On (1): Allow tabs to be moved

5.12 ALLOWTABSPLIT system variable

5.12.1 Split tabs (Mac & Linux)

Allows drag to split the tab control, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On

Possible values:	Off (0): Don't allow tabs to be split On (1): Allow tabs to be split

5.13 AMSYMSCALE system variable

5.13.1 Mechanical2D annotation scaling

Controls the display of Mechanical2D symbols and text in Model Space.

Type:	Real
Saved in:	Drawing
Default value:	1.0

Note: The minimum value is 1.0E-100.

5.14 ANGBASE system variable

5.14.1 Angle base

Controls the start location of angle 0.

Type:	Real
Saved in:	Drawing
Default value:	0.0

5.15 ANGDIR system variable

5.15.1 Angle direction

Toggles the angle direction clockwise/Counterclockwise.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Counter-clockwise On (1): Clockwise

5.16 ANGLESAMPLINGINTERVAL system variable

5.16.1 Angle sampling interval

Controls the angle sampling interval in decimal degrees, used to round gradings at convex vertices.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 90
Default value:	5

5.17 ANNOALLVISIBLE system variable

5.17.1 Annotation visibility

Hides or displays annotative entities that do not support the current annotation scale. The setting is saved individually for model space and each layout.

Type:	Short
Saved in:	Drawing
Default value:	1
Possible values:	0: Only annotative entities that support the current scale representation are displayed 1: All annotative entities are displayed

5.18 ANNOAUTOSCALE system variable

5.18.1 Annotation scaling

Synchronizes new annotative entities with the current annotation scale.

Type:	Short
Saved in:	Registry
Default value:	-4

Possible values:	0: Do not add to annotative entities. 1: Add to annotative entities that support it, except entities on locked, turned off, frozen or viewport-frozen layers. 2: Add to annotative entities that support it, except entities on turned off, frozen or viewport-frozen layers. 3: Add to annotative entities that support it, except entities on locked layers. 4: Add all annotative entities supporting it. -1: Do not add to annotative entities (toggled value 1). -2: Do not add to annotative entities (toggled value 2). -3: Do not add to annotative entities (toggled value 3). -4: Do not add to annotative entities (toggled value 4).

5.19 ANNOMONITOR system variable

5.19.1 Annotation monitor

Turns the annotation monitor on or off. When ON, a warning sign is displayed near the disassociated dimension.

Type:	Short
Saved in:	Drawing
Default value:	-2
Possible values:	-2: Annotation monitor is Off, any Model Documentation edit and update events automatically changes the value to 2. The status bar control toggles between 2 and -2. -1: Annotation monitor is Off. The status bar control toggles between 1 and -1. 0: Annotation monitor is Off. 1: Annotation monitor is On. The status bar control toggles between 1 and -1. 2: Annotation monitor is On. The status bar control toggles between 2 and -2.

5.20 ANNOTATIVEDWG system variable

5.20.1 Annotative drawing

Creates an annotative block when this drawing is inserted into another drawing.

Note: The ANNOTATIVEDWG system variable becomes read-only if the drawing contains annotative entities

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Not annotative On (1): Annotative

5.21 ANTIALIASRENDER system variable

5.21.1 Anti-alias amount for render

Controls the smoothness of the output of the RENDER command.

For values higher than 1, an anti-aliased output is calculated, at a cost, this increases with bigger values.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 5
Default value:	2
Possible values:	1: 1x1 (no anti-aliasing) 2: 2x2 3: 3x3 4: 4x4 5: 5x5 (maximum anti-aliasing)

5.22 ANTIALIASSCREEN system variable

5.22.1 Anti-alias amount for screen

Controls the smoothness of on-screen curve display.

CAUTION: When the visual style is set to 2DWireframe and the value is higher than 1, calculation of an anti-aliased display comes at a high performance cost. For the other display modes the calculation time is increased, but with lesser impact.

BricsCAD only

Type:	Short

Saved in:	Preference
Range:	1 to 5
Default value:	1
Possible values:	1: 1x1 (no anti-aliasing) 2: 2x2 3: 3x3 4: 4x4 5: 5x5 (maximum anti-aliasing)

5.23 APBOX system variable

5.23.1 Entity snap aperture box

Displays the Entity Snap aperture box, at the cursor, during a pick action. Entity snaps are activated when the aperture box passes over an entity. See also the APERTURE system variable.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Does not display the aperture box. On (1): Displays the aperture box.

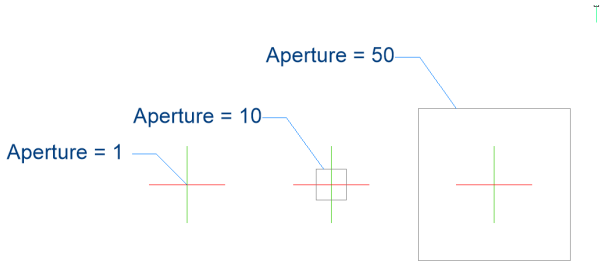
5.24 APERTURE system variable

5.24.1 Entity snap sensitivity

Controls the Aperture Box size, in pixels. Entity snaps are activated when the aperture box passes over an entity. To display the aperture box switch on the APBOX system variable.

Values between 1 and 50 are accepted.

Type:	Short
Saved in:	Registry
Range:	1 to 50
Default value:	10



5.25 ARCTESSELLATION system variable

5.25.1 Arc approximation mid-ordinate distance

Controls the surface mid-ordinate distance, the maximum distance between the arc and the chord (straight) segment, used for arc approximation.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.01

5.26 ARCTESSELLATIONGRADING system variable

5.26.1 Arc approximation mid-ordinate distance

Controls the grading mid-ordinate distance, the maximum distance between the arc and the chord (straight) segment, used for arc approximation.

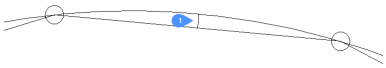
BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.01

5.27 ARCTESSELLATIONTEMPLATEELEMENT system variable

5.27.1 Template Element arc approximation mid-ordinate distance

Controls the corridor mid-ordinate distance (1), the maximum distance between the arc and the chord (straight) segment, used for arc approximation.



BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.01

5.28 AREA system variable

5.28.1 Area (Read Only)

The last calculated area by the AREA, LIST or DBLIST commands.

Type:	Real
Saved in:	Not saved

5.29 AREAPREC system variable

5.29.1 Area precision

Controls the number of decimal places displayed for areas, if area properties are formatted with the PROPUNITS system variable.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	-1

Possible values:	-1: Use the LUPREC system variable 0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

5.30 AREAUNITS system variable

5.30.1 Area units

Controls a list of units used to display areas, if area properties are formatted with the PROPUNITS system variable. If empty, all areas match the drawing.

Note: The string contains a space-separated list of unit abbreviations.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	in ft mi µm mm cm m km

5.31 ARRAYASSOCIATIVITY system variable

5.31.1 Associative arrays

Creates new arrays as associative arrays.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Not associative On (1): Associative

5.32 ARRAYEDITSTATE system variable

5.32.1 Array edit state (Read Only)

Displays if an associative array's source entity is currently being edited.

Type:	Boolean
Saved in:	Not saved
Default value:	Off

5.33 ARRAYTYPE system variable

5.33.1 Array type

Controls the default associative array type. See also the ARRAYASSOCIATIVITY system variable.

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Rectangular array 1: Path array 2: Polar array

5.34 ATTDIA system variable

5.34.1 Attribute dialog

Shows a dialog box for attribute values for the INSERT command.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don’t use dialog box On (1): Use dialog box

5.35 ATTFULLUPDATE system variable

5.35.1 Reset attributes when editing a block parameter

Adjusts the behavior of parametric blocks' attributes.

If on, when changing a parameter of a block reference causes the underlying block to be cloned, the values of all attributes of the block reference will be reset to the values in the original block.

If off, only the missing attributes will be copied from the original block.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Only the missing attributes will be copied from the original block. On (1): The values of all attributes of the block reference will be reset to the values in the original block.

5.36 ATTMODE system variable

5.36.1 Attribute display mode

Controls the display of attributes.

Note: If the ATTMODE variable is set to 2, all attributes display, including Hidden attributes.

Type:	Short
Saved in:	Drawing
Default value:	1
Possible values:	0: Don't show 1: As defined in block 2: Show all

5.37 ATTRACTIONDISTANCE system variable

5.37.1 Grips attraction distance

Sets the grip attraction distance. See also the ENABLEATTRACTION system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	4

5.38 ATTREQ system variable

5.38.1 Insertion default settings

Controls attribute settings for a block inserted with the INSERT command.

If off, uses default values. If on, uses a prompt.

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	Off (0): Use default values On (1): Prompt user

5.39 AUDITCTL system variable

5.39.1 Audit control

Creates an audit report (ADT) file when the AUDIT command is used.

When you turn on the AUDITCTL settings variable, AUDIT creates an ASCII file describing problems and the action taken. This report, with the file extension ADT, is placed in the same directory as the current drawing.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't write ADT files On (1): Write ADT files

5.40 AUDITERRORCOUNT system variable

5.40.1 Audit Error Count (Read Only)

The number of errors found in the last audit (AUDIT command).

Type:	Short
Saved in:	Not saved

5.41 AUNITS system variable

5.41.1 Angular unit type

Controls the unit type for angles.

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	0: Decimal degrees 1: Degrees/minutes/seconds 2: Gradians 3: Radians 4: Surveyor's units

5.42 AUPREC system variable

5.42.1 Angular unit precision

Controls the number of decimal places for angular units.

Type:	Short
Saved in:	Drawing
Default value:	0

Possible values:	0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

5.43 AUTOCOMPLETEDELAY system variable

5.43.1 Auto complete delay

Controls the delay before features display at the Command line. See also the AUTOCOMPLETEMODE system variable.

Values between 0.0 and 10.0 are accepted.

Type:	Real
Saved in:	Registry
Default value:	0.3

5.44 AUTOCOMPLETEMODE system variable

5.44.1 Auto complete mode

Controls the types features shown at the Command line.

Type:	Short
Saved in:	Registry
Range:	0 to 63
Default value:	47

Possible options:	1: Enable 2: Auto-Append 4: Suggestion List 8: Display Icons (unsupported) 16: Exclude the display of System Variables 32: Display preference variables

5.45 AUTOMATICCONNECTION system variable

5.45.1 Automatic connection

Controls automatic creation of connections for the BIMLINEARSOLID and BIMAPPLYPROFILE commands.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	Off (0): Disable On (1): Enable

5.46 AUTOMATICSTAIRSECTIONBEHAVIOR system variable

5.46.1 Automatic stair section behavior

Controls the generation of 2D representations of BIM stair entities during a section generation.

Affects only the automatic stair sectioning behavior. See the BIMGENERATE2DSTAIR command.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Symbolic 1: Geometric

If set to **Symbolic**, a symbolic representation of entities classified as **Stairs** will be generated during section generation. This will affect only the automatic stair sectioning behavior. To customize, launch the BIMGENERATE2DSTAIR command before sectioning.

5.47 AUTOMATICTEES system variable

5.47.1 Automatic tees

Controls the automatic creation of T type connections during the BIMFLOWCONNECT command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Disable On (1): Enable

5.48 AUTOMENULOAD system variable

5.48.1 Auto menu load (Obsolete)

Controls if the default menu or a menu file associated with a drawing is loaded.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Not automatic menu loading On (1): Automatic menu loading

5.49 AUTORESETSCALES system variable

5.49.1 Purge unused scales

Controls how unused annotation scales are managed, when a drawing containing a large number of scales is loaded. A large number of annotation scales decreases performance.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Show a dialog box before purging unused annotation scales 1: Automatically purge unneeded scales 2: Don't purge scales and don't show dialog box when drawing contains a large number of scales

5.50 AUTOSAVECHECKSONLYFIRSTBITDBMOD system variable

5.50.1 Ignore all but first bit of DBMOD for autosave

Does not create autosave files for drawings, when they have been viewed but not edited (includes zoom and pan actions).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Autosave file for files that are viewed only On (1): No autosave file for files that are viewed only

5.51 AUTOSNAP system variable

5.51.1 AutoSnap

Toggles polar and entity snap tracking and controls the display of a snap marker, tooltips and magnet.

Type:	Short
Saved in:	Registry
Range:	0 to 127
Default value:	127

Possible options:	0: All off 1: AutoSnap marker 2: AutoSnap tooltips 4: AutoSnap magnet 8: Polar tracking 16: Entity snap tracking 32: Tooltips for polar tracking and entity snap tracking 64: Tracking line from LASTPOINT

5.52 AUTOTRACKINGVECCOLOR system variable

5.52.1 Auto tracking vector color

Controls the color of polar/snap tracking markers.

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	171

5.53 AUTOVPFITTING system variable

5.53.1 Automatically resize viewports

Controls if viewport borders automatically adjust to fit, when a viewport is updated.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't fit viewport borders automatically On (1): Fit viewport borders automatically

6. B

6.1 BACKGROUNDPLOT system variable

6.1.1 Background plotting

Controls if background plotting is enabled for plot and/or publish actions.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	2
Possible options:	0: None 1: When plotting (Not yet supported) 2: When publishing

6.2 BACKZ system variable

6.2.1 Back clipping plane offset

The value of the **CLipping** option of the DVIEW command.

Type:	Real
Saved in:	Drawing
Default value:	0.0

6.3 BASEFILE system variable

6.3.1 Template

The file path and default template file name for new drawings. If empty, uses built-in defaults.

BricsCAD only

Type:	String
Saved in:	Registry

6.4 BCFSOURCEURL system variable

6.4.1 BCF source url

The address (URL) of the BCF source.

BricsCAD only

Type:	String
Saved in:	Registry

6.5 BILLOFMATERIALSSETTINGS system variable

6.5.1 Bill of materials defaults

Sets the default options for BOMs (Bill Of Materials).

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	10
Possible values:	1: Add thumbnails to new bill of materials 2: Automatically update thumbnails 4: Display warning messages 8: Allow multiple inserts of the same table

6.6 BIMDEFAULTPROPERTIESPATH system variable

6.6.1 Default properties path

The file paths for properties, loaded when a new document is opened.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	bimproj_user.xml;bimproj_IFC2x3.xml;bimproj_IFC4.xml;bimproj_quantity.xml

6.7 BIMMATCHPROP system variable

6.7.1 Match BIM Properties

Matches BIM properties during the MATCHPROP command.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Match standard properties 1: Match standard and BIM properties

6.8 BIMOSMODE system variable

6.8.1 BIM snap mode

Overrules the OSMODE and 3DOSMODE system variables for BIM entities.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3
Possible values:	0: Entity snap modes are not overruled for BIM entities 1: Axis of linear solid 2: Axis of BIM grid

6.9 BIMPROFILESTANDARDS system variable

6.9.1 Profile's standards

Controls the profiles standards used in the **Profiles** dialog box and panel.

Separate entries with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

6.10 BINDTYPE system variable

6.10.1 Xref bind type

Controls how XRefs names are handled when XRefs are bound or edited in place.

If on, uses insert-like behavior. If off, uses traditional bind behavior.

Type:	Boolean
Saved in:	Not saved
Default value:	0
Possible values:	Off (0): Traditional binding behavior On (1): Insert-like behavior

- If the BINDTYPE system variable = 1 (Insert-like behavior): Xrefs will be converted into blocks.
- If BINDTYPE system variable = 0 (Traditional binding behavior): it binds the xref and makes the xref part of the drawing (the objects/layers from the external drawing will be added to the current drawing with the prefix equal to the file name).

6.11 BKGCOLOR system variable

6.11.1 Background color

Controls the background color of the drawing window in model space.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	RGB:24,25,28

6.12 BKGCOLORPS system variable

6.12.1 Paper space background color

Controls the background color of the drawing window in paper space.

BricsCAD only

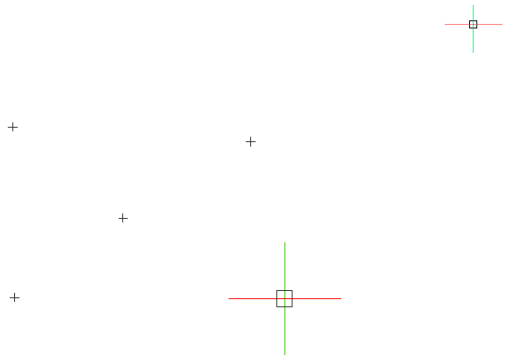
Type:	String
Saved in:	Registry
Default value:	RGB:250,250,250

6.13 BLIPMODE system variable

6.13.1 Blip mode

Determines whether or not marker blips are displayed.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't display marker blips On (1): Display marker blips



6.14 BLOCKEDITLOCK system variable

6.14.1 Block editor lock

Disables the **Block Editor** (BEdit mode). Blocks cannot be edited.

Type:	Boolean
Saved in:	Registry

Default value:	Off

6.15 BLOCKEDITOR system variable

6.15.1 Block editor (Read Only)

Shows if the **Block Editor** (BEdit mode) is open or not.

Type:	Boolean
Saved in:	Not saved

6.16 BLOCKIFYMODE system variable

6.16.1 Blockify settings

Controls the behavior of the BLOCKIFY and PARAMETRICBLOCKIFY commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	16 to 247
Default value:	176
Possible options:	1: Use entire drawing as search space 2: Use default block insertion point 4: Use default block name 32: Compare geometry only 64: Convert unique solids to blocks 128: Show preview

6.17 BLOCKIFYTOLERANCE system variable

6.17.1 Blockify tolerance

Controls the relative tolerance used in the BLOCKIFY and PARAMETRICBLOCKIFY commands to determine if two entities are equal.

A negative value means the program will determine the optimal tolerance (recommended).

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	-1.0

6.18 BLOCKLEVELOFDETAIL system variable

6.18.1 Block Level of detail

Controls the block level of detail (LOD).

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	1
Possible values:	0: Low 1: High

Note: The low level of detail representation is a bounding box.

6.19 BLOCKSPATH system variable

6.19.1 Blocks path

Specifies the file path used for the fifth folder on the left side of the **Select Drawing File** dialog box, opened with the INSERT command when the **Browse** option is selected.

BricsCAD only

Type:	String Standard
Saved in:	Preference

6.20 BMAUTOUPDATE system variable

6.20.1 Update external components

Controls when external assembly components are reloaded to reflect the changes in their definition files.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	1
Possible values:	0: Only when BMUPDATE command is issued 1: Automatically when the file is opened

6.21 BMEXTERNALIZEILLEGALSYMBOLS system variable

6.21.1 Illegal symbols treatment

Defines treatment of symbols that are not allowed in file names.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	3
Possible values:	1: Remove 2: Replace with underscore (_) 3: Replace with escape sequences

6.22 BMFORMTEMPLATEPATH system variable

6.22.1 BMFORM template path

The file path and name of the default BMFORM command Template file.

BricsCAD only

Type:	String
Saved in:	Preference

6.23 BMUPDATEMODE system variable

6.23.1 Assembly components update mode

Controls if external assembly components are reloaded if they are modified, or unconditionally.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Update only modified components (faster) 1: Update all components (slower, but repairs assembly structure)

6.24 BOMFILTERSETTINGS system variable

6.24.1 Default BOM filter settings

Sets the default filter settings, defines which objects to include.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 127
Default value:	1
Possible values:	1: Include mechanical components, blocks and solids 2: Include non-mechanical local blocks and solids 4: Include non-mechanical external references 8: Include solid plies 16: Ignore BOM status 32: Treat external references as transparent 64: Treat leaf parts as transparent

Note: If the file does not contain any mechanical components and the mode does not require to include any non-mechanical entities, then it will be extended to include all non-mechanical entities.

6.25 BOMPROPERTYSET system variable

6.25.1 Default BOM property set

Sets the default set of properties for BOM tables.

BricsCAD only

Type:	Short

Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible values:	1: Mechanical-only properties 2: All properties except coordinates 3: All properties

Note: If the BOM filter mode requires to include non-mechanical objects (BOMFILTERSETTINGS = 2 / 4 / 6)), then the property set will be automatically extended to include all properties except coordinates (BOMPROPERTYSET=2).

6.26 BOMTEMPLATE system variable

6.26.1 Default template

Controls the file path for the default BOM template.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	" "

6.27 BOMTHUMBNAILHEIGHT system variable

6.27.1 Default thumbnail height, px

Sets the default thumbnail height for BOM (Bill Of Material) tables, in pixels.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	200

6.28 BOMTHUMBNAILWIDTH system variable

6.28.1 Default thumbnail width, px

Sets the default thumbnail width for BOM tables, in pixels.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	200

6.29 BOUNDARYCOLOR system variable

6.29.1 Detected Boundary Color

Controls the color used to detect boundaries.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	95

6.30 BSYSLIBCOPYOVERWRITE system variable

6.30.1 Bsyslib copy overwrite

Controls how materials or compositions with a name that already exists in the target drawing are copied.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	0

Possible values:	0: Prompt 1: Skip 2: Overwrite 3: Rename

6.31 BVMODE system variable

6.31.1 Block Visibility Mode (Read Only)

Controls how hidden entities are displayed in **Block Editor**.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: Hidden entities are invisible 1: Hidden entities are visible but dimmed

7. C

7.1 CACHELAYOUT system variable

7.1.1 Cache layout

Caches layouts - reduces the time needed to switch between layouts.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't cache layout On (1): Cache layout

7.2 CAMERADISPLAY system variable

7.2.1 Camera display

Displays a visual representation of a camera for all camera locations.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't display camera glyphs On (1): Display camera glyphs

7.3 CAMERAHEIGHT system variable

7.3.1 Camera height

Controls the default height, in drawing units, for new cameras.

Type:	Real
Saved in:	Drawing
Default value:	0.0

7.4 CANNOSCALE system variable

7.4.1 Annotation scale name

Controls the name of the current annotation scale for the current space.

Type:	String
Saved in:	Drawing
Default value:	1:1

7.5 CANNOSCALEVALUE system variable

7.5.1 Annotation scale value (Read Only)

Displays the value of the current annotation scale.

Type:	Real
Saved in:	Drawing
Default value:	1.0

7.6 CDATE system variable

7.6.1 Calendar date (Read Only)

Shows the current date and time, in decimal format.

Type:	Real
Saved in:	Not saved

7.7 CECOLOR system variable

7.7.1 Entity color

Sets the color for new entities.

Type:	String
Saved in:	Drawing
Default value:	ByLayer

7.8 CELTSCALE system variable

7.8.1 Entity linetype scale

Sets the current entity linetype scale multiplier.

Type:	Real
Saved in:	Drawing
Range:	Greater than 0
Default value:	1.0

7.9 CELTYPE system variable

7.9.1 Entity linetype

Sets the linetype for new entities.

Type:	String
Saved in:	Drawing
Default value:	ByLayer

7.10 CELWEIGHT system variable

7.10.1 Entity lineweight

Sets the lineweight of new entities.

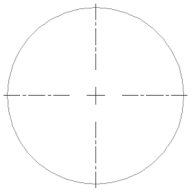
Type:	Short
Saved in:	Drawing
Range:	-3 to 211
Default value:	-1
Possible values:	-3: Lineweight Default (defined by LWDEFAULT) -2: Lineweight ByBlock -1: Lineweight ByLayer 0 - 211: Lineweight value in hundredths of millimeters

7.11 CENTERCROSSGAP system variable

7.11.1 Center mark cross gap

Controls the gap between the center mark and its centerlines.

Type:	String
Saved in:	Drawing
Default value:	0.05x

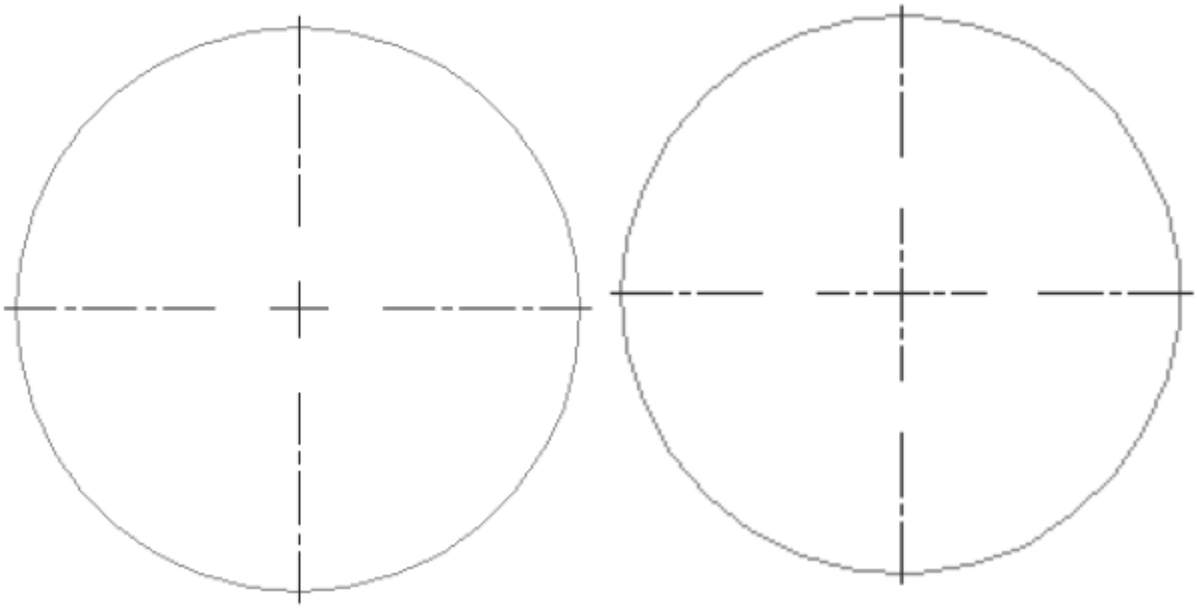


7.12 CENTERCROSSSIZE system variable

7.12.1 Center mark cross size

Controls the size of an associative center mark.

Type:	String
Saved in:	Drawing
Default value:	0.1x



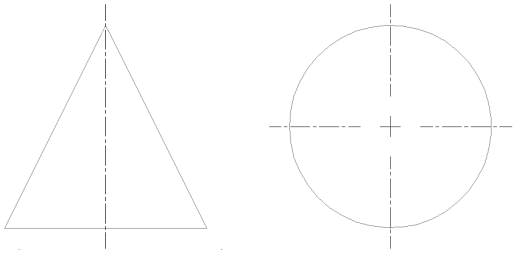
7.13 CENTEREXE system variable

7.13.1 Centerline extension length

Controls the extension length of a centerline.

Type:	Real
Saved in:	Drawing
Default value:	0.12: If MEASUREMENT=0 and INSUNITS=inches 3.5: If MEASUREMENT=1 and INSUNITS=millimeters

Note: The value is expressed in drawing units.



7.14 CENTERLAYER system variable

7.14.1 Default layer for center mark or centerline

Controls a default layer for new centermarks or centerlines.

Type:	String
Saved in:	Drawing
Default value:	.

7.15 CENTERLTSCALE system variable

7.15.1 Linetype scale for center mark or centerline

Controls the linetype scale used to create center marks and centerlines.

Type:	Real
Saved in:	Drawing
Default value:	1.0

7.16 CENTERLTYPE system variable

7.16.1 Center mark/centerline linetype

Controls the linetype used by center marks and centerlines.

Type:	String
Saved in:	Drawing
Default value:	CENTER2

7.17 CENTERLTYPEFILE system variable

7.17.1 Linetype file for center mark or centerline

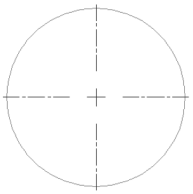
Controls the linetype file used to create center marks and centerlines.

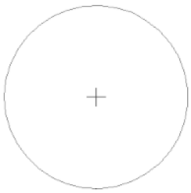
Type:	String
Saved in:	Drawing
Default value:	• Default in imperial unit drawings: **default.lin**. • Default in metric unit drawings: **iso.lin**.

7.18 CENTERMARKEXE system variable

7.18.1 Automatic extension for center mark or centerline

Automatically extends centerlines for new center marks and centerlines.





Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): No automatic extension On (1): Automatic extension

7.19 CETRANSPARENCY system variable

7.19.1 Transparency

Sets the transparency for new entities.

Type:	String
Saved in:	Drawing
Default value:	ByLayer
Possible values:	ByLayer: Apply the layer's transparency ByBlock: Apply the block's transparency 0: Apply no transparency (fully opaque) 1-90: Apply transparency percentage from least (1) to most (90) transparent

7.20 CHAMFERA system variable

7.20.1 Chamfer first distance

Controls the first chamfer distance when the CHAMMODE system variable is Distance-Distance.

Type:	Real
Saved in:	Drawing
Default value:	0.0

7.21 CHAMFERB system variable

7.21.1 Chamfer second distance

Controls the second chamfer distance when the CHAMMODE system variable is Distance-Distance.

Type:	Real
Saved in:	Drawing
Default value:	0.0

7.22 CHAMFERC system variable

7.22.1 Chamfer length

Controls the chamfer length when the CHAMMODE system variable is Length-Angle.

Type:	Real
Saved in:	Drawing
Default value:	0.0

7.23 CHAMFERD system variable

7.23.1 Chamfer angle

Controls the chamfer angle when the CHAMMODE system variable is Length-Angle.

Type:	Real

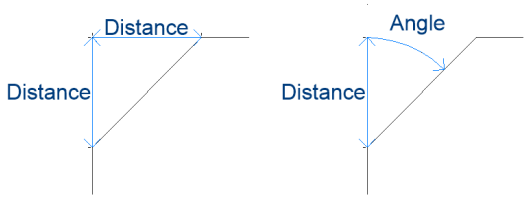
Saved in:	Drawing
Default value:	0.0

7.24 CHAMMODE system variable

7.24.1 Chamfer mode

Controls the default chamfer creation method.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Distance-Distance 1: Length-Angle



7.25 CHECKDWLPRESENCE system variable

7.25.1 Check DWL file existence before open

Warn if there is a DWL lock file when a drawing is opened, indicates that another user has the drawing open.

The content of the lock files allows to inform other users trying to open that drawing, that it is in use, since when, and by whom. This is typically useful for drawings on a shared folder that can be accessed by multiple users from different operating systems.

BricsCAD only

Type:	Boolean

Saved in:	Preference
Default value:	Off (Windows) On (Mac & Linux)
Possible values:	Off (0): Don't check DWL file existence before opening a drawing On (1): Check DWL file existence before opening a drawing

7.26 CIRCLERAD system variable

7.26.1 Circle radius

Controls the default circle radius.

A value of zero means no default.

Type:	Real
Saved in:	Not saved
Default value:	0.0

7.27 CIVILASSOCIATIVITY system variable

7.27.1 Associativity

Controls if Civil entities are associative.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	15
Possible options:	1: TIN Surface are associative 2: Grading are associative 4: TIN Volume Surface are associative 8: Corridor are associative

7.28 CLAYER system variable

7.28.1 Current layer

Sets the layer for new entities.

Type:	String
Saved in:	Drawing
Default value:	0

7.29 CLEANSCREENOPTIONS system variable

7.29.1 Clean screen options

Controls which UI elements are hidden by the CLEANSCREENON command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 127
Default value:	15
Possible options:	1: Hide document tabs 2: Hide dockable panels 4: Hide toolbars 8: Hide Ribbon 16: Hide Command line 32: Hide Status bar 64: Hide menu bar

7.30 CLEANSCREENSTATE system variable

7.30.1 Clean screen state (Read Only)

Indicates if clean screen state is active. Use the CLEANSCREENON and CLEANSCREENOFF commands.

Activating the clean screen state makes the drawing area larger by hiding elements of the user interface.

Type:	Boolean

Saved in:	Not saved
Default value:	Off

7.31 CLIPBOARDFORMAT system variable

7.31.1 Clipboard DWG format

Controls the drawing format version used to copy to the clipboard.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	4
Possible values:	1: DWG 2018 4: DWG 2013 7: DWG 2010 10: DWG 2007 13: DWG 2004 16: DWG 2000 19: DWG R14 22: DWG R13 25: DWG R11/R12

7.32 CLIPBOARDFORMATS system variable

7.32.1 Clipboard Formats

Controls the types of data that can be copied to the clipboard.

Reduce the number of data types to improve performance.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 127
Default value:	127

Possible options:	1: Bitmap 2: Metafile Picture Format 4: Enhanced Metafile 8: AutoCAD 16: Native 32: OLE Embed Source and Object Descriptor 64: CVS and XMLSS table data

7.33 CLIPROMPTLINES system variable

7.33.1 Prompt Lines

Controls the maximum number of floating lines of text momentarily displayed above the Command line. Applies only if the Command line is hidden, or floating with the CMDLINEUSEMINIFRAME system variable set to on (1).

Values between 0 and 64 are accepted.

Type:	Short
Saved in:	Registry
Range:	0 to 64
Default value:	4

7.34 CLISTATE system variable

7.34.1 Command line state (Read Only)

Command line status.

Type:	Boolean
Saved in:	Not saved
Default value:	1
Possible values:	Off (0): Command line is invisible On (1): Command line is visible

7.35 CLOSECHECKSONLYFIRSTBITDBMOD system variable

7.35.1 Ignore all but first bit of DBMOD for close

If on, does not ask to save drawings, when they have been viewed but not edited (includes zoom and pan actions).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't close drawing without getting a request to save the file. On (1): Close drawing without getting a request to save the file.

7.36 CLOUDDOWNLOADPATH system variable

7.36.1 Cloud download path

The folder path for files downloaded through the **Bricsys 24/7** Panel.

BricsCAD only

Type:	String Standard
Saved in:	Registry
Default value:	{User}Documents/Bricsys247

7.37 CLOUDLOG system variable

7.37.1 Cloud log

Controls if data exchanged with Bricsys 24/7 is logged or not. If set to "Log file" a log file will be written in the folder set in the LOGFILEPATH system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2

Default value:	0
Possible values:	0: No log 1: Log messages 2: Log file

7.38 CLOUDLOGVERBOSE system variable

7.38.1 Cloud log verbose

Creates a verbose log for Bricsys 24/7.

If switched on, more information is logged and Bricsys 24/7 actions will be slower.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Verbose log off On (1): Verbose log on

7.39 CLOUDONMODIFIED system variable

7.39.1 Cloud on modified

Specifies what to do when a file opened from Bricsys 24/7 is modified and saved locally.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	1
Possible values:	0: Do nothing 1: Prompt 2: Always upload to new revision 3: Always save locally under new name

7.40 CLOUDSERVER system variable

7.40.1 Cloud server

The address of the Bricsys 24/7 server.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	https://my.bricsys247.com/

7.41 CLOUDSSOSCOPE system variable

7.41.1 Cloud SSO Scope

Controls scopes or permissions used to connect to the SSO service.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	openid profile email

7.42 CLOUDSSOCLIENTID system variable

7.42.1 Cloud SSO Client ID

The client_id used to connect to the SSO service.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	bricscad

7.43 CLOUDTEMPFOLDER system variable

7.43.1 Cloud temporary folder

The file path for temporary Bricsys 24/7 files.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	{User}AppData/Local/Temp/Bricsys_24_7

7.44 CLOUDUPLOADDEPENDENCIES system variable

7.44.1 Cloud upload dependencies

Controls what to do with dependencies, such as XRefs, when a drawing is uploaded to Bricsys 24/7.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1
Possible values:	0: Upload drawing only (ignore dependencies) 1: Use eTransmit dialog if the drawing contains external references 2: Always use eTransmit dialog

7.45 CMATERIAL system variable

7.45.1 Current material

Controls the default render material for new entities.

Type:	String
Saved in:	Drawing
Default value:	ByLayer

7.46 CMDACTIVE system variable

7.46.1 Active command (Read Only)

Indicates the type of the current command.

Type:	Short
Saved in:	Not saved
Default value:	1
Possible options:	1: Ordinary command is active 2: Ordinary command and a transparent command are active 4: Script is active 8: Dialog box is active 16: DDE is active 32: lisp is active (only visible to an ObjectARX-defined command) 64: ObjectARX command is active

7.47 CMDDIA system variable

7.47.1 Command dialogs

Controls if dialog boxes are shown for commands.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don’t use dialog box for commands On (1): Use dialog box for commands

7.48 CMDECHO system variable

7.48.1 Command echo

Displays prompts and input during a LISP 'command' function.

Type:	Boolean
Saved in:	Not saved
Default value:	On

Possible values:	Off (0): Echoing off On (1): Echoing on

7.49 CMDLINEEDITBGCOLOR system variable

7.49.1 Command line edit background color

The Command line edit field background color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB: 50 54 56 (Settings dialog) #323638 (Command line)

7.50 CMDLINEEDITFGCOLOR system variable

7.50.1 Command line edit foreground color

The Command line edit field foreground color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White (Settings dialog) #FFFFFF (Command line)

7.51 CMDLINEFADINGLOGBGCOLOR system variable

7.51.1 Command line fade log background color

The Command line fade log background color.

Color may be represented as a name (for standard colors) or as RGB values. At the Command line, color may be entered as a name (for standard colors), RGB values, or HTML color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB: 50 54 56 (Settings dialog) #323638 (Command line)

7.52 CMDLINEFADINGLOGFADEDELAY system variable

7.52.1 Command line fading log fade delay

The delay before Command line's log starts to fade.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 to 10.0
Default value:	2.0

7.53 CMDLINEFADINGLOGFGCOLOR system variable

7.53.1 Command line fade log foreground color

The Command line fade log foreground color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White

7.54 CMDLINEFADINGLOGTRANSPARENCY system variable

7.54.1 Command line fade log transparency

Controls the Command line fade log transparency.

Values between 0 and 100 are accepted. A value of zero means fully opaque, 100 is fully transparent.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	30

7.55 CMDLINEFONTNAME system variable

7.55.1 Command line font name

The Command line font.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	Consolas

7.56 CMDLINEFONTSIZE system variable

7.56.1 Command line font size

The Command line font size.

Values between 1 and 10 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	10

7.57 CMDLINEFRAMEACTIVETRANSPARENCY system variable

7.57.1 Command line frame transparency when active

Controls Command line frame transparency when active. Values between 0 and 100 are accepted.

A value of zero means fully opaque, 100 if fully transparent.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	10

7.58 CMDLINEFRAMEINACTIVETRANSPARENCY system variable

7.58.1 Command line frame transparency when inactive

Controls the Command line frame transparency when inactive.

Values between 0 and 100 are accepted. A value of zero means fully opaque, 100 is fully transparent.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	30

7.59 CMDLINEFRAMEUSETEXTSCR system variable

7.59.1 Command line frame TEXTSCR

When the Command line is floating, controls the effect of TEXTSCR command, also impacts log prompt delay. If on, displays a separate window, the same as in the docked state. If off, displays as a mini-frame.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't display (TEXTSCR) history window in a separate floating frame On (1): Display (TEXTSCR) history window in a separate floating frame

7.60 CMDLINELISTBGCOLOR system variable

7.60.1 Command line list background color

The Command line history list background color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB:130,130,130

7.61 CMDLINELISTFGCOLOR system variable

7.61.1 Command line list foreground color

The Command line history list foreground color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White

7.62 CMDLINEOPTIONBGCOLOR system variable

7.62.1 Command line option background color

The Command line options background color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB:121,132,142

7.63 CMDLINEOPTIONSHORTCUTCOLOR system variable

7.63.1 Command line option shortcut color

The Command line option shortcut color.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB:255,187,0

7.64 CMDLINEUSEMINIFRAME system variable

7.64.1 Command line mini floating frame

Controls if the mini-frame is used when the Command line floats.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't use new mini-frame On (1): Use new mini-frame

Note: The CMDLINEUSEMINIFRAME system variable replaces the CMDLINEUSENEWFRAME system variable.

7.65 CMDLNTEXT system variable

7.65.1 Prompt prefix

Controls the prefix text shown in the Command line when no command is active.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	:

7.66 CMDNAMES system variable

7.66.1 Active Command Name (Read Only)

The names of any active or transparent commands.

Type:	String
Saved in:	Not saved

7.67 CMLEADERSTYLE system variable

7.67.1 Multileader style

Controls the multileader style for entities created with the MLINE command.

Type:	String
Saved in:	Drawing
Default value:	Standard

7.68 CMLJUST system variable

7.68.1 Multiline justification

Controls the justification of multilines relative to the cursor, for the MLINE command.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Top (second line created below the cursor) 1: Zero (lines created either side of the cursor) 2: Bottom (second line created above the cursor)

7.69 CMLSCALE system variable

7.69.1 Multiline scale

Controls the overall distance between lines created with the MLINE command.

A negative value mirrors the offset lines.

Type:	Real
Saved in:	Drawing
Default value:	1.0: If MEASUREMENT=0 and INSUNITS=inches 20.0: If MEASUREMENT=1 and INSUNITS=millimeters

7.70 CMLSTYLE system variable

7.70.1 Multiline style

Controls the multiline style for entities created with the MLINE command.

Type:	String
Saved in:	Drawing
Default value:	Standard

7.71 CMPCLRMISS system variable

7.71.1 Color of missing entities - DWGCOMPARE

Controls the color of missing entities during the DWGCOMPARE command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	1

7.72 CMPCLRMOD1 system variable

7.72.1 Color of modified entities- DWGCOMPARE

Controls the color of modified entities during the DWGCOMPARE command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	253

7.73 CMPCLRMOD2 system variable

7.73.1 Color of modified entities in the second drawing- DWGCOMPARE

Controls the color of modified entities in the second drawing during the DWGCOMPARE command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	2

7.74 CMPCLRNEW system variable

7.74.1 Color of new entities in - DWGCOMPARE

Controls the color of new entities during the DWGCOMPARE command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	3

7.75 CMPDIFFLIMIT system variable

7.75.1 Maximal number of entities - DWGCOMPARE

Controls the limit for entities to compare during the DWGCOMPARE command.

Values between 1 and 10,000,000 are accepted.

BricsCAD only

Type:	Long
Saved in:	Registry
Range:	1 to 10000000
Default value:	10000000

7.76 CMPFADECTL system variable

7.76.1 Fade - DWGCOMPARE

Controls the fade level for unmodified entities during the DWGCOMPARE command.

Values between 0 and 90 are accepted. A value of zero means Maximum opacity, 90 means maximum transparency.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 90
Default value:	80

7.77 CMPLOG system variable

7.77.1 Log control - DWGCOMPARE

Toggles the creation of a log report (cmplog) for the DWGCOMPARE command.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't write cmplog files On (1): Write cmplog files

7.78 COLORBOOKPATH system variable

7.78.1 Color book file search path

The file path(s) for color books.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

7.79 COLORPICKBOX system variable

7.79.1 Pickbox color

Sets the color for the pickbox. Values between 0 and 255 are accepted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 255
Default value:	7

7.80 COLORTHEME system variable

7.80.1 UI color theme

Applies a dark or light color theme to the user interface.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Dark color theme 1: Light color theme

7.81 COLORX system variable

7.81.1 X axis color

Controls the color of the X-axis.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	11

7.82 COLORY system variable

7.82.1 Y axis color

Controls the color of the Y-axis.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	112

7.83 COLORZ system variable

7.83.1 Z axis color

Controls the color of the Z-axis.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	150

7.84 COMACADCOMPATIBILITY system variable

7.84.1 COM Acad compatibility

Use registry settings to improve support for existing VB applications.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't use registry settings On (1): Use registry settings

Note: When the COMACADCOMPATIBILITY system variable is set to **On**, AutoCAD® drawing files that are embedded as OLE objects in other applications will open in BricsCAD.

7.85 COMBINETEXTMODE system variable

7.85.1 Combined text mode

Controls the order of the text selection word-wrap method and linespacing style, for the TXT2MTXT command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 15
Default value:	11
Possible options:	1: Combine into a single mtext 2: Sort top-down 4: Word-wrap text 8: Uniform linespacing

7.86 COMMUNICATORBACKGROUNDMODE system variable

7.86.1 Perform import and export in background

Enables user interaction while import or export is performed.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disables user interaction while import or export is performed. On (1): Enables user interaction while import or export is performed.

7.87 COMPASS system variable

7.87.1 Compass

Toggles the display of the 3D compass on/off in the current viewport.

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): 3D Compass off On (1): 3D Compass on

7.88 COMPONENTSCONFIG system variable

7.88.1 Library Panel Configuration

The name of the active **Library** panel configuration file. Controls what is shown in the **Library** panel.

Use the SRCHPATH command to find the file.

BricsCAD only

Type:	String
Saved in:	Workspace

7.89 COMPONENTSPATH system variable

7.89.1 Library directory path

The file path(s) for user created components.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

7.90 CONSTRAINTBARDISPLAY system variable

7.90.1 Constraint Display

Controls when constraints are shown.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3
Possible values:	1: Show constraint markers when geometrical constraints are added 2: Show hidden constraint markers when constrained entities are selected

7.91 CONTINUOUSMOTION system variable

7.91.1 Continuous motion

Controls if rotation continues after the mouse is released during the ROTATE commands

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Disable continuous inertial motion in realtime On (1): Enable continuous inertial motion in realtime

7.92 CONVERTODMAX system variable

7.92.1 Maximal multiplier for an outer diameter

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	1.1

7.93 CONVERTODMIN system variable

7.93.1 Minimal multiplier for an outer diameter

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.95

7.94 CONVERTTHMAX system variable

7.94.1 Maximal multiplier for a thickness

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	2

7.95 CONVERTTHMIN system variable

7.95.1 Minimal multiplier for a thickness

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.5

7.96 COORDS system variable

7.96.1 Coordinates

Controls the format and update frequency of the coordinate field in the Status bar.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible values:	0: Update coordinates only when points are selected 1: Coordinates show pointer location 2: Coordinates in polar form for point, distance and angle selection 3: Coordinates in geographic form as latitude and longitude

7.97 COPYMODE system variable

7.97.1 Copy mode

Controls if the COPY command creates a single copy or multiple copies, by default.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Repeat automatically 1: Create single copy

7.98 CPLOTSTYLE system variable

7.98.1 Current plot style

Controls the plot style for new entities. In color-dependent mode drawings this is "BYCOLOR" and is read-only. In named-plot-style mode drawings, the options: "BYLAYER" (default), "BYBLOCK", "NORMAL" and "USER DEFINED", this can be changed. See also the PSTYLEMODE system variable. Use the CONVERTPSTYLES command to convert the current drawing to use named or color-dependent plot styles.

Note: To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES.

Type:	String
Saved in:	Drawing

7.99 CPROFILE system variable

7.99.1 Current profile (Read Only)

The name of the current user profile.

Type:	String
Saved in:	Registry
Default value:	Default

7.100 CRASHREPORTSENDING system variable

7.100.1 Crash report sending (Windows)

Controls the preferences of sharing the crash report and showing the **Crash report** dialog box.

Sending a crash report helps identify and fix any issues and improve BricsCAD for all users.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: Ask before sending 1: Send always and don't ask 2: Don't send and don't ask

7.101 CREATETHUMBNAILONTHEFLY system variable

7.101.1 Create preview thumbnail on the fly

Generates a preview thumbnail in the **Open** dialog box, if a drawing doesn't have a thumbnail. Does not apply if the drawing was saved with RASTERPREVIEW system variable switched on (1).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't create preview thumbnail on the fly On (1): Create preview thumbnail on the fly

7.102 CREATESKETCHFEATURE system variable

7.102.1 Sketch based feature (experimental)

Links 3D entities created with the EXTRUDE and REVOLVE commands to the 2D entities used to create them and converts the 2D entities into a sketch. Any modifications to the sketch are reflected in the 3D entity.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Do not create sketch based feature 1: Create sketch based feature

Note: This system variable can also be set by pressing the **CreateSketchFeature** toggle button

in the ribbon.

The location of the toggle button depends on the loaded CUI file and the workspace:

Classic interface
Modeling workspace: **Solid** & **Surface** tabs > **Direct Modeling** ribbon panel.
Mechanical workspace: **Solid** & **Surface** tabs > **Create** ribbon panel.

Modern interface
Modeling & **Mechanical** workspaces: **Home** tab > **Controls** ribbon panel.

7.103 CREATEVIEWPORTS system variable

7.103.1 Automatic viewport creation

Controls if a viewport is automatically included when a new layout is created.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't create viewport for new layouts On (1): Create viewport for new layouts

7.104 CROSSHAIRDRAWMODE system variable

7.104.1 Crosshair rendering mode

Controls the way the mouse cursor is rendered while inside the drawing window (crosshair, pickbox, etc.) for 3D visualization. Rendering by RedSDK will be faster, but some old systems might not support rendering by RedSDK.

- In 2dwireframe, render the crosshair in OpengGL. Attempts to eliminate cursor duplicates or flickering, which may happen using the window toolkit.
- In RedSDK visual styles, render the crosshair by RedSDK. Rendering the cursor by RedSDK tends to be faster, but some old systems might not support it.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3 (Mac & Linux) 2 (Windows)

Possible values:	0: Always render crosshair at window toolkit level 1: Render crosshair in OpenGL, for 2d drawings 2: Render crosshair by RedSDK, for 3d drawings

7.105 CROSSINGAREACOLOR system variable

7.105.1 Crossing area color

Controls the color for the crossing selection areas (right-left).

Note: In effect only when SELECTIONAREA setting is on.

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	91

7.106 CTAB system variable

7.106.1 Current tab

The name of the current tab, model or layout.

Type:	String
Saved in:	Drawing
Default value:	Model

7.107 CTABLESTYLE system variable

7.107.1 Current table style

Sets the table style for new table entities.

Type:	String
Saved in:	Drawing
Default value:	Standard

7.108 CTRL3DMOUSE system variable

7.108.1 3D mouse mode

Enables a 3Dconnexion 3D mouse.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Disable 3D mouse 1: Enable 3D mouse

7.109 CTRLMOUSE system variable

7.109.1 Mouse shortcuts

Toggles mouse shortcuts on/off.

For Windows and Linux short cuts include:

- **Ctrl+Shift + Left button** for realtime zoom.
- **Ctrl+Shift + Right button** for realtime pan.
- **Ctrl + middle button** for view rotation.
- **Ctrl + right button** for view rotation with fixed Z-axis.

For macOS short cuts include:

- **Cmd+Shift + Left button** for realtime zoom.
- **Cmd+Shift + Right button** for realtime pan.
- **Cmd + middle button** for view rotation.
- **Cmd + right button** for view rotation with fixed Z-axis.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1

Default value:	1
Possible values:	0: Disable mouse shortcuts 1: Enable mouse shortcuts

7.110 CTRLMBUTTON system variable

7.110.1 Middle Button Click

Enables/disables temporary tracking points on middle click (mouse wheel click).

Note: This system variable is only available on the command line.

If CTRLMBUTTON is ON, then during a command a mouse middle click can be used to start entering temporary tracking points.

Default value:	1
Possible values:	0: Disables temporary tracking points on middle button click. 1: Enables temporary tracking points on middle button click.

7.111 CURSORSIZE system variable

7.111.1 Crosshair size

Controls the crosshair size, as a percentage of the screen size.

Type:	Short
Saved in:	Registry
Range:	1 to 100
Default value:	5

7.112 CVPORT system variable

7.112.1 Current viewport

Changes the identification number of the current viewport on three conditions:

1 The identification number is an active viewport.

2 Cursor movement in that viewport is not locked by a command in progress.

3 Tablet mode is off.

Type:	Short
Saved in:	Drawing
Range:	1 or greater
Default value:	2

7.113 CVERSIONCONTROLPATH system variable

7.113.1 Current version control path

The file path used to store the current version control project.

BricsCAD only

Type:	String
Saved in:	Registry

8. D

8.1 DATACOLLECTION system variable

8.1.1 Diagnostics and usage data collection

Controls the sharing of anonymous usage data.

This helps personalize the program and significantly enhances the user experience for everyone.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-2 to 1
Default value:	-2
Possible values:	-2: Not asked -1: Not set 0: Off 1: On

8.2 DATACOLLECTIONENABLED system variable

8.2.1 Current state of data collection (Read Only)

Controls diagnostic and usage data collection.

BricsCAD only

Type:	Boolean
Saved in:	Not saved
Range:	Off
Possible values:	Off (0): Data collection is disabled On (1): Data collection is enabled

Note: The value of this system variable is by default based on the value of the DATACOLLECTION preference variable, however it is possible to override the default by applying an administrative override. The administrative override is applied by manually adding the registry value in *HKLM\Software\Bricsys\BricsCAD\V24x64\AdminPolicy*.

To add this override follow the next steps:

- Go to: *Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Bricsys\BricsCAD\V24x64*.
- Right-click the *V24*x64 key and choose **New** > **Key**and rename it to **AdminPolicy**.
- Right-click on the new created key and choose **New** > **DWORD (32-bit)** and name the value **DATACOLLECTIONENABLED**.
- Change its value to 0 or 1 to override the value of DATACOLLECTION user preference.

8.3 DATACOLLECTIONLOGINTYPE system variable

8.3.1 Latest type of login for data collection (Read Only)

The login type for data collection.

See the DATACOLLECTIONOPTIONS system variable.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	Off
Possible values:	-1: Off 0: Anonymous 1: User/Password

8.4 DATACOLLECTIONOPTIONS system variable

8.4.1 Data Collection Options

Controls what anonymous data is shared.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 7
Default value:	0

Possible values:	0: Nothing 1: System and Settings Data 2: Application Data 4: Anonymized Geometry

8.5 DATALINKNOTIFY system variable

8.5.1 Data link Notifications

Controls data link notifications.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Disables data link update notifications. 1: Enables data link notifications. 2: Enables data link notification and balloon message notifications.

8.6 DATE system variable

8.6.1 Current date (Read Only)

Shows the current date and time in Julian Day format.

Type:	Real
Saved in:	Not saved

8.7 DBCSTATE system variable

8.7.1 DbConnect state (Read Only)

Shows if the dbConnect Manager is active or not.

Type:	Boolean
Saved in:	Drawing

Default value:	Off
Possible values:	Off (0): Don't display dbConnect Manager On (1): Display dbConnect Manager

8.8 DBLCLKEDIT system variable

8.8.1 Double click editing

Enables **Block Editor** (BEdit mode) and **Reference Editor** (RefEdit mode) on double click of Blocks and XRefs.

Type:	Boolean
Saved in:	Registry
Range:	On
Possible values:	Off (0): Disable double click editing On (1): Enable edit on double click

8.9 DBMOD system variable

8.9.1 Modification status (Read Only)

The status of drawing modifications.

Type:	Short
Saved in:	Not saved
Possible values:	1: Entity database modified 4: Database variable modified 8: Window modified 16: View modified 32: Field modified

8.10 DCTCUST system variable

8.10.1 Custom spelling dictionary

The file path and file name of the current, custom spelling dictionary.

During a spelling check, the SPELL command matches the words in the rawing or the current selection set to the words in the current main dictionary and the current custom dictionary. Custom dictionaries are used for discipline-specific words, such as medical or mechanical.

Type:	String
Saved in:	Registry

8.11 DCTMAIN system variable

8.11.1 Main spelling dictionary

The file name of the current, main spelling dictionary. Stored in the support folder.

Note: Keywords can be used to set this variable.

Type:	String
Saved in:	Registry

8.12 DEFAULTBSYSLIBIMPERIAL system variable

8.12.1 Default Bsyslib imperial

Default location of the Bsyslib central database when MEASUREMENT is 0 (imperial).

BricsCAD only

Type:	String
Saved in:	Preference

8.13 DEFAULTBSYSLIBMETRIC system variable

8.13.1 Default Bsyslib metric

Default location of the Bsyslib library database when MEASUREMENT is 1 (metric).

BricsCAD only

Type:	String
Saved in:	Preference

8.14 DEFAULTCURVETYPEHA system variable

8.14.1 Default curve type for horizontal alignment

Controls the curve type, used to create new horizontal alignment or to add a new PI.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	-1: None 0: Auto Arc 1: Free Arc 2: Auto Spiral-Curve-Spiral 3: Free Spiral-Curve-Spiral

8.15 DEFAULTCURVETYPEVA system variable

8.15.1 Default curve type for vertical alignments

Controls the curve type, used to create new vertical alignment or to add a new PVI.

BricsCAD only

Type:	Short
Saved in:	Drawing
Possible values:	-1: None 0: Auto Arc 1: Free Arc 2: Auto Parabola 3: Free Parabola

8.16 DEFAULTLIGHTING system variable

8.16.1 Default lighting

Controls if default lighting overrides other lights in the drawing. Default lighting is a distant light that follows the view direction, can be set per viewport.

Type:	Boolean

Saved in:	Drawing
Default value:	0
Possible values:	Off (0): Default lighting is used only when no other lights are switched on On (1): Default lighting overrides other lights.

8.17 DEFAULTLIGHTSHADOWBLUR system variable

8.17.1 Default light shadow blur

Controls the default shadow blur for lights.

Values between 1 and 40 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 40
Default value:	8

8.18 DEFAULTNEWSHEETTEMPLATE system variable

8.18.1 Default new sheet template

The default drawing template file (DWG or DWT) for new sheets.

BricsCAD only

Type:	String
Saved in:	Preference

8.19 DEFAULTPLOTSTYLETABLE system variable

8.19.1 Default plot style table

Controls the default plot style table for new page setups and new layouts.

Note: Changing this preference will not apply to the layouts that already exist.

BricsCAD only

Type:	String
Saved in:	Preference

8.20 DEFAULTSPACEHEIGHT system variable

8.20.1 Default Space Height

Default height of a space. Used if there are no ceilings to connect to or walls to get the height from.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	120 for MEASUREMENT=0 (inches) 3000 for MEASUREMENT=1 (millimeters)

8.21 DEFAULTSTYLEPIPECROSS system variable

8.21.1 Default style for pipe cross

Controls the default style in use while BIM FlowFittings cross is converts to a Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Cross

8.22 DEFAULTSTYLEPIPEECCENTRICREDUCER system variable

8.22.1 Default style for pipe eccentric reducer

Controls the default style in use while BIM FlowFittings eccentric converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Eccentric Reducer

8.23 DEFAULTSTYLEPIPEELBOW45 system variable

8.23.1 Default style for pipe elbow (45 deg)

Controls the default style in use while BIM FlowBends with 45 degrees angle converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Elbow LR 45 Deg

8.24 DEFAULTSTYLEPIPEELBOW90 system variable

8.24.1 Default style for pipe elbow (90 deg)

Controls the default style in use while BIM FlowBends with 90 degrees angle converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Elbow LR 90 Deg

8.25 DEFAULTSTYLEPIPEREDUCER system variable

8.25.1 Default style for pipe reducer

Controls the default style in use while BIM FlowFittings reducer converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Reducer

8.26 DEFAULTSTYLEPIPESEGMENT system variable

8.26.1 Default style for pipe segment

Controls the default style in use while BIM FlowSegments converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B36.10M Pipe

8.27 DEFAULTSTYLEPIPETEE system variable

8.27.1 Default style for pipe tee

Controls the default style in use while BIM FlowFittings tee is converts to an Std part.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	ASME B16.9 Tee

8.28 DEFLPLSTYLE system variable

8.28.1 Default layer plot style

Controls the default plot style for layer 0. "BYCOLOR" in color-dependent mode drawings, read-only. "NORMAL" in named-plot-style mode drawings, can be changed. See also the PSTYLEMODE system variable.

Note: To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES

Type:	String
Saved in:	Registry

8.29 DEFPLSTYLE system variable

8.29.1 Default entity plot style

Controls the default plot style for new entities. "BYCOLOR" in color-dependent mode drawings, read-only. "NORMAL" in named-plot-style mode drawings, can be changed. See also the PSTYLEMODE system variable. Use the CONVERTPSTYLES command to convert the current drawing to use named or color-dependent plot styles.

Type:	String
Saved in:	Registry

8.30 DELETEINTERFERENCE system variable

8.30.1 Delete interference

Controls the behavior of the INTERFERE command.

If on, the first set of solids are subtracted from the second set.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't solve interferences after commands On (1): Solve interferences after commands

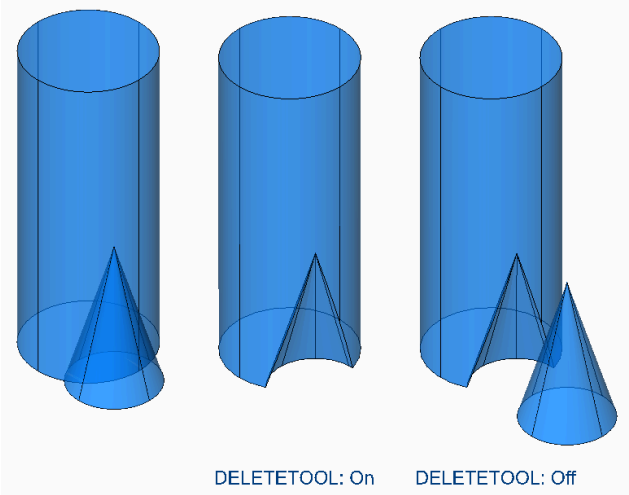
8.31 DELETETOOL system variable

8.31.1 Delete tool

Controls the behavior of the SUBTRACT command. If on, entities used to subtract are deleted.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Default value:	0
Possible values:	Off (0): Don't delete tool entities in command SUBTRACT On (1): Delete tool entities in command SUBTRACT



8.32 DELOBJ system variable

8.32.1 Delete source entity

Controls if source entities, used to create 3D entities (with commands such as EXTRUDE, REVOLVE and LOFT) are retained or deleted.

Type:	Short
Saved in:	Registry
Default value:	1
Possible values:	0: Retain defining entities 1: Delete profile entities 2: Delete all defining entities -1: Prompt to delete profile entities -2: Prompt to delete all defining entities (including paths and reference curves)

8.33 DEMANDLOAD system variable

8.33.1 Demand load

Controls how the program handles custom entities created by third-party applications.

Type:	Short
Saved in:	Registry
Range:	0 to 3

Default value:	3
Possible values:	1: Demand-load source application when opening a drawing that contains custom entities 2: Demand-load source application when invoking one of the application's commands

Note: If you set this system variable to 0, third-party applications and some internal commands may not function.

8.34 DETAILSPATH system variable

8.34.1 Details directory path

The file path(s) for user created detail files.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

8.35 DGNEXPXREFMODE system variable

8.35.1 Export Conversion of XRefs

Controls the conversion of XRefs for DGN export.

The dependent files themselves are not converted when exporting the parent. They must be converted separately.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0
Possible values:	0: Convert reference to DGN 1: Keep reference to DWG 2: Bind reference file to the parent DGN 3: Detach Xrefs

8.36 DGNFRAME system variable

8.36.1 DGN frame

Controls the visibility of DGN frames, if the FRAME system variable is set to 'Use individual system variables' (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Hide DGN frames 1: Display and plot DGN frames 2: Display but do not plot DGN frames

8.37 DGNIMP2DCLOSEDBSPLINECURVEIMPORTMODE system variable

8.37.1 2D closed B-spline curve import mode

Controls how to convert DGN closed 2D B-Spline curve elements.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Convert to spline 1: Convert to region

8.38 DGNIMP2DELLIPSEIMPORTMODE system variable

8.38.1 2D ellipse import mode

Controls how to convert DGN 2D Ellipse elements.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Convert to ellipse 1: Convert to region

8.39 DGNIMP2DSHAPEIMPORTMODE system variable

8.39.1 2D shape import mode

Controls how to convert DGN 2D Shape and 2D Complex Shape elements.

If an element is filled, then a hatch is created as well.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: Convert to polyline 1: Convert to region 2: Convert to polyface mesh

8.40 DGNIMP3DCLOSEDBSPLINECURVEIMPORTMODE system variable

8.40.1 3D closed B-spline curve import mode

Controls how to convert DGN closed 3D B-Spline curve elements.

BricsCAD only

Type:	Short
Saved in:	Preference

Range:	0 to 1
Default value:	1
Possible values:	0: Convert to spline 1: Convert to region

8.41 DGNIMP3DELLIPSEIMPORTMODE system variable

8.41.1 3D ellipse import mode

Controls how to convert DGN 3D Ellipse elements.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Convert to ellipse 1: Convert to region

8.42 DGNIMP3DOBJECTIMPORTMODE system variable

8.42.1 3D entity import mode

Controls how 3D entities are converted during DGN import.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: Convert to polyface mesh 1: Convert to 3D Solid, Body or Surface

8.43 DGNIMP3DSHAPEIMPORTMODE system variable

8.43.1 3D shape import mode

Controls how to convert DGN 3D Shape and 3D Complex Shape elements.

If an element is filled, a hatch is created as well.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1
Possible values:	0: Convert to polyline 1: Convert to region 2: Convert to polyface mesh

8.44 DGNIMPBREAKDIMENSIONASSOCIATION system variable

8.44.1 Break dimension association

Breaks DGN dimension associations during DGN import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't break dimension associations On (1): Break dimension associations

8.45 DGNIMPCONVERTDGNCOLORINDICESTOTRUECOLORS system variable

8.45.1 Convert DGN color indices to true colors

Converts DGN color indexes to RGB true colors. If off, DGN color indexes are converted to DWG color indexes.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Convert DGN color indices to DWG color indices On (1): Convert DGN color indices to RGB true colors

Specifies how Microstation colors are mapped to BricsCAD colors. Microstation assigns color numbers to colors that are different from BricsCAD. If on, then BricsCAD converts DGN color indexes to RGB true colors. Otherwise it tries to convert DGN color indices to DWG color indices. BricsCAD gets the color from the DGN color table and tries to find the same color in DWG color table. If it is not possible, then the color will be saved as an RGB true color to the DWG file.

8.46 DGNIMPCONVERTEMPTYDATAFIELDSTOSPACES system variable

8.46.1 Convert empty data fields to spaces

Replaces empty field values from a DGN file with space symbols. If off, empty field values from a DGN file are replaced with underscore symbols ("_").

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Replace by underscore symbols ("_") On (1): Replace by space symbols

8.47 DGNIMPERASEUNUSEDRESOURCES system variable

8.47.1 Erase unused resources

Erases unreferenced items (text styles, linetypes, etc.) during DGN import.

BricsCAD only

Type:	Boolean
Saved in:	Preference

Default value:	Off
Possible values:	Off (0): Import unreferenced elements. On (1): Erase unreferenced imported items

8.48 DGNIMPEXPLODETEXTNODES system variable

8.48.1 Explode text nodes

Imports DGN text nodes as a set of simple entities (text, line, etc.). If off, DGN text nodes are converted to multiline text.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Convert text nodes to multiline text On (1): Convert text nodes to simple entities, such as text and lines

8.49 DGNIMPIMPORTACTIVEMODELTOMODELSPACE system variable

8.49.1 Import active model to Model Space

Imports the active DGN model to Model Space, during DGN import. If off, imports only the first DGN design model from the model table.

Note: Microstation uses the phrase “design model” for model space, and “active model” for the current view of a model.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Import the first design model from the model table to the model space On (1): Import the active model to model space

8.50 DGNIMPIMPORTDGTEXTSASDBMTEXTS system variable

8.50.1 Import Texts as MTexts

Imports simple DGN text entities as multiline texts.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Does not import simple text objects as multiline texts. On (1): Imports simple text objects as multiline texts.

8.51 DGNIMPIMPORTINVISIBLEELEMENTS system variable

8.51.1 Import invisible elements

Imports invisible DGN elements as invisible entities. If off invisible DGN elements are not imported.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Skip invisible elements On (1): Import invisible elements

8.52 DGNIMPIMPORTPAPERSPACEMODELS system variable

8.52.1 Import Paper Space models

Imports all DGN sheet models to paper space layouts. If off, sheet models are not imported.

Note: Microstation uses the phrase “sheet model” for paper space.

BricsCAD only

Type:	Boolean
Saved in:	Preference

Default value:	On
Possible values:	Off (0): Don't import sheet models On (1): Import sheet models to paper space layouts

8.53 DGNIMPIMPORTVIEWINDEX system variable

8.53.1 Import view index

Controls the number of DGN views, level masks and view settings to use.

Values between -1 and 7 are accepted. -1 means that the view is not defined and view settings and level masks are not used.

Note: Microstation uses the word "level" for layers; a "mask" hides content in areas or levels/layers.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	-1 to 7
Default value:	-1
Possible values:	-1: View is not defined 1 to 7: Specifies level mask

8.54 DGNIMPRECOMPUTEDIMENSIONSAFTERIMPORT system variable

8.54.1 Recompute dimensions after import

Converts DGN dimensions to DWG-based dimensions.

If off creates DGN-based dimensions.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

Possible values:	Off (0): create DGN-style dimension geometry blocks On (1): re-compute all dimensions to create DWG dimension geometry blocks

8.55 DGNIMPSYMBOLRESOURCEFILES system variable

8.55.1 Symbol resource files

The file path for DGN resource RSC files - fonts, line styles, etc. Analog of the MS_SYMBRSRC MicroStation system variable.

BricsCAD only

Type:	String
Saved in:	Preference

8.56 DGNIMPXREFIMPORTMODE system variable

8.56.1 External references import mode

Controls DGN attachment import.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	2
Possible values:	0: Omit - does not import DGN attachments 1: Retain - converts attached DGN files to DWG XRefs 2: Merge to cell - converts attached DGN files to DWG blocks 3: Create DGN Underlay - converts attached DGN files to Underlay entities

8.57 DGNOSNAP system variable

8.57.1 DGN entity snap

Enables entity snap for DGN underlay files.

Type:	Boolean

Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable DGN entity snap On (1): Enable DGN entity snap

8.58 DIASTAT system variable

8.58.1 Dialog state (Read Only)

Shows how the most recent dialog box was exited.

Type:	Boolean
Saved in:	Not saved
Possible values:	Off (0): Cancel On (1): OK

8.59 DIMADEC system variable

8.59.1 Dim Angle Precision

Controls the number of decimal places for angular dimensions.

A value of -1 uses the DIMDEC system variable.

Type:	Short
Saved in:	Drawing
Range:	-1 to 8
Default value:	0
Possible values:	-1: Use the DIMDEC system variable 0 - 8: Decimal places

8.60 DIMALT system variable

8.60.1 Alt units

Enables alternate units in dimensions.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Disable alternate units On (1): Enable alternate units

8.61 DIMALTD system variable

8.61.1 Alt precision

Controls the number of decimal places for alternate dimension units.

Type:	Short
Saved in:	Drawing
Range:	0 to 8
Default value:	2 - If MEASUREMENT=0 and INSUNITS=inches 3 - If MEASUREMENT=1 and INSUNITS=milimeters

8.62 DIMALTF system variable

8.62.1 Alt multiplier

Controls the conversion of alternate units. See also the DIMALT system variable.

Multiples the primary unit to give alternate units. If one drawing unit equals 1 inch and the value is set to 25.4, alternate linear dimensions are expressed in mm.

Type:	Real
Saved in:	Drawing
Default value:	25.4 - If MEASUREMENT=0 and INSUNITS=inches 0.0394 - If MEASUREMENT=1 and INSUNITS=milimeters

8.63 DIMALTRND system variable

8.63.1 Alt roundoff

Controls the roundoff for alternate units.

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.64 DIMALTTD system variable

8.64.1 Alt tolerance precision

Controls the tolerance precision in the alternate dimension units.

Type:	Short
Saved in:	Drawing
Range:	0 to 8
Default value:	3 - If MEASUREMENT=1 and INSUNITS= inches 2 - If MEASUREMENT=0 and INSUNITS=millimeters

8.65 DIMALTTZ system variable

8.65.1 Alt tolerance suppress zeros

Controls the suppression of zeros in tolerance values.

Type:	Boolean
Saved in:	Drawing
Default value:	0

Possible values:	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions

8.66 DIMALTU system variable

8.66.1 Alt unit type

Controls the alternate unit type for linear dimensions.

Type:	Short
Saved in:	Drawing
Range:	1 to 8
Default value:	2
Possible values:	1: Scientific 2: Decimal 3: Engineering 4: Architectural (stacked) 5: Fractional (stacked) 6: Architectural 7: Fractional 8: Windows Control Panel

8.67 DIMALTZ system variable

8.67.1 Alt suppress zeros

Suppresses leading and/or trailing zeros for alternate unit dimension.

Type:	Short
Saved in:	Drawing
Range:	0 to 12
Default value:	0

Possible values:	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions

8.68 DIMANNO system variable

8.68.1 Style is annotative (Read Only)

Indicates if the current dimension style is annotative.

Type:	Boolean
Saved in:	Drawing

8.69 DIMAPOST system variable

8.69.1 Alt units prefix/suffix

Controls the prefix and/or suffix that appears in the alternate dimension text, does not apply to angular dimensions. See also the **Drawing Explorer** > **Dimension Styles**(DIMSTYLE command).

Set to " to turn off, or use the suffix string 'prefix[]suffix'. Insert a single linefeed with '\\X' (often when alternate units are active).

Type:	String
Saved in:	Drawing

8.70 DIMARCSYM system variable

8.70.1 Arc symbol

Controls the display of arc symbols, in arc length dimensions.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0

Possible values:	0: Arc length symbol is placed before the dimension text 1: Arc length symbol is placed above the dimension text 2: The display of the arc length symbol is suppressed

8.71 DIMASO system variable

8.71.1 Associativity (obsolete)

Replaced by DIMASSOC. Has no effect except to preserve the integrity of scripts.

Type:	Boolean
Saved in:	Drawing
Default value:	On

8.72 DIMASSOC system variable

8.72.1 Associativity

Controls the associativity of dimension entities or if exploded dimensions are created.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Exploded dimensions 1: Non-associative dimension entities 2: Associative dimension entities

8.73 DIMASZ system variable

8.73.1 Arrow size

Controls the size of dimension and leader line arrowheads.

Type:	Real
Saved in:	Drawing

Default value:	0.18 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=millimeters

8.74 DIMATFIT system variable

8.74.1 Arrow and text fit

Controls how dimension text and arrows are arranged when there is insufficient space between the extension lines.

When the DIMTMOVE system variable is set to 1, a leader is added if the dimension text is placed outside.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	3
Possible values:	0: Place both text and arrows outside extension lines 1: Move arrows first, then text 2: Move text first, then arrows 3: Move either text or arrows, whichever fits best

8.75 DIMAUNIT system variable

8.75.1 Dim angle units

Controls the angular dimension unit type.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	0
Possible values:	0: Decimal degrees 1: Degrees/minutes/seconds 2: Gradians 3: Radians

8.76 DIMAZIN system variable

8.76.1 Suppress angle zeros

Suppresses leading and/or trailing zeros for angular dimensions.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	0
Possible options:	1: Suppress leading zeros 2: Suppress trailing zeros

8.77 DIMBLK system variable

8.77.1 Arrow

The name of the block displayed at the ends of dimension and leader lines, when the DIMSAH system variable is set to **Set by DIMBLK**.

The block name can be either a standard name or refer to a user-defined arrowhead block.

Type:	String
Saved in:	Drawing

8.78 DIMBLK1 system variable

8.78.1 Arrow 1

The name of the block displayed at the first end of a dimension line, when the DIMSAH system variable is set to **Set by DIMBLK1 and DIMBLK2**.

Type:	String
Saved in:	Drawing

8.79 DIMBLK2 system variable

8.79.1 Arrow 2

The name of the block displayed at the second end of a dimension line, when the DIMSAH system variable is set to **Set by DIMBLK1 and DIMBLK2**.

Type:	String
Saved in:	Drawing

8.80 DIMCEN system variable

8.80.1 Center mark

Controls if and how center marks and centerlines of circles and arcs are drawn with the DIMCENTER, DIMDIAMETER and DIMRADIUS commands.

- A value of zero means no center mark.
- Negative numbers mean a line.
- Positive numbers mean a mark.

Type:	Real
Saved in:	Drawing
Default value:	0.09 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=milimeters
Possible values:	0: None <0: Line >0: Mark

8.81 DIMCLRD system variable

8.81.1 Dim line color

The color of dimension lines, arrowheads and dimension leader lines.

Type:	Short
Saved in:	Drawing
Range:	0 to 256

Default value:	0
Possible values:	0: ByBlock 1 - 255: index 256: ByLayer

8.82 DIMCLRE system variable

8.82.1 Ext line color

Controls the color for dimension extension lines.

Type:	Short
Saved in:	Drawing
Range:	0 to 256
Default value:	0
Possible values:	0: ByBlock 1 - 255: index 256: ByLayer

8.83 DIMCLRT system variable

8.83.1 Text color

Controls the default dimension text color.

Type:	Short
Saved in:	Drawing
Range:	0 to 256
Default value:	0
Possible values:	0: ByBlock 1 - 255: index 256: ByLayer

8.84 DIMDEC system variable

8.84.1 Dim precision

Controls the number of decimal places for primary dimension units.

Values between 0 and 8 are accepted.

Type:	Short
Saved in:	Drawing
Range:	0 to 8
Default value:	4

8.85 DIMDLE system variable

8.85.1 Dim line ext

Controls the length of dimension lines beyond the extension lines, when obliques or architectural ticks are drawn instead of arrowheads.

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.86 DIMDLI system variable

8.86.1 Dim baseline spacing

Controls the spacing between baselines dimension lines.

Type:	Real
Saved in:	Drawing
Default value:	0.38 - If MEASUREMENT=0 and INSUNITS=inches 3.75 - If MEASUREMENT=1 and INSUNITS=millimeters

8.87 DIMDSEP system variable

8.87.1 Decimal separator

Sets the decimal separator character.

Type:	String
Saved in:	Drawing

8.88 DIMEXE system variable

8.88.1 Ext line ext

Controls the extension of dimension extension lines beyond the dimension line.

Type:	Real
Saved in:	Drawing
Default value:	0.18 - If MEASUREMENT=0 and INSUNITS=inches 1.25 - If MEASUREMENT=1 and INSUNITS=millimeters

8.89 DIMEXO system variable

8.89.1 Ext line offset

Controls the offset of dimension extension lines from their origin points.

Type:	Real
Saved in:	Drawing
Default value:	0.0625 - If MEASUREMENT=0 and INSUNITS=inches 0.625 - If MEASUREMENT=1 and INSUNITS=millimeters

8.90 DIMFIT system variable

8.90.1 Dim fit (obsolete)

Replaced by DIMATFIT and DIMTMOVE.

Type:	Short
Saved in:	Drawing

Default value:	3

8.91 DIMFRAC system variable

8.91.1 Fractional type

Controls the fraction format for Architectural or Fractional linear dimensions. See also the DIMLUNIT system variable.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Horizontal 1: Diagonal 2: Not stacked

8.92 DIMFXL system variable

8.92.1 Ext line fixed length

Controls the length of extension lines, if the DIMFXLON system variable is on (1).

Type:	Real
Saved in:	Drawing
Default value:	1.0

8.93 DIMFXLON system variable

8.93.1 Ext line fixed

Fixes the length of extension lines on dimensions.

Type:	Boolean
Saved in:	Drawing

Default value:	Off
Possible values:	Off (0): Don't use fixed length extension lines On (1): Use fixed length extension lines

8.94 DIMGAP system variable

8.94.1 Text offset

Controls the offset distance around dimension text, and the distance between annotations and hook lines created with the LEADER command.

See the DIMTAD system variable. Negative numbers mean draws a box around the dimension or annotation text.

Type:	Real
Saved in:	Drawing
Default value:	0.09 - If MEASUREMENT=0 and INSUNITS=inches 0.625 - If MEASUREMENT=1 and INSUNITS=millimeters

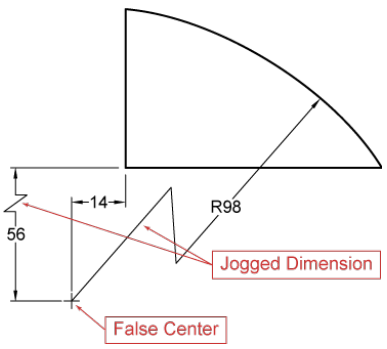
8.95 DIMJOGANG system variable

8.95.1 Jogged angle

Controls the angle of oblique dimension line segments, in jogged radius dimensions.

Note: Jogged radius dimensions are often created when the center point is located off the page.

Type:	Real
Saved in:	Drawing
Default value:	45.0



8.96 DIMJUST system variable

8.96.1 Text Position Horizontal

Controls the horizontal position of dimension text.

Type:	Short
Saved in:	Drawing
Range:	0 to 4
Default value:	0
Possible values:	0: Text above the dimension line and center-justified between extension lines 1: Text next to the first extension line 2: Text next to the second extension line 3: Text above and aligned with the first extension line 4: Text above and aligned with the second extension line

8.97 DIMLAYER system variable

8.97.1 Default layer for new dimensions

The default layer for new dimensions.

Type:	String
Saved in:	Drawing
Default value:	.

8.98 DIMLDRBLK system variable

8.98.1 Leader arrow

Controls the arrowhead block for leaders.

Type:	String
Saved in:	Drawing

8.99 DIMLFAC system variable

8.99.1 Dim Scale Linear

Controls the scale multiplier for linear dimensions, including radius, diameter and ordinate dimensions.

Linear dimensions are multiplied by DIMLFAC.

- Positive values mean that it is used for model space and paper space.
- Negative values mean paper space only.

Type:	Real
Saved in:	Drawing
Default value:	1.0

8.100 DIMLIM system variable

8.100.1 Tolerance method

Generates dimension limits as the default text for dimensions.

If On, switches DIMTOL Off.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't generate dimension limits as default text On (1): Generate dimension limits as default text

8.101 DIMLTEX1 system variable

8.101.1 Ext line 1 linetype

Controls the linetype for the first extension line of a dimension.

Type:	String
Saved in:	Drawing

8.102 DIMLTEX2 system variable

8.102.1 Ext line 2 linetype

Controls the linetype for the second extension line of a dimension.

Type:	String
Saved in:	Drawing

8.103 DIMLTYPE system variable

8.103.1 Dim line linetype

Controls the linetype for dimension lines.

Type:	String
Saved in:	Drawing

8.104 DIMLUNIT system variable

8.104.1 Dim units

Controls the primary unit type for linear dimensions.

Type:	Short
Saved in:	Drawing
Range:	1 to 6
Default value:	2
Possible values:	1: Scientific 2: Decimal 3: Engineering 4: Architectural 5: Fractional 6: Windows Control Panel

8.105 DIMLWD system variable

8.105.1 Dim line LW

Controls the lineweight of dimension lines.

Type:	Short
Saved in:	Drawing
Range:	-3 to 211
Default value:	Bylayer
Possible values:	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters

8.106 DIMLWE system variable

8.106.1 Ext line LW

Controls the lineweight of dimension extension lines.

Type:	Short
Saved in:	Drawing
Range:	-3 to 211
Default value:	Bylayer
Possible values:	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters

8.107 DIMMARKTYPE system variable

8.107.1 Dimension override marking

Automatically displays overridden associative dimensions with a special marking, when they do not include the default dimension text.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Not enabled 1: Display overridden dimensions with an underline 2: Display overridden dimensions with an overline

8.108 DIMPOST system variable

8.108.1 Dim prefix/suffix

Controls the prefix and/or suffix added to dimension text. See also the **Drawing Explorer** > **Dimension Styles** (DIMSTYLE command).

Set to " to turn off, or use the suffix string 'prefix[]suffix'. Insert a single linefeed with '\X' when alternate units are active.

Type:	String
Saved in:	Drawing

8.109 DIMRND system variable

8.109.1 Dim round

Controls the roundoff rules for linear dimensions.

Note: It does not effect angular dimensions.

A value of 0.1 rounds to the nearest 0.1 unit, a value of 1 rounds to the nearest whole number. The number of decimal places is limited by the DIMDEC system variable.

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.110 DIMSAH system variable

8.110.1 Arrowheads

Controls how dimension line arrowhead blocks are set.

Type:	Boolean
Saved in:	Drawing
Default value:	0
Possible values:	Off (0): Set by DIMBLK - uses the same block for the first and the second arrowhead On (1): Set by DIMBLK1 and DIMBLK2 - uses different blocks for the first and the second arrowhead

8.111 DIMSCALE system variable

8.111.1 Dim scale overall

Applies a scale multiplier to dimension variables that specify the size of the components of dimension entities, such as text height, distance or offsets.

Note: It does not affect measured lengths, coordinates, or angles.

Type:	Real
Saved in:	Drawing
Range:	0 or greater
Default value:	1.0

8.112 DIMSD1 system variable

8.112.1 Dim line 1

Suppresses the first part of dimension lines - from the first extension line to the text origin.

Type:	Boolean
Saved in:	Drawing
Default value:	Off

Possible values:	Off (0): Don't suppress first dimension line On (1): Suppress first dimension line

8.113 DIMSD2 system variable

8.113.1 Dim line 2

Suppresses the second part of dimension lines - from the text origin to the second extension line.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't suppress second dimension line On (1): Suppress second dimension line

8.114 DIMSE1 system variable

8.114.1 Ext line 1

Suppresses the first extension line of a dimension.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't suppress first extension line On (1): Suppress first extension line

8.115 DIMSE2 system variable

8.115.1 Ext line 2

Suppresses the second extension line of a dimension.

Type:	Boolean
Saved in:	Drawing

Default value:	Off
Possible values:	Off (0): Don't suppress second extension line On (1): Suppress second extension line

8.116 DIMSHO system variable

8.116.1 Dimension show (Obsolete)

Has no effect except to preserve the integrity of scripts. Controls the redefinition of dimension entities while dragging.

Type:	Boolean
Saved in:	Drawing
Default value:	On

8.117 DIMSOXD system variable

8.117.1 Dim line inside

Suppresses arrowheads outside extension lines if there is insufficient room inside the extension lines and if the DIMTIX system variable is on (1).

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't suppress outside arrowheads On (1): Suppress outside arrowheads

8.118 DIMSTYLE system variable

8.118.1 Dimension style (Read Only)

The current dimension style.

Type:	String
Saved in:	Drawing

Default value:	Standard

8.119 DIMTAD system variable

8.119.1 Text Position Vert

Controls the vertical position of text in relation to dimension lines. The position above dimension line is set by the DIMGAP system variable.

The **Above dimension line** option does not apply if the DIMTIH system variable is set to **Horizontal** and the dimension line is not horizontal.

Type:	Short
Saved in:	Drawing
Range:	0 to 4
Default value:	0
Possible values:	0: Centered between extension lines 1: Above dimension line 2: Farthest from defining points 3: Japanese Industrial Standards 4: Below dimension line

8.120 DIMTDEC system variable

8.120.1 Tolerance precision

Controls the number of decimal places for tolerance values in the primary dimension units.

Type:	Short
Saved in:	Drawing
Range:	0 to 8
Default value:	4

8.121 DIMTFAC system variable

8.121.1 Tolerance text height

Controls the scale multiplier used to calculate the text height for dimension fractions and tolerances, relative to the dimension text height, set with the DIMTXT system variable. Only applies if the DIMLUNIT system variable is set to **Fractional** (5).

Type:	Real
Saved in:	Drawing
Default value:	1.0

8.122 DIMTFILL system variable

8.122.1 Text fill

Controls the dimension text background.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: No background or fill 1: Background or fill color matches the background of the drawing window 2: Background or fill color matches the value specified by DIMTFILLCLR system variable

8.123 DIMTFILLCLR system variable

8.123.1 Text fill color

Controls dimension text background color, when the DIMTFILL system variable is set to 2.

Type:	Short
Saved in:	Drawing
Range:	0 to 256

Default value:	0
Possible values:	0: ByBlock 1-255: index 256: ByLayer

8.124 DIMTIH system variable

8.124.1 Text inside align

Controls the dimension text position on dimensions.

Note: It does not apply to ordinate dimensions.

Type:	Boolean
Saved in:	Drawing
Default value:	1
Possible values:	Off (0): Aligned with dimension line On (1): Horizontal

8.125 DIMTIX system variable

8.125.1 Text inside

Draws dimension text between extension lines, even if there is insufficient room.

Note: It does not apply to radius and diameter dimensions.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't force text between extension lines On (1): Force text between extension lines

8.126 DIMTM system variable

8.126.1 Tolerance limit lower

Controls the minimum (lower) tolerance limit for dimension text when the DIMTOL or DIMLIM system variable is on.

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.127 DIMTMOVE system variable

8.127.1 Text movement

Controls how dimension text moves.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Move dimension line with dimension text 1: Add leader when dimension text is moved 2: Allow text to be moved freely without a leader

8.128 DIMTOFL system variable

8.128.1 Dim line forced

Forces a dimension line to be drawn between dimension extension lines, even when text is placed outside.

Type:	Boolean
Saved in:	Drawing
Default value:	Off

Possible values:	Off (0): Don't force dimension lines even when text is outside On (1): Force dimension lines even when text is outside

8.129 DIMTOH system variable

8.129.1 Text outside align

Places dimension text outside extension lines horizontally.

Type:	Boolean
Saved in:	Drawing
Default value:	1
Possible values:	Off (0): Aligned with dimension line On (1): Horizontal

8.130 DIMTOL system variable

8.130.1 Tolerance display

Adds tolerances to dimension text.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't display tolerance On (1): Display tolerance

8.131 DIMTOLJ system variable

8.131.1 Tolerance pos vert

Controls the vertical position for tolerance values relative to the primary dimension text.

Type:	Short
Saved in:	Drawing

Range:	0 to 2
Default value:	1
Possible values:	0: Bottom 1: Middle 2: Top

8.132 DIMTP system variable

8.132.1 Tolerance limit upper

Controls the maximum (upper) tolerance limit for dimension text when the DIMTOL or DIMLIM system variable is on.

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.133 DIMTSZ system variable

8.133.1 Dim tick size

Controls the size of tick marks drawn instead of arrowheads for linear, radius and diameter dimensions. If the value is zero, arrowheads are drawn.

Type:	Real
Saved in:	Drawing
Default value:	0.0
Possible values:	0: Draw arrowheads >0: Draw oblique strokes instead of arrowheads

8.134 DIMTVP system variable

8.134.1 Text offset vertical

Controls the vertical position of dimension above or below the dimension line. Acts as a multiplier of the DIMTXT system variable, when the DIMTAD system variable is set to **Centered between extension lines**.

A value of 1.0 is equivalent to setting the DIMTAD system variable to on (1).

Type:	Real
Saved in:	Drawing
Default value:	0.0

8.135 DIMTXSTY system variable

8.135.1 Text style

Controls the default dimension text style.

Type:	String
Saved in:	Drawing
Default value:	Standard

8.136 DIMTXT system variable

8.136.1 Text height

Controls the default dimension text height, if the text style set in the DIMTXSTY system variable has no fixed height.

Type:	Real
Saved in:	Drawing
Default value:	0.18 - If MEASUREMENT=0 and INSUNITS=inches 2.5 - If MEASUREMENT=1 and INSUNITS=millimeters

8.137 DIMTXTDIRECTION system variable

8.137.1 Text direction

Controls the dimension text direction.

Type:	Boolean
Saved in:	Drawing

Default value:	0
Possible values:	Off (0): Left to right On (1): Right to left

8.138 DIMTZIN system variable

8.138.1 Tolerance suppress zeros

Controls the suppression of zeros in tolerance values.

Type:	Short
Saved in:	Drawing
Range:	0 to 15
Default value:	0
Possible options:	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions

8.139 DIMUNIT system variable

8.139.1 Dim unit type (obsolete)

Replaced by DIMLUNIT and DIMFRAC system variables.

Type:	Short
Saved in:	Drawing
Range:	1 to 8
Default value:	2

Possible values:	1: Scientific 2: Decimal 3: Engineering 4: Architectural (stacked) 5: Fractional (stacked) 6: Architectural 7: Fractional 8: Windows Control Panel

8.140 DIMUPT system variable

8.140.1 Place text manually

Toggles the placement of dimension text during dimension creation.

Type:	Boolean
Saved in:	Drawing
Default value:	0
Possible values:	Off (0): Cursor controls only the dimension line location On (1): Cursor controls both the text position and the dimension line location

8.141 DIMZIN system variable

8.141.1 Suppress dim zeros

Suppresses leading and/or trailing zeros for primary units.

Type:	Short
Saved in:	Drawing
Range:	0 to 15
Default value:	0

Possible options:	0: Suppress zero feet and precisely zero inches 1: Include zero feet and precisely zero inches 2: Include zero feet and suppress zero inches 3: Suppress zero feet and include zero inches 4: Suppress leading zeros in decimal dimensions 8: Suppress trailing zeros in decimal dimensions

8.142 DISPLAYAXES system variable

8.142.1 Display Axes

Displays the axes of structural elements.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible options:	Off (0): Do not display axes On (1): Display axes

8.143 DISPLAYAXESFORMEP system variable

8.143.1 Display axes

Controls the display of MEP element axes.

Type:	Boolean
Saved in:	Registry
Default value:	0

8.144 DISPLAYSCALING system variable

8.144.1 Automatic display scaling (Read Only)

Current display scaling - the same as the system display settings.

BricsCAD only

Type:	Short

Saved in:	Not saved
Range:	50 to 1000
Default value:	100

8.145 DISPLAYSIDESANDENDS system variable

8.145.1 Display Sides and Ends

Displays the sides and ends of structural entities on selection. If on, these are selectable.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't display sides and ends On (1): Display side and ends

8.146 DISPLAYSNAPMARKERINALLVIEWS system variable

8.146.1 Snap marker in all views

Controls if snap markers display in all viewports.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't display snap marker in all views On (1): Display snap marker in all views

8.147 DISPLAYTOOLTIPS system variable

8.147.1 Snap tooltips

Toggles the display of snap tooltips on/off.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable snap tooltips On (1): Enable snap tooltips

8.148 DISPPAPERBKG system variable

8.148.1 Paper background

Displays a paper sheet in paper space.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display paper background On (1): Display paper background

8.149 DISPPAPERMARGINS system variable

8.149.1 Printable area

Displays the printable area of a layout in paper space.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display printable area On (1): Display printable area

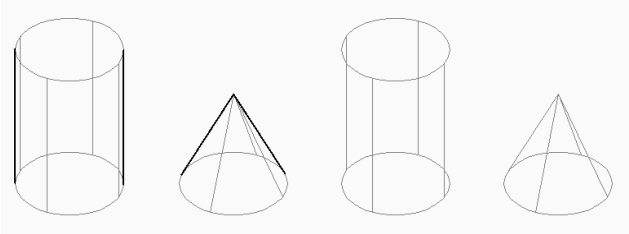
8.150 DISPSILH system variable

8.150.1 Display silhouette curves

Displays silhouette curves on solid entities in Wireframe modes (2D and 3D).

Note: To view changes on existing entities, perform a REGEN.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't display silhouette curves On (1): Display silhouette curves



8.151 DISTANCE system variable

8.151.1 Distance (Read Only)

The last calculated distance of the DIST command.

Type:	Real
Saved in:	Not saved

8.152 DMAUDITLEVEL system variable

8.152.1 DMAUDIT command, level of detail

Controls the message types displayed for the DMAUDIT command.

BricsCAD only

Type:	Short
Saved in:	Workspace

Range:	0 to 3
Default value:	1
Possible options:	1: Ignore dynamic range errors 2: Ignore sliver faces

Dynamic range

The dynamic range is the range of lengths required to create valid geometry. The range is limited because a modeler expresses the coordinates of points in 3D-space in terms of double precision floating point numbers. To represent a number, floating point numbers use a finite number of significant digits, which in the case of double precision numbers is roughly fourteen to sixteen significant digits. The modeler's use of digits is limited to nine significant digits to avoid susceptibility to round-off error. This means that a model's dynamic range can only be nine orders of magnitude wide. Thus, the ratio of the longest to shortest length that can be modeled is 10^9.

The numbers could be interpreted as inches, millimeters, or any other unit. The modeler has a resolution of 10^-6, which means that if the distance between two points is less than that, they are considered to be the same. A guard band of at least one order of magnitude around the resolution value is also required. For practical reasons, there can be ambiguity about distances that are close to the resolution value, so this guard band is a safety margin to improve reliability.

As a result, the valid dynamic range of models in BricsCAD is 10^-5 to 10^4 and is not unit dependent. The dynamic range of parts modeled in millimeters is 0.00001 mm to 10000 mm. The dynamic range of parts modeled in meters is 0.00001 m to 10000 m.

If the dynamic range is exceeded, the behavior of modeling algorithms is unpredictable. This may cause modeler algorithms to produce incorrect results or failures.

Sliver face

Some models may contain long narrow faces that were not intended to be present in the design of the model. Typically, these occur in imported models due to the tolerance differences between geometric modeling systems.

Because the size of a feature cannot be smaller than the resolution of a modeler, genuine faces are at least an order of magnitude larger than the maximum gap in the model. Any face smaller than that is a candidate for being spurious.

The entity's tolerance is calculated as the highest tolerance value among the entity's tolerant edges and vertices.

The maximum distance between the long edges of such a face is smaller than the specified tolerance. It has at least one short and no more than three long edges. A short edge is an edge that is shorter than the specified tolerance. A long edge is longer than the specified tolerance. The tolerance can be calculated automatically based on the entity's bounding box.

Because the dimensions of sliver geometry are close to the modeler resolution, performing operations on it is difficult. Because such geometry isn't usually intended, it is attempted to be replaced with tolerant geometry. In bodies, tolerant edges replace sliver faces, and tolerant vertices replace short edges. When fixing manually, slivers can be removed and adjacent faces extended if needed.

Note: When performing entity check and heal in various contexts, tolerance is taken from the entity as the biggest value of tolerance among entity's tolerant edges and vertices, or some other values on discretion of the caller.

8.153 DMAUTOUPDATE system variable

8.153.1 3D constraints recalculation mode

Updates the model automatically, when constraints are applied or modified.

If off, use the DMUPDATE command to update the model.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't update 3D constraints automatically On (1): Update 3D constraints automatically

8.154 DMCONNECTIONCUTTYPE system variable

8.154.1 Connection type

Controls the type of connection created by the BIMSTRUCTURALCONNECT command.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Smooth 1: Planar

8.155 DMPUSHPULLSUBTRACT system variable

8.155.1 DMPUSHPULL subtract

Controls what happens when an entity, modified with the DMPUSHPULL command, touches an existing entity.

When OFF, a solid that intersects with another solid, no longer subtracts the intersecting areas from the other solid.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Range:	0 to 1
Default value:	Off
Possible values:	Off (0): Disable DMPUSHPULL subtract On (1): Enable DMPUSHPULL subtract

8.156 DMRECOGNIZE system variable

8.156.1 Automatic 3D geometry constraints recognition

Automatically constrains geometrical relations between surfaces, when 3D entities are edited or 3D constraints are recalculated.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	-1 to 1023
Default value:	0
Possible options:	Negative: Switch off automatic 3D geometry constraints recognition 1: Tangent surfaces 2: Coincident planes 4: Parallel planes 8: Perpendicular planes 16: Cylinders perpendicular to planes 32: Coaxial surfaces 64: Cylinders and spheres of equal radius 128: Vertices between 4 or more faces 256: Edges between coincident faces 512: Fix a constrained plane lying in XY/YZ/ZX (compatibility)

8.157 DOCKPRIORITY system variable

8.157.1 Docking Priority

Controls the dock priority of top, left, right and bottom docking bars.

Note: A restart is required.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 14
Default value:	1
Possible values:	1: Top, Left, Right, Bottom 2: Top, Bottom, Left, Right 3: Top, Left, Bottom, Right 4: Top, Right, Bottom, Left 5: Left, Right, Top, Bottom 6: Left, Top, Bottom, Right 7: Left, Top, Right, Bottom 8: Left, Bottom, Right, Top 9: Right, Top, Left, Bottom 10: Right, Bottom, Left, Top 11: Right, Top, Bottom, Left 12: Bottom, Left, Right, Top 13: Bottom, Left, Top, Right 14: Bottom, Right, Top, Left

8.158 DOCTABPOSITION system variable

8.158.1 Tabs position

Controls where the document control tab is displayed.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	0

Possible values:	0: Top 1: Bottom 2: Left 3: Right

8.159 DONUTID system variable

8.159.1 Donut inside diameter

The default inside diameter for the DONUT command.

Type:	Real
Saved in:	Not saved
Default value:	0.5

8.160 DONUTOD system variable

8.160.1 Donut outside diameter

The default outside diameter for the DONUT command.

Type:	Real
Saved in:	Not saved
Default value:	1.0

8.161 DRAGMODE system variable

8.161.1 Entity drag mode

Controls if a preview displays during the MOVE and COPY commands.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2

Possible values:	0: No dragging 1: When requested 2: Whenever possible

8.162 DRAGMODEHIDE system variable

8.162.1 Hide during drag

Hides the original entity during move and stretch actions.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible values:	1: During 3D Modeling commands 2: During 2D Drafting commands

8.163 DRAGMODEINTERRUPT system variable

8.163.1 Drag interruption mode

Controls the recalculation/redrawing of the model is interrupted when the cursor is in motion.

If on, display a live preview. If off, every drag action must first be completed.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible values:	0: Disabled 1: Enabled

8.164 DRAGOPEN system variable

8.164.1 Drag open

Controls what to do when a drawing is dragged from the explorer to the program.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Insert file to current drawing 1: Open file in new tab

8.165 DRAGP1 system variable

8.165.1 Regen-drag rate

Controls the regen-drag input sampling rate.

Type:	Short
Saved in:	Registry
Range:	0 to 32767
Default value:	10

8.166 DRAGP2 system variable

8.166.1 Fast-drag rate

Controls the fast-drag input sampling rate.

Type:	Short
Saved in:	Registry
Range:	0 to 32767

Default value:	25

8.167 DRAGSNAP system variable

8.167.1 Snap dragged entities

Enables rubber band dynamics during modify commands: COPY, PASTECLIP, PASTEBLOCK, MOVE, ROTATE, MIRROR, SCALE, STRETCH and more.

The DRAGSNAP system variable controls the snap behavior while dragging. DRAGSNAP controls whether rubberband dynamics are displayed at the current cursor location or at the current entity snap location.

Note: Rubber band dynamics means that the cursor and the entity being modified will jump to the active snap point, this will make to target location more obvious.

- If on, the cursor and any selected entities will jump to the active snap point, this will make the target location more obvious.
- If off, snap is only in effect during drawing and editing commands.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't snap dragged entities On (1): Snap dragged entities

8.168 DRAWINGPATH system variable

8.168.1 Drawings path

The file path used for the fifth folder on the left of the OPEN, SAVEAS and INSERT command dialogs (Windows only).

BricsCAD only

Type:	String Standard
Saved in:	Preference

8.169 DRAWINGVIEWASM system variable

8.169.1 Assemblies optimization

Enables the use of assembly data structures, optimizes the generation of views created with the VIEWBASE command.

Toggles between normal analytical hidden line removal (HLR) and ASM_HLR procedure.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disable assemblies optimization On (1): Enable assemblies optimization

8.170 DRAWINGVIEWENTS system variable

8.170.1 Additional entities

Controls entities that will be processed in drawing views created by VIEWBASE command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off (0)
Possible values:	Off (0): Disable displaying of the Points On (1): Point (appearance is controlled by PDSIZE and PDMODE)

8.171 DRAWINGVIEWFLAGS system variable

8.171.1 Drawing View Flags

Enables the parallel generation and update of views created with the VIEWBASE command.

BricsCAD only

Type:	Short

Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disabled parallel generation and update of views On (1): Enabled parallel generation and update of views

8.172 DRAWINGVIEWPRESET system variable

8.172.1 Drawing view preset

Controls the view preset for the VIEWBASE command.

Presets specify the types of generated drawings and their placement in the layout.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	None

8.173 DRAWINGVIEWPRESETHIDDEN system variable

8.173.1 Drawing view hidden lines preset

Controls the hidden lines preset for the VIEWBASE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't store the current hidden line preset On (1): Store the current hidden line preset

8.174 DRAWINGVIEWPRESETSCALE system variable

8.174.1 Scale for drawing view preset

Controls the annotation scale for the current drawing view preset.

BricsCAD only

Type:	String
Saved in:	Registry

8.175 DRAWINGVIEWPRESETTANGENT system variable

8.175.1 Drawing view tangent lines preset

Controls the tangent lines preset for the VIEWBASE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't store the current tangent lines preset On (1): Store the current tangent lines preset

8.176 DRAWINGVIEWPRESETTRAILING system variable

8.176.1 Drawing view trailing lines preset

Controls the trailing lines preset for the VIEWBASE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't store the current trailing lines preset On (1): Store the current trailing lines preset

8.177 DRAWINGVIEWQUALITY system variable

8.177.1 Quality of drawing views

Controls the quality of views created with the VIEWBASE command.

Turn off to significantly reduce the time needed to generate drawing views. Views with draft-quality geometry are created, it is not possible to put annotations on the edges of entities in these views.

However, they look very similar to a precise (high-quality) drawing view and you can use them to quickly create layouts.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Draft quality 1: High quality

8.178 DRAWORDERCTL system variable

8.178.1 Draworder control

Controls draw order functionality. Limits the draw order, use if some editing operations take slightly longer.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	3
Possible options:	1: Default display of entities with draw order 2: Draw order inheritance

8.179 DWFFORMAT system variable

8.179.1 Default DWF format

Controls the default export format for the 3DDWF command.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1

Default value:	1
Possible values:	0: DWF 1: DWFx

8.180 DWFFRAME system variable

8.180.1 DWF frame

Controls the visibility of DWF or DWFx underlay frames, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Hide DWF frames 1: Display and plot DWF frames 2: Display but do not plot DWF frames

8.181 DWFOSNAP system variable

8.181.1 DWF entity snap

Enables entity snap for DWF underlay files.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable DWF entity snap On (1): Enable DWF entity snap

8.182 DWFVERSION system variable

8.182.1 DWF version

Controls the DWF export version.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 10
Default value:	2
Possible values:	1: 3D DWF v6.01 2: Binary DWF v6.0 3: Zipped Ascii Encoded 2D Stream DWF v6.0 4: Compressed DWF v5.5 5: Binary DWF v5.5 6: Ascii DWF v5.5 7: Compressed DWF v4.2 8: Binary DWF v4.2 9: Ascii DWF v4.2 10: XPS DWFx

8.183 DWGCHECK system variable

8.183.1 Drawing check

Executes an automatic data integrity check when a drawing is opened.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible values:	0: Warn on potential problem 1: Warn on potential problem and on other application 2: Notify on potential problem 3: Notify on potential problem, warn on other application

8.184 DWGCODEPAGE system variable

8.184.1 Drawing codepage (Read Only)

Displays the drawing code page, same as the SYSCODEPAGE system variable.

Type:	String
Saved in:	Drawing

8.185 DWGGUIDCLOUDAI system variable

8.185.1 Drawing Guid

Unique GUID (Globally Unique Identifier) for this drawing.

BricsCAD only

Type:	String
Saved in:	Drawing
Default value:	" "

8.186 DWGNAME system variable

8.186.1 Drawing name (Read Only)

The name of the current drawing.

Type:	String
Saved in:	Not saved

8.187 DWGPREFIX system variable

8.187.1 Drawing prefix (Read Only)

The folder path of the current drawing.

Type:	String Standard
Saved in:	Not saved

8.188 DWGTITLED system variable

8.188.1 Drawing titled (Read Only)

Shows if the current drawing has been named.

Type:	Boolean
Saved in:	Not saved
Possible values:	Off (0): Drawing has not been named On (1): Drawing has been named

8.189 DXEVAL system variable

8.189.1 Data extraction update mode

Controls the notification for data extraction tables.

Type:	Short
Saved in:	Drawing
Range:	0 to 511
Default value:	12
Possible options:	0: No notification 1: Notification on open 2: Notification on save 4: Notification on plot 8: Notification on publish 16: Notification on ETRANSMIT or ARCHIVE 32: Notification on save + automatic update 64: Notification on plot + automatic update 128: Notification on publish + automatic update 256: Notification on ETRANSMIT or ARCHIVE + automatic update

8.190 DXFTEXTADJUSTALIGNMENT system variable

8.190.1 DXF text adjust alignment

Controls if alignment is adjusted when text is loaded from a DXF.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't adjust alignment On (1): Adjust alignment

8.191 DYNCONSTRAINTMODE system variable

8.191.1 Dynamic Constraint Mode

Displays hidden dimensional constraints when constrained entities are selected.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display hidden dimensional constraints when constrained entities are selected. On (1): Display hidden dimensional constraints when constrained entities are selected.

8.192 DYNDIGRIP system variable

8.192.1 Show dynamic dimensions

Controls which dynamic dimensions are shown.

Type:	Short
Saved in:	Registry
Range:	0 to 31
Default value:	31

Possible options:	0: None 1: Resulting length 2: Extended length 4: Absolute angle 8: Relative angle 16: Arc radius

8.193 DYNDIMAPERTURE system variable

8.193.1 Dynamic dimension aperture

Controls the radius around the cursor, used to detect the nearest entity during a command, in pixels. Applies only when the DYNMODE system variable is set to **Nearest entity dynamic dimensions**.

Values between 1 and 500 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 500
Default value:	20
Unit	pixels

8.194 DYNDIMCOLORHOT system variable

8.194.1 Dynamic dimension hot color

The color of dynamic dimensions, during a grip move action.

Values between 1 and 255 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	142

8.195 DYNDIMCOLORHOVER system variable

8.195.1 Dynamic dimension hover color

The color of dynamic dimensions, when the cursor hovers over a grip point.

Values between 1 and 255 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	142

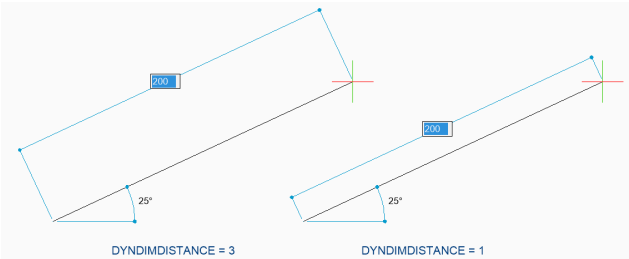
8.196 DYNDIMDISTANCE system variable

8.196.1 Dynamic dimension distance

Controls the position of the dynamic dimension box - the offset distance from the entity.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 to 10.0
Default value:	1.0



8.197 DYNDIMLINETYPE system variable

8.197.1 Dynamic dimension linetype

Controls the linetype visualization of dynamic dimensions during a grip move action.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	-1 to 2
Default value:	0
Possible values:	-1: Current 0: Continuous 1: Dotted 2: Dashed

8.198 DYNDIVIS system variable

8.198.1 Dynamic dimension visibility

Controls which dynamic dimensions are displayed when grips are moved.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: Only the first dynamic dimension 1: Only the first two dynamic dimensions 2: All dynamic dimensions, as specified by DYNDIGRIP

8.199 DYNINPUTTRANSPARENCY system variable

8.199.1 Transparency of dynamic input fields

Controls the transparency of dynamic input fields, as a percentage.

- A value of zero means fully transparent.
- A value of 100 means fully opaque.

BricsCAD only

Type:	Short

Saved in:	Preference
Range:	0 to 100
Default value:	90

8.200 DYNMODE system variable

8.200.1 Dynamic input mode

Toggles dynamic input features on/off.

Type:	Short
Saved in:	Registry
Range:	-31 to 31
Default value:	3
Possible options:	Negative: Switch all off temporarily 0: No dynamic input 1: Dynamic input at pointer (not yet supported) 2: Editable dynamic dimensions 4: Tracking dynamic dimensions 8: Nearest entity by UCS X/Y axes dynamic dimensions 16: Nearest entity dynamic dimensions

8.201 DYNPICOORDS system variable

8.201.1 Default mode for dynamic coordinates input

The default mode for coordinate entry, during dynamic input.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0

Possible values:	0: Relative 1: Absolute

9. E

9.1 EDGEMODE system variable

9.1.1 Edge mode

Controls how cutting and boundary edges are checked with the TRIM and EXTEND commands, with or without extension.

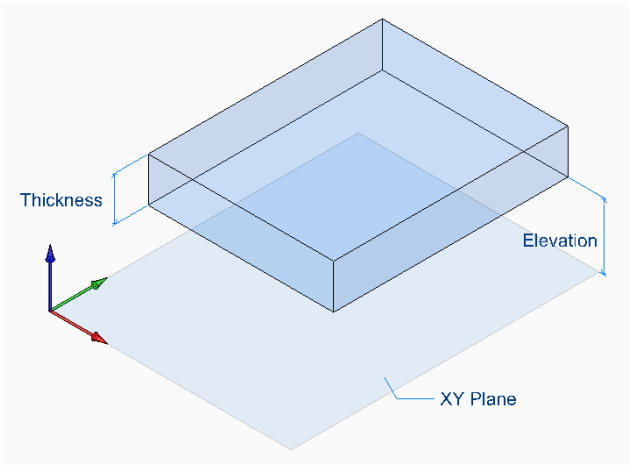
Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Use the selected edge without an extension On (1): Extend or trim the selected entity to an imaginary extension of the cutting or boundary edge

9.2 ELEVATION system variable

9.2.1 Elevation

The elevation (Z-axis) for new entities, relative to the current UCS.

Type:	Real
Saved in:	Drawing
Default value:	0.0



9.3 ELEVATIONATBREAKLINECROSSINGS system variable

9.3.1 Elevation at breakline crossings

Controls the elevation at breakline crossings.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: Minimal 1: Maximal 2: Average

9.4 ENABLEATTRACTION system variable

9.4.1 Grips attraction

Enables grip to grip attraction during move or modify actions on a grip point.

Note: The OSMODE system variable may override this behavior.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable grip attraction On (1): Enable grip attraction

9.5 ENABLEBIMBKUPDATE system variable

9.5.1 Enable section update in background

Enables section update in the background, see the BIMBKUPDATE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

9.6 ENABLEHYPERLINKMENU system variable

9.6.1 Hyperlink menu

Toggles the hyperlink menu on/off.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable hyperlink menu On (1): Enable hyperlink menu

9.7 ENABLEHYPERLINKTOOLTIP system variable

9.7.1 Hyperlink tooltip

Toggles the display of the hyperlink tooltip on/off.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Disable hyperlink tooltip On (1): Enable hyperlink tooltip

9.8 ERRNO system variable

9.8.1 Error number (Read Only)

Reports the error type of a LISP program.

Type:	Short
Saved in:	Not saved
Default value:	0

9.9 EXPERT system variable

9.9.1 Expert

Controls the display of certain prompts. If prompts are suppressed, continues as though y(es) was entered. Can affect scripts, menu macros, LISP and command functions.

Type:	Short
Saved in:	Not saved
Range:	0 to 5
Default value:	0
Possible values:	0: Issue all prompts normally 1: Suppress **regen** and **layer off** prompts 2: Also suppress **block already defined** (BLOCK) and **file already exists** (SAVE and WBLOCK) prompts 3: Also suppress **linetype already loaded** prompt 4: Also suppress **file already exists** (UCS and VPORTS Save) prompts 5: Also suppress **dimstyle already exists** prompt

9.10 EXPINSALIGN system variable

9.10.1 Explorer Insert Aligned

Align blocks inserted from the Drawing Explorer with selected entities.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

Possible values:	Off (0): Don't insert blocks aligned On (1): Insert blocks aligned

9.11 EXPINSANGLE system variable

9.11.1 Explorer Insert Angle

The rotation angle used for blocks inserted from the Drawing Explorer.

Applies if the EXPINSFIXANGLE system variable is switched on.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0
Unit	degrees

9.12 EXPINSFIXANGLE system variable

9.12.1 Explorer Insert Fix Angle

Uses a rotation angle for blocks inserted from the Drawing Explorer. See also the EXPINSANGLE system variable.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't insert blocks at fixed angle On (1): Insert blocks at fixed angle

9.13 EXPINSFIXSCALE system variable

9.13.1 Explorer Insert Fix Scale

Inserts blocks from Drawing Explorer at a fixed scale.

See the EXPINSSCALE system variable.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't insert blocks at fixed scale On (1): Insert blocks at fixed scale

9.14 EXPINSSCALE system variable

9.14.1 Explorer Insert Scale

The scale multiplier used for blocks inserted from the Drawing Explorer.

Applies if the EXPINSFIXSCALE system variable is switched on (1).

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	1.0

9.15 EXPLMODE system variable

9.15.1 Explode mode

Enables the EXPLODE command on nonuniformly scaled (NUS) blocks.

Type:	Boolean
Saved in:	Registry
Range:	On
Possible values:	Off (0): Don't explode nonuniformly scaled blocks On (1): Explode nonuniformly scaled blocks

9.16 EXPORT3DPDFWRITER system variable

9.16.1 3D PDF writer

Controls the writer used to save 3D PDF files.

Type:	Short
Saved in:	Registry
Default value:	1
Possible values:	0: Communicator 3D PDF writer 1: Internal 3D PDF writer

9.17 EXPORTACISASSEMBLYWRITER system variable

9.17.1 ASAT/ASAB writer

Controls the writer used to save ASAT/ASAB files. The internal ASAT/ASAB writer used if the Communicator is not installed.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Communicator ASAT/ASAB writer 1: Internal ASAT/ASAB writer

9.18 EXPORTACISFORMATVERSION system variable

9.18.1 ACIS export format version

Controls the ACIS file version to export to.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	0

Possible options:	0: Latest available 1: R18 2: R19 3: R20 4: R21 5: R22 6: R23 7: R24 8: R25 9: 2016 10: 2017 11: 2018 12: 2019 13: 2020 14: 2021 15: 2022

9.19 EXPORTCATIAV4FORMATVERSION system variable

9.19.1 CATIA V4 export format version

Controls CATIA V4 file version to export to.

Type:	Short
Saved in:	Registry
Range:	0 to 6
Default value:	0
Possible values:	0: Latest available 1: 4.1.9 2: 4.2.0 3: 4.2.1 4: 4.2.2 5: 4.2.3 6: 4.2.4

9.20 EXPORTCATIAV5FORMATVERSION system variable

9.20.1 CATIA V5 export format version

Controls CATIA V5 file version to export to.

Type:	Short
Saved in:	Registry
Range:	0 to 17
Default value:	0
Possible values:	0: Latest available 1: CATIA V5 R16 2: CATIA V5 R17 3: CATIA V5 R18 4: CATIA V5 R19 5: CATIA V5 R20 6: CATIA V5 R21 7: CATIA V5 R22 8: CATIA V5 R23 9: CATIA V5 R24 10: CATIA V5 R25 11: CATIA V5-6 R2016 12: CATIA V5-6 R2017 13: CATIA V5-6 R2018 14: CATIA V5-6 R2019 15: CATIA V5-6 R2020 16: CATIA V5-6 R2021 17: CATIA V5-6 R2022

9.21 EXPORTGEOMETRYFLAGS system variable

9.21.1 Export Geometry Flags

Controls how geometry representations in IGES and STEP formats are exported.

Type:	Short
Saved in:	Registry
Range:	0 to 15
Default value:	0

Possible values:	01: Convert Analytical Curves to Splines 02: Convert Analytical Surfaces to Splines 04: Split Pcurves at G1 Discontinuities (Mac only) 08: Split Periodic Faces

9.22 EXPORTHIDDENPARTS system variable

9.22.1 Hidden parts

Controls how hidden parts are exported.

Entities can be invisible because of:

- The result of the HIDEOBJECTS command.
- Sitting on a hidden layer.
- Owned by an invisible component.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	**0: Export and hide if possible**: Exports hidden entities. If the target format supports hidden entities, hidden entities in the source document will be hidden also in target document. **1: Do not export**: Invisible entities are skipped.

9.23 EXPORTMODELSPACE system variable

9.23.1 Export model space

Controls what part of model space to export to DWF, DWFx or PDF.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0

Possible values:	0: Display 1: Extents 2: Window

Note: The EXPORTMODELSPACE, EXPORTPAPERSPACE and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

9.24 EXPORTPAGESETUP system variable

9.24.1 Export page setup

Toggles the page setup for DWF, DWFx or PDF export.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Default 1: Override

Note: The EXPORTMODELSPACE, EXPORTPAPERSPACE and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

9.25 EXPORTPAPERSPACE system variable

9.25.1 Export paper space

Controls which layout(s) to export to DWF, DWFx or PDF, from paper space.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Current layout 1: All layouts

Note: The EXPORTMODELSPACE, EXPORTPAPERSPACE and EXPORTPAGESETUP system variables currently are dummies for DWF exports.

9.26 EXPORTPARASOLIDFORMATVERSION system variable

9.26.1 Parasolid export format version

Controls the Parasolid file version to export to.

Type:	Short
Saved in:	Registry
Range:	0 to 23
Default value:	0
Possible values:	0: Latest available 1: Parasolid 12 2: Parasolid 13 3: Parasolid 14 4: Parasolid 15 5: Parasolid 16 6: Parasolid 17 7: Parasolid 18 8: Parasolid 19 9: Parasolid 20 10: Parasolid 21 11: Parasolid 22 12: Parasolid 23 13: Parasolid 24 14: Parasolid 25 15: Parasolid 26 16: Parasolid 27 17: Parasolid 28 18: Parasolid 29 19: Parasolid 30 20: Parasolid 31 21: Parasolid 32 22: Parasolid 33 23: Parasolid 34

9.27 EXPORTPRODUCTSTRUCTURE system variable

9.27.1 Product structure

Controls if a product structure is exported.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	**0: No product structure**: Exports a flat structure without components in the target document, whether the BricsCAD document has a product structure or not. **1: Export product structure**: Exports the BricsCAD product structure data (if existing) to the target document.

Note: The option [1] is valid for Pro (or higher) license level. It works as [0] otherwise.

9.28 EXPORTSTEPFORMATVERSION system variable

9.28.1 STEP export format version

Controls the STEP file version to export to.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: AP203 1: AP214 2: AP242

9.29 EXPORTXCGMFORMATVERSION system variable

9.29.1 XCGM export format version

Controls the XCGM file version to export to.

Type:	Short
Saved in:	Registry
Range:	0 to 16
Default value:	0
Possible values:	0: Latest available 1: CGM R2013x 2: CGM R2014 3: CGM R2014x 4: CGM R2015x B1 5: CGM R2015x B5 6: CGM R2015x B5 SP1 7: CGM R2016 1.0 8: CGM R2016 1.1 9: CGM R2017 1.0 10: CGM R2017 1.1 11: CGM R2018 1.0 12: CGM R2018 1.1 13: CGM R2019 1.0 14: CGM R2020 1.0 15: CGM R2021 1.0 16: CGM R2022 1.0

9.30 EXTMAX system variable

9.30.1 Extents maximum (Read Only)

The drawing extents' upper-right coordinate.

It increases as new entities are created outside the existing extents.

Type:	3D point
Saved in:	Drawing

9.31 EXTMIN system variable

9.31.1 Extents minimum (Read Only)

The drawing extents' lower-left coordinates.

Type:	3D point
Saved in:	Drawing

9.32 EXTNAMES system variable

9.32.1 Extend names

Controls the maximum characters for the names of named entities (for example: linetypes and layers) saved in symbol tables.

Type:	Boolean
Saved in:	Drawing
Default value:	1
Possible values:	Off (0): Names up to 31 characters On (1): Names up to 255 characters

9.33 EXTRUDEINSIDE system variable

9.33.1 Extrude behavior inside

Controls how new entities, modify a parent entity when they intersect. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

A parent entity is any entity that touches the contour from which the extruded/revolved entity was created.

The EXTRUDEINSIDE system variable is one of the four system variables found under the **Extrude mode** group.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM

Possible options:	0: Do not modify 1: Subtract created entity from parent 2: Unite created entity with parent

9.34 EXTRUDEOUTSIDE system variable

9.34.1 Extrude behavior outside

Controls how new entities, modify a parent entity when they touch. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

A parent entity is any entity that touches the contour from which extruded/revolved entity was created.

The EXTRUDEOUTSIDE system variable is one of the four system variables found under the **Extrude mode** group.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM
Possible options:	0: Do not modify 1: Subtract the new entity from the existing entity 2: Unite the entities

10. F

10.1 FACETRATIO system variable

10.1.1 Faceting aspect ratio

Controls the aspect ratio of faceting for cylindrical and conic ACIS solids.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: Creates an N by 1 mesh for cylindrical and conic ACIS solids 1: Creates an N by M mesh for cylindrical and conic ACIS solids

10.2 FACETRES system variable

10.2.1 Facet resolution

Controls the smoothness of shaded, rendered and hidden line views.

Values between 0.01 and 10.0 are accepted. Large values can have a significant impact on memory usage and performance.

Type:	Real
Saved in:	Drawing
Range:	0.01 to 10.0
Default value:	0.5

10.3 FBXEXPORTCAMERAS system variable

10.3.1 FBX Export Cameras

Enables the export of cameras to FBX.

BricsCAD only

Type:	Boolean

Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable export of cameras On (1): Enable export of cameras

10.4 FBXEXPORTENTITIES system variable

10.4.1 FBX Export Entities

Enables the export of entities to FBX.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable export of entities On (1): Enable export of entities

10.5 FBXEXPORTENTITIESSELTYPE system variable

10.5.1 FBX entities to export

Controls which entities are exported to FBX.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Visible Entities 1: Selected Entities

10.6 FBXEXPORTLIGHTS system variable

10.6.1 FBX Export Lights

Enables the export of lights to FBX.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable export of lights On (1): Enable export of lights

10.7 FBXEXPORTMATERIALS system variable

10.7.1 FBX Export Materials

Enables the export of materials to FBX.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable export of materials On (1): Enable export of materials

10.8 FBXEXPORTTEXTURES system variable

10.8.1 FBX Export Textures

Sets the material type used for an FBX file export.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2

Default value:	0
Possible values:	0: Embed 1: Reference 2: Copy textures to location

10.9 FBXEXPORTTEXTURESPATH system variable

10.9.1 Fbx Export Textures path

The file path for FBX Export Textures.

This setting is only used when the FBXEXPORTTEXTURES system variable is set to 2.

BricsCAD only

Type:	String Standard
Saved in:	Preference

10.10 FEATURECOLORS system variable

10.10.1 Feature colors

Colors sheet metal parts based on feature type.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible options:	On (1): Solid faces are colored by specified color of related feature Off (0): All feature faces are colored with the default 3d solid color

10.11 FIELDDISPLAY system variable

10.11.1 Field display

Applies a gray fill behind field text.

Type:	Boolean
Saved in:	Registry

Default value:	On
Possible values:	Off (0): No gray background On (1): Gray background

10.12 FIELDEVAL system variable

10.12.1 Field update mode

Controls the way fields are updated.

Type:	Short
Saved in:	Drawing
Range:	0 to 31
Default value:	31
Possible options:	0: Not updated 1: Updated on open 2: Updated on save 4: Updated on plot 8: Updated on use of ETRANSMIT 16: Updated on regeneration

Note: Date fields are only updated by the UPDATEFIELD command; they are not automatically updated based on the FIELDEVAL system variable value.

10.13 FILEDIA system variable

10.13.1 File dialog

Toggles the display of file dialog boxes. If off, enter a tilde (~) to bring up the file dialog. This also works for LISP functions and command fields in tool definitions.

Type:	Boolean
Saved in:	Registry
Default value:	On

Possible values:	Off (0): Don't display dialog boxes On (1): Display dialog boxes

10.14 FILLETRAD system variable

10.14.1 Fillet radius

The last radius used with the FILLET command.

Type:	Real
Saved in:	Drawing
Default value:	0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0 - If MEASUREMENT=1 and INSUNITS=millimeters

10.15 FILLETWELDINGCOMBINEADJACENT system variable

10.15.1 Combine adjacent fillet welds

Makes it possible to combine adjacent fillet weld segments into one fillet welding feature.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't combine adjacent fillet weld segments. On (1): Combine adjacent fillet weld segments.

10.16 FILLETWELDINGMAXGAPRATIO system variable

10.16.1 Maximal ratio of a gap to a weld size

Sets the default maximal ratio of a gap between a welding part and the fillet weld size, see the FILLETWELDINGZSIZE system variable.

Values between 0.0 and 0.8 are accepted.

BricsCAD only

Type:	Real

Saved in:	Drawing
Range:	0 to 0.8
Default value:	0.4

10.17 FILLETWELDINGZSIZE system variable

10.17.1 Default fillet weld Z size

Sets default Z-size of symmetric fillet welds.

Values between 0 and 50 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 50
Default value:	5

10.18 FILLMODE system variable

10.18.1 Fill mode

Shows fills for multilines, traces, solids, hatches (includes solid-fill), and wide polylines.

A REGEN is required.

If off, all filled entities display and print as outlines, this will also reduce the time it takes to display or print a drawing.

Type:	Boolean
Saved in:	Drawing
Range:	On
Possible values:	Off (0): Entities are not filled On (1): Entities are filled

10.19 FITLINEFITARCMODE system variable

10.19.1 FitLine FitArc mode

The FITLINEFITARCMODE system variable sets the values for the options **Use entire drawing**, **Fit in 3d**, and **Delete original entities after fitting**, that are used by the FITLINE and FITARC commands. The value is stored as a bit code using the sum of the values of all selected options.

Note: This system variable is only available at the Command line.

Type:	Byte
Saved in:	Registry
Range:	0 to 255
Default value:	0
Possible values:	0: None 1: Use entire drawing 2: Fit in 3D 4: Delete original entities after fitting

10.20 FITTINGRADIUSTYPE system variable

10.20.1 Fitting Radius Type

Sets the default flow fitting radius type.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	(0): Profile Width Ratio (1): Absolute Value

10.21 FITTINGRADIUSVALUE system variable

10.21.1 Fitting Radius Value

Sets default flow fitting radius value.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1.5

10.22 FONTALT system variable

10.22.1 Alternate font

The substitute font used when a text font cannot be found.

Type:	String
Saved in:	Registry
Default value:	simplex.shx

10.23 FONTMAP system variable

10.23.1 Font mapping file

The font mapping file.

Type:	String
Saved in:	Registry
Default value:	default.fmp

10.24 FRAME system variable

10.24.1 Frame

Controls the visibility of frames for XRefs, images and underlays.

Overrides the IMAGEFRAME, DWFFRAME, PDFFRAME, DGNFRAME, and XCLIPFRAME system variables.

Type:	Short
Saved in:	Drawing
Range:	0 to 3

Default value:	3
Possible values:	0: Hide frames 1: Display and plot frames 2: Display but do not plot frames 3: Use individual system variables

10.25 FRAMESELECTION system variable

10.25.1 Frame selection

Controls if the hidden frame of an image, underlay, clipped XRefs, or wipeout can be selected.

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	Off (0): Hidden frames cannot be selected On (1): Hidden frames can be selected

10.26 FRONTZ system variable

10.26.1 Front clipping plane offset

Displays the **CLipping** option of the DVIEW command.

Type:	Real
Saved in:	Drawing
Default value:	0.0

10.27 FULLOPEN system variable

10.27.1 Full open (Read Only)

Indicates the state of the current drawing.

Type:	Short
Saved in:	Not saved

Range:	0 to 1
Possible values:	0: Drawing is partially open 1: Drawing is fully open

11. G

11.1 GEARTEETHNUMBER system variable

11.1.1 Maximum number of sproket teeth

Controls the number of teeth for sprockets, during the -BMHARDWARE command. Use this option to insert sprockets with simplified or full geometry.

Values between 0 and 1000 are accepted.

Note: This number must be greater or equal to the number of teeth of the inserted sproket to create a sproket with full geometry. 1000 is enough to insert any sproket from the library with a full set of teeth.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	1

11.2 GENERATEASSOCATTRS system variable

11.2.1 Generate associative attributes

Enables the generation of associative attributes on 3D entities.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Possible values:	Off (0): Do not generate associative attributes for 3D entities On (1): Generate associative attributes for 3D entities

11.3 GENERATEASSOCVIEWS system variable

11.3.1 Generate associative drawings

Enables associative dimensions for drawings generated with the BIMSECTIONUPDATE, VIEWBASE and VIEWSECTION commands.

As a result, dimensions are updated in the associated paperspace viewports and BIM section drawings.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Default value:	Off
Possible values:	Off (0): Disable associative dimensions On (1): Enable associative dimensions

11.4 GEOLATLONGFORMAT system variable

11.4.1 Geographic latitude/longitude format

Controls the format of geographical latitude and longitude values.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	Off
Possible values:	0: Decimal degrees 1: Degrees/minutes/seconds

11.5 GEOMARKERVISIBILITY system variable

11.5.1 Geographic marker visibility

Controls the visibility of the geographic marker.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Geographic marker is not visible On (1): Geographic marker is visible

11.6 GEOMRELATIONS system variable

11.6.1 Geometric relationship indication

Controls if geometric relationships are recognized and maintained when a 2D entity is dragged.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	0
Possible options:	1: Recognize tangent relationships 2: Recognize perpendicular relationships

11.7 GETSTARTED system variable

11.7.1 Get Started

Controls if the Launcher is displayed on startup.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show Launcher dialog On (1): Show Launcher dialog

11.8 GFANG system variable

11.8.1 Gradient fill angle

Controls the default gradient fill angle.

Type:	Real
Saved in:	Not saved

Default value:	0.0

11.9 GFCLR1 system variable

11.9.1 Gradient fill primary color

Controls the default first color of a gradient fill.

Type:	String
Saved in:	Not saved
Default value:	5

11.10 GFCLR2 system variable

11.10.1 Gradient fill secondary color

Controls the default second color of a gradient fill.

Type:	String
Saved in:	Not saved
Default value:	7

11.11 GFCLRLUM system variable

11.11.1 Gradient fill tint level

Controls the default tint intensity in a one-color gradient fill.

Type:	Real
Saved in:	Not saved
Default value:	1.0

11.12 GFCLRSTATE system variable

11.12.1 Number of colors for a gradient fill

Controls the default number of colors for a gradient fill.

Type:	Boolean
Saved in:	Not saved
Default value:	0
Possible values:	Off (0): Two colors On (1): One color

11.13 GFNAME system variable

11.13.1 Gradient fill name

Controls the pattern of a gradient fill.

Type:	Short
Saved in:	Not saved
Range:	1 to 9
Default value:	1
Possible values:	1: LINEAR 2: CYLINDER 3: INVCYLINDER 4: SPHERICAL 5: HEMISPHERICAL 6: CURVED 7: INVSPHERICAL 8: INVHEMISPHERICAL 9: INVCURVED

11.14 GFSHIFT system variable

11.14.1 Gradient fill shift

Controls if a gradient fill pattern is centered or is shifted up and to the left.

Type:	Boolean
Saved in:	Not saved

Default value:	0
Possible values:	Off (0): Centered On (1): Shifted

11.15 GLSWAPMODE system variable

11.15.1 GL Swap Mode

Controls the swap method used when drawing with the GL engine. Depending on the hardware driver used, the visual effect may differ between these options.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 4
Default value:	2
Possible values:	0: Call glCopyPixels to copy back to front, don't call glXSwapBuffers. 1: Call glCopyPixels to copy back to front, then call glXSwapBuffers. 2: Call glXSwapBuffers, don't call glCopyPixels. 3: Call glXSwapBuffers, then call glCopyPixels to copy front to back. 4: Do nothing - for testing purposes only.

11.16 GRADIENTCOLORBOTTOM system variable

11.16.1 Background gradient color bottom

Controls the default bottom color for gradient backgrounds and the default for solid view backgrounds.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB:210,210,210

11.17 GRADIENTCOLORMIDDLE system variable

11.17.1 Background gradient color middle

Controls the default middle color for gradient backgrounds.

Applies only if the GRADIENTMODE system variable is set to **Three-color gradient**.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	RGB:250,250,250

11.18 GRADIENTCOLORTOP system variable

11.18.1 Background gradient color top

Controls the default top color for gradient backgrounds.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White

11.19 GRADIENTMODE system variable

11.19.1 Background gradient mode

Controls if and how a gradient is applied in the default background. Can be adjusted in the **Background** dialog box.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0

Possible values:	0: No gradient background 1: Two-color gradient (top/bottom) 2: Three-color gradient (top/middle/bottom)

11.20 GRIDAXISCOLOR system variable

11.20.1 Grid axis color

Controls the color of the grid axis lines.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	254

11.21 GRIDDISPLAY system variable

11.21.1 Grid display

Controls how the grid is displayed.

Type:	Short
Saved in:	Drawing
Range:	0 to 15
Default value:	2
Possible options:	0: Restrict to LIMITS area 1: Display beyond LIMITS area 2: Adaptive grid display 4: Allow subdivision below grid spacing 8: Follow Dynamic UCS

11.22 GRIDMAJOR system variable

11.22.1 Grid major

Controls the frequency of major versus minor grid lines.

Values between 1 and 100 are accepted.

Type:	Short
Saved in:	Drawing
Range:	1 to 100
Default value:	5

11.23 GRIDMAJORCOLOR system variable

11.23.1 Grid major color

Controls the color of the major grid lines.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Possible values:	251

11.24 GRIDMINORCOLOR system variable

11.24.1 Grid minor color

Controls the color of the minor grid lines.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	250

11.25 GRIDMODE system variable

11.25.1 Grid mode

Turns the grid on.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Grid off On (1): Grid on

11.26 GRIDSTYLE system variable

11.26.1 Grid style

Controls if the grid is displayed as dots or lines.

Type:	Short
Saved in:	Registry
Range:	0 to 7
Default value:	0
Possible options:	0: Lined grid 1: Dotted grid in 2D model space 2: Dotted grid in Block Editor 4: Dotted grid in Sheet/Layout

11.27 GRIDUNIT system variable

11.27.1 Grid unit

Controls the X and Y grid spacing for the current viewport.

Type:	2D point
Saved in:	Drawing

Default value:	0.5,0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0,10.0 - If MEASUREMENT=1 and INSUNITS=millimeters

11.28 GRIDXYZTINT system variable

11.28.1 Grid XYZ tint

Applies the UCS axis colors for grid lines. See also the COLORX, COLORY and COLORZ system variables.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 7
Default value:	1
Possible options:	1: Apply XYZ tint to grid axis lines 2: Apply XYZ tint to major grid lines 4: Apply XYZ tint to minor grid lines

11.29 GRIPBLOCK system variable

11.29.1 Grips in blocks

Displays grips on entities inside a block, when a block is selected.

The insertion point of the block is displayed regardless of this setting.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Doesn't display grips on entities within the block On (1): Display grips on entities within the block

11.30 GRIPCOLOR system variable

11.30.1 Grip color

Controls the color of unselected grips.

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	72

11.31 GRIPDYNCOLOR system variable

11.31.1 Dynamic grip color

Controls the color of custom grips for dynamic blocks.

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	140

11.32 GRIPHOT system variable

11.32.1 Selected grip color

Controls the color of selected grips.

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	240

11.33 GRIPHOVER system variable

11.33.1 Hover grip color

Controls the color of an unselected grip, when the cursor hovers over it.

Type:	Short

Saved in:	Registry
Range:	1 to 255
Default value:	150

11.34 GRIPOBJLIMIT system variable

11.34.1 Grip entity limit

Sets the maximum number of grips to display for a selection.

Values between 0 and 32767 are accepted.

- The display of grips is suppressed if the number of selected entities exceeds the value of this system variable.
- If set to 0, grips are always displayed.

Type:	Short
Saved in:	Registry
Range:	0 to 32767
Default value:	100

11.35 GRIPS system variable

11.35.1 Grips

Controls how grips display when entities are selected.

Type:	Short
Saved in:	Registry
Default value:	2
Possible values:	0: Turn off grips 1: Turn on endpoint grips 2: Turn on endpoint and midpoint grips

11.36 GRIPSIZE system variable

11.36.1 Grip size

Controls the grip display size, in pixels.

Values between 1 and 255 are accepted.

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	4

11.37 GRIPTIPS system variable

11.37.1 Grip tips

Controls if grip tips display when the cursor hovers over grips on custom entities or dynamic blocks that support grip tips (Not yet supported).

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display grip tips On (1): Display grip tips

11.38 GSDEVICETYPE2D system variable

11.38.1 2D graphic system device

Sets current graphic system device used for wireframe.

GDI+ option is strongly recommended, extra options are available only for testing purposes.

BricsCAD only

Type:	Short
Saved in:	Preference

Range:	0 to 3
Default value:	0
Possible values:	0: GDI+ 1: OpenGL (not recommended, available only for testing) 2: RedOpenGL (not recommended, available only for testing) 3: GDI (not recommended, available only for testing)

11.39 GSDEVICETYPE3D system variable

11.39.1 3D graphic system device

Set current graphic system device for rendered output for Hidden, Gouraud (with edges) and Flat (with edges) visual styles.

Other rendered visual styles, such as Modeling and Realistic, will always use RedOpenGL.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: OpenGL 1: RedOpenGL

12. H

12.1 HALOGAP system variable

12.1.1 Halo gap

Controls the value of the gap displayed if an entity is hidden by another entity. Applies to 2D views only.

Specified as a percent of one drawing unit, independent of the zoom level.

Type:	Short
Saved in:	Drawing
Range:	0 to 100
Default value:	0

12.2 HANDLES system variable

12.2.1 Publish Handles (Read Only)

Shows if entity handles can be accessed by applications or not.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Handles cannot be accessed by applications On (1): Handles can be accessed by applications

12.3 HANDSEED system variable

12.3.1 Handle seed (Read Only)

Indicates the handle used to create new entities.

BricsCAD only

Type:	String
Saved in:	Not saved
Default value:	25

12.4 HIDEPRECISION system variable

12.4.1 Hide and shade precision

Controls the accuracy of hides and shades. If on, uses double precision, more memory is needed, which might affect performance.

Type:	Short
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Disable double precision On (1): Enable double precision

12.5 HIDESYSTEMPRINTERS system variable

12.5.1 Hide system printers

Hides system printers.

Type:	Boolean
Saved in:	Preference
Default value:	Off

12.6 HIDETEXT system variable

12.6.1 Hide text on HIDE

Controls if text can be hidden with the HIDE command.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Text is not hidden and does not hide other entities 1: Text is hidden but does hide other entities

12.7 HIDEXREFSCALES system variable

12.7.1 Hide xref scales

Hides XRefs scales.

Type:	Boolean
Saved in:	Not saved
Default value:	On
Possible values:	Off (0): Don't hide XRefs scales On (1): Hide XRefs scales

12.8 HIGHLIGHT system variable

12.8.1 Highlight

Highlights entities when they are selected.

Note: Does not affect entities selected with grips.

Type:	Boolean
Saved in:	Not saved
Default value:	On
Possible values:	Off (0): Do not highlight entity selection On (1): Highlight entity selection

12.9 HIGHLIGHTCOLOR system variable

12.9.1 Selection Highlight Color

Controls the highlight color used when GLSelectionHighlightStyle is set to **Use a different color for highlight**.

BricsCAD only

Type:	Short
Saved in:	Registry

Range:	1 to 255
Default value:	150

12.10 HIGHLIGHTEFFECT system variable

12.10.1 Selection Highlight Style

Controls how entities are highlighted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3
Possible values:	0: Use line stipple for highlight 1: Use a different color for highlight 2: Use a thickened line for highlight 3: Use a different color and thickened line for highlight

12.11 HORIZONBKG_ENABLE system variable

12.11.1 Horizon background

Controls if horizon background is shown in perspective views.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable horizon background On (1): Enable horizon background

12.12 HORIZONBKG_GROUNDHORIZON system variable

12.12.1 Ground horizon

Controls the color of the ground horizon.

Type:	String
Saved in:	Preference
Default value:	RGB:67,74,80

12.13 HORIZONBKG_GROUNDORIGIN system variable

12.13.1 Ground origin

Controls the color of the ground.

Type:	String
Saved in:	Preference
Default value:	RGB:95,103,112

12.14 HORIZONBKG_SKYHIGH system variable

12.14.1 Sky high

Controls the color of the higher regions of the sky.

Type:	String
Saved in:	Preference
Default value:	RGB:204,229,234

12.15 HORIZONBKG_SKYHORIZON system variable

12.15.1 Sky horizon

Controls the color at the lowest part of the sky at the horizon. This effect can be very subtle. This color is also used as the color of the "sky" when the camera is below the "earth".

Type:	String

Saved in:	Preference
Default value:	RGB:238,248,250

12.16 HORIZONBKG_SKYLOW system variable

12.16.1 Sky low

Controls the color of the lower regions of the sky.

Type:	String
Saved in:	Preference
Default value:	RGB:238,248,250

12.17 HOTKEYASSISTANT system variable

12.17.1 Hotkey Assistant

Displays the Hotkey Assistant.

The Hotkey Assistant appears in the bottom-middle of the screen and displays keyboard shortcut tips, during some commands.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show Hotkey Assistant On (1): Show Hotkey Assistant

12.18 HPANG system variable

12.18.1 Hatch pattern angle

The hatch pattern angle.

Type:	Real
Saved in:	Not saved

Default value:	0.0

12.19 HPANNOTATIVE system variable

12.19.1 Hatch pattern annotative

Controls if new hatch patterns are created as annotative hatch patterns.

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Do not create annotative patterns On (1): Create annotative patterns

12.20 HPASSOC system variable

12.20.1 Hatch pattern associativity

Controls if new hatch patterns and gradient fills are associative. Associative hatches and gradient fills are updated automatically when their boundaries change.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't associate hatch patterns and gradient fills with their boundaries On (1): Associates hatch patterns and gradient fills with their boundaries

12.21 HPBACKGROUNDCOLOR system variable

12.21.1 Hatch background default color

The default hatch background color.

Enter '.' for none.

Type:	String

Saved in:	Drawing
Default value:	.

12.22 HPBOUND system variable

12.22.1 Hatch pattern boundary

Controls the entity type created by the BHATCH and BOUNDARY commands.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	1
Possible values:	0: Region 1: Polyline

12.23 HPBOUNDRETAIN system variable

12.23.1 Hatch pattern boundary retain

Creates boundary entities for hatches and gradient fills.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: Do not create boundary entities 1: Create boundary entities

12.24 HPCOLOR system variable

12.24.1 Hatch default color

Controls the default hatch foreground color.

Enter '.' to use the current color, defined by the CECOLOR system variables.

Type:	String
Saved in:	Drawing
Default value:	.

12.25 HPDOUBLE system variable

12.25.1 Hatch pattern doubling

Controls user-defined hatch pattern crosshatching.

- If on, creates a cross hatch.
- If off, creates a single hatch.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Hatch pattern doubling off On (1): Hatch pattern doubling on

12.26 HPDRAWORDER system variable

12.26.1 Hatch pattern draw order

Controls the draw order of hatches and gradient fills, defined by the **Draw order** setting in the **Hatch and Gradient** dialog box.

Type:	Short
Saved in:	Not saved
Range:	0 to 4
Default value:	3

Possible values:	0: None 1: Send to back 2: Bring to front 3: Send behind boundary 4: Bring in front of boundary

12.27 HPGAPTOL system variable

12.27.1 Hatch pattern gap tolerance

Controls the tolerance for a boundary created with the BHATCH or BOUNDARY commands. When zoomed in closely, boundary detection will fail. When zoomed so the contour 'looks' closed, the boundary is detectable.

Values between 0.0 and 500.0 are accepted.

Type:	Real
Saved in:	Registry
Range:	0 or greater
Default value:	0.0

12.28 HPISLANDDETECTION system variable

12.28.1 Hatch pattern island detection

Controls hatch creation when islands are within a hatch boundary.

Type:	Short
Saved in:	Not saved
Range:	0 to 2
Default value:	0
Possible values:	0: Nested - Hatches areas within islands. 1: Outer - Hatches areas outside of islands. 2: Ignore - Hatches whole the boundary.

12.29 HPLAYER system variable

12.29.1 Default layer for new hatches

The default layer for new hatches.

Type:	String
Saved in:	Drawing
Default value:	0

12.30 HPLINETYPE system variable

12.30.1 Hatch pattern linetype

Applies non-continuous linetypes to hatch entities (decreases performance).

When turned off, lines in the hatch pattern display as continuous, even if a non-continuous linetype is applied to the hatch entity. When turned on, lines in the hatch pattern display with the linetype that's applied to the hatch entity. This is not recommended because it can impact performance. Instead, you can choose a hatch pattern that is predefined with a non-continuous linetype.

Type:	Boolean
Saved in:	Registry
Range:	Off
Possible values:	Off (0): Don't apply non-continuous linetypes to hatch entities On (1): Apply non-continuous linetypes to hatch entities

12.31 HPMAXAREAS system variable

12.31.1 Fill mode for sparse hatches

Converts sparse hatches to fills.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0

Possible values:	0: Sparse hatches are left blank 1: Sparse hatches are changed to solid fills

12.32 HPMAXCONTOURPOINTS system variable

12.32.1 Maximum number of points on a hatch contour

Controls the maximum number of points on a contour (outline) that a hatch entity can contain and still render.

Values between 0 and 10,000,000 are accepted.

Hatches do not render if the number of points exceeds the specified value.

Setting to 0 disables the check, meaning the variable is not used.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 10000000
Default value:	100000

12.33 HPNAME system variable

12.33.1 Hatch pattern name

The default hatch pattern name.

Type:	String
Saved in:	Not saved

12.34 HPOBJWARNING system variable

12.34.1 Hatch pattern entity warning

Controls how many hatch boundary entities can be selected before a warning message appears.

Values between 1 and 100,000,000 are accepted.

Type:	Long
Saved in:	Registry

Range:	1 to 100000000
Default value:	10000

12.35 HPORIGIN system variable

12.35.1 Hatch pattern origin

Stores the origin point for new hatches, relative to the current UCS.

Type:	2D point
Saved in:	Drawing
Default value:	0,0

12.36 HPSCALE system variable

12.36.1 Hatch pattern scale

The default hatch pattern scale.

Type:	Real
Saved in:	Not saved
Default value:	1.0

12.37 HPSEPARATE system variable

12.37.1 Hatch pattern separate

Controls if separate hatches or a single hatch is created when several hatch boundaries are selected, during the HATCH command.

Type:	Boolean
Saved in:	Registry
Range:	Off
Possible values:	Off (0): Don't create separate hatches On (1): Create separate hatches

12.38 HPSPACE system variable

12.38.1 Hatch pattern spacing

Controls the hatch pattern line spacing for user-defined hatch patterns.

Type:	Real
Saved in:	Not saved
Default value:	1.0

12.39 HPTRANSPARENCY system variable

12.39.1 Default transparency for new hatches

The default transparency for new hatches, as a percentage.

Values accepted: ByLayer, ByBlock, '.' (use current), 0 (fully opaque), and 90 (maximum transparency).

Type:	String
Saved in:	Drawing
Default value:	.
Possible values:	.: Use current ByLayer: Apply the layer's transparency ByBlock: Apply the block's transparency 0: Apply no transparency (fully opaque) 1-90: Apply transparency percentage from least (1) to most (90) transparent

12.40 HYPERLINKBASE system variable

12.40.1 Hyperlink base

The file path for relative hyperlinks in the drawing.

Type:	String Standard
Saved in:	Drawing

13. I

13.1 IFCCREATEUNIQUEGUID system variable

13.1.1 Export with unique guids

Controls if unique GUIDs (Globally Unique Identifiers) for nested elements are generated during IFC export.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3
Possible values:	1: Inside classified blocks 2: Inside classified XRefs

13.2 IFCEXPLODEEXTERNALREFERENCES system variable

13.2.1 Explode external references in IFC spatial structure

Explodes external references in IFC spatial structures during IFC export.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.3 IFCEXPORTBASEQUANTITIES system variable

13.3.1 Export base quantities

Export derived base quantities (quantities calculated from two or more measurements) from BIM entities during IFC export.

BricsCAD only

Type:	Boolean

Saved in:	Registry
Default value:	0

13.4 IFCEXPORTELEMENTSONOFFANDFROZENLAYER system variable

13.4.1 Export elements on Off and Frozen layers

Exports elements on Off and Froze layers during IFC export.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.5 IFCEXPORTMAPPINGPATH system variable

13.5.1 Export mapping file path

Exports file paths during IFC export.

Type:	String
Saved in:	Registry
Default value:	" "

13.6 IFCEXPORTMULTIPLYELEMENTSASAGGREGATED system variable

13.6.1 Export multi-ply elements as aggregated elements

Export multi-ply elements as aggregated elements.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.7 IFCEXPORTPROFILECENTEROFGRAVITY system variable

13.7.1 Export profile center of gravity

Export profile center of gravity during IFC export, applies only to IFC2x3.

Warning: May cause linear solids to appear in the wrong position.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.8 IFCEXPORTSWEPTSOLIDSASBREP system variable

13.8.1 Always export swept solids as BRep

Exports extrusions, revolutions, swept 3D solids with clippings and subtractions with a boundary representation during IFC export.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.9 IFCEXPORTTESSELATION system variable

13.9.1 Level of tessellation

Controls the exported geometry tessellation level during IFC export. When the **Current** faceting option is chosen, no regeneration is required, the faceting as set by FACETRES system variables or the Modeler Properties.

The **Low**, **Medium**, or **High** options cause regeneration of facets, which takes longer.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3

Default value:	0
Possible values:	0: Current 1: Low 2: Medium 3: High

13.10 IFCEXPORTVALIDATEMODEL system variable

13.10.1 Apply IFC model validation (Beta)

Checks that an IFC model complies with schema rules during IFC export. Problems are reported in an export log next to IFC file.

Warning: Validation takes extra time and can slow down the export of big IFC files.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.11 IFCEXPORTVERIFYMODEL system variable

13.11.1 Apply IFC model verification

Check that IFC model complies with its schema rules. The problems will be reported in export log next to ifc file. Evaluation takes extra time and can slow down export of big IFC files.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.12 IFCIMPORTBIMDATA system variable

13.12.1 Import BIM Data

Imports BIM data during IFC import.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.13 IFCIMPORTBREPGEOMETRYASMESHES system variable

13.13.1 Import BREP geometry as meshes

Imports BREP geometry as meshes during IFC import.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.14 IFCIMPORTMAPPINGPATH system variable

13.14.1 Import mapping file path

Imports file paths during IFC import.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	" "

13.15 IFCIMPORTMODELORIGIN system variable

13.15.1 Import model position

Sets how to position a model in the world coordinate system (WCS) during IFC import.

BricsCAD only

Type:	Short
Saved in:	Registry

Range:	0 to 2
Default value:	1
Possible values:	0: WCS matches IFC Global Coordinate system 1: WCS matches IFC Project Location 2: WCS matches IFC Site Location

13.16 IFCIMPORTPARAMETRICCOMPONENTS system variable

13.16.1 Import Parametric Components

Imports windows and doors as parametric components during IFC import.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.17 IFCIMPORTPROJECTSTRUCTUREASXREFS system variable

13.17.1 Import IFC project structure as XRefs

Imports IFC project structure as XRefs.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Range:	0 to 1
Default value:	0

Note: When IFCIMPORTPROJECTSTRUCTUREASXREFS system variable is ON (1), an IFC file cannot be opened with drag and drop in a saved drawing, but the IMPORT command should be used. A warning message is displayed.

13.18 IFCIMPORTSPACES system variable

13.18.1 Import Spaces

Imports spaces during IFC import.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.19 IFCIMPORTUSESUBDMESH system variable

13.19.1 Import IFC meshes as subdivision meshes

Imports IFC meshes as subdivision meshes. If off, uses Polyface meshes to import meshes from IFC. A polyface mesh has a limitation of 32767 faces or vertices, a subdivision has no limitation.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.20 IFCMATCHIMPORTEDPROFILESGEOMETRICALLY system variable

13.20.1 Import: use profiles from databases with corresponding geometry

Compares profiles with the project and central database based on their geometry during IFC import. If it matches, the parameters defined in the project/central database (profile name, size and standard) are used instead of imported parameters.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Range:	0 to 1
Default value:	0

13.21 IFCTESSELATEBSPLINECURVESANDSURFACES system variable

13.21.1 Tessellate complex curves and surfaces

Tessellates BSpline curves and surfaces in IFC4 and IFC4.1 during IFC export.

Note: BSpline curves are not supported by some software products in IFC import.

Type:	Boolean
Saved in:	Registry
Default value:	0

13.22 IMAGECACHEFOLDER system variable

13.22.1 Image disk cache folder

The file path used to store temporary image cache file.

See the IMAGEDISKCACHE system variable.

BricsCAD only

Type:	String Standard
Saved in:	Preference
Default value:	{User}AppData/Local/Temp/ImageCache

13.23 IMAGECACHEMAXMEMORY system variable

13.23.1 Maximum used memory

Maximum size of the in-memory image cache, in MiB.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	160

13.24 IMAGEDISKCACHE system variable

13.24.1 Image disk cache

Stores temporary image cache files.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable image disk cache On (1): Enable image disk cache

13.25 IMAGEFRAME system variable

13.25.1 Image frame

Controls the visibility of image frames, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	1
Possible values:	0: Hide image frames 1: Display and plot image frames 2: Display but do not plot image frames

13.26 IMAGEHLT system variable

13.26.1 Image highlight

Controls how an image is highlighted when selected.

- If on, highlights the whole image.
- If off, highlights the border only.

Type:	Boolean

Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't highlight entire raster image On (1): Highlight entire raster image

13.27 IMAGENOTIFY system variable

13.27.1 Image notify

Displays a warning, when a drawing is opened, if there are missing raster images.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disable image notification On (1): Enable image notification

13.28 IMPORTACISWITHBRICSCAD system variable

13.28.1 Import ACIS using built-in importer

Imports ACIS files with embedded routines, even if the Communicator is installed.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.29 IMPORTCATIAV5REPRESENTATION system variable

13.29.1 Import representation

Controls the data that the Communicator imports during a Catia V5 import.

Preview graphics are only imported and shown if the COMMUNICATORBACKGROUNDMODE system variable is on.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible options:	0: Graphics 1: Geometry 2: Geometry with preview graphics

13.30 IMPORTCATIAV5EDGEATTRIBUTES system variable

13.30.1 Import edge attributes mode

Controls the import of edge attributes, by edge type, during a Catia V5 import.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible options:	0: None 1: Edges that are parts of wire entities 2: Edges that are owners of part PMI 3: All edges

13.31 IMPORTCATIAV5SEARCHPATHSPREFERENCE system variable

13.31.1 Search path preference

Controls the priority of file paths during a Catia V5 import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 3
Default value:	1
Possible options:	1: Sub-folders first 2: Root folder only 3: Root folder first

13.32 IMPORTCREOCONFIGURATION system variable

13.32.1 Import configuration

Sets the name of the configuration to import. If no configuration name is specified, then the part's default configuration is imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

BricsCAD only

Type:	String
Saved in:	Registry

13.33 IMPORTCREOALTERNATESEARCHPATHS system variable

13.33.1 Alternate search paths

The alternate file used during a Creo import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with a semicolon.

BricsCAD only

Type:	String
Saved in:	Registry

13.34 IMPORTIGESSTITCH system variable

13.34.1 Perform stitching

Automatically runs the DMSTITCH command during an IGES import.

If on, overrides the IMPORTSTITCH system variable on IGES models.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.35 IMPORTINVENTORSEARCHPATHSPREFERENCE system variable

13.35.1 Search paths preference

Controls the priority order of search paths during an Inventor file import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 3
Default value:	1
Possible options:	1: Sub-folders first 2: Root folder only 3: Root folder first

13.36 IMPORTNXCONFIGURATION system variable

13.36.1 Import configuration

Sets the name of the configuration that should be imported. If no configuration name is specified, then the part's default configuration will be imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

BricsCAD only

Type:	String
Saved in:	Registry

13.37 IMPORTNXSEARCHPATHSPREFERENCE system variable

13.37.1 Search paths preference

Controls the priority of file paths during an NX import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 3
Default value:	1
Possible options:	1: Sub-folders first 2: Root folder only 3: Root folder first

13.38 IMPORTJTREPRESENTATION system variable

13.38.1 Import representation

Controls the data to import during a JT import.

Note: This option is only taken into account when import in background is enabled.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1

Possible values:	0: Graphics 1: Geometry 2: Geometry with graphics

13.39 IMPORTCOLORS system variable

13.39.1 Translate colors

Controls how colors are converted during import.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: To RGB 1: To RGB, if there is no matching palette index 2: To nearest palette index

- If 0: all entity colors will be converted to RGB, regardless of the current palette.
- If 1: if the entity color is found in the palette, the entity gets an index color. Otherwise, it is given a true color.
- If 2: for any true color of the imported entity, the nearest match is searched in the palette and this index color is assigned to the entity.

13.40 IMPORTCUIFILEEXISTS system variable

13.40.1 Import cui file exists

Controls what to do when a CUI file already exists, when a MNU or CUIX file is imported.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0 to 2

Possible values:	0: Prompt 1: Overwrite 2: Rename

13.41 IMPORTHIDDENPARTS system variable

13.41.1 Hidden parts

Controls how hidden parts are imported.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: Import and hide 1: Import and set visible 2: Do not import

- If 0: all entities are imported; invisible entities are hidden. Note that currently there are no user tools to make these hidden entities visible again.
- If 1: all entities are imported and visible, regardless of the visibility in the source file.
- If 2: hidden entities in the source file are not imported.

13.42 IMPORTIGESSIMPLIFY system variable

13.42.1 Perform simplification

Automatically runs the DMSIMPLIFY command during an IGES import.

If on, overrides the IMPORTSIMPLIFY system variable on IGES models.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.43 IMPORTINVENTORALTERNATESEARCHPATHS system variable

13.43.1 Alternate search paths

Controls the list of alternate file system paths used during an Inventor file import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

BricsCAD only

Type:	String
Saved in:	Registry

13.44 IMPORTNXALTERNATESEARCHPATHS system variable

13.44.1 Alternate search paths

Controls the list of alternate file paths used during an NX import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

BricsCAD only

Type:	String
Saved in:	Registry

13.45 IMPORTPMI system variable

13.45.1 Product and manufacturing information

Enables the import of product and manufacture information.

Note: Currently, such information is imported as exploded data (lines, text, etc.) instead of compound entities (for example: annotations).

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1

13.46 IMPORTPRODUCTSTRUCTURE system variable

13.46.1 Product structure

Controls the way a product structure is represented for an imported model.

As mechanical components automatically runs the BMMECH command after import.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: None 1: As blocks 2: As mechanical components

- If 0: creates a flat structure without blocks in the model space of the target database, regardless of whether the imported data have an assembly structure or not.
- If 1: the imported data have an assembly structure, which will be converted into a hierarchy of plain blocks; so the structure will be preserved, while the assembly metadata are lost. If the imported data is composed of entities only, they are placed in the modelspace of the target database.
- If 2: in this mode, data will be translated to BricsCAD assembly data, the structure and its properties (physical materials – BLMATERIALS command). If the imported file has no assembly data, a mechanical component will nevertheless be created in the BricsCAD target document root.

13.47 IMPORTREPAIR system variable

13.47.1 Repair model on import

Automatically runs the DMAUDITALL command on imported models.

3D geometry is analyzed and problems are fixed automatically, in order to improve the quality of the imported geometry. Geometry modeled in CAD systems which use a kernel different from ACIS, often needs to be healed because of possible flaws.

BricsCAD only

Type:	Boolean
Saved in:	Registry

Default value:	Off
Possible values:	Off (0): Do not repair model on import On (1): Repair model on import

13.48 IMPORTSIMPLIFY system variable

13.48.1 Perform simplification

Automatically runs the DMSIMPLIFY command on imported models. See also the IMPORTIGESSIMPLIFY system variable.

Note: The IMPORTIGESSIMPLIFY system variable can set an override for the IGES file format.

- Convert imported splines into canonical surfaces.
- Simplify topology (remove imprinted edges) if possible.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.49 IMPORTSOLIDEDGEALTERNATESEARCHPATHS system variable

13.49.1 Alternate search paths

Controls the list of alternate file paths used during a Solid Edge file import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with semicolon.

BricsCAD only

Type:	String
Saved in:	Registry

13.50 IMPORTSOLIDEDGESEARCHPATHSPREFERENCE system variable

13.50.1 Search paths preference

Controls the priority order of files paths during a Solid Edge file import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 3
Default value:	1
Possible options:	1: Sub-folders first 2: Root folder only 3: Root folder first

13.51 IMPORTSOLIDWORKSALTERNATESEARCHPATHS system variable

13.51.1 Alternate search paths

Controls the list of alternate file system paths to search during a Solid Works import.

Separate values with semicolons (;).

Note: Paths must be absolute (fully qualified) and separated with a semicolon.

BricsCAD only

Type:	String
Saved in:	Registry

13.52 IMPORTSOLIDWORKSCONFIGURATION system variable

13.52.1 Import configuration

Sets the name of the configuration that should be imported. If no configuration name is specified, then the part's default configuration will be imported.

Note: A named configuration sets a collection of body entities in a part that can be imported as a group while suppressing the import of other body entities.

BricsCAD only

Type:	String

Saved in:	Registry

13.53 IMPORTSOLIDWORKSREPRESENTATION system variable

13.53.1 Import representation

Controls the data imported during a Solid Works import. Preview graphics are only imported and shown if the COMMUNICATORBACKGROUNDMODE system variable is on.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: Graphics 1: Geometry 2: Geometry with preview graphics

13.54 IMPORTSOLIDWORKSROTATEYZ system variable

13.54.1 Map SolidWorks Y to current Z axis

Enables the conversion of a SolidWorks coordinate system to the current coordinate system.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0) On (1)

13.55 IMPORTSOLIDWORKSSEARCHPATHSPREFERENCE system variable

13.55.1 Search paths preference

Controls the priority order for search paths during a Solid Works import.

Note: This option is taken into account only when import in background is enabled (COMMUNICATORBACKGROUNDMODE system variable is ON).

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 3
Default value:	1
Possible options:	1: Sub-folders first 2: Root folder only 3: Root folder first

13.56 IMPORTSTEPROTATEYZ system variable

13.56.1 Map Y to current Z axis

Enables conversion of a SolidWorks coordinate system to the current coordinate system, during a STEP import.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0) On (1)

13.57 IMPORTSTITCH system variable

13.57.1 Perform stitching

Automatically runs the DMSTITCH command on imported models. See the IMPORTIGESSTITCH system variable.

In some cases, imported geometry represents solid geometry as a set of separate surfaces. Use the DMSTITCH command to work with solid operations on the imported geometry. If IMPORTSTITCH is set to ON, the DMSTITCH command is executed automatically when the geometry is imported.

Note:

- Stitch operations are time-consuming when importing large files.
- Check the IMPORTIGESSTITCH setting, which can set an override for the IGES file format.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0

13.58 INCLUDEPLOTSTAMP system variable

13.58.1 Include Plot Stamp

Includes a plot stamp when printing.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't include Plot Stamp On (1): Include Plot Stamp

13.59 INDEXCTL system variable

13.59.1 Index control

Controls if layer and/or spatial indexes are created and saved.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	0

Possible options:	0: No indexes 1: Layer index 2: Spatial index

13.60 INETLOCATION system variable

13.60.1 Internet location

The default website for the BROWSER command.

Type:	String
Saved in:	Registry
Default value:	"http://www.bricsys.com"

13.61 INSBASE system variable

13.61.1 Insertion base point

The drawing's insertion point, used when the drawing is inserted into other drawings as a block. Set by the BASE command, and expressed as a UCS coordinate for the current space.

Type:	3D point
Saved in:	Drawing
Default value:	0,0,0

13.62 INSMODE system variable

13.62.1 Insertion mode Auto

Controls the advanced options available in the INSERT command.

BricsCAD only

Type:	Short
Saved in:	Workspace
Default value:	1 for BIM, Mechanical and Modeling workspaces

Possible options:	0: Regular mode 1: Advanced mode (dynamic dimensions and additional options from BMINSERT (like "Edit", "Smart Insert", "Array", etc) are available if they make sense in the current context).

13.63 INSNAME system variable

13.63.1 Insertion name

Stores the default block name for the INSERT command.

Type:	String
Saved in:	Drawing
Default value:	

13.64 INSUNITS system variable

13.64.1 Insertion units

Controls the unit used to scale blocks, images or XRefs, when they are inserted into a drawing. When both the INSUNITS and PROPUNITS system variables are on, length, area, volume and/or inertia properties are formatted with their respective unit(s).

Note: It does not convert current drawing units.

See also the LUNITS and MEASUREMENT system variables

Type:	Short
Saved in:	Drawing
Range:	0 to 24
Default value:	1

Possible values:	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile

13.65 INSUNITSDEFSOURCE system variable

13.65.1 Insertion units default source

Controls the source content units value.

Note: If INSUNITS in the source drawing is **Unspecified**, INSUNITSDEFSOURCE is used instead.

Type:	Short
Saved in:	Registry
Range:	0 to 24
Default value:	0

Possible values:	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile

13.66 INSUNITSDEFTARGET system variable

13.66.1 Insertion units default target

Controls the target drawing units value, if the INSUNITS system variable is zero.

Values between 0 and 20 are accepted.

Type:	Short
Saved in:	Registry
Range:	0 to 24
Default value:	0

Possible values:	0: Unspecified (No units) 1: Inches 2: Feet 3: Miles 4: Millimeters 5: Centimeters 6: Meters 7: Kilometers 8: Microinches 9: Mils 10: Yards 11: Ångströms 12: Nanometers 13: Microns 14: Decimeters 15: Decameters 16: Hectometers 17: Gigameters 18: Astronomical Units 19: Light-years 20: Parsecs 21: US Survey Feet 22: US Survey Inch 23: US Survey Yard 24: US Survey Mile

13.67 INSUNITSSCALING system variable

13.67.1 Insertion units scaling

Controls how the INSUNITS system variable is applied when entities are inserted, imported or pasted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible values:	1: Scale with the INSUNITS system variable, if inactive, uses the INSUNITSDEFSOURCE system variable 2: Use paper size unit instead of INSUNITS in paper space.

When inserting or attaching Xrefs, Blocks or images the inserted content is scaled with respect to the value of INSUNITS in the target and source drawing.

- If INSUNITS in the source drawing is **Unspecified**, INSUNITSDEFSOURCE is used instead.
- If INSUNITS in the target drawing is **Unspecified**, INSUNITSDEFTARGET is used instead.

13.68 INTERFERECOLOR system variable

13.68.1 Interference color

Controls the color of interference entities.

Type:	String
Saved in:	Drawing
Default value:	ByLayer

13.69 INTERFERELAYER system variable

13.69.1 Interference layer

Controls the layer used for interference entities.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	"Interferences"

13.70 INTERFERENCELEVEL system variable

13.70.1 Interference Check Level

Controls the interference check between details, copied details and/or the rest of the model.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0

Possible values:	0: No interference checking 1: Check overlap of detail volumes 2: Full interference check, ignore background spatial elements 3: Full interference checking

13.71 INTERFEREOBJVS system variable

13.71.1 Interference entity visual style

Controls the interference entity visual style.

Type:	String
Saved in:	Drawing
Default value:	

13.72 INTERFEREVPVS system variable

13.72.1 Interference viewport visual style

Controls the interference checking visual style for the viewport.

Type:	String
Saved in:	Drawing
Default value:	

13.73 INTERIORELEVATIONMINLENGTH system variable

13.73.1 Interior Elevation Minimum Length

Minimum length of a wall for an Interior Elevation to generate.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	20 - for MEASUREMENT=0 (inches) 500 - for MEASUREMENT=1 (millimeters)

13.74 INTERIORELEVATIONOFFSET system variable

13.74.1 Interior Elevation Offset Distance

Offset distance, for an Interior Elevation volume, from wall surfaces.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	2 - for MEASUREMENT=0 (inches) 50 - for MEASUREMENT=1 (millimeters)

13.75 INTERSECTEDENTITIES system variable

13.75.1 Resolve intersection

Controls how new entities, modify existing entities when they intersect. Applies to entities as they are created with the EXTRUDE and REVOLVE commands, when the **Auto** option is selected.

The INTERSECTEDENTITIES system variable is one of the four system variables found under the **Extrude mode** group.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	0 - for Workspaces Drafting and Modeling 1 - for Workspaces Mechanical and BIM
Possible options:	0: Do not modify 1: Subtract from intersection 2: Unite at intersection

13.76 INTERSECTIONCOLOR system variable

13.76.1 Intersection color

Controls the polyline color at the intersection of 3D surfaces in 2D Wireframe views, if INTERSECTIONDISPLAY is on (Not yet supported).

Type:	Short
Saved in:	Drawing
Range:	0 to 257
Default value:	257
Possible values:	0: ByBlock 1 - 255: index 256: ByLayer 257: ByEntity

13.77 INTERSECTIONDISPLAY system variable

13.77.1 Intersection display

Toggles the display of polylines at the intersection of 3D surfaces in 2D Wireframe views (Not yet supported).

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don’t display intersection polylines On (1): Display intersection polylines

13.78 ISAVEBAK system variable

13.78.1 Incremental save backup

Creates backup files (BAK) for active drawings. If off, improves the speed of incremental saves, especially for large drawings.

Type:	Boolean
Saved in:	Registry
Default value:	On

Possible values:	Off (0): Don't create BAK file On (1): Create BAK file

13.79 ISAVEPERCENT system variable

13.79.1 Save percent

Controls the "wasted space" allowed for QUICKSAVE actions, before a full save is executed,as a percentage.

Values between 0 and 100 are accepted. A value of zero means Each save is a full save.

Type:	Short
Saved in:	Registry
Range:	0 to 100
Default value:	50

13.80 ISOLINES system variable

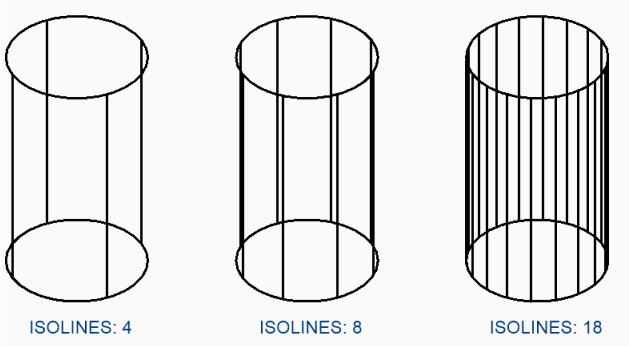
13.80.1 Isolines

Controls the number of isolines (contour lines) per surface.

Values between 0 and 2047 are accepted.

Note: To view changes on existing entities, perform a REGEN.

Type:	Short
Saved in:	Drawing
Range:	0 to 2047
Default value:	4


ISOLINES: 4
ISOLINES: 8
ISOLINES: 18

14. L

14.1 LASTANGLE system variable

14.1.1 Last angle (Read Only)

The end angle of the last arc drawn.

Type:	Real
Saved in:	Not saved

14.2 LASTPOINT system variable

14.2.1 Last point

The coordinates of the last point entered - the value used by the '@' symbol in the Command line.

Note: Expressed as a UCS coordinate for the current space; referenced by the at symbol (@) during keyboard entry.

Type:	3D point
Saved in:	Not saved

14.3 LASTPROMPT system variable

14.3.1 Last prompt (Read Only)

The last string in Command line.

Type:	String
Saved in:	Not saved

14.4 LATITUDE system variable

14.4.1 Latitude

Controls the latitude of the current drawing, in decimal format.

Values between -90.0 and 90.0 are accepted. Positive values represent north latitudes.

Type:	Real
Saved in:	Drawing

Range:	-90.0 to 90.0
Default value:	37.795

14.5 LAYERFILTEREXCESS system variable

14.5.1 Layer Filter Excess

Specifies the maximum number of layer filters allowed in a drawing before suggesting some be removed. You can create any number of layer filters. However, if the number of layer filters exceeds this value and exceeds the number of layers, a message dialog displays the next time you open the drawing. It recommends deleting all layer filters to improve performance.

If LAYERFILTEREXCESS is 0, dialog is suppressed.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	250

14.6 LAYERPMODE system variable

14.6.1 Layer previous mode

Tracks layer settings modification and enables the LAYERP command.

Type:	Boolean
Saved in:	Registry
Range:	On
Possible values:	Off (0): Doesn't allow tracking of layer settings modification and enables LAYERP command On (1): Allows tracking of layer settings modification and enables LAYERP command

14.7 LAYLOCKFADECTL system variable

14.7.1 Locked layer fade control

Controls the fade level for entities on locked layers to contrast them with entities on unlocked layers and reduces the visual complexity of a drawing. Entities on locked layers are still visible for reference and for object snapping.

Values between -90 and 90 are accepted. Negative values disable fading.

Type:	Short
Saved in:	Registry
Range:	-90 to 90
Default value:	50

14.8 LAYOUTREGENCTL system variable

14.8.1 Layout regeneration control

Controls how the display of the Model and layout tabs is updated. If performance is poor in general or when switching between tabs.

Setting LAYOUTREGENCTL to 1 or 0 might improve performance.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Always regenerate between when a tab is activated 1: Suppress the regeneration of the Model tab and last layout made current regenerate all other tabs when activated 2: Regenerate only the first time the tab is active

14.9 LAYOUTTAB system variable

14.9.1 Layout and model tabs

Controls the display of layout and model tabs.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show layout and model tabs On (1): Show layout and model tabs

14.10 LEGACYCODESEARCH system variable

14.10.1 Legacy code search mode (Read Only)

Enables unsafe search for executable code in drawing folders.

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Disable unsafe searching for executable code On (1): Enable unsafe searching for executable code

14.11 LENGTHSAMPLINGINTERVAL system variable

14.11.1 Sampling interval for straight segments

Controls the length of sampling intervals, used to sample straight segments.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1.00

14.12 LENGTHUNITS system variable

14.12.1 Length units

Controls a list of units used to display lengths, if length properties are formatted with the PROPUNITS system variable. The string contains a space-separated list of unit abbreviations.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	"in ft mi µm mm cm m km"

14.13 LENSLENGTH system variable

14.13.1 Lens length (Read Only)

Displays the current viewport's lens length, in millimeters, used for perspective mode.

Type:	Real
Saved in:	Drawing
Default value:	50.0
Unit	mm

14.14 LEVELOFDETAIL system variable

14.14.1 Composition Level of detail

Controls the composition level of detail (LOD).

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	0: Low 2: High

- If 0: Composition plies do not display.
- If 2: Composition plies display.

14.15 LICFLAGS system variable

14.15.1 Licensed components (Read Only)

Controls if certain components are licensed or not. The value is stored as a bitcode using the sum of the values of all selected options.

BricsCAD only

Type:	Short
Saved in:	Not saved
Range:	0 to 7
Default value:	0
Possible options:	0: No components licensed 1: VBA is licensed 2: Acis editing is licensed 4: Pro

14.16 LIGHTGLYPHCOLOR system variable

14.16.1 Color for light glyph

Controls the color of light glyphs (icons used to indicate the placement of lights in model space).

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	30

14.17 LIGHTGLYPHDISPLAY system variable

14.17.1 Light display

Displays a visual representation of lights for all light locations.

Type:	Boolean

Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't display light On (1): Display light

14.18 LIGHTINGUNITS system variable

14.18.1 Lighting units

Controls the light units type.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Obsolete. Generic lighting 1: Photometric, American units (foot-candles) 2: Photometric, International units (lux)

14.19 LIGHTWEBGLYPHCOLOR system variable

14.19.1 Color for web light glyph

Controls the color for web light glyphs (icons used to indicate the placement of web lights in model space).

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	1

14.20 LIMCHECK system variable

14.20.1 Limits check

Prevent the creation of entities outside the drawing limits.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Can create entities outside limits On (1): Cannot create entities outside limits

14.21 LIMMAX system variable

14.21.1 Limits maximum

The upper-right corner of the drawing limits, expressed in world coordinates.

Type:	2D point
Saved in:	Drawing
Default value:	12,9

14.22 LIMMIN system variable

14.22.1 Limits minimum

The lower-left corner of the drawing limits, expressed in world coordinates.

Type:	2D point
Saved in:	Drawing
Default value:	0,0

14.23 LINEARBRIGHTNESS system variable

14.23.1 Linear brightness

Controls the intensity of lights, can be specified per viewport.

Values between -10 and 10 are accepted. A value of zero means no scaling.

Smaller values decrease light intensity and bigger values increase light intensity. This setting can be specified per viewport.

Type:	Short
Saved in:	Drawing
Range:	-10 to 10
Default value:	0

14.24 LINEARCONTRAST system variable

14.24.1 Linear contrast

Controls ambient light intensity. Only effects materials with a non-black ambient color, can be set per viewport.

Values between -10 and 10 are accepted.

- A value of -10 means maximum ambient light.
- A value of 10 means no ambient light.

This setting only has effect on materials that have a non-black ambient color. This setting can be specified per viewport.

Type:	Short
Saved in:	Drawing
Range:	-10 to 10
Default value:	0

14.25 LINETYPE3DPLINE system variable

14.25.1 3D Polyline linetype

Controls applying line type to 3D Polyline.

BricsCAD only

Type:	Boolean
Saved in:	Registry

Default value:	0
Possible values:	0: Continuous Linetype is always applied to 3D Polyline 1: Complex Linetype is applied to 3D Polyline

14.26 LISPINIT system variable

14.26.1 LISP init

Controls if LISP variables and functions are preserved between drawings.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Preserved from drawing to drawing 1: Valid in current drawing only

14.27 LOADMECHANICAL2D system variable

14.27.1 Mechanical 2D Editor

Controls if Mechanical 2D enablers can load.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Loading of Mechanical 2D enablers is not permitted On (1): Loading of Mechanical 2D enablers is permitted

Note: Changing the value of this variable will take effect after restarting the application.

14.28 LOCALE system variable

14.28.1 Locale (Read Only)

The ISO language code of this version of the program.

Type:	String
Saved in:	Not saved
Default value:	"en_US"

14.29 LOCALROOTPREFIX system variable

14.29.1 Local root prefix (Read Only)

The path of the folder, where local files for the current user, such as templates, were installed.

The Template and Textures folders are in this location, and you can add any customizable files that you do not want to roam on the network. See ROAMABLEROOTPREFIX for the location of the roamable files.

Type:	String Standard
Saved in:	Registry

14.30 LOCKUI system variable

14.30.1 Lock user interface elements

Locks interface elements and prevents repositioning.

- Windows and Linux: hold the Ctrl key to override.
- macOS: hold the Cmd key to override.

Type:	Short
Saved in:	Registry
Range:	-7 to 7
Default value:	0
Possible options:	negative: Locking temporarily disabled 1: Lock docked toolbars 2: Lock docked panels 4: Lock floating panels and toolbars

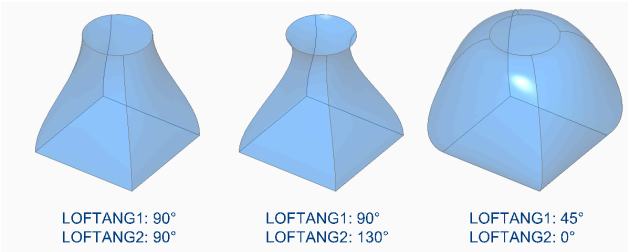
14.31 LOFTANG1 system variable

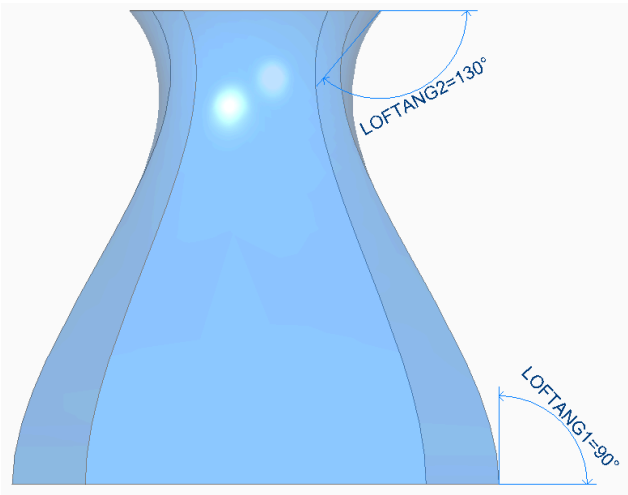
14.31.1 Loft angle 1

Sets the angle at the first cross-section, for the LOFT command, modifies the loft shape. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Values between 0.0 and 360.0 are accepted.

Type:	Real
Saved in:	Drawing
Range:	0.0 to 360.0
Default value:	90.0





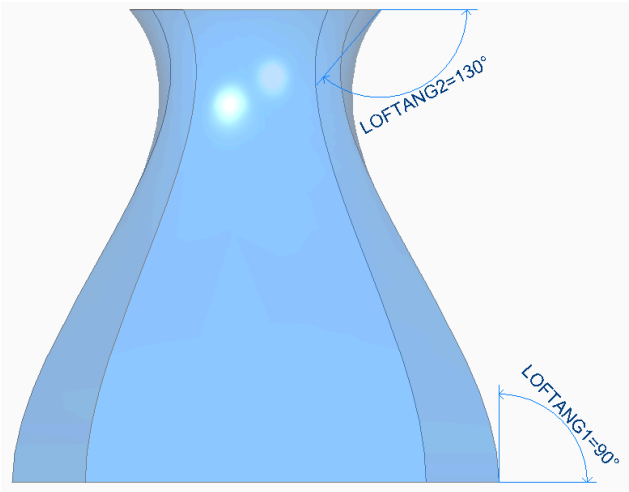
14.32 LOFTANG2 system variable

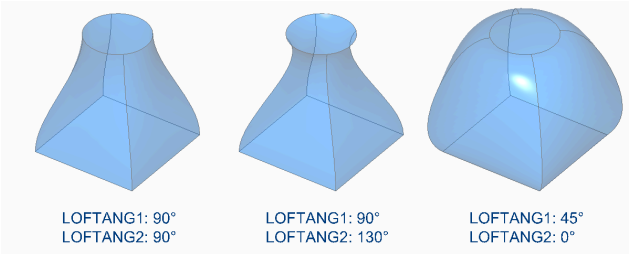
14.32.1 Loft angle 2

Sets the angle at the last cross-section, for the LOFT command, modifies the loft shape. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Values between 0.0 and 360.0 are accepted.

Type:	Real
Saved in:	Drawing
Range:	0.0 to 360.0
Default value:	90.0





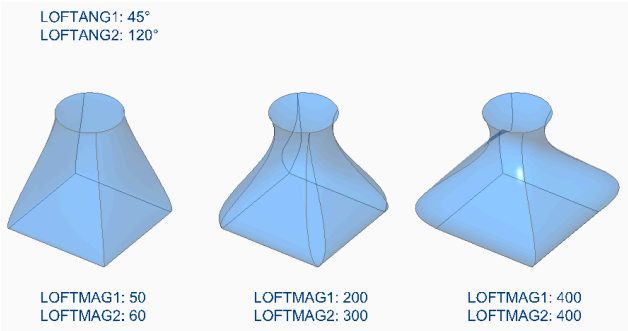
14.33 LOFTMAG1 system variable

14.33.1 Loft magnitude 1

Sets the relative distance of the surface from the cross section in the direction of the LOFTANG1 system variable, before the surface starts to bend towards the next section. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Type:	Real
Saved in:	Drawing

Default value:	0.0

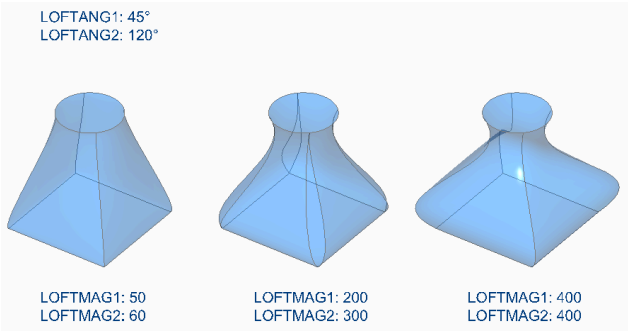


14.34 LOFTMAG2 system variable

14.34.1 Loft magnitude 2

Sets the relative distance of the surface from the cross section in the direction of the LOFTANG2 system variable, before the surface starts to bend towards the next section. Works only if the LOFTNORMALS system variable is set to **Surface uses draft angle and magnitude**.

Type:	Real
Saved in:	Drawing
Default value:	0.0



14.35 LOFTNORMALS system variable

14.35.1 Loft normals

Controls the behavior of surfaces and solids created with the LOFT command as they pass through a cross section.

Type:	Short

Saved in:	Drawing
Range:	0 to 6
Default value:	1
Possible values:	0: Ruled surface 1: Smooth surface 2: Surface is perpendicular to the first cross section 3: Surface is perpendicular to the last cross section 4: Surface is perpendicular to the first and last cross sections 5: Surface is perpendicular to all cross sections 6: Surface uses draft angle and magnitude

14.36 LOFTPARAM system variable

14.36.1 Loft param

Controls the shape of surfaces and solids created with the LOFT command.

Type:	Short
Saved in:	Drawing
Range:	0 to 15
Default value:	7
Possible options:	0: No parameters 1: No twist between cross sections 2: Align directions of cross sections 4: Create simple surfaces and solids 8: Close between the first and last cross sections

14.37 LOGFILEMODE system variable

14.37.1 Log file mode

Maintains a logfile.

A logfile contains each executed command. These logfiles are saved in the folder specified by the LOGFILEPATH system variable.

Type:	Boolean

Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't maintain log file On (1): Maintain log file

14.38 LOGFILENAME system variable

14.38.1 Log file name (Read Only)

The name of the log file. See also the LOGFILEMODE system variable.

Type:	String
Saved in:	Not saved

14.39 LOGFILEPATH system variable

14.39.1 Log file path

The file path used for the log file.

Type:	String Standard
Saved in:	Registry

14.40 LOGGEDINSTATUS system variable

14.40.1 Logged in (Read Only)

Shows if a Bricsys account is currently logged in to this version of the program.

BricsCAD only

Type:	Boolean
Saved in:	Registry

14.41 LOGINNAME system variable

14.41.1 Login name (Read Only)

Shows the Windows login name, saved to the file properties statistics of the drawing.

Type:	String
Saved in:	Not saved

14.42 LONGITUDE system variable

14.42.1 Longitude

Controls the longitude of the drawing, in decimal format.

Values between -180.0 and 180.0 are accepted. Positive values represent east longitudes.

Type:	Real
Saved in:	Drawing
Range:	-180.0 to 180.0
Default value:	-122.394

14.43 LOOKFROMDIRECTIONMODE system variable

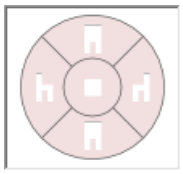
14.43.1 LookFrom direction mode

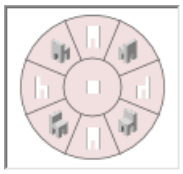
Controls how many view directions can be selected in isometric mode.

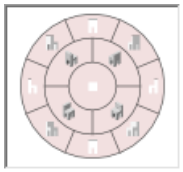
- Windows and Linux: hold the Ctrl key to switch from top to down directions.
- macOS: hold the Cmd key to switch from top to down directions.

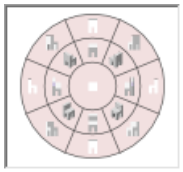
BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	1
Possible values:	0: Orthogonal only (6 directions) 1: No flat view at corners (14 directions) 2: 4 top/down corners(18 directions) 3: 8 top/down corners(26 directions)









14.44 LOOKFROMFEEDBACK system variable

14.44.1 LookFrom feedback

Controls if the LookFrom control displays messages in tooltips or on the Status bar.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1
Possible values:	0: None 1: Tooltips 2: Status bar

14.45 LOOKFROMZOOMEXTENTS system variable

14.45.1 LookFrom zoom extents

Zooms to extents whenever a view direction is selected from the LookFrom control.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Range:	On
Possible values:	Off (0): Zoom extents off On (1): Zoom extents on

14.46 LTGAPSELECTION system variable

14.46.1 Linetype gap selection

Makes it possible to snap to gaps on non-continuous linetypes.

Type:	Boolean
Saved in:	Registry
Range:	Off
Possible values:	Off (0): No selection or snapping within gaps (legacy behavior) On (1): Selection or snapping within gaps

14.47 LTSCALE system variable

14.47.1 Linetype scale

Sets the default linetype scale multiplier.

Type:	Real
Saved in:	Drawing
Default value:	1.0

14.48 LUNITS system variable

14.48.1 Linear unit type

Controls the unit type for lengths.

Type:	Short
Saved in:	Drawing
Range:	1 to 5
Default value:	2
Possible values:	1: Scientific 2: Decimal 3: Engineering 4: Architectural 5: Fractional

14.49 LUPREC system variable

14.49.1 Linear unit precision

Controls the number of decimal places displayed for linear units. See also the MEASUREMENT and INSUINTS system variables.

Type:	Short
Saved in:	Drawing
Range:	0 to 8
Default value:	4
Possible values:	0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000

14.50 LWDEFAULT system variable

14.50.1 Default lineweight

Controls the default lineweight, in hundredths of millimeters.

Type:	Short
Saved in:	Registry
Range:	0 to 211
Default value:	25
Possible values:	-3: Default (defined by LWDEFAULT) -2: ByBlock -1: ByLayer 0 - 211: Lineweight value in hundredths of millimeters

14.51 LWDISPLAY system variable

14.51.1 Lineweight display

Displays lineweights.

Type:	Boolean
Saved in:	Drawing
Range:	Off
Possible values:	Off (0): Don't display lineweight On (1): Display lineweight

14.52 LWDISPSCALE system variable

14.52.1 Lineweight display scale

Controls the lineweight display scale in Model space.

Values between 0.0 and 1.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Registry
Range:	0.0 to 1.0
Default value:	0.55

14.53 LWUNITS system variable

14.53.1 Lineweight units

Controls the lineweight display unit.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Inches 1: Millimeters

15. M

15.1 MACROREC system variable

15.1.1 Macro recording

Controls if a macro is currently being recorded.

BricsCAD only

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Macro is not being recorded On (1): Macro is being recorded

15.2 MAKEBAK system variable

15.2.1 Make backup (Obsolete)

Replaced by ISAVEBAK. Has no effect except to preserve the integrity of scripts. Removed 02/12/2010.

BricsCAD only

Type:	Boolean
Saved in:	Registry

15.3 MANIPULATOR system variable

15.3.1 Manipulator

Controls when the Manipulator is displayed.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2

Possible values:	0: Manipulator is not displayed 1: Display Manipulator whenever entities are selected 2: Display Manipulator if left mouse button was pressed longer than MANIPULATORDURATION

Note: The manipulator can be displayed manually through the Quad.

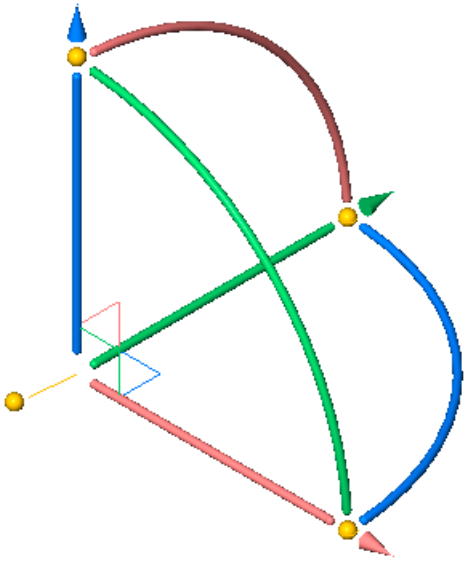
15.4 MANIPULATORCOLORTHEME system variable

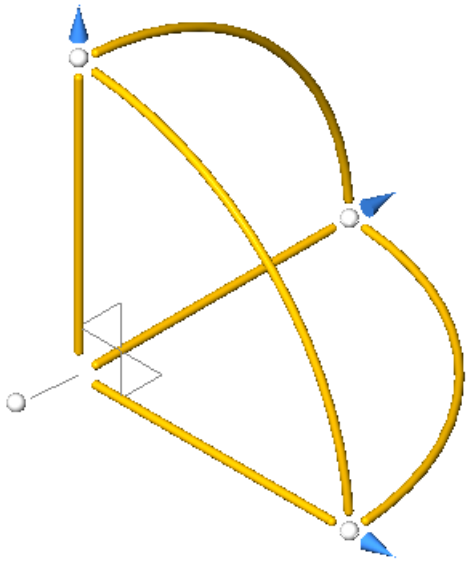
15.4.1 Color theme of Manipulator

Controls the color theme of the Manipulator.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: Monochrome color theme 1: Classic color theme





15.5 MANIPULATORDURATION system variable

15.5.1 Manipulator duration

Controls the delay before the Manipulator is displayed, on a long left-click, when an entity is selected, in milliseconds.

Values between 100 and 10,000 are accepted.

BricsCAD only

Type:	Long
Saved in:	Registry
Range:	100 to 10000
Default value:	250

15.6 MANIPULATORHANDLE system variable

15.6.1 Manipulator handle

Controls the behavior of the Manipulator anchor handles (the bars of the Manipulator).

The handle can be used for unconstrained move and copy operations. Unconstrained meaning: not along an axis or constrained to a plane.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Handles move the Manipulator 1: Handles move the selected entities unrestricted

15.7 MANIPULATORSIZE system variable

15.7.1 Size of Manipulator

Controls the size of the Manipulator.

Values between 0.5 and 2.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.5 to 2
Default value:	1

15.8 MASSPREC system variable

15.8.1 Mass precision

Controls the number of decimal places displayed for masses, if mass properties are formatted with the PROPUNITS system variable.

Note: If negative, LUPREC (Linear Unit Precision) is used.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-1 to 8
Default value:	-1
Possible values:	-1: Use LUPREC 0: 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

15.9 MASSPROPACCURACY system variable

15.9.1 Mass properties calculation relative accuracy

Controls the accuracy used for mass properties calculations. This accuracy is relative. For a value of 3 the calculated values may deviate up to 0.1% from the actual value, for 12 it is 1.e-10%. For value of 2 the deviation may exceptionally exceed 1% and we assume a margin of 2%.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	2 to 12
Default value:	2
Possible values:	2: 2% accuracy 3: 0.1% accuracy 4: 0.01% accuracy 5: 0.001% accuracy 6: 1.e-4% accuracy 7: 1.e-5% accuracy 8: 1.e-6% accuracy 9: 1.e-7% accuracy 10: 1.e-8% accuracy 11: 1.e-9% accuracy 12: 1.e-10% accuracy

15.10 MASSUNITS system variable

15.10.1 Mass units

Controls the units used to display mass, if mass properties are formatted with the PROPUNITS system variable. If empty, all masses are displayed without units.

The MASSUNITS setting affects the mass values only. Other mass properties such as density or moments of inertia are formatted in SI units for the metric system and in imperial units for the imperial system, regardless of the MASSUNITS setting.

The string contains a space-separated list of unit abbreviations.

BricsCAD only

Type:	String

Saved in:	Registry
Default value:	oz lb st mg g kg t

15.11 MAXACTVP system variable

15.11.1 Maximum active viewports

Controls the maximum number of viewports that can be active simultaneously in a layout. Has no effect on the number of viewports that are plotted.

Type:	Short
Saved in:	Drawing
Default value:	64

15.12 MAXHATCH system variable

15.12.1 Maximum hatch dashes

Controls the maximum number of dashes in a hatch pattern.

Hatches of which the number of dashes exceeds the maximum number of dashes cannot be created.

Values between 100 and 10,000,000 are accepted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	100 to 10000000
Default value:	100000

15.13 MAXSORT system variable

15.13.1 Maximum sort

Controls the maximum number of symbol, file and/or block names sorted by commands that list.

If the number of items exceeds this value, the items are not sorted into alphabetical order.

Values between 0 and 200 are accepted.

Type:	Short
Saved in:	Registry
Default value:	200

15.14 MAXTHREADS system variable

15.14.1 Maximum number of threads

Controls the maximum number of threads used to display and load drawings and point cloud operations. See also the MTFLAGS system variable.

Values between 0 and 16 are accepted. A value of zero means automatically use the optimal number of threads.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 16
Default value:	0

15.15 MBSTATE system variable

15.15.1 Mechanical browser state (Read Only)

Mechanical browser status.

BricsCAD only

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	1
Possible values:	0: Mechanical browser is invisible 1: Mechanical browser is visible

15.16 MBUTTONPAN system variable

15.16.1 Middle button pan

Controls how the middle mouse button/wheel responds.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Action defined in menu file 1: Pan

15.17 MEASUREINIT system variable

15.17.1 Measurement initial

Controls drawing units as Imperial or Metric for new drawings

Also controls the hatch pattern and linetype files used: ANSI for Imperial and ISO for Metric units.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Imperial (use ANSI Hatch and ANSI Linetype) 1: Metric (use ISO Hatch and ISO Linetype)

15.18 MEASUREMENT system variable

15.18.1 Measurement

Controls the current drawing units as Imperial or Metric, also controls if ANSI or ISO hatch pattern and linetype files are used. See also the LUNITS and INSUINTS system variables.

Type:	Short

Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Imperial (use ANSI Hatch and ANSI Linetype) 1: Metric (use ISO Hatch and ISO Linetype)

15.19 MECH2DSAVEFORMAT system variable

15.19.1 Mechanical 2D save format

Controls the save format of Mechanical 2D entities.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	2013 to 2018
Default value:	2018
Possible values:	2013: 2013 Mechanical 2D 2014: 2014 Mechanical 2D 2015: 2015 Mechanical 2D 2016: 2016 Mechanical 2D 2018: 2018 Mechanical 2D

15.20 MECHANICALBLOCKS system variable

15.20.1 Mechanical blocks (experimental)

Experimental feature. Enables or disables mechanical blocks as an alternative to mechanical components.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On

	Off (0): Disables mechanical blocks On (1): Enables mechanical blocks

15.21 MECHANICALBROWSERSETTINGS system variable

15.21.1 Mechanical browser options

Sets the default mechanical browser options.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2047
Default value:	819
Possible options:	1: Expressions of constraints 2: Components parameters 4: Expressions of components parameters 8: Sub-components of standard parts 16: Arrays 32: Block and External References 64: Always synchronize selection 128: Keep values list order 256: Highlight objects selected in the browser 512: Asynchronous properties load 1024: Expose all solids

15.22 MENUBAR (EXCEPT OS X) system variable

15.22.1 Menu bar

Displays the Menu bar.

Type:	Boolean
Saved in:	Workspace
Range:	0 to 1
Default value:	On

Possible values:	Off (0): Don't show menubar On (1): Show menubar

15.23 MENUCTL system variable

15.23.1 Menu control

Controls if the screen menu switches pages in response to keyboard command entry.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Screen menu doesn't switch pages in response to keyboard command entry On (1): Screen menu switches pages in response to keyboard command entry

15.24 MENUECHO system variable

15.24.1 Menu echo

Controls menu echo and prompt control.

Type:	Short
Saved in:	Not saved
Range:	0 to 15
Default value:	0
Possible options:	1: Suppress menu item echo 2: Suppress system prompts during menu 4: Disable ^P toggle 8: Display input/output strings (DIESEL macros debugging)

15.25 MENUNAME system variable

15.25.1 Menu name (Read Only)

The file path for the menu file.

Type:	String
Saved in:	Registry

15.26 MESHTYPE system variable

15.26.1 Mesh type

Controls the type of mesh that is created by REVSURF, TABSURF, RULESURF and EDGESURF commands (Not yet supported).

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Create legacy polygon or polyface mesh 1: Create full-featured mesh entities (recommended)

15.27 MIDDLECLICKCLOSE system variable

15.27.1 Middle click close (Mac & Linux)

Allows a tab to be closed with a middle button click on the tab bar.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	true

15.28 MILLISECS system variable

15.28.1 Milliseconds (Read Only)

Counts the number of milliseconds that have passed since system startup.

Type:	Long

Saved in:	Not saved

15.29 MIRRHATCH system variable

15.29.1 Mirror hatch patterns

Controls if hatch patterns are mirrored by the MIRROR command.

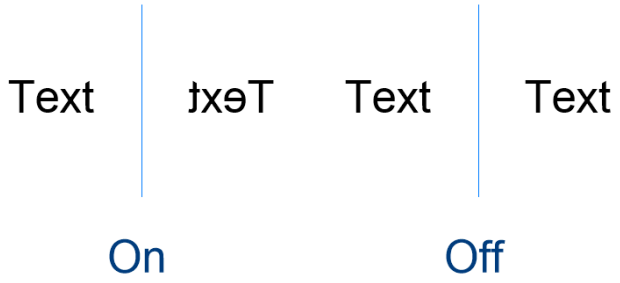
Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't mirror hatch patterns On (1): Mirror hatch patterns

15.30 MIRRTEXT system variable

15.30.1 Mirror text

Controls if text is mirrored by the MIRROR command.

Type:	Boolean
Saved in:	Drawing
Range:	On
Possible values:	Off (0): Don’t mirror text On (1): Mirror text



15.31 MLEADERSCALE system variable

15.31.1 Multileader scale

Controls the width scale for entities created with the MLEADER command.

Note: The scale must have a positive value.

Type:	Real
Saved in:	Drawing
Default value:	1.0

15.32 MODEMACRO system variable

15.32.1 Mode macro

Displays a text string on the status line, such as the name of the current drawing,time/date stamp or special modes. Used to help debug Diesel programs.

Type:	String
Saved in:	Not saved

15.33 MSLTSCALE system variable

15.33.1 Model space linetype scale

Controls the linetype annotation scale behavior, in model space.

Note: When changing MSLTSCALE, REGEN or REGENALL is needed to update the display.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Linetypes are not scaled by annotation scale 1: Linetypes are scaled by the annotation scale

15.34 MSOLESCALE system variable

15.34.1 Model space OLE scale

Controls the size of an OLE (Object Linking & Embedding) entity, that contains text, when pasted into model space. Entities already placed in the drawing are not affected.

If set to zero, uses the DIMSCALE system variable.

Type:	Real
Saved in:	Drawing
Range:	0.0 or greater
Default value:	1.0

15.35 MTEXTCOLUMN system variable

15.35.1 Multiline text column setting

Controls the default column property for multi-line text.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: No columns 1: Dynamic columns with auto height 2: Dynamic columns with manual height

15.36 MTEXTDETECTSPACE system variable

15.36.1 Space detection for creating lists in mtext editor

Creates formatted list items, when the space bar is pressed after a letter, number or symbol, in mtext editor mode.

Type:	Boolean
Saved in:	Registry

Range:	On
Possible values:	Off (0): Don't allow spaces for mtext editor lists On (1): Allow spaces for mtext editor lists

15.37 MTEXTED system variable

15.37.1 Multiline text editor

Controls the text editors to use for multiline text entities.

Type:	String
Saved in:	Registry

15.38 MTEXTFIXED system variable

15.38.1 Multiline text fixed

Controls whether the application zooms, rotates and/or pans the view to fit the multiline text to be edited.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Do nothing when mtext editor is opened 1: Do nothing when mtext editor is opened 2: Rotate / zoom / pan view to fit multiline text

15.39 MTEXTTOOLBAR system variable

15.39.1 MText Formatting toolbar

Controls if the formatting toolbar is displayed when multiline text is edited.

Type:	Boolean
Saved in:	Registry

Range:	On
Possible values:	Off (0): Don't show formatting toolbar On (1): Show formatting toolbar

15.40 MTFLAGS system variable

15.40.1 Multi-Threading Flags

Bit flags for parallel processing of display and loading.

Type:	Short
Saved in:	Registry
Range:	0 to 4095
Default value:	3015
Possible options:	0: No parallel processing 1: Parallelized regeneration of display. 2: Parallelized redraw of display. 4: Parallelized loading of drawings. 8: Parallelized calculation of hidden line removal. 16: Parallelized generation of BIM sections to separate destination files. 32: Parallelized generation of BIM sections to the same destination file. 64: Parallelized computations in Direct Modeling commands and operations. 128: Parallelized computations in Assembly commands and operations. 256: Parallelized computations in Sheet Metal commands and operations. 512: Parallelized interference checking 1024: Delayed XREF loading 2048: Parallelized point cloud operations

15.41 MULTISELECTANGULARTOLERANCE system variable

15.41.1 BimMultiSelect angular tolerance

Controls the maximum angle between two linear solids axes, for these solids to still be considered parallel.

BricsCAD only

Type:	Real

Saved in:	Registry
Range:	0 to 90
Default value:	3

15.42 MYDOCUMENTSPREFIX system variable

15.42.1 MyDocuments root prefix (Read Only)

The path of the user documents folder.

Type:	String Standard
Saved in:	Registry

16. N

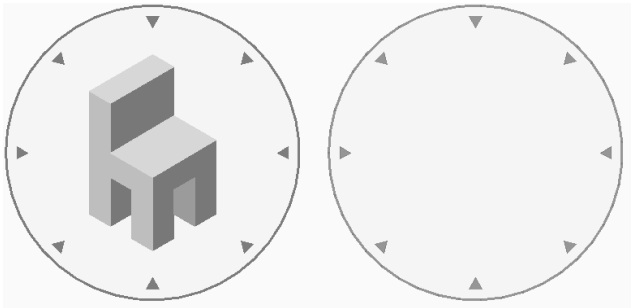
16.1 NAVVCUBEDISPLAY system variable

16.1.1 LookFrom display

Toggles the LookFrom control on/off.

The LookFrom is the navigation control, by default this appears in the top-right corner.

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	On
Possible values:	Off (0): Don't display the LookFrom control On (1): Display the LookFrom control



16.2 NAVVCUBELOCATION system variable

16.2.1 LookFrom location

Controls the location of the LookFrom control.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0

Possible values:	0: Top-right corner 1: Top-left corner 2: Bottom-left corner 3: Bottom-right corner

16.3 NAVVCUBEOPACITY system variable

16.3.1 LookFrom opacity

Controls the opacity of the LookFrom control while inactive.

Type:	Short
Saved in:	Registry
Range:	0 to 100
Default value:	50

16.4 NAVVCUBEORIENT system variable

16.4.1 LookFrom orientation

Controls if the LookFrom control reflects the current WCS (World Coordinate System) or UCS (User Coordinate System).

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: WCS 1: UCS

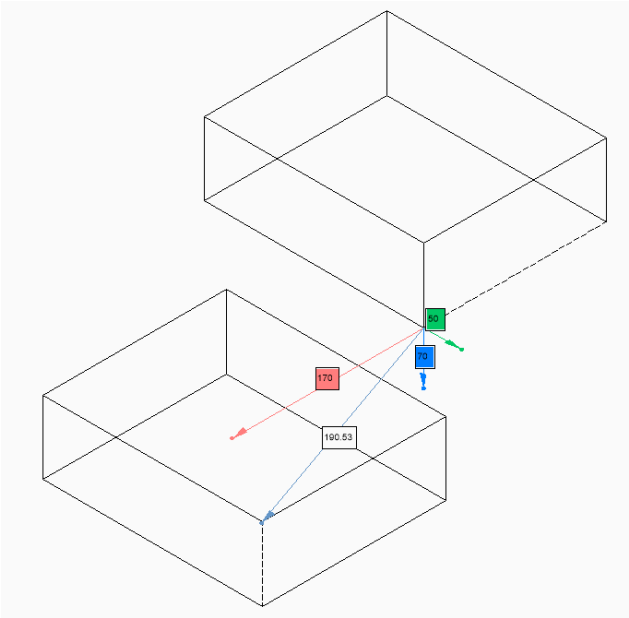
16.5 NEARESTDISTANCE system variable

16.5.1 Nearest Distance

Controls nearest distance dimension between a pair of selected entities. The value is stored as a bitcode using the sum of the values of all selected options.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 15
Default value:	1
Possible options:	1: Show nearest distance dimension 2: Show OX aligned nearest distance dimension 4: Show OY aligned nearest distance dimension 8: Show OZ aligned nearest distance dimension



16.6 NOMUTT system variable

16.6.1 No muttering

Suppresses text in the Command line.

When on, the Command line will stop prompting all the options and actions.

Type:	Boolean
Saved in:	Not saved

Default value:	Off
Possible values:	Off (0): Don't suppress Command line prompts On (1): Suppress Command line prompts

16.7 NORTHDIRECTION system variable

16.7.1 North direction

Controls the angle of the sun, from north, in the context of the world coordinate system (WCS).

Type:	Real
Saved in:	Drawing
Default value:	0.0

17. O

17.1 OBJECTISOLATIONMODE system variable

17.1.1 Object Isolation Mode

Controls if entities hidden with HIDEOBJECTS or ISOLATEOBJECTS remain hidden after a drawing is saved, closed and reopened.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible values:	0: Entities are hidden only for the current session, includes interference solids 1: Entities remain hidden between sessions, includes interference solids 2: Entities are hidden only for the current session, does not include interference solids 3: Entities remain hidden between sessions, does not include interference solids

17.2 OBSCUREDCOLOR system variable

17.2.1 Obscured color

Controls the color of obscured lines.

Visible only if the OBSCUREDLTYPE system variable is in use.

Type:	Short
Saved in:	Drawing
Range:	0 to 257
Default value:	257
Possible values:	0: ByBlock 1 - 255: index 256: ByLayer 257: ByEntity

17.3 OBSCUREDLTYPE system variable

17.3.1 Obscured linetype

Controls the linetype of obscured lines. Unlike regular linetypes, obscured linetypes are zoom level independent.

Type:	Short
Saved in:	Drawing
Range:	0 to 11
Default value:	0
Possible values:	0: Off 1: Solid 2: Dashed 3: Dotted 4: Short Dash 5: Medium Dash 6: Long Dash 7: Double Short Dash 8: Double Medium Dash 9: Double Long Dash 10: Medium Long Dash 11: Sparse Dot

17.4 OFFSETDIST system variable

17.4.1 Offset distance

Stores the last distance used for the OFFSET command.

Type:	Real
Saved in:	Not saved
Range:	-1.0
Possible values:	<0: draws a parallel copy of an entity through a specified point

17.5 OFFSETERASE system variable

17.5.1 Offset erase

Erases the source entity for the OFFSET command.

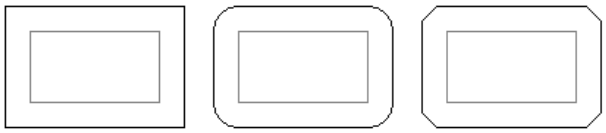
Type:	Boolean
Saved in:	Registry
Range:	Off
Possible values:	Off (0): Offset erase off On (1): Offset erase on

17.6 OFFSETGAPTYPE system variable

17.6.1 Offset gap type

Controls how possible gaps, in parallel copies of closed polylines, are filled.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: Extend polyline segments 1: Filleted arc segments 2: Chamfered line segments



17.7 OLEFRAME system variable

17.7.1 OLE frame

Controls the display of a frame around an OLE object, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: No OLE frames 1: Display and plot OLE frames 2: Display but do not plot OLE frames

17.8 OLEHIDE system variable

17.8.1 OLE hide

Controls the visibility of OLE objects for both screen display and plotting.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible values:	0: All OLE entities are visible and plot 1: OLE entities are visible and plot in paper space only 2: OLE entities are visible and plot in model space only 3: No OLE entities are visible and do not plot

17.9 OLEQUALITY system variable

17.9.1 OLE quality

Controls the default plot quality of OLE entities. When set to **Automatically Select** (3), the quality level is assigned automatically depending on the entity type (for example, photographs are set to **High**).

Type:	Short
Saved in:	Registry
Range:	0 to 3

Default value:	3
Possible values:	0: Monochrome 1: Low graphics 2: High graphics 3: Automatically Select

17.10 OLESTARTUP system variable

17.10.1 OLE startup

Loads the OLE entity source when plotting.

Type:	Boolean
Saved in:	Drawing
Range:	Off
Possible values:	Off (0): Don't load OLE source application when plotting On (1): Load OLE source application when plotting

17.11 OPMSTATE system variable

17.11.1 Properties bar state (Read Only)

Properties bar status.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	1
Possible values:	0: Properties bar is invisible 1: Properties bar is visible

17.12 ORBITAUTOTARGET system variable

17.12.1 Orbit Auto Target

Controls the behavior of the RTROT command.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Mouse - The rotation point is located at the mouse click location 1: Center - The target point is located at the center of the selected entities(s), or the entities displayed on screen

17.13 ORTHOMODE system variable

17.13.1 Orthogonal mode

Constrains cursor movement perpendicularly. When on the cursor can only move horizontally or vertically, relative to the current UCS and grid rotation angle. See also the SNAPANG system variable.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Orthogonal mode off On (1): Orthogonal mode on

17.14 OSMODE system variable

17.14.1 Entity snap mode

Controls the 2D entity snap types.

Type:	Short
Saved in:	Registry
Range:	0 to 32767
Possible options:	4135

Possible values:	0: None 1: Endpoint 2: Midpoint 4: Center 8: Node 16: Quadrant 32: Intersection 64: Insertion 128: Perpendicular 256: Tangent 512: Nearest 1024: Geometric center 2048: Apparent intersection 4096: Extension 8192: Parallel 16384: Turn off all snaps

17.15 OSNAPCOORD system variable

17.15.1 Entity snap coordinates

Controls if entity snaps override manually entered coordinates.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Entity snap settings override keyboard coordinate entry 1: Keyboard entry overrides entity snap settings 2: Keyboard entry overrides entity snap settings except in scripts

17.16 OSNAPZ system variable

17.16.1 Ignore entity snap elevation

Overrides the Z coordinate of an entity snap with the current ELEVATION system variable value.

Type:	Boolean
Saved in:	Not saved

Default value:	Off
Possible values:	Off (0): Don't replace Z value with current elevation On (1): Replace Z value with current elevation

17.17 OSOPTIONS system variable

17.17.1 Entity snap options

Suppresses entity snaps on certain entity types.

Type:	Short
Saved in:	Registry
Range:	0 to 7
Default value:	7
Possible options:	1: Entity snap ignores hatches 2: Entity snap ignores negative Z values in Dynamic UCS mode 4: Entity snap ignores end points of dimension extension lines 8: Entity snap ignores invisible geometry in shaded and hidden-line views

17.18 OVERKILLLAYER system variable

17.18.1 Duplicate Entities Layer

The layer that entities are moved to during the OVERKILL command - the **Move duplicates to Duplicate Entities layer** option.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	Duplicate Entities

18. P

18.1 PANBUFFER system variable

18.1.1 Pan buffer

Enables faster panning, particularly in complex drawings.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable faster panning On (1): Enable faster panning

18.2 PANELBUTTONSIZE system variable

18.2.1 Panel control button size

Controls the size of the icons used for panels.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	1
Default value:	0 to 2
Possible values:	0: Small buttons 1: Large buttons 2: Extra-large buttons

18.3 PAPERUPDATE system variable

18.3.1 Paper update

Controls paper size adaption when printers are switched in the **Print** dialog box.

- If on: existing papersize is maintained. If the printer has no close match, the size will be displayed as 'previous paper size'. On print, user confirmation is required before substitution by default values.

- If off: always assigns the default papersize of the selected printer.

Type:	Boolean
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	Off (0): Use default paper size of the selected printer On (1): Use configured paper size of the plotter configuration file

18.4 PARAMETERCOPYMODE system variable

18.4.1 Parameter copy mode

Controls how constraints and related parameters are copied with the COPY command.

Type:	Short
Saved in:	Registry
Range:	0 to 4
Default value:	3
Possible values:	0: Do not copy 2D constraints 1: Replace all expressions with constants 2: Use existing parameters, if parameter is missing replace it with constant 3: Use existing parameters, create new parameter if it is missing 4: Use existing parameters, create new parameter if it is missing or has different value

18.5 PARAMETERMATCHMODE system variable

18.5.1 Match Parametric Blocks by parameters

The option is not stored in registry, however for some designated blocks it is known that the individual copy is required for each separate insert.

BricsCAD only

Type:	Short

Saved in:	Not saved
Range:	0 to 2
Default value:	0
Possible values:	0: Re-use existing block if insert has same expressions 1: Use separate copy for each block insert 2: Force default behavior for previously separated blocks

18.6 PARAMETRICBLOCKS2DPATH system variable

18.6.1 Parametric blocks 2D directory path

The file path(s) for user created 2D Parametric Blocks files.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

18.7 PBLOCKREFERENCEACTIONSVISUALIZATION system variable

18.7.1 Parametric block actions references visualization

Enables the visualization of the parametric operations' geometries when hovering over parametric block references in model space.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Visualization off On (1): Visualization on

18.8 PDFANIMATIONFPS system variable

18.8.1 Frames per second

Controls the number of frames per second for an animation.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	24

18.9 PDFCREATEBOOKMARKS system variable

18.9.1 Create bookmarks

Create bookmarks for PDF exports.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Do not create bookmarks On (1): Creates bookmarks

18.10 PDFCACHE system variable

18.10.1 PDF cache

Enables/disables the PDF cache.

A multi-resolution persistent image cache is used to display attached Pdf underlays, enabling (very) fast zoom and pan operations. The highest cached resolution is 5000 x 5000 pixels. Still, when zooming in very close, the display of the Pdf underlay will become pixelated. So a hybrid modus can be used which switches to real-time generation of crisp Pdf underlay display when zooming in very close. The initial generation of the image cache may take a few seconds, from then on processing gets (very) fast, and remains like that in subsequent sessions.

BricsCAD only

Type:	Short

Saved in:	Registry
Range:	0 to 2
Default value:	2 (Windows) 0 (Mac & Linux)
Possible values:	0: No caching, always real time generation 1: Use pdf cache, only use real time generation when zooming in close 2: Always use pdf cache

18.11 PDFEMBEDDEDTTF system variable

18.11.1 Pdf embedded fonts

Embeds True Type fonts for PDF exports.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable embedded TTF fonts On (1): Enable embedded TTF fonts

18.12 PDFEXPORTHYPERLINKS system variable

18.12.1 Export hyperlinks

Exports entity hyperlinks for PDF exports.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disables export of entity hyperlinks On (1): Enables export of entity hyperlinks

18.13 PDFFRAME system variable

18.13.1 PDF frame

Controls the visibility of PDF underlay frames, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	1
Possible values:	0: Hide PDF frames 1: Display and plot PDF frames 2: Display but do not plot PDF frames

18.14 PDFIMAGEANTIALIAS system variable

18.14.1 Image anti-aliasing

Enables anti-aliasing for images that are upscaled during PDF export.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disables anti-aliasing for images On (1): Enables anti-aliasing for images

18.15 PDFIMAGECOMPRESSION system variable

18.15.1 Image compression

Compresses images to JPEG during PDF export.

BricsCAD only

Type:	Short

Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: None 1: JPEG

18.16 PDFIMAGEDPI system variable

18.16.1 Image DPI

Controls the minimal resolution for an image exported to PDF.

Cannot exceed the value of the PDFVECTORRESOLUTIONDPI system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	300

18.17 PDFIMPORTAPPLYLINEWEIGHT system variable

18.17.1 Apply lineweight properties

Retains the lineweight properties of imported entities, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Ignore the lineweight properties of the imported entities On (1): Retain the lineweight properties of the imported entities

18.18 PDFIMPORTASBLOCK system variable

18.18.1 Import as block

Imports PDF files as blocks.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't import PDF files as a block On (1): Import PDF files as a block

18.19 PDFIMPORTCHARSPACEFACTOR system variable

18.19.1 Inter-character space factor

The multiplier for the width of the space between characters in a word, used during PDF import.

If the distance between the text objects in the string is less than the width of the space taken from the font metric multiplied by this factor, the text objects are combined into one word.

Note: Applies only if PDFIMPORTCOMBINETEXTOBJECTS is turned on.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.6

18.20 PDFIMPORTCOMBINETEXTOBJECTS system variable

18.20.1 Combine text entities

Controls if text entities, that use the same font and are on the same line, are combined, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference

Default value:	Off
Possible values:	Off (0): Text entities are not combined On (1): Text entities are combined

18.21 PDFIMPORTCONVERTSOLIDSTOHATCHES system variable

18.21.1 Convert solid fills to hatches

Converts 2D solid entities into solid-filled hatches, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't convert solid fills to hatches from imported PDF files On (1): Convert solid fills to hatches from imported PDF files

18.22 PDFIMPORTIMAGEPATH system variable

18.22.1 Raster Images Folder

The file path used to save images, during PDF import, absolute or relative.

- If relative, the PDF image path is relative to the folder of the current drawing file.
- If empty, the folder of the current drawing is used, if the drawing has not yet been saved the images will be saved in the same folder as the imported PDF.

Type:	String
Saved in:	Registry
Default value:	PDF Images

18.23 PDFIMPORTJOINLINEANDARCSEGMENTS system variable

18.23.1 Join line and arc segments

Joins continuous segments into a polyline, where possible, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Range:	On
Possible values:	Off (0): Don't join the line and arc segments from imported PDF files On (1): Join the line and arc segments from imported PDF files

18.24 PDFIMPORTLAYERSUSETYPE system variable

18.24.1 Layers

Controls layers during PDF import.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: Use PDF Layers 1: Create layers per entity type 2: Use current layer

18.25 PDFIMPORTRASTERIMAGES system variable

18.25.1 Raster Images

Extracts images to PNG files and attaches these to the current drawing, during PDF import. These images are stored in the folder set in the PDFIMPORTIMAGEPATH system variable.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Range:	Off

Possible values:	Off (0): Don't extract raster images On (1): Extract raster images

18.26 PDFIMPORTSOLIDFILLS system variable

18.26.1 Solid fills

Ignore or import solid-filled areas during PDF import, if the information is in the PDF. Solid-filled areas include solid-filled hatches, 2D solids, wipeout entities, wide polylines, and triangular arrowheads.

Note: Solid-filled hatches are assigned a 50% transparency.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Ignore solid-filled areas. On (1): Import solid-filled areas.

18.27 PDFIMPORTSPACEFACTOR system variable

18.27.1 Inter-word space factor

Controls the multiplier for the width of the space between words on a line.

If the distance between the text objects in the string is greater than the width of the space between characters in a word (specified by the PDFIMPORTCHARSPACEFACTOR system variable), but less than the width of the space taken from the font metrics multiplied by this factor, the text objects are combined into one word.

Note: Applies only if PDFIMPORTCOMBINETEXTOBJECTS is turned on.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	1.5

18.28 PDFIMPORTTRUETYPETEXT system variable

18.28.1 TrueType text

Import TrueType text as a TrueType text, the textstyle named is inherited from the font, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't import the TrueType text On (1): Import the TrueType text

18.29 PDFIMPORTTRUETYPETEXTASGEOMETRY system variable

18.29.1 Import True Type text as geometry

Imports True Type Text as geometry, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't import TrueType text as geometry On (1): Import TrueType text as geometry

18.30 PDFIMPORTUSECLIPPING system variable

18.30.1 Apply clipping

Clips entities, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

Possible values:	Off (0): Clipping is not applied to entities on import On (1): Clipping is applied to entities on import

18.31 PDFIMPORTUSEGEOMETRYOPTIMIZATION system variable

18.31.1 Import geometry with optimization

Optimizes geometry, during PDF import.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't import geometry with optimization On (1): Import geometry with optimization

18.32 PDFIMPORTUSEIMAGECLIPPING system variable

18.32.1 Clip images

Clips images during a PDF import. The clipped part images becomes transparent.

Note: Applies only if PDFIMPORTUSECLIPPING is on (1).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Images are not clipped on import On (1): Images are clipped on import

18.33 PDFIMPORTUSEPAGEBORDERCLIPPING system variable

18.33.1 Apply clipping at page border

Clips entities at the page border during, PDF import.

Note: Applies only if the PDFIMPORTUSECLIPPING system variable is on (1).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Clipping at page border is not applied on import. On (1): Clipping at page border is applied on import.

18.34 PDFIMPORTVECTORGEOMETRY system variable

18.34.1 Vector geometry

Imports vector geometry during PDF import.

If on, linear paths and Beziér curves are imported as polylines within a tolerance. Curves that resemble arcs, circles, and ellipses are also converted. Solid-filled areas are imported as 2D solids or solid-filled hatches. Patterned hatches are imported as many separate entities.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't import vector geometry On (1): Import vector geometry

18.35 PDFLAYERSSETTING system variable

18.35.1 PDF layer support

Controls the way layers are exported to PDF.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	1

Possible values:	0: Don't use layers 1: Use all layers with visible entities 2: Use all layers with entities, including OFF and FROZEN layers.

18.36 PDFLAYOUTSTOEXPORT system variable

18.36.1 PDF layouts to export

Controls the layout(s) exported to PDF (paper space).

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: Active layout 1: All layout(s) in multi-sheet files 2: All layout(s) in single-sheet files

18.37 PDFMERGECONTROL system variable

18.37.1 PDF Merge Control

Controls the appearance of lines that cross in PDF exports.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0
Possible values:	0: Lines Overwrite - Uses the last plotted line and obscures the line(s) under it 1: Lines Merge - Merges the colors of crossing lines

18.38 PDFNOTIFY system variable

18.38.1 PDF notify

Displays a warning, when a drawing is opened, if there are missing PDFs.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disable PDF notification On (1): Enable PDF notification

18.39 PDFOSNAP system variable

18.39.1 PDF entity snap

Enables entity snap for PDF underlay files.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable PDF entity snap On (1): Enable PDF entity snap

18.40 PDFPAPERHEIGHT system variable

18.40.1 PDF overridde - paper height

Paper height for PDF export, in millimeters, if the PDFPAPERSIZEOVERRIDE system variable is on (1).

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	297

18.41 PDFPAPERSIZEOVERRIDE system variable

18.41.1 PDF papersize override

Enables papersize override for PDF export.

If On, the papersize as defined in the BricsCAD Print settings is overridden. The papersize width and height defined by PDFPAPERWIDTH and PDFPAPERHEIGHT are used instead.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Disable papersize override On (1): Enable papersize override

18.42 PDFPAPERWIDTH system variable

18.42.1 PDF overridde - paper width

Paper width for PDF export, in millimeters, if the PDFPAPERSIZEOVERRIDE system variable is on (1).

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	210

18.43 PDFPRCCOMPRESSION system variable

18.43.1 PRC Compression

Controls the compression of PRC 3D data (3D PDF).

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2

Default value:	0
Possible values:	0: No compression 1: Medium compression 2: High compression

18.44 PDFPRCEXPORT system variable

18.44.1 PRC Export Mode

PRC mode for the export of PRC 3D data (3D PDFs).

Export as BREP is an experimental mode which may work incorrectly. We recommend using **Export as Mesh** mode.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: No export 1: Export as BREP (Experimental) 2: Export as Mesh

18.45 PDFPRCPROJECTION system variable

18.45.1 PRC Projection

Controls the projection type for PRC 3D data (3D PDF).

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0
Possible values:	0: Orthogonal 1: Perspective

18.46 PDFPRCVIEWMODE system variable

18.46.1 PRC View mode

Controls how 2D entities and 3D entities are exported for PRC PDFs (3D PDFs).

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: All entities in single view 1: Only 3D entities in single view 2: Only 3D entities in multiple views

18.47 PDFSHXTEXTASGEOMETRY system variable

18.47.1 PDF SHX text as geometry

Converts SHX font text to geometry for PDF exports. This might be necessary if the receiving party does not have the same SHX fonts on their computer.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't convert SHX text to geometry On (1): Convert SHX text to geometry

18.48 PDFSIMPLEGEOMOPTIMIZATION system variable

18.48.1 Pdf simple geometry optimization

Simplifies geometry for PDF exports (merges separate line segments to one polyline and uses Bezier curve control points).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable simple geometry optimization On (1): Enable simple geometry optimization

18.49 PDFTTFTEXTASGEOMETRY system variable

18.49.1 PDF TTF text as geometry

Converts True Type font text to geometry for PDF exports.

This is useful for when the TTF files are covered by a license that prohibits sharing, or you want to make it harder to extract text.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't convert TTF text to geometry On (1): Convert TTF text to geometry

18.50 PDFUSEPLOTSTYLES system variable

18.50.1 Use PDF plotstyles

Enables plotstyles for PDF exports.

If On, the plotstyle of the layout controls the color and lineweight in the PDF export.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On

Possible values:	Off (0): Disables usage of plotstyles On (1): Enables usage of plotstyles

18.51 PDFVECTORRESOLUTIONDPI system variable

18.51.1 Vector Resolution DPI

Resolution of vector graphics for PDF export from model space.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	72 to 40000
Default value:	2400

18.52 PDFZOOMTOEXTENTSMODE system variable

18.52.1 PDF zoom to extents mode

Scales the layout geometry of papersize layouts for PDF exports.

If switched off, uses the scale and papersize from the pagesetup data.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't zoom to extents On (1): Zoom to extents

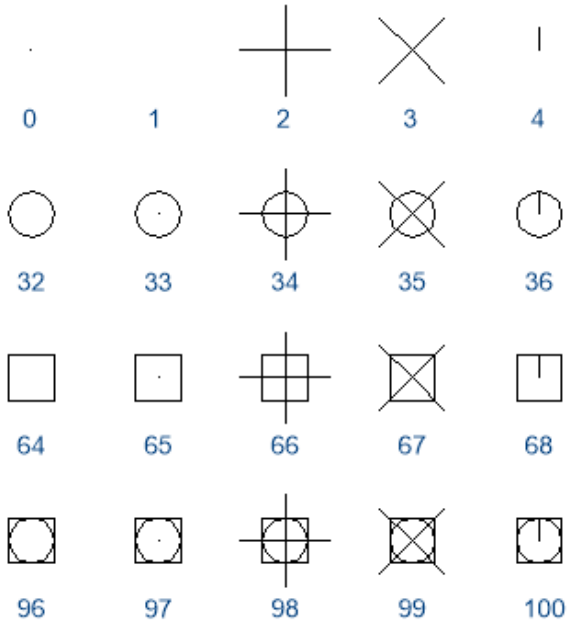
18.53 PDMODE system variable

18.53.1 Point display mode

Controls the display style for point entities.

Type:	Short

Saved in:	Drawing
	0 to 100
Default value:	34
Possible options:	1: none 0: . 2: + 3: x 4: ' 32: circle 64: square



18.54 PDSIZE system variable

18.54.1 Point display size

Controls the display size for point entities.

Type:	Real
Saved in:	Drawing
Default value:	1.5

Possible values:	0: 5% of the drawing area height >0: Absolute size <0: Percentage of the viewport size

18.55 PEDITACCEPT system variable

18.55.1 Polyline edit accept

Displays a warning, when non-polylines are selected during the PEDIT command. When suppressed, the selected entity is automatically converted to a polyline.

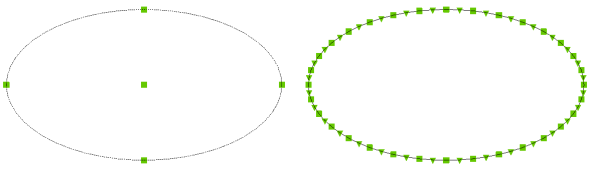
Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Display prompt On (1): Suppress prompt

18.56 PELLIPSE system variable

18.56.1 Polyline ellipse

Controls the entity type created with the ELLIPSE command.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Create real ellipses On (1): Create polyline representations of an ellipse



18.57 PERIMETER system variable

18.57.1 Last perimeter (Read Only)

The last perimeter calculated by the AREA, LIST, or DBLIST commands.

Type:	Real
Saved in:	Not saved

18.58 PERSPECTIVE system variable

18.58.1 Perspective

Turns on perspective view for the current viewport.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Perspective view off On (1): Perspective view on

18.59 PFACEVMAX system variable

18.59.1 Polyface mesh maximum vertices (Read Only)

The maximum number of vertices for each face.

Type:	Short
Saved in:	Not saved
Range:	3 or greater
Default value:	4

18.60 PICKADD system variable

18.60.1 Pick add

Controls how the Shift key selects entities.

Type:	Boolean
Saved in:	Registry
Range:	0 to 1
Default value:	On
Possible values:	Off (0): Press SHIFT to add entities to the current selection On (1): Press SHIFT to remove entities to the current selection

18.61 PICKAUTO system variable

18.61.1 Selection window behavior

Controls the selection behavior - window and lasso - used to select multiple entities at the same time.

See also the PICKDRAG system variable.

Type:	Short
Saved in:	Registry
Range:	-7 to 7
Default value:	5
Possible options:	Negative: No window selection, saving earlier value 0: No window selection 1: Window selection, pick the first and last point, if the cursor does not start above an entity 2: Window selection, for click and drag, if the cursor starts above an entity 4: Lasso selection, for click and drag, if the cursor does not start above an entity

Note: A negative value is the same as 0, but helps in storing the earlier value.

18.62 PICKBOX system variable

18.62.1 Pick box

Controls the selection area size around the cursor, in pixels.

Values between 0 and 50 are accepted.

Note: If you select an entity by clicking, the Pick Box must touch or overlap the entity.

Type:	Short
Saved in:	Registry
Range:	0 to 50
Default value:	4
Unit	pixels

18.63 PICKDRAG system variable

18.63.1 Pick drag

Controls the window selection behavior used to select multiple entities at the same time.

See also the PICKAUTO system variable.

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Draw selection window with two points On (1): Draw selection window with click and drag

18.64 PICKFIRST system variable

18.64.1 Pick first

Makes it possible to select entities first, then issue a command.

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	Off (0): First issue a command, then select entities On (1): First select entities, then issue a command

18.65 PICKSTYLE (EXCEPT OS X) system variable

18.65.1 Pick style

Controls the selection of groups and associative hatches.

Use **Ctrl+H** to toggle this system variable.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible options:	0: No group selection or associative hatch selection 1: Group selection - if a member of a selectable group is selected, all members of the group are selected 2: Associative hatch selection - the hatch and its boundary are selected, no matter what is picked (the hatch or the boundary) 3: Group selection and associative hatch selection

18.66 PICTUREEXPORTSCALE system variable

18.66.1 Picture format export scale factor

Controls the output resolution scale for WMF, EMF or BMP exports. Used in commands EXPORT, WMFOUT, COPYCLIP, CUTCLIP and in COM/VBA function AcadDocument. The output view size is the current view size-in pixels, multiplied by this value.

Trouble: Scale values of 10 or more may cause slow system response.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 or greater
Default value:	1.0

18.67 PLACESBARFOLDER1 system variable

18.67.1 First folder

Controls the first folder in the places bar of the nonstandard **Open file** dialog box (Windows only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 5
Default value:	0
Possible values:	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.68 PLACESBARFOLDER2 system variable

18.68.1 Second folder

Controls the second folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 5
Default value:	1

Possible values:	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.69 PLACESBARFOLDER3 system variable

18.69.1 Third folder

Controls the third folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 5
Default value:	3
Possible values:	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.70 PLACESBARFOLDER4 system variable

18.70.1 Fourth folder (Windows)

Controls the fourth folder in the places bar of the nonstandard **Open file** dialog box (Windows platform only).

This enables you to place shortcuts to your favorite drawing folders on your desktop or in your Favorites folder.

See also the USESTANDARDOPENFILEDIALOG system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 5
Default value:	5
Possible values:	0: Desktop 1: My Computer 2: My Documents 3: Favorites 4: Network 5: My Recent Documents

18.71 PLATFORM system variable

18.71.1 Platform (Read Only)

Displays the current Operating System version.

Type:	String
Saved in:	Not saved

18.72 PLINECACHE system variable

18.72.1 Polyline cache

Controls the creation of a cache of polyline vertices, when a drawing is opened.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Disable polyline cache On (1): Enable polyline cache

18.73 PLINECONVERTMODE system variable

18.73.1 Polyline convert mode

Controls how splines are converted to polylines.

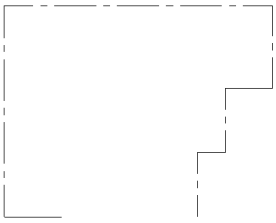
Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Create polylines with linear segments 1: Create polylines with arc segments

18.74 PLINEGEN system variable

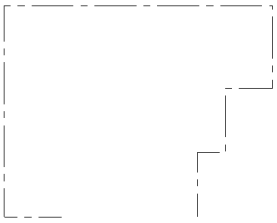
18.74.1 Polyline generation

Controls how linetype patterns are generated around 2D polyline vertices.

Linetypes are normally generated from vertex to vertex (0). Polylines of which the vertices are very close together might be rendered as a continuous line, if the linetype pattern does not fit between two subsequent vertices. When set to 1, the linetype is drawn from one end of the polyline to the other end, instead of from vertex to vertex.



Polyline starts and ends with a dash at each vertex. The linetype will not display on parts that are too small.



The linetype displays in a continuous pattern around the polyline vertices.

Type:	Boolean
Saved in:	Drawing
Default value:	0
Possible values:	Off (0): Polylines start and end with a dash at each vertex On (1): Linetype in a continuous pattern around the polyline vertices

18.75 PLINETYPE system variable

18.75.1 Polyline type

Controls how polylines are created with the PLINE command and if old-format polylines are converted.

It saves disk space and memory by using the optimized format.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Old-format polylines are not converted; PLINE creates old-format polylines 1: Old-format polylines are not converted; PLINE creates optimized polylines 2: Old-format polylines are converted; PLINE creates optimized polylines

18.76 PLINEWID system variable

18.76.1 Polyline width

The default width for new polyline.

Type:	Real
Saved in:	Drawing
Default value:	0.0

18.77 PLOTCFGPATH system variable

18.77.1 Plotter configuration path

The file path used for the Plotter configuration folders. Separate file paths with semicolons (;).

When printing a layout, the available paper size settings are controlled by a Plotter Configuration File. The Printer/Plotter Configuration list is composed of all printer drivers that are installed on your computer. The Printer Configuration are the files in the folder which is specified by the Plotter Configuration Path. If this is set to a large folder with many files and subfolders, then the entire folder and subfolders are searched for appropriate files. This might cause the print dialog to take a long time to open.

BricsCAD only

Type:	String
Saved in:	Preference

18.78 PLOTID system variable

18.78.1 Plot id (Obsolete)

Obsolete, has no effect except to preserve the integrity of old scripts and LISP routines.

Type:	String
Saved in:	Registry

18.79 PLOTOUTPUTPATH system variable

18.79.1 Plot output path

The default file path used for the creation of plot files.

BricsCAD only

Type:	String
Saved in:	Preference

18.80 PLOTSTYLEPATH system variable

18.80.1 Plot styles path

The file path used for the Plot styles folders.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Preference

18.81 PLOTTER system variable

18.81.1 Plotter (Obsolete)

Has no effect except to preserve the integrity of older scripts and LISP routines.

Type:	Short
Saved in:	Registry

18.82 PLOTTRANSPARENCYOVERRIDE system variable

18.82.1 Plot transparency override

Controls if transparencies are enabled for print.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: Transparencies are disabled 1: Value from page setup dialog is used 2: Transparencies are enabled

18.83 PLQUIET system variable

18.83.1 Plot quiet

Controls if optional dialog boxes and nonfatal errors display during batch plot or when a script is run.

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Display plot dialog boxes and nonfatal errors On (1): Log nonfatal errors and don't display plot-related dialog boxes

18.84 POINTCLOUD2DVSDISPLAY system variable

18.84.1 Toggle show/hide bounding box in 2d wireframe mode

Controls the display of a bounding box and warning message when the 2D Wireframe visual style is active and there are point clouds in the drawing. Point clouds are not displayed when the 2D Wireframe visual style is active.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Display a bounding box and warning message that point clouds are not displayed in 2D wireframe visual style 1: Do not display bounding box and warning message

18.85 POINTCLOUDADAPTIVEDISPLAY system variable

18.85.1 Toggle adaptive vs. fixed point sizes (Windows & Linux)

Uses adaptive point sizes for point cloud display. If off, uses fixed point sizes.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: Use fixed point sizes - all points have the same size 1: Use adaptive point sizes - point sizes are adjusted for a better visual appearance

18.86 POINTCLOUDBOUNDARY system variable

18.86.1 Show/hide point cloud extent boundary

Controls how the point cloud boundary is displayed.

Type:	Short
Saved in:	Registry
Range:	0 to 2

Default value:	1
Possible values:	0: Don't show 1: Show only when selected 2: Always show

18.87 POINTCLOUDCACHEFOLDER system variable

18.87.1 Disk cache folder

The file path(s) used to store point cloud cache files.

Multiple paths are supported. The first one will be used for adding new cached/preprocessed data.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String Standard
Saved in:	Preference
Default value:	{User}AppData/Local/Temp/PointCloudCache

18.88 POINTCLOUDHSPC system variable

18.88.1 Point Cloud format (hspc/bcad)

Specifies the format used for processing point clouds (HSPC or BCAD).

Note: The HSPC file format (Hexagon Smart Point Cloud) is a proprietary format developed by Hexagon VCH (Visual Computing Hub). Using this format enables storing per point information which will be used to have more point cloud functionalities (in the future).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Use BCAD format. On (1): Use HSPC format.

18.89 POINTCLOUDIGNOREGEOTAGS system variable

18.89.1 Ignore geo tags in source data

Ignores geo tags in source data.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't ignore geo tags in source data On (1): Ignore geo tags in source data

18.90 POINTCLOUDPOINTMAX system variable

18.90.1 Maximum number of points displayed on screen

Maximum number of points displayed per point cloud. This is independent of the number of points present in the dataset.

Note: Values between 500,000 and 50,000,000 are accepted.

Type:	Short
Saved in:	Registry
Range:	500000 to 50000000
Default value:	10000000

18.91 POINTCLOUDPOINTSIZE system variable

18.91.1 Point size

Point cloud point display size, in pixels.

Values between 1 and 10 are accepted.

Type:	Short
Saved in:	Drawing

Range:	1 to 10
Default value:	2

18.92 POINTCLOUDNORMALS system variable

18.92.1 Normal calculation

Calculates normals during point cloud preprocessing, used to identify planar (flat surfaces) such as walls and floors.

Note: Applies if the POINTCLOUDHSPC system variable is on (1).

When a point cloud is structured (in other words it has bubbles), the normal vectors will be computed automatically during preprocessing.

Structured point clouds already available in the cache in HSPC which have no normal vectors yet can be computed with the POINTCLOUDNORMALS command.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable normal calculation during HSPC preprocessing. On (1): Enable normal calculation during HSPC preprocessing.

18.93 POLARADDANG system variable

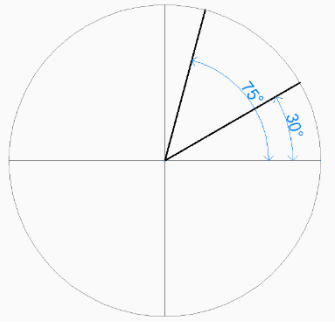
18.93.1 Polar add angles

Contains a list of custom polar snap angles, if the POLARMODE system variable is set to **Use additional polar tracking angles**.

Up to 10 angles, up to 25 characters each, separated with semicolons (;).

Requires POLARMODE flag 0x04 to be set (**Use additional polar tracking angles**). The AUNITS system variable sets the format for display of angles. Unlike POLARANG, POLARADDANG angles do not result in multiples of their values.

Type:	String
Saved in:	Registry



18.94 POLARANG system variable

18.94.1 Polar angle

Controls the polar angle increments, in degrees.

Type:	Real
Saved in:	Registry
Default value:	90.0
Unit	degrees

18.95 POLARDIST system variable

18.95.1 Polar distance

Controls the snap increment for polar snap (if the SNAPTYPE system variable is set to **Polar snap**).

Type:	Real
Saved in:	Registry
Default value:	0.0

18.96 POLARMODE system variable

18.96.1 Polar mode

Controls entity snap tracking and polar snap tracking.

Type:	Short
Saved in:	Registry

Range:	0 to 15
Default value:	1
Possible options:	1: Relative 2: Use polar tracking settings in entity snap tracking 4: Use additional polar tracking angles 8: Press SHIFT to acquire entity snap tracking points

18.97 POLYSIDES system variable

18.97.1 Polygon sides

The number of sides last used with the POLYGON command.

Type:	Short
Saved in:	Not saved
Range:	3 to 1024
Default value:	4

18.98 POPERATIONSCOLOR system variable

18.98.1 Parametric operations color

Controls the color of the parametric operations' geometry.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	RGB:238,173,60

18.99 POPUPS system variable

18.99.1 Popups (Read Only)

Shows the status of the currently configured display driver.

Type:	Boolean

Saved in:	Not saved
Default value:	On
Possible values:	Off (0): Don't support dialog boxes, the menu bar, and icon menus On (1): Support dialog boxes, the menu bar, and icon menus

18.100 PREVIEWDELAY system variable

18.100.1 Delay to preview selection

Controls the delay, before entities are highlighted on hover, in milliseconds.

Values between 0 and 1000 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1000
Default value:	30

18.101 PREVIEWEFFECT system variable

18.101.1 Selection preview effect

Controls how a selection preview is displayed (Not yet supported).

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Dashed lines 1: Thickened lines 2: Dashed and thickened lines

18.102 PREVIEWFILTER system variable

18.102.1 Selection filter

Controls the entity types that can not be selected.

Type:	Short
Saved in:	Registry
Range:	0 to 63
Default value:	1
Possible options:	1: Exclude entities on locked layers 2: Exclude entities in xrefs 4: Exclude tables 8: Exclude multiline text entities 16: Exclude hatch entities 32: Exclude entities in groups

18.103 PREVIEWTYPE system variable

18.103.1 Preview type

Controls which view is used for drawing preview thumbnails (Not yet supported).

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Last saved view 1: Home view

18.104 PREVIEWWNDINOPENDLG system variable

18.104.1 Preview window in open dialog

Shows a file preview in the Open dialog box. Can be set from the dialog (check box).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Range:	On
Possible values:	Off (0): Don't display preview in the Open dialog box On (1): Display preview in the Open dialog box

18.105 PRINTFILE system variable

18.105.1 Print file

Alternate name for plot files.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	.

18.106 PRINTPDFPREVIEW system variable

18.106.1 Print As PDF Preview

Controls if the Print As PDF preview uses the system default PDF viewer or an internal program window.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	1
Possible values:	0: Use internal window 1: Use external viewer

18.107 PRODUCT system variable

18.107.1 Product (Read Only)

Displays the product name.

Type:	String
Saved in:	Not saved
Default value:	BricsCAD

18.108 PROFILEOFFSETBEHAVIOR system variable

18.108.1 Profile offset behavior

Controls the position of a solid or its axis, when the profile offset is changed.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Keep axis 1: Keep solid

18.109 PROGBAR system variable

18.109.1 Progress bar

Controls the display of the progress bar.

BricsCAD only

Type:	Boolean
Saved in:	Not saved
Default value:	On

Possible values:	Off (0): Don't show progress bar On (1): Show progress bar

18.110 PROGRAM system variable

18.110.1 Program (Read Only)

Displays the program name.

Type:	String
Saved in:	Not saved
Default value:	BRICSCAD

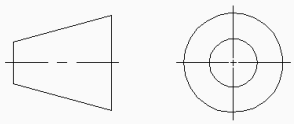
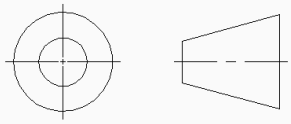
18.111 PROJECTIONTYPE system variable

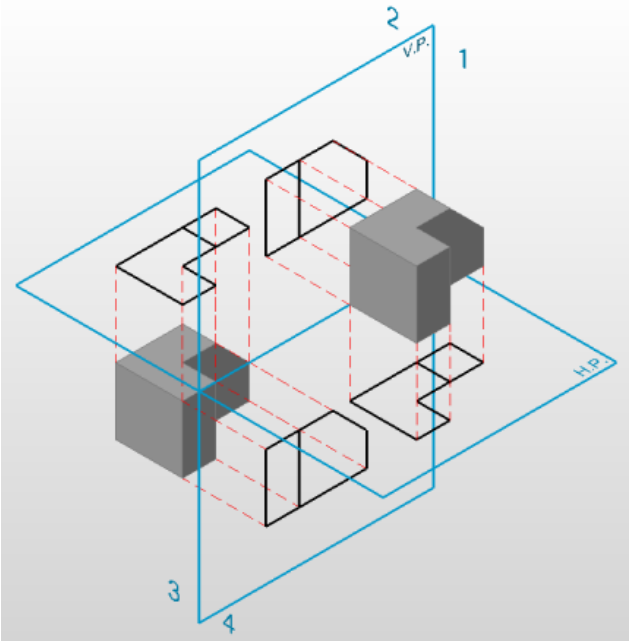
18.111.1 Drawing view projection type

Switches between first and third angle projection types.

These angle projections are a way to represent 3D entities in 2D drawing views. These projection types will show the same views but the difference between the two types is the position of these views (top, right, left, bottom). See **Generated drawing views** to learn more about it.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: First angle projection type - Europe 1: Third angle projection type - United States, Canada, Australia

Projection	Symbol
First angle	
Third angle	



18.112 PROJECTNAME system variable

18.112.1 Project name

The project name of the current drawing.

Project names help to keep track of Xrefs and images easier by assigning additional support paths specific to the project only.

Type:	String
Saved in:	Drawing

18.113 PROJECTSEARCHPATHS system variable

18.113.1 Project search paths

Stores a list of project names, each with a list of file paths to search.

If external references and images are not found in the saved path, the project search paths are used to find the external references and images.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Preference

18.114 PROJMODE system variable

18.114.1 Projection mode

Controls the projection mode for the TRIM and EXTEND commands.

If the cutting entity is not in the same plane as the entity you want to TRIM/EXTEND, this system variable defines how the intersection is to be calculated.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: True 3D mode (no projection) 1: Project to the XY plane of the current UCS 2: Project to the current view plane

18.115 PROMPTMENU system variable

18.115.1 Prompt menu

Controls the command prompt menu dialog.

BricsCAD only

Type:	Short

Saved in:	Registry
Range:	0 to 5
Default value:	0
Possible values:	0: Don't display prompt menu 1: Display prompt menu 2: Display prompt menu top-left 3: Display prompt menu top-right 4: Display prompt menu bottom-left 5: Display prompt menu bottom-right

18.116 PROMPTMENUFLAGS system variable

18.116.1 Prompt menu flags

Controls the behavior of the prompt menu.

See the PROMPTMENU system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 7
Default value:	0
Possible options:	1: Show hidden options - hidden options display in italics 2: Hide prompt menu during selection 4: Disable selection options in the prompt menu

18.117 PROMPTOPTIONFORMAT system variable

18.117.1 Prompt option format

Controls how command options are displayed in the Command line.

A command option has a keyword, a description and a shortcut. The shortcut is the keyword without lower case characters (a-z).

For example, the third option of the CIRCLE command:

Keyword = **TanTanRad**

Description = **Tangent-Tangent-Radius**

Shortcut = **TTR**

Note: The PROMPTOPTIONTRANSLATEKEYWORDS system variable controls whether translations of command option keywords are loaded or not. If disabled, the local keyword will be a copy of the global (English) keyword. As a result global shortcuts can be used without an underscore.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 4
Default value:	0
Possible values:	0: Show description, with shortcut in upper-case 1: Show keyword only 2: Show description and keyword in brackets 3: Show description and shortcut in brackets 4: Show local keyword and global keyword in brackets (non-English versions only)

Example for the CIRCLE command:

Show description only (0)
Select center of circle or [2 Point/3 Point/Tangent-Tangent-Radius/turn Arc into circle/Multiple circles]:

Note: This is the default prompt option format in the English version. In other versions the default prompt option format depends on local standards.

Show keyword only (1)
Select center of circle or [2Point/3Point/TanTanRad/Arc/Multiple]:

Show description and keyword in brackets (2)
Select center of circle or [2 Point(2Point)/3 Point(3Point)/Tangent-Tangent-Radius(TanTanRad)/Turn arc into circle(Arc)/Multiple circles(Multiple)]:

Show description and shortcut in brackets (3)
Select center of circle or [2 Point(2P)/3 Point(3P)/Tangent-Tangent-Radius(TTR)/Turn arc into circle(A)/Multiple circles(M)]:

Show local keyword and global keyword in brackets (relevant in localized versions only) (4)
Select center of circle or [2Point/3Point/TanTanRad/Arc/Multiple]:

18.118 PROMPTOPTIONTRANSLATEKEYWORDS system variable

18.118.1 Prompt option translate keywords

Loads translated command option keywords.

If disabled, English keywords are used and global shortcuts can be used without an underscore.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't load translations of keywords On (1): Load translations of keywords

18.119 PROPAGATESEARCHSPACE system variable

18.119.1 Search space

Asks for a search space during the BIMPROPAGATE command. Limits the locations and entity can be propagated to.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off

18.120 PROPAGATETOLERANCE system variable

18.120.1 Position tolerance

The position tolerance used for the BIMPROPAGATE command, in drawing units.

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.00001

18.121 PROPERTYPREVIEW system variable

18.121.1 Property Preview

Shows property changes, on hover of combo box list values, in **Properties** panel, for selected entities.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Do not show property changes, on hover of combo box list values, in **Properties** panel, for selected entities On (1): Show property changes, on hover of combo box list values, in **Properties** panel, for selected entities

18.122 PROPERTYPREVIEWDELAY system variable

18.122.1 Property Preview Delay

Controls the delay before property changes show, on hover of combo box list values in **Properties** panel, in milliseconds. Applies if the PROPERTYPREVIEW system variable is on (1).

Values between 0 and 1000 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	100 to 10000
Default value:	500

18.123 PROPERTYPREVIEWOBJLIMIT system variable

18.123.1 Property Preview Object Limit

Controls the maximum number of entities that can support hover properties. Values between 0 and 30,000 are accepted.

BricsCAD only

Type:	Short

Saved in:	Preference
Range:	1 to 30000
Default value:	500

18.124 PROPOBJLIMIT system variable

18.124.1 Properties objects limit

Controls the limit of entities displayed in the **Properties** panel to improve performance.

Values between 0 and 100000 are accepted. A value of 0 turns off the limitation.

Type:	Long
Saved in:	Registry
Default value:	25000
Possible values:	0 to 100000

18.125 PROPPREVTIMEOUT system variable

18.125.1 Property Preview Timeout

Controls the delay before hover properties display, in seconds.

Values between 0 and 5 are accepted.

Type:	Short
Saved in:	Preference
Range:	1 to 5
Default value:	1

18.126 PROPUNITS system variable

18.126.1 Property units

Automatically formats length, area, volume, dimension and mass units, in panels and input boxes. For example, 2000mm will be displayed as 2m.

Applies if the INSUNITS system variable is active.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 255
Default value:	47
Possible values:	1: Format length properties 2: Format area properties 4: Format volume properties 8: (Reserved) 16: Format dynamic dimensions 32: Format mass properties

18.127 PROXYGRAPHICS system variable

18.127.1 Proxy graphics

Saves images of proxy entities to the drawing. If switched off, a bounding box displays instead.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't save images with the drawing On (1): Save images with the drawing

18.128 PROXYNOTICE system variable

18.128.1 Proxy notice

Displays a notice when you open a drawing containing custom entities created by an application that is not present.

Type:	Boolean
Saved in:	Registry

Default value:	On
Possible values:	Off (0): Don't display proxy warning On (1): Display proxy warning

18.129 PROXYSERVERENABLED system variable

18.129.1 Proxy server

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Don't use proxy server On (1): Use proxy server

18.130 PROXYSERVERHTTP system variable

18.130.1 HTTP server

The address of proxy server for HTTP protocol.

BricsCAD only

Type:	String
Saved in:	Registry

18.131 PROXYSERVERHTTPPORT system variable

18.131.1 HTTP server port

The port number of proxy server for HTTP protocol.

BricsCAD only

Type:	String
Saved in:	Registry

18.132 PROXYSERVERHTTPS system variable

18.132.1 HTTPS server

The address of proxy server for HTTPS protocol.

BricsCAD only

Type:	String
Saved in:	Registry

18.133 PROXYSERVERHTTPSPORT system variable

18.133.1 HTTPS server port

The port number of proxy server for HTTPS protocol.

BricsCAD only

Type:	String
Saved in:	Registry

18.134 PROXYSERVERPASSWORD system variable

18.134.1 User password

The user password to log in to proxy server.

BricsCAD only

Type:	String
Saved in:	User setting

18.135 PROXYSERVERUSER system variable

18.135.1 User name

The user name to log in to proxy server.

BricsCAD only

Type:	String
Saved in:	User setting

18.136 PROXYSHOW system variable

18.136.1 Proxy show

Controls how proxy entities display in a drawing.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: Proxy entities are not displayed 1: Graphic images are displayed for all proxy entities 2: Only the bounding box is displayed for all proxy entities

18.137 PROXYWEBSEARCH system variable

18.137.1 Proxy web search

Toggles the check for entity enablers.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Does not check for entity enablers 1: Check for entity enablers if connected to the internet

18.138 PSLTSCALE system variable

18.138.1 Paper space linetype scale

Controls the linetype scaling in paper space. If **Viewport scaling governs linetype scaling** is active, the length of the dashes is based on paper space drawing units - linetypes display identically, in all viewports, even if scaled differently.

A REGEN is required.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: No special linetype scaling 1: Viewport scaling governs linetype scaling

18.139 PSOLHEIGHT system variable

18.139.1 Polysolid height

Controls the default height, in drawing units, for the POLYSOLID command.

Type:	Real
Saved in:	Drawing
Default value:	80.0

18.140 PSOLWIDTH system variable

18.140.1 Polysolid width

Controls the default width, in drawing units, for the POLYSOLID command.

Type:	Real
Saved in:	Drawing
Default value:	5.0

18.141 PSTYLEMODE system variable

18.141.1 Plot style mode (Read Only)

The plot style mode of the current drawing.

To convert the current drawing to use named or color-dependent plot styles, use CONVERTPSTYLES.

Type:	Short

Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Named plot style tables 1: Color-dependent plot style tables

18.142 PSTYLEPOLICY system variable

18.142.1 Plot style policy

Controls if the color of an entity is associated with its plot style.

Note: If PSTYLEPOLICY is 0, the plot style for new entities is set to the default defined in DEFPLSTYLE and the plot style for new layers is set to the default defined in DEFLPLSTYLE.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: No association between color and plot style 1: Associate an entity's plot style with its color

18.143 PSVPSCALE system variable

18.143.1 Paper space viewport scale

Controls the scale multiplier for new viewports created with the VPORTS command.

Note: The view scale multiplier is defined by comparing the ratio of units in paper space to the units in newly created model space viewports.

The view scale multiplier you set is used with the VPORTS command. A value of 0 means the scale multiplier is Scaled to Fit.

Type:	Real
Saved in:	Drawing

Default value:	0.0

18.144 PUBLISHALLSHEETS system variable

18.144.1 Publish all sheets

Controls how layouts are loaded to the **Publish** dialog box.

If on, loads all layouts from all active drawings. If off, loads only the layouts from the current drawing.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Only the contents of the current document automatically load On (1): The contents of all open documents automatically load

18.145 PUBLISHCOLLATE system variable

18.145.1 Collate published sheets

Combines published sheets with equal output configurations into single multi-page plot job.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off

18.146 PUCSBASE system variable

18.146.1 Paper space UCS base (Read Only)

The name of the UCS that controls the orthographic UCS in paper space.

Type:	String
Saved in:	Drawing

19. Q

19.1 QAFLAGS system variable

19.1.1 Quality Assurance flags

Internal system variable with flags for Quality Assurance and testing.

Note: This is subject to change, and not intended for regular use. Some of these options could have unpredictable or unwanted side-effects.

Type:	Short
Saved in:	Registry
Range:	0 to 32767
Default value:	0
Possible options:	0: Red device: no low quality draw 2: No pause during text screen listings 4: No 'alert' dialogs (text display instead) 8: Have Warnings act as Errors and stop scripts 16: Minimal audit report 32: Disable window recreation on switch between 2d and rendered visual styles. 64: Enable various performance measurements printed as info prompts 128: Parallel vectorization: EnableSchedulerLogOutput 256: Cmd message enable 512: Dcl take screenshot 1024: Print time on statusbar 2048: No crash dump file 4096: Create assert log file 8192: Create RED files during rendering 16384: Parallel vectorization performance measurement

Note: If 1: in menu macro cancels grips (acts like keyboard).

19.2 QTEXTMODE system variable

19.2.1 Quick text mode

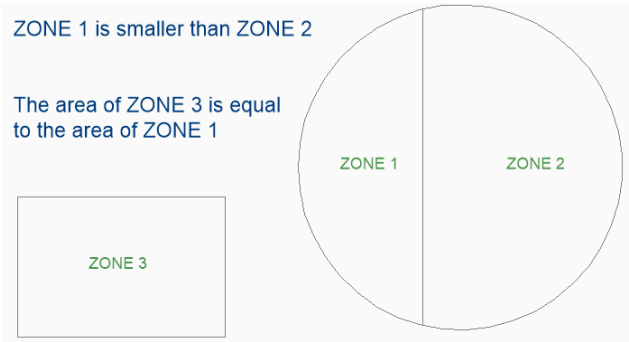
Controls how text entities are displayed.

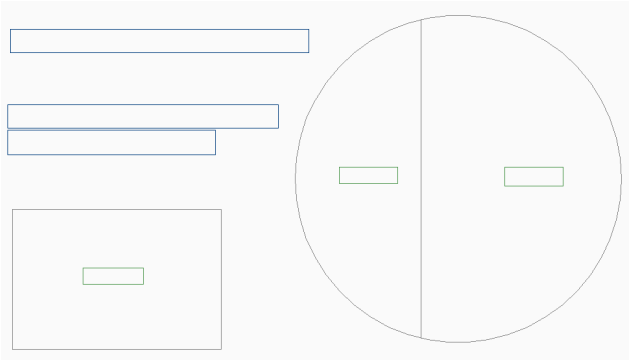
- When On: this turns on quick text mode, rendering all text – text, mtext, attributes, dimension text, and so on—as rectangles.
- When Off (0): this turns off quick text mode, returning text to its normal display.

- This is useful when drawings contain much text, thereby slowing down the display of the drawing, but you still need to see the location of the text. The rectangles display the color of the text as well.

Note: To view changes on existing entities, perform a REGEN.

Type:	Boolean
Saved in:	Drawing
Range:	Off
Possible values:	Off (0): Don't display box in place of text On (1): Display box in place of text





19.3 QUADCOMMANDLAUNCH system variable

19.3.1 Quad default command launch

Controls how the first Quad command is activated.

The default quad command depends on which command from the quad is used last.

- When 0: hover over an entity to see the quad and click on the command button to launch the command.
- When 1: hover over an entity to see the quad and right-click on the entity to launch the command, instead of clicking on the command button first.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Do not launch the first Quad command on right-click 1: Launch the first Quad command on right-click when the Quad is displayed

19.4 QUADDISPLAY system variable

19.4.1 Quad display

Determines when to display the quad.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-15 to 15
Default value:	5
Possible options:	negative: Switch off quad 0: Do not display the Quad 1: Display the Quad when the cursor hovers on an entity 2: Display the Quad when entities are selected 4: Display the Quad on right click 8: Suppress the Quad on hover, when entities are selected

19.5 QUADEXPANDDELAY system variable

19.5.1 Quad expand delay

Controls the delay for the Quad to expand, after the cursor moves over the Quad, in milliseconds.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	160

19.6 QUADEXPANDTABDELAY system variable

19.6.1 Quad expand tab delay

Controls the delay for a Quad tab to expand, after the cursor moves over the Quad, in milliseconds.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	50

19.7 QUADGOTRANSPARENT system variable

19.7.1 Quad go transparent

Controls if the Quad goes transparent when the mouse moves away from it.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't go transparent On (1): Go transparent

19.8 QUADHIDEDELAY system variable

19.8.1 Quad hide delay

Controls the delay before the Quad hides, when the mouse is inactive, in milliseconds.

Applies to the zone set in the QUADHIDEMARGIN system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	350

19.9 QUADHIDEMARGIN system variable

19.9.1 Quad hide margin

Controls the width of the active margin area around the Quad.

As long as the mouse keeps moving inside this margin, the Quad will stay visible. The Quad will still gradually go transparent if QUADGOTRANSPARENT system variable is on.

As soon as the mouse movement stops, or when the mouse is moved beyond the margin, the quad will disappear.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	50

19.10 QUADICONSIZE system variable

19.10.1 Quad icon size

Controls the Quad icon size.

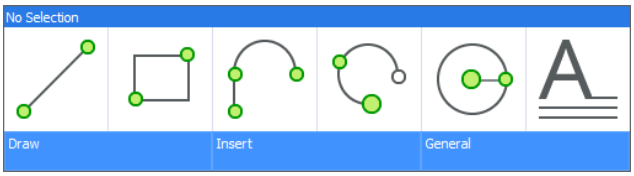
BricsCAD only

Type:	Short
Saved in:	Workspace
Default value:	1
Possible values:	0: Small icons 1: Large icons 2: Extra-large icons

Small Icons:

Large Icons:

Extra Large Icons:



19.11 QUADICONSPACE system variable

19.11.1 Quad icon space

Controls the spacing between icons.

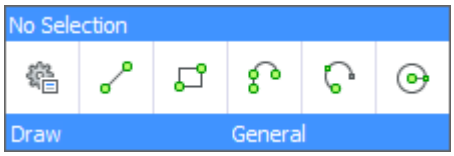
BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1
Possible values:	0: Narrow 1: Normal 2: Wide

Narrow:

Normal:

Wide:



19.12 QUADMOSTRECENTITEMS system variable

19.12.1 Quad most recent items

Controls how many most recent items are displayed in the top bar of the Quad, remaining slots are filled by AI.

Values between 0 and 16 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 16
Default value:	4

19.13 QUADPOPUPCORNER system variable

19.13.1 Quad popup corner

Controls where the Quad will popup relative to the current cursor position.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1

Possible values:	0: Upper right 1: Middle right 2: Lower right

19.14 QUADROLLOVERDELAY system variable

19.14.1 Quad rollover delay

Controls the delay before rollover properties appear in the Quad, in milliseconds.

Note: This is does not apply when the QUADDISPLAY system variable is off and ROLLOVERTIPS system variable is on.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 10000
Default value:	0

19.15 QUADSHOWDELAY system variable

19.15.1 Quad show delay

Controls the delay before the Quad shows, on hover, in milliseconds.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	150

19.16 QUADWIDTH system variable

19.16.1 Quad width

Controls the number of columns in the Quad.

Values between 4 and 16 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	4 to 16
Default value:	6

20. R

20.1 R12SAVEACCURACY system variable

20.1.1 R12 Save accuracy

Controls the number of segments between spline control segments or on 90 degrees elliptical arcs when saved to R12.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	8

20.2 R12SAVEDEVIATION system variable

20.2.1 R12 Save deviation

Controls the deviation for ellipses and splines when saved to R12.

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.0

20.3 RASTERPREVIEW system variable

20.3.1 Raster preview

Controls if preview image is saved with the drawing.

This image is displayed by file managers and other programs.

Type:	Boolean
Saved in:	Registry
Default value:	On

Possible values:	Off (0): Don't create preview image On (1): Create preview image

20.4 RE_INIT system variable

20.4.1 Reinitialize Aliases (Read Only)

Reinitializes the digitizer, digitizer port and/or reloads PGP file (command aliases).

Type:	Short
Saved in:	Not saved
Range:	0 to 21
Default value:	0
Possible options:	1: Digitizer input/output port reinitialization 4: Digitizer reinitialization 16: PGP file reinitialization (reload)

20.5 REALTIMESPEEDUP system variable

20.5.1 Realtime speedup

Controls the number of mouse messages that are skipped during Pan operations.

Values between 0 and 10 are accepted.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 10
Default value:	5

20.6 REALWORLDSCALE system variable

20.6.1 Real world scale

Renders materials with units set to real-world scale.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't render real-world scale materials On (1): Render real-world scale materials

20.7 RECENTFILES system variable

20.7.1 Recent file list max count

Controls the maximum number of files shown in the **Recent Files** section in the File menu (MRU's) and the Start page.

Values between 0 and 60 are accepted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 60
Default value:	30

20.8 RECENTPATH system variable

20.8.1 Recent path

Most recently used file path.

BricsCAD only

Type:	String Standard
Saved in:	Preference

20.9 REDHILITE_DUCSLOCKED_FACE_ALPHA system variable

20.9.1 Face opacity

Controls the transparency of a selected face.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	25 to 100
Default value:	25

20.10 REDHILITE_DUCSLOCKED_FACE_COLOR system variable

20.10.1 Face color

Controls the highlight color of a Dynamic UCS locked face.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	#007AFF

20.11 REDHILITE_HIDDENEDGE_ALPHA system variable

20.11.1 Edge opacity

Controls the transparency hidden edges, when a whole entity is selected, if the REDHILITEFULL_EDGE_SHOWHIDDEN system variable is on (1).

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference

Range:	0 to 100
Default value:	50

20.12 REDHILITE_HIDDENEDGE_COLOR system variable

20.12.1 Hidden edge color

Controls the color of hidden edges, when a whole entity is selected, if the REDHILITEFULL_EDGE_SHOWHIDDEN system variable is on (1).

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White (Settings dialog) #FFFFFF (Command line)

20.13 REDHILITEFULL_EDGE_ALPHA system variable

20.13.1 Edge opacity

Controls the transparency of an edge, when a whole entity is selected.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	100

20.14 REDHILITEFULL_EDGE_COLOR system variable

20.14.1 Edge color

Controls the color of an edge, when a whole entity is selected.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	0, 122, 255 (Settings dialog) #007AFF (Command line)

20.15 REDHILITEFULL_EDGE_SHOWHIDDEN system variable

20.15.1 Hidden edges

Displays hidden edges, when a whole entity is selected.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't show hidden edges On (1): Show hidden edges

20.16 REDHILITEFULL_EDGE_SMOOTHING system variable

20.16.1 Edge smoothing

Controls if smooth (anti-aliased) lines are shown, when a whole entity is selected.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Smooth edges off On (1): Smooth edges on

20.17 REDHILITEFULL_EDGE_THICKNESS system variable

20.17.1 Edge thickness

Controls the thickness of an edge, when a whole entity is selected.

Values between 0.0 and 20.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 to 20.0
Default value:	2.0

20.18 REDHILITEFULL_FACE_ALPHA system variable

20.18.1 Face transparency

Controls the transparency of a face when selected.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 means fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	10

20.19 REDHILITEFULL_FACE_COLOR system variable

20.19.1 Face color

Controls the color of a face, when a whole entity is selected.

BricsCAD only

Type:	String

Saved in:	Preference
Possible values:	0, 122, 255 (Settings dialog) #007AFF (Command line)

20.20 REDHILITEPARTIAL_SELECTEDEDGE_ALPHA system variable

20.20.1 Edge opacity

Controls the transparency of an edge, when selected.

Values between 0 and 100 are accepted.

- 0 is fully transparent.
- 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	100

20.21 REDHILITEPARTIAL_SELECTEDEDGE_COLOR system variable

20.21.1 Edge color

Controls the color of an edge, when selected.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	255, 128, 0 (Settings dialog) #FF8000 (Command line)

20.22 REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable

20.22.1 Glow

Toggles a glow effect on an edge, when selected.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't show glow On (1): Show glow

20.23 REDHILITEPARTIAL_SELECTEDEDGE_SMOOTHING system variable

20.23.1 Edge smoothing

Displays smooth (anti-aliased) lines when, when selected.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Smooth edges off On (1): Smooth edges on

20.24 REDHILITEPARTIAL_SELECTEDEDGE_THICKNESS system variable

20.24.1 Edge thickness

Controls the thickness of an edge, when selected, in pixels.

Values between 0.0 and 20.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 to 20.0
Default value:	2.0

20.25 REDHILITEPARTIAL_SELECTEDEDGEGLOW_ALPHA system variable

20.25.1 Glow transparency

Controls the transparency of the glow. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	75

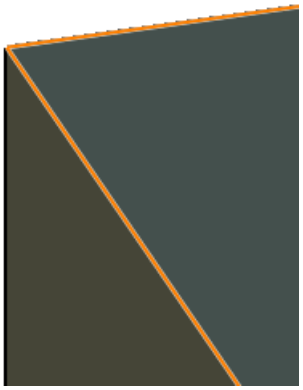
20.26 REDHILITEPARTIAL_SELECTEDEDGEGLOW_COLOR system variable

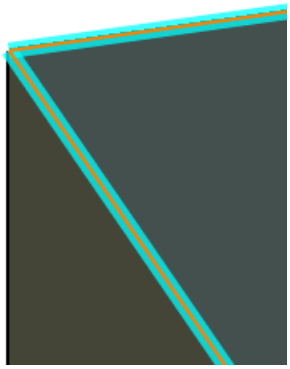
20.26.1 Glow color

Controls the color of the glow effect on an edge, when selected. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	White (Settings dialog) #FFFFFF (Command line)





20.27 REDHILITEPARTIAL_SELECTEDEDGEGLOW_SMOOTHING system variable

20.27.1 Glow smoothing

Displays smooth (anti-aliased) lines for the glow effect on an edge, when selected. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Smooth glow lines off On (1): Smooth glow lines on

20.28 REDHILITEPARTIAL_SELECTEDEDGEGLOW_THICKNESS system variable

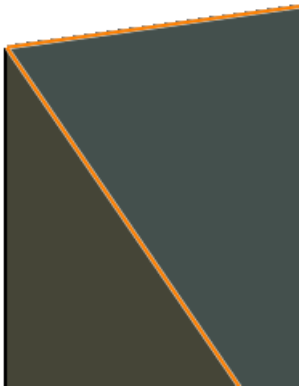
20.28.1 Glow thickness

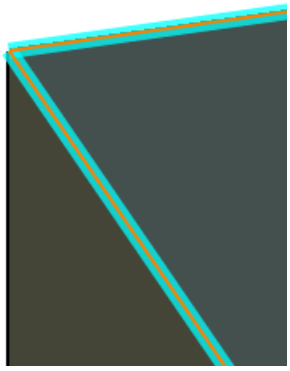
Controls the thickness of the glow effect on an edge, when selected, in pixels. See also the REDHILITEPARTIAL_SELECTEDEDGE_SHOWGLOW system variable.

Values between 0.0 and 20.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.0 to 20.0
Default value:	3.0





20.29 REDHILITEPARTIAL_SELECTEDFACE_ALPHA system variable

20.29.1 Face opacity

Controls the transparency of a face, when selected.

Values between 0 and 100 are accepted.

- A value of zero means fully transparent.
- A value of 100 is fully opaque.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 100
Default value:	10

20.30 REDHILITEPARTIAL_SELECTEDFACE_COLOR system variable

20.30.1 Face color

Controls the color of a face, when selected.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	#007AFF

20.31 REDHILITEPARTIAL_UNSELECTEDEDGE_SHOWHIDDEN system variable

20.31.1 Hidden edges

Controls if hidden edges are be displayed on selection.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On

Possible values:	Off (0): Don't show hidden edges On (1): Show hidden edges

20.32 REDSDKLINESMOOTHING system variable

20.32.1 Line smoothing

Enables line smoothing for 3D rendering modes.

Note: It has no effect if anti-aliasing is on.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Line smoothing off On (1): Line smoothing on

20.33 REDUCELENGTHTYPE system variable

20.33.1 Reduce Length Type

Sets default flow fitting reduce length type.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	(0): Profile Width Ratio (1): Absolute Value

20.34 REDUCELENGTHVALUE system variable

20.34.1 Reduce Length Value

Sets default flow fitting reduce length value.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0.0 to 1e6
Default value:	0.5

20.35 REFEDITLOCKNOTINWORKSET system variable

20.35.1 Refedit lock

Locks entities that are not in the XRef, when in Reference Edit mode (REFEDIT).

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Do not lock entities not in the chosen XRef On (1): Lock entities not in the chosen XRef

20.36 REFEDITNAME system variable

20.36.1 Refedit name (Read Only)

The name of the XRef currently being edited.

Type:	String
Saved in:	Not saved

20.37 REFPATHTYPE system variable

20.37.1 Default path type of reference files

Controls if reference files are attached using full, relative or no paths, when they are attached for the first time.

Type:	Short

Saved in:	Registry
Default value:	1
	0: No path 1: Relative path 2: Full path

Note: Reference files that are already attached are not affected.

20.38 REGENMODE system variable

20.38.1 Regeneration mode

Toggles automatic regeneration on/off. See also the REGENAUTO command.

BricsCAD will regenerate the display automatically when REGENMODE is On, but in a few cases a forced regeneration of the drawing might be necessary. This is done by the REGEN command.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Turn off REGENAUTO command On (1): Turn on REGENAUTO command

20.39 REGEXPAND system variable

20.39.1 Registry paths expanding type

Controls the types of paths stored to a registry (absolute or expandable).

Note: A re-start is required.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On

Possible values:	Off (0): Don't store paths in a portable format using environment variables On (1): Store paths in a portable format using environment variables

20.40 REMEMBERFOLDERS system variable

20.40.1 Remember folders

The file path used for the standard file selection dialog boxes.

- When 0: When you start the program by double-clicking a shortcut icon, if a Start In path is specified for the icon, that path is used as the default for all standard file selection dialog boxes.
- When 1: The default path in each standard file selection dialog box is the last path used in that dialog box. The Start In folder specified for the shortcut icon is not used.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Start in path - see the DRAWINGPATH and BLOCKSPATH system variables 1: Use most recent path

20.41 RENDERCOMPOSITIONMATERIAL system variable

20.41.1 Render Composition Material

Renders the materials of compositions and their plies.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0-1 (On-Off)
Default value:	0
Possible values:	0: Do not render the materials of compositions and their plies 1: Render the materials of compositions and their plies

Note:

The RENDERCOMPOSITIONMATERIAL system variable is only available for BIM and Ultimate license levels.

20.42 RENDERMATERIALDOWNLOAD system variable

20.42.1 Download missing resources for render materials

Automatically downloads missing render materials resources.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't download missing resources for render materials On (1): Download missing resources for render materials

20.43 RENDERMATERIALSPATH system variable

20.43.1 Render materials directory path

The file path(s) for user created render material files.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String
Saved in:	Registry

20.44 RENDERUSINGHARDWARE system variable

20.44.1 Render using hardware

Controls if hardware is used to render. Switch this off if there are problems caused by the graphics card or driver.

A restart may be required.

BricsCAD only

Type:	Short

Saved in:	Preference
Range:	0 to 3
Default value:	1
Possible values:	0: Use software only (slower) 1: Prefer hardware (faster) 2: Prefer software (only for testing purposes) 3: Use hardware only (only for testing purposes)

20.45 REPORTPANELMODE system variable

20.45.1 Report panel mode

Controls the look of the **Report** panel.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	2
Possible values:	0: Classic - Report Panel has a classic appearance as a dockable window 1: Modern - Report Panel is a transparent window 2: Hidden - Report panel is a transparent window hidden in the Status bar

20.46 RESTORECONNECTIONS system variable

20.46.1 Restore Connections

Restores structural connections after commands.

Type:	Boolean
Saved in:	Registry
Default value:	1

Possible values:	Off (0): Don't Restore Connections On (1): Restore Connections

20.47 RESTORELOSTFOCUS system variable

20.47.1 Restore lost focus (Linux)

Controls lost focus recovery. Dependent on the window manager, focus may be lost by when short-lived windows like Quad and rollover tips are used.

Type:	Boolean
Saved in:	Registry
Possible values:	Off (0): Do not try to recover from focus loss On (1): Attempt automatic recovery from focus loss

20.48 RETAINEDGRAPHICS system variable

20.48.1 Retained Graphics

Toggles the use of retained graphics.

Retained graphics can improve the performance of certain operations, for example, rotating and panning the camera.

Type:	Boolean
Saved in:	Preference
Default value:	1
Possible values:	Off (0): Don't use retained graphics On (1): Use retained graphics

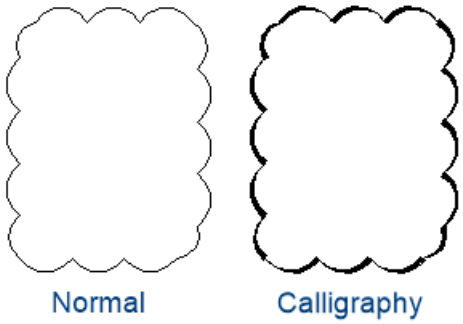
20.49 REVCLOUDARCSTYLE system variable

20.49.1 Revision cloud default arc style

Controls the default arc style for revision clouds.

Type:	Short
Saved in:	Registry

Default value:	0
Possible values:	0: Normal 1: Calligraphy

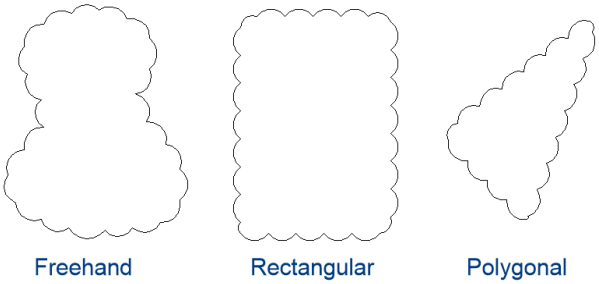


20.50 REVCLOUDCREATEMODE system variable

20.50.1 Revision cloud creation mode

Controls the default revision cloud creation mode.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1
Possible values:	0: Freehand 1: Rectangular 2: Polygonal



20.51 REVCLOUDGRIPS system variable

20.51.1 Revision cloud grips

Uses custom grips for revision clouds.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Displays grips on every arc segment On (1): Displays only the most relevant grips

20.52 REVCLOUDMAXARCLENGTH system variable

20.52.1 Revision cloud default maximum arc length

Controls the default maximum arc length for revision clouds. The maximum arc length is multiplied by the value of the DIMSCALE system variable.

Type:	Real
Saved in:	Registry
Default value:	0.375

20.53 REVCLOUDMINARCLENGTH system variable

20.53.1 Revision cloud default minimum arc length

Controls the default minimum arc length for revision clouds. The minimum arc length is multiplied by the value of the DIMSCALE system variable.

Type:	Real
Saved in:	Registry
Default value:	0.375

20.54 RHINOVERSION system variable

20.54.1 Rhino Export version

The 3DM version used to export to Rhino.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 60
Default value:	0
Possible values:	0: Last available 2: Rhino 2 3: Rhino 3 4: Rhino 4 50: Rhino 5 60: Rhino 6

20.55 RIBBONDOCKEDHEIGHT system variable

20.55.1 Ribbon docked height

Controls the height of the Ribbon.

Values between 0 and 500 are accepted. A value of zero means Automatic height.

Type:	Short
Saved in:	Registry
Range:	0 to 500
Default value:	0

20.56 RIBBONPANELMARGIN system variable

20.56.1 Panel margin

The size, in pixels, of the blank space at the Ribbon panel edges.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 50
Default value:	8

20.57 RIBBONSTATE system variable

20.57.1 Ribbon state (Read Only)

Indicates if the Ribbon is on.

The ribbon can be closed with the RIBBONCLOSE command and can be displayed with the RIBBON command.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Don't show ribbon bar On (1): Show ribbon bar

20.58 RIBBONTOOLSIZE system variable

20.58.1 Ribbon tool size

Controls the size of Ribbon buttons.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	0

Possible values:	0: Small buttons 1: Large buttons 2: Extra-large buttons

20.59 RIBBONSETTINGSENABLED system variable

20.59.1 Ribbon interface settings control on/off

Toggles the display of the Interface Settings control in the ribbon on/off.

Note: A restart may be required.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	0: Do not display the Interface Settings control in the ribbon 1: Display the Interface Settings control in the ribbon

20.60 ROAMABLEROOTPREFIX system variable

20.60.1 Roamable root prefix (Read Only)

The path of the root folder where roamable files for the current user such as menus and plotstyles, were installed.

Type:	String Standard
Saved in:	Registry

20.61 ROLLOVEROPACITY system variable

20.61.1 Rollover opacity

Controls the opacity of the Quad.

Values between 10 and 100 are accepted.

- A value of 10 means maximum transparency.
- A value of 100 means full opacity.

Type:	Short

Saved in:	Registry
Range:	10 to 100
Default value:	100

20.62 ROLLOVERSELECTIONSET system variable

20.62.1 Rollover selection set

Controls the behavior of properties in the rollover tips, when mixed entities are selected. Setting the value to **Properties shared by all selected entities** decreases performance on large selections.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	2
Possible values:	0: No properties 1: General properties 2: Properties shared by all selected entities

20.63 ROLLOVERTIPS system variable

20.63.1 Rollover tips

Toggles the display of entity properties in the Quad, on hover.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show properties on hover On (1): Show properties on hover

20.64 RTDISPLAY system variable

20.64.1 Realtime display

Controls how raster images and OLE entities display during ZOOM or PAN action.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Display raster images and OLE content 1: Display outlines only

20.65 RTROTATIONSPEEDFACTOR system variable

20.65.1 Realtime Rotation Speed Factor

Controls the rotation speed for the Look and Walk tools (RTLOOK and RTWALK commands).

Values between 0.01 and 100.00 are accepted.

BricsCAD only

Type:	Real
Saved in:	Preference
Range:	0.01 to 100.
Default value:	1

20.66 RUBBERBANDCOLOR system variable

20.66.1 Rubber band color

Controls the color of the rubber band line, used for temporary snap tracking.

BricsCAD only

Type:	Short
Saved in:	Registry

Range:	1 to 255
Default value:	40

20.67 RUBBERBANDSTYLE system variable

20.67.1 Rubber band dashed style

Enables a dashed linestyle for the rubber band line, used for temporary snap tracking.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Dashed style off On (1): Dashed style on

20.68 RUBBERSHEET (for OS X) system variable

20.68.1 Rubbersheet Touchpad

Enable simultaneous zoom/rotate/pan with dual finger movements on the touchpad.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Dual finger touch simultaneously zooms/rotates/pans off On (1): Dual finger touch simultaneously zooms/rotates/pans on

20.69 RUBBERSHEETSENSIBILITY (FOR OS X) system variable

20.69.1 Rubbersheet gesture activation sensibility

Controls the sensitivity of gestures.

Values of 0 to 10 are accepted.

Type:	Short

Saved in:	Registry
Range:	0 to 10
Default value:	5

20.70 RULERDISPLAY system variable

20.70.1 Ruler display

Shows a ruler during Manipulator operations.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Do not display ruler On (1): Display ruler

20.71 RULERTEXTCOLOR system variable

20.71.1 Ruler Text Color

Controls the text color of the Manipulator ruler.

Applies only if the RULERDISPLAY system variable is on (1).

Type:	String
Saved in:	Preference
Default value:	#c8c8c8
Possible values:	RGB color code Hex color code Index color code

A new value for the variable can be entered in the Command line.

20.72 RUNASLEVEL system variable

20.72.1 Run as license level

Runs the program in a different (lower) level than the licensed level. If the licensed level is lower than RUNASLEVEL, RUNASLEVEL is ignored.

Note: A restart is required.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 5
Default value:	5
Possible values:	0: Lite 1: Pro 2: (Obsolete) 3: BIM 4: Mechanical 5: Ultimate

20.73 RVTRFALEVELOFDETAIL system variable

20.73.1 Level of detail

Controls the level of detail (LOD) for RVT and RFA import.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	1 to 3
Default value:	3
Possible values:	1: Coarse 2: Medium 3: Fine

20.74 RVTVALIDATEBREP system variable

20.74.1 Validate BREP geometry

Validate BREP geometry during an RVT import.

Warning: Disabling this may import more geometry without no check on integrity.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	0: Off (Disable) 1: ON (Enable)

21. S

21.1 SAFEMODE system variable

21.1.1 Safe mode (Read Only)

Indicates if executable code can be loaded and executed in the current session. Starting in a clean environment can help to eliminate potential causes of a crash.

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Allows executable code run On (1): Does not allow executable code to run

21.2 SAVECHANGETOLAYOUT system variable

21.2.1 Save changes to layout

Saves changes to a layout from the **Print** dialog box.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Range:	0 to 1
Default value:	On
Possible values:	Off (0): Don't save changes to layout On (1): Save changes to layout

21.3 SAVEFIDELITY system variable

21.3.1 Save fidelity

Controls if this drawing is saved with visual fidelity.

Type:	Boolean

Saved in:	Registry
Range:	0 to 1
Default value:	On
Possible values:	Off (0): Don't save with visual fidelity On (1): Save with visual fidelity

21.4 SAVEFILE system variable

21.4.1 Save file name (Read Only)

The current automatic save file name.

Type:	String
Saved in:	Not saved

21.5 SAVEFILEPATH system variable

21.5.1 Save file path

The file path where automatic saves and temporary files are stored.

Type:	String Standard
Saved in:	Registry

21.6 SAVEFORMAT system variable

21.6.1 Save format

Controls the default save format.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 39
Default value:	1

Possible values:	1: DWG 2018 2: DXF 2018 3: Binary DXF 2018 4: DWG 2013 5: DXF 2013 6: Binary DXF 2013 7: DWG 2010 8: DXF 2010 9: Binary DXF 2010 10: DWG 2007 11: DXF 2007 12: Binary DXF 2007 13: DWG 2004 14: DXF 2004 15: Binary DXF 2004 16: DWG 2000 17: DXF 2000 18: Binary DXF 2000 19: DWG R14 20: DXF R14 21: Binary DXF R14 22: DWG R13 23: DXF R13 24: Binary DXF R13 25: DWG R11/R12 26: DXF R11/R12 27: Binary DXF R11/R12 28: DXF R10 29: Binary DXF R10 30: DXF R9

21.7 SAVELAYERSNAPSHOT system variable

21.7.1 Save Layer Snapshot with view

Saves the current layer settings and uses them for new views.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On

21.8 SAVENAME system variable

21.8.1 Saved drawing name (Read Only)

The file name and folder path of the current drawing.

Type:	String
Saved in:	Not saved

21.9 SAVEONDOCSWITCH system variable

21.9.1 Save on document switch

Saves the drawing automatically when another drawing tab is activated.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't save on doc switch On (1): Save on doc switch

21.10 SAVEROUNDTRIP system variable

21.10.1 Save roundtrip

Allows information, in a database file, not supported in the drawing to be saved.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On

21.11 SAVETIME system variable

21.11.1 Save time interval

Controls the interval for automatic saves, in minutes.

Values between 0 and 240 are accepted. If set to zero, automatic saves are turned off.

Type:	Short
Saved in:	Registry
Range:	0 to 240
Default value:	60
Possible values:	0: Turn off automatic saving 1 - 240: Saves the drawing at intervals specified (in minutes)

21.12 SCREENBOXES system variable

21.12.1 Screen menu boxes (Read Only)

Contains the number of boxes displayed in the screen menu. If the screen menu is turned off, the value is zero.

Type:	Short
Saved in:	Not saved

21.13 SCREENMODE system variable

21.13.1 Screen mode (Read Only)

Stores the graphic/text state of the program display.

Type:	Short
Saved in:	Not saved
Range:	0 to 3
Possible values:	0: Text screen is displayed 1: Drawing area is displayed 2: Dual-screen display is configured

21.14 SCREENSIZE system variable

21.14.1 Screen size (Read Only)

The size of the current viewport, in pixels (width x height).

Type:	2D point
Saved in:	Not saved

21.15 SCRLHIST system variable

21.15.1 Scroll history

Controls the number of lines stored in the history of the Command line.

Values between 0 and 256 are accepted.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 or greater
Default value:	256

21.16 SDI system variable

21.16.1 Single-document interface (Windows)

Controls if a drawing is opened in a new application instance or an existing instance. Partially implemented: SDI variable controls double-click behavior for drawings, but it is still possible to open multiple documents in each application instance.

Note: SDI setting 2 and 3 are not saved. If SDI is set to 3, the program switches it back to 1 when the application that doesn't support multiple drawings is unloaded.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0

Possible values:	0: Multiple-drawing interface 1: Single-drawing interface 2: (Read-only) Multiple-drawing interface is disabled because an application has been loaded that does not support multiple drawings 3: (Read-only) Multiple-drawing interface is disabled because the user has set SDI to 1 and the program has loaded an application that does not support multiple drawings. (SDI was set to 1 before the application was loaded)

21.17 SECTIONRESULTINTERVAL system variable

21.17.1 Section result interval

The distance between generated section blocks in model space.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	400.0

Note:

- If INSUNITS=inches (1), the default value of SECTIONRESULTINTERVAL is 400.0.
- If INSUNITS=millimeters (4), the default value of SECTIONRESULTINTERVAL is 10000.0.
- If INSUNITS=centimeters (5), the default value of SECTIONRESULTINTERVAL is 1000.0.
- If INSUNITS=meters (6), the default value of SECTIONRESULTINTERVAL is 10.0.

21.18 SECTIONSCALE system variable

21.18.1 Section scale

The default scale used to generate sections.

Values between 0.000001 and 1000000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.02

21.19 SECTIONSETTINGSSEARCHPATH system variable

21.19.1 Section settings search path

The file path for BIM section styles, BIM tag styles and drawing customizations.

Separate paths with semicolons (;).

BricsCAD only

Type:	String Standard
Saved in:	Registry

21.20 SECTIONSHEETSETTEMPLATEIMPERIAL system variable

21.20.1 Section sheet set template imperial

The file path for the Sheet Set file (DST) used as template for a new section. Applies only when MEASUREMENT system variable is 0 (imperial).

The default file is BIM-section-imperial.dst, which can be found in the {SheetSetTemplatePath} folder.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	BIM-section-imperial.dst

Note: The SECTIONSHEETSETTEMPLATEIMPERIAL system variable is only available for **BIM** and **Ultimate** license levels.

21.21 SECTIONSHEETSETTEMPLATEMETRIC system variable

21.21.1 Section sheet set template metric

The file path for Sheet Set file (dst), used as template for a new section. Applies only when the MEASUREMENT system variable is 1 (metric).

The default file is BIM-section-metric.dst, which can be found in the {SheetSetTemplatePath} folder.

BricsCAD only

Type:	String
Saved in:	Registry

Default value:	BIM-section-metric.dst

Note: The SECTIONSHEETSETTEMPLATEMETRIC system variable is only available for **BIM** and **Ultimate** license levels.

21.22 SECURELOAD system variable

21.22.1 Executable file security policy (Read Only)

The security policy used to load executable files.

Type:	Short
Saved in:	Not saved
Range:	0 to 2
Default value:	0
Possible values:	0: No security policy 1: Warn if loading from untrusted location 2: Load only from trusted locations

21.23 SELECTIONANNODISPLAY system variable

21.23.1 Show all annotation scales on selection

Displays an annotated entity, in all scales, on selection.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable annotation scales display On (1): Enable annotation scales display

21.24 SELECTIONAREA system variable

21.24.1 Selection area

Controls the display of selection area effects.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show selection area effects On (1): Show selection area effects

21.25 SELECTIONAREAOPACITY system variable

21.25.1 Selection area opacity

Controls the transparency of the selection area. Applies only when SELECTIONAREA setting is on.

Values between 0 and 100 are accepted.

- A value of zero means Fully Transparent.
- A value of 100 means fully opaque.

Type:	Short
Saved in:	Registry
Range:	0 to 100
Default value:	25

21.26 SELECTIONMODES system variable

21.26.1 Selection modes

Controls what is selected by default: whole entities, subentities or boundaries.

Use the TAB key, on hover, to cycle through the options.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 15
Default value:	0

Possible options:	1: Select edges 2: Select faces 4: Select detected boundaries 8: Select vertices

21.27 SELECTIONPREVIEW system variable

21.27.1 Selection preview display

Controls the rules used to highlight entities when the pickbox cursor hovers over an entity.

Applies only if the QUADDISPLAY system variable is off.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3
Possible options:	1: When no commands are active 2: When a command prompts for entity selection

21.28 SELECTSIMILARMODE system variable

21.28.1 Match options for SELECTSIMILAR

Controls which properties must match for the SELECTSIMILAR command. For this command to operate as intended, at least one property must be turned on. When all properties are turned off, this command selects only the entity(ies) you pick at the **Select entities** prompt.

Type:	Short
Saved in:	Registry
Range:	0 to 255
Default value:	130

Possible options:	0: Entity type 1: Color 2: Layer 4: Linetype 8: Linetype scale 16: Lineweight 32: Plot style 64: Entity style 128: Name

21.29 SETBYLAYERMODE system variable

21.29.1 Set by layer mode

Controls which layer properties are applied with the SETBYLAYER command.

Type:	Short
Saved in:	Registry
Range:	0 to 255
Default value:	255
Possible values:	0: None 1: Color 2: Linetype 4: Lineweight 8: Material 16: Plot style 32: ByBlock 64: Blocks 128: Transparency

21.30 SHADEDGE system variable

21.30.1 Shading edges

Controls how faces and edges display in rendered views.

Type:	Short
Saved in:	Drawing

Range:	0 to 3
Default value:	3
Possible values:	0: Faces shaded, edges not highlighted 1: Faces shaded, edges drawn in background color 2: Faces not filled, edges in entity color 3: Faces in entity color, edges in background color

21.31 SHADEDIF system variable

21.31.1 Shading diffusion

Controls the ratio of diffuse reflective light to ambient light as a percentage of diffuse reflective light when the SHADEDGE system variable is set to 0 or 1.

Type:	Short
Saved in:	Drawing
Range:	0 to 100
Default value:	70

21.32 SHEETNUMBERLEADINGZEROES system variable

21.32.1 Sheet number leading zeroes

Controls the number of zeros that prefix new sheet 'Number' values.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 8
Default value:	1

Possible values:	1: 1 (1, 2, 3, ...) 2: 2 (01, 02, 03, ...) 3: 3 (001, 002, 003, ...) 4: 4 (0001, 0002, 0003, ...) 5: 5 (00001, 00002, 00003, ...) 6: 6 (000001, 000002, 000003, ...) 7: 7 (0000001, 0000002, 0000003, ...) 8: 8 (00000001, 00000002, 00000003, ...)

21.33 SHEETSETAUTOBACKUP system variable

21.33.1 Sheet set automatic backup

Creates a backup file when a Sheet Set file is opened.

The backup files must have the same name as the Sheet Set file but with a 'ds$' extension.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't create backup files On (1): Create backup files

21.34 SHEETSETTEMPLATEPATH system variable

21.34.1 Sheet Set template path

The file path for the Sheet Set Templates folder.

The default path is: *\Users\%username%\AppData\Local\Bricsys\BricsCAD\V24x64\en_US\Templates*.

Type:	String
Saved in:	Preference

21.35 SHORTCUTMENU system variable

21.35.1 Shortcut menus

Controls the status of the DEFAULT, EDIT and COMMAND (right-click) context menus.

Type:	Short
Saved in:	Registry
Range:	0 to 31
Default value:	19
Possible options:	0: Disable all Default, Edit, and Command mode shortcut menus 1: Enable Default mode shortcut menus 2: Enable Edit mode shortcut menus 4: Enable Command mode shortcut menus (available whenever a command is active) 8: Enable Command mode shortcut menus only when command options are currently available from the Command line 16: Enable a shortcut menu when the right mouse is held down 32: Repeat command with short right click when entities are selected and Quad is not shown

21.36 SHORTCUTMENUDURATION system variable

21.36.1 Shortcut menu duration

Controls the delay between right-click and the appearance of the (right-click) context menu, in milliseconds.

Values between 100 and 10,000 are accepted.

Type:	Long
Saved in:	Registry
Range:	100 to 10000
Default value:	250

21.37 SHOWDOCTABS system variable

21.37.1 Tabs visibility

Toggles tabs on/off, in the documents tab.

You can make the drawing area larger by hiding the document tabs from the user interface.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't make tabs visible On (1): Make tabs visible

21.38 SHOWFULLPATHINTITLE system variable

21.38.1 Display full path in title

Displays the full path of a drawing in the title bar. If off, displays only the file name.

Type:	Boolean
Saved in:	Preference
Default value:	Off

21.39 SHOWLAYERUSAGE system variable

21.39.1 Layer Usage

Shows information about layer usage in the **Layers** panel.

In the column **Current**, the **Layer Usage** icons indicate when viewport settings for the current layout and paper space viewport are different from model space settings:

: Current layer with viewport overrides.

: Layer with viewport overrides.

: Empty layer with viewport overrides.

Type:	Boolean
Saved in:	Registry
Default value:	Off

Possible values:	Off (0): Do not display Layer Usage On (1): Display Layer Usage

21.40 SHOWSCROLLBUTTONS system variable

21.40.1 Scroll buttons (Mac & Linux)

Displays left and right scroll buttons.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't show scroll buttons On (1): Show scroll buttons

21.41 SHOWTABCLOSEBUTTON system variable

21.41.1 Close button on tabs (Mac & Linux)

Toggles the close button on the tab bars on/off, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't show close button on tabs On (1): Show close button on tabs

21.42 SHOWTABCLOSEBUTTONACTIVE system variable

21.42.1 Close button on active tab (Mac & Linux)

Toggles the close button on the active tab only on/off, in the documents tab.

BricsCAD only

Type:	Boolean

Saved in:	Preference
Default value:	Off
Possible values:	Off (0): Don't show close button on the active tab only On (1): Show close button on the active tab only

21.43 SHOWTABCLOSEBUTTONALL system variable

21.43.1 Close button on all tabs (Mac & Linux)

Toggles the close button on all tabs on/off, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't show close button on all tabs On (1): Show close button on all tabs

21.44 SHOWWINDOWLISTBUTTON system variable

21.44.1 Window list button (Mac & Linux)

Shows a drop-down list of windows.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Don't show window list button On (1): Show window list button

21.45 SHPNAME system variable

21.45.1 Shape name

The default shape name according to naming conventions.

'.' means no default.

Note: Shapes are an early version of blocks that were efficient, but difficult to code. Shapes are rarely used anymore.

Type:	String
Saved in:	Not saved

21.46 SIGWARN system variable

21.46.1 Signature warning

Controls the Signature dialog behavior, when a drawing with a signature is opened.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Displayed only if the drawing has an invalid signature On (1): Displayed if a drawing has a signature

21.47 SINGLETONMODE system variable

21.47.1 Singleton mode

Switch to control whether one or more instances of BricsCAD can run simultaneously.

- When set to Off, only a single instance of BricsCAD can run.
- When set to On, you can launch two or more copies of BricsCAD at the same time.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

Possible values:	Off (0): Singleton mode off On (1): Singleton mode on

21.48 SKETCHINC system variable

21.48.1 Sketch increment

The length of segments created with the SKETCH command, in drawings units.

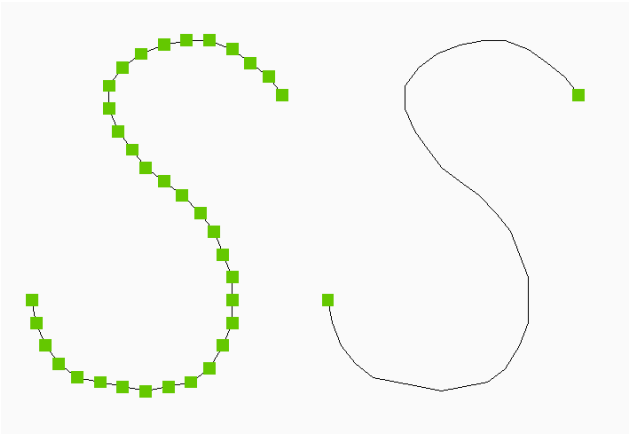
Type:	Real
Saved in:	Drawing
Default value:	1.0

21.49 SKPOLY system variable

21.49.1 Sketch poly

Controls the entity type created with the SKETCH command.

Type:	Boolean
Saved in:	Drawing
Default value:	0
Possible values:	Off (0): Generate lines On (1): Generate polylines



21.50 SKYSTATUS system variable

21.50.1 Sky status

Controls if sky illumination is computed at render time (Not yet supported).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: No sky 1: Sky background 2: Sky background and illumination

21.51 SMASSEMBLYEXPORTMODE system variable

21.51.1 SmAssemblyExport mode

Controls how data is exported by the SMASSEMBLYEXPORT command.

BricsCAD only

Type:	Short
Saved in:	Registry
Possible values:	0: Do not change external components 1: Keep recognized features on sheet metal/poor sheet metal parts

21.52 SMASSEMBLYEXPORTREPORTPATHTYPE system variable

21.52.1 Report file path type

Controls whether absolute or relative file paths are used in the reports generated by the SMASSEMBLYEXPORT command.

BricsCAD only

Type:	Short
Saved in:	Drawing

Range:	0 to 1
Default value:	0
Possible values:	0: Relative paths 1: Absolute paths

21.53 SMASSEMBLYEXPORTSOLIDTYPESINREPORTS system variable

21.53.1 Solid types in reports

Controls the types of solids present in command reports for the SMASSEMBLYEXPORT command. Sheet metal and poor sheet metal solids are always present in reports.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 15
Default value:	1
Possible values:	1: Non sheet metal solids 2: Standard part component solids 4: Recognize hollow linear extruded solids and treat them as non-sheet metal 8: Recognize circular tube linear extruded solids and treat them as non-sheet metal

21.54 SMATTRIBUTESLAYERCOLOR system variable

21.54.1 Color of the attributes layer

Controls the color of the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255

Default value:	7

21.55 SMATTRIBUTESLAYERTEXTHEIGHT system variable

21.55.1 Height of the text

Controls the text height of the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.01

21.56 SMATTRIBUTESLAYERTEXTHEIGHTTYPE system variable

21.56.1 Type of the text height

Controls the text height type for the 'Attributes' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Bounding box ratio 1: Absolute value

21.57 SMBENDANNOTATIONSLAYERCOLOR system variable

21.57.1 Color of the bend annotations text layer

Controls the color of the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	5

21.58 SMBENDANNOTATIONSLAYERTEXTHEIGHT system variable

21.58.1 Height of the text

Controls the text height of the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Real
Saved in:	Registry
Default value:	0.01

21.59 SMBENDANNOTATIONSLAYERTEXTHEIGHTTYPE system variable

21.59.1 Type of the text height

Controls the text height type for the 'Bend Annotations' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	0
Possible values:	0: Bounding box ratio 1: Absolute value

21.60 SMBENDLINESDOWNLAYERCOLOR system variable

21.60.1 Color of the bend down lines layer

Controls the color of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	1

21.61 SMBENDLINESDOWNLAYERLINETYPE system variable

21.61.1 Linetype of the bend down lines layer

Controls the linetype of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	CONTINUOUS

21.62 SMBENDLINESDOWNLAYERLINEWEIGHT system variable

21.62.1 Lineweight of the bend down layer

Controls the lineweight of the 'Bends Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry

Range:	-3 to 211
Default value:	-3

21.63 SMBENDLINESUPLAYERCOLOR system variable

21.63.1 Color of the bend up lines layer

Controls the line color of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	1

21.64 SMBENDLINESUPLAYERLINETYPE system variable

21.64.1 Linetype of the bend up lines layer

Controls the linetype of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	CONTINUOUS

21.65 SMBENDLINESUPLAYERLINEWEIGHT system variable

21.65.1 Lineweight of the bend up layer

Controls the lineweight of the 'Bends Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-3 to 211
Default value:	-3

21.66 SMBEVELFEATURECOLOR system variable

21.66.1 Color of the bevel features layer

Controls the color of the 'Bevel Features' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	6

21.67 SMCOLORBEND system variable

21.67.1 Bend feature color

Controls the display color of sheet metal bends.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#FFDC50

21.68 SMCOLORBENDRELIEF system variable

21.68.1 Bend relief feature color

Controls the display color of sheet metal reliefs.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#64D296

21.69 SMCOLORBEVEL system variable

21.69.1 Bevel feature color

Controls the display color of sheet metal bevels.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#C0CE93

21.70 SMCOLORCORNERRELIEF system variable

21.70.1 Corner relief feature color

Controls the display color of sheet metal corner reliefs.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#64D296

21.71 SMCOLORFLANGE system variable

21.71.1 Flange feature color

Controls the display color of sheet metal flanges.

BricsCAD only

Type:	String
Saved in:	Registry

Default value:	#90A4AE

21.72 SMCOLORFLANGEREFERENCESIDE system variable

21.72.1 Flange feature reference side color

Controls the display color of sheet metal faces on the reference side of a flange.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#68A4AE

21.73 SMCOLORFORM system variable

21.73.1 Form feature color

Controls the display color of sheet metal forms.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#8791E1

21.74 SMCOLORHEM system variable

21.74.1 Hem feature color

Controls the display color of sheet metal hems.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#FCAED6

21.75 SMCOLORJOG system variable

21.75.1 Jog feature color

Controls the display color of sheet metal jogs.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#CC7722

21.76 SMCOLORJUNCTION system variable

21.76.1 Junction feature color

Controls the display color of sheet metal junctions.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#FF6E40

21.77 SMCOLORLOFTEDBEND system variable

21.77.1 Lofted bend feature color

Controls the display color of sheet metal lofted bends.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#A0DCFA

21.78 SMCOLORMITER system variable

21.78.1 Miter feature color

Controls the display color of sheet metal miters.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#AF46D8

21.79 SMCOLORROLLEDEDGE system variable

21.79.1 Rolled edge feature color

Controls the display color of sheet metal rolled edges.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#8791E1

21.80 SMCOLORTAB system variable

21.80.1 Tab feature color

Controls the display color of sheet metal tabs.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#FDA542

21.81 SMCOLORWRONGBEND system variable

21.81.1 Wrong bend feature color

Controls the display color of sheet metal wrong bends.

BricsCAD only

Type:	String

Saved in:	Registry
Default value:	#FF3300

21.82 SMCOLORWRONGFLANGE system variable

21.82.1 Wrong flange feature color

Controls the display color of sheet metal wrong flanges.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	#A82000

21.83 SMCONTOURSLAYERCOLOR system variable

21.83.1 Color of the contour layer

Controls the color of the '2D dxf layer', contains unfolded geometry created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	7

21.84 SMCONTOURSLAYERLINETYPE system variable

21.84.1 Linetype of the contour layer

Controls the linetype of the 'Contour' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String

Saved in:	Registry
Default value:	CONTINUOUS

21.85 SMCONTOURSLAYERLINEWEIGHT system variable

21.85.1 Lineweight of the contour layer

Controls the line weight of the 'Contour' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-3 to 211
Default value:	30

21.86 SMCONVERTMAXIMALBEVELANGLE system variable

21.86.1 Maximal angle of bevel

Controls the maximal angle of bevel during the SMCONVERT command.

Values between 0.0 and 90.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 90
Default value:	80

21.87 SMCONVERTMINIMALBEVELANGLE system variable

21.87.1 Minimal angle of bevel

Controls the minimal angle of a bevel during the SMCONVERT command.

Values between 0.0 and 90.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 90
Default value:	10

21.88 SMCONVERTPREFERFORMFEATURES system variable

21.88.1 Prefer form features to flanges and bends

Controls how features are recognized on solid faces, for the SMCONVERT command, single form features or bends and flanges.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	0: Off 1: On

21.89 SMCONVERTPREFERHEMFEATURES system variable

21.89.1 Prefer hem features to flanges and bends

Controls how features are recognized on solid faces, for the SMCONVERT command, single hem features or bends and flanges.

BricsCAD only

Type:	Boolean

Saved in:	Drawing
Default value:	On
Possible values:	0: Off 1: On

21.90 SMCONVERTPREFERZEROBENDFEATURES system variable

21.90.1 Prefer zero bend features to wrong bends

Controls how features are recognized on solid faces, during the SMCONVERT command, zero bend features or wrong bend features.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	0: Off 1: On

21.91 SMCONVERTRECOGNIZEHOLES system variable

21.91.1 Recognize holes

Recognizes holes on flanges as features during the SMCONVERT command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	0: Off 1: On

21.92 SMCONVERTRECOGNIZERIBCONTROLCURVES system variable

21.92.1 Recognize bead control curves

Recognizes 2D control curves for bead features, during the SMCONVERT command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	0: Off 1: On

21.93 SMCONVERTWRONGFEATURETHICKNESSDEVIATIONTYPE system variable

21.93.1 Type of deviation of wrong feature thickness

Controls if the deviation value is treated as ratio to model thickness or an absolute value. See the SMCONVERTWRONGFEATURETHICKNESSDEVIATIONVALUE command.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.94 SMCONVERTWRONGFEATURETHICKNESSDEVIATIONVALUE system variable

21.94.1 Deviation value of wrong feature thickness

Sets the allowed deviation between model thickness and the thickness of a given wrong feature.

Values between 0 and 1,000,000 are accepted.

BricsCAD only

Type:	Real

Saved in:	Drawing
Range:	0 to 1e6
Default value:	0.2

21.95 SMDEFAULTBENDLINEEXTENTTYPE system variable

21.95.1 Bend line extent type

Controls if the SMDEFAULTBENDLINEEXTENTVALUE system variable is a ratio to the thickness or an absolute value.

The value will be used to initialize sheet metal settings in the document.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	1: Thickness ratio 2: Absolute value

21.96 SMDEFAULTBENDLINEEXTENTVALUE system variable

21.96.1 Bend line extent value

Controls sheet metal bend lines.

Values between -1,000,000 and 1,000,000.0 are accepted.

- Positive value = Stretches past a contour
- Negative value = Does not reach it
- Zero = Just touches

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	-1000000 to 1000000

Default value:	0.25

21.97 SMDEFAULTBENDRADIUSTYPE system variable

21.97.1 Bend radius type

Controls the default sheet metal bend radius.

Absolute value toggles the Thickness ratio. **Override bend radius in SMCONVERT** controls if the bend radius is taken from SMDEFAULTBENDRADIUSVALUE or from the model.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 3
Default value:	2
Possible values:	1: Absolute value 2: Override bend radius in SMCONVERT

21.98 SMDEFAULTBENDRADIUSVALUE system variable

21.98.1 Bend radius value

Controls the default sheet metal bend radius, in drawing units. See also the SMDEFAULTBENDRADIUSTYPE system variable.

Values between 0.0001 and 1,000,000 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1

21.99 SMDEFAULTBENDRELIEFWIDTHTYPE system variable

21.99.1 Bend relief type

Controls if the SMDEFAULTBENDRELIEFWIDTHVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.100 SMDEFAULTBENDRELIEFWIDTHVALUE system variable

21.100.1 Bend relief width value

Controls the default value for a sheet metal bend relief width.

Values between 0.0 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.5

21.101 SMDEFAULTBEVELFEATUREUNFOLDMODE system variable

21.101.1 Bevel unfolding mode

Controls the appearance of bevels in an unfolded part.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	2
Possible values:	0: Keep 1: Remove 2: Annotate

21.102 SMDEFAULTCORNERRELIEFDIAMETERVALUE system variable

21.102.1 Corner relief diameter value

Controls the default diameter for a sheet metal corner relief.

Values between -1.0 and 1,000,000.0 are accepted. Set to -1.0 for automatic determination of least feasible for given corner relief.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	-1.0

21.103 SMDEFAULTFLANGESPLITEXTENSIONTYPE system variable

21.103.1 Miter extension type

Controls if the SMDEFAULTFLANGESPLITEXTENSIONVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.104 SMDEFAULTFLANGESPLITEXTENSIONVALUE system variable

21.104.1 Miter extension value

Controls the default value for a sheet metal miter extension.

Values between 0.0 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real

Saved in:	Drawing
Default value:	0.1

21.105 SMDEFAULTFLANGESPLITGAPTYPE system variable

21.105.1 Miter gap type

Controls if the SMDEFAULTFLANGESPLITGAPVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.106 SMDEFAULTFLANGESPLITGAPVALUE system variable

21.106.1 Miter gap value

Controls the default value for sheet metal miter gap size.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.1

21.107 SMDEFAULTFORMFEATUREUNFOLDMODE system variable

21.107.1 Form feature unfolding mode

Controls the appearance of form features in an unfolded part.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	4
Possible values:	0: Keep 1: Remove 2: Project 3: Contour 4: Symbol 5: Project without center mark 6: Contour without center mark

21.108 SMDEFAULTGUSSETDEPTHVALUE system variable

21.108.1 Gusset height value

Controls the default sheet metal gusset height.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	8

21.109 SMDEFAULTGUSSETDEPTHTYPE system variable

21.109.1 Gusset depth type

Controls if the SMDEFAULTGUSSETDEPTHVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1

Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.110 SMDEFAULTGUSSETFILLETRADIUSVALUE system variable

21.110.1 Gusset fillet radius value

Controls the default sheet metal gusset radius.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1

21.111 SMDEFAULTGUSSETFILLETRADIUSTYPE system variable

21.111.1 Gusset fillet radius type

Controls if the SMDEFAULTGUSSETFILLETRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.112 SMDEFAULTGUSSETTYPE system variable

21.112.1 Gusset type

Toggles between a round or flat sheet metal gusset type.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	1 to 2
Default value:	1
Possible values:	1: Round 2: Flat

21.113 SMDEFAULTGUSSETWIDTHVALUE system variable

21.113.1 Gusset width value

Controls the default sheet metal gusset width.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	6

21.114 SMDEFAULTGUSSETWIDTHTYPE system variable

21.114.1 Gusset width type

Controls if the SMDEFAULTGUSSETWIDTHVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0

Possible values:	0: Thickness ratio 1: Absolute value

21.115 SMDEFAULTHEMGAPTYPE system variable

21.115.1 Open Hem gap type

Controls if the SMDEFAULTHEMGAPVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.116 SMDEFAULTHEMGAPVALUE system variable

21.116.1 Open Hem gap value (in addition to the thickness)

Controls the default sheet metal open hem gap size.

Values between 0.001 and 100.0 are accepted.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0.1

21.117 SMDEFAULTHEMRELATIVEBENDDEDUCTION system variable

21.117.1 Hem relative bend deduction value

Sets a bend deduction value, relative to the thickness, used for closed hem unfolding.

Values between 0.0 (hem lengthen) and 10.0 (shorten bend zone by a value equal to 8 times the thickness) are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 10
Default value:	2.4

21.118 SMDEFAULTJUNCTIONALIGNMENTTORELIEF system variable

21.118.1 Junction alignment to relief

Forces sheet metal junction faces to align to adjacent relief faces.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Disabled 1: Enabled

21.119 SMDEFAULTJUNCTIONGAPTYPE system variable

21.119.1 Junction gap type

Controls if the SMDEFAULTJUNCTIONGAPVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.120 SMDEFAULTJUNCTIONGAPVALUE system variable

21.120.1 Junction gap value

Controls the default sheet metal for the open junction gap size.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.001

21.121 SMDEFAULTKFACTOR system variable

21.121.1 K-Factor value

Sets the location ratio of the neutral surface (the surface not stretched or squeezed when the sheet is bent) to the material thickness.

Values between 0.00000 (internal bend radius) and 1.00000 (external bend radius) are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Range:	0 to 1
Default value:	0.27324

21.122 SMDEFAULTLOFTEDBENDNUMBERSAMPLES system variable

21.122.1 Lofted bend subdivisions

Controls the default value for sheet metal lofted bend subdivisions.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	10

21.123 SMDEFAULTRELIEFEXTENSIONTYPE system variable

21.123.1 Relief extension type

Controls if the SMDEFAULTRELIEFEXTENSIONTYPE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.124 SMDEFAULTRELIEFEXTENSIONVALUE system variable

21.124.1 Relief extension value

Controls the default value for a sheet metal relief extension.

Values between 0.0 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing

Default value:	0.1

21.125 SMDEFAULTRIBFILLETRADIUSTYPE system variable

21.125.1 Bead fillet radius type

Controls if the SMDEFAULTRIBFILLETRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	0: Profile radius ratio 1: Absolute value

21.126 SMDEFAULTRIBFILLETRADIUSVALUE system variable

21.126.1 Bead fillet radius value

Controls the default radius for a sheet metal bead fillet.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	5

21.127 SMDEFAULTRIBPROFILERADIUSTYPE system variable

21.127.1 Bead profile radius type

Controls if the SMDEFAULTRIBPROFILERADIUSVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short

Saved in:	Drawing
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.128 SMDEFAULTRIBPROFILERADIUSVALUE system variable

21.128.1 Bead profile radius value

Controls the default radius for a sheet metal bead profile.

Values between -1.0 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	2

21.129 SMDEFAULTRIBROUNDRADIUSTYPE system variable

21.129.1 Bead round radius type

Controls if the SMDEFAULTRIBROUNDRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.130 SMDEFAULTRIBROUNDRADIUSVALUE system variable

21.130.1 Bead round radius value

Controls the default radius for a sheet metal bead, round.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1

21.131 SMDEFAULTSHARPBENDRADIUSLIMITRATIO system variable

21.131.1 Sharp bend radius limit ratio

Controls the default sheet metal sharp bend radius limit, as a ratio to the thickness.

Values between 0.0 and 1,000,000.0 are accepted

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	5

21.132 SMDEFAULTTABCHAMFERDISTANCETYPE system variable

21.132.1 Tab chamfer distance type

Controls if the SMDEFAULTTABCHAMFERDISTANCEVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.133 SMDEFAULTTABCHAMFERDISTANCEVALUE system variable

21.133.1 Tab chamfer distance value

Controls the default chamfer distance of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.1

21.134 SMDEFAULTTABCLEARANCETYPE system variable

21.134.1 Tab clearance type

Controls if the SMDEFAULTTABCLEARANCEVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.135 SMDEFAULTTABCLEARANCEVALUE system variable

21.135.1 Tab clearance value

Controls the default clearance of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing

Default value:	0.1

21.136 SMDEFAULTTABDISTANCETYPE system variable

21.136.1 Tab distance type

Controls if the SMDEFAULTTABDISTANCEVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.137 SMDEFAULTTABDISTANCEVALUE system variable

21.137.1 Tab distance value

Controls the default distance of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	20

21.138 SMDEFAULTTABEDGETYPE system variable

21.138.1 Tab edge type

Controls if sheet metal tabs have sharp, round or chamfered edges.

BricsCAD only

Type:	Short

Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Sharp edges 1: Fillet edges 2: Chamfer edges

21.139 SMDEFAULTTABFILLETRADIUSTYPE system variable

21.139.1 Tab fillet radius type

Controls if the SMDEFAULTTABFILLETRADIUSVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.140 SMDEFAULTTABFILLETRADIUSVALUE system variable

21.140.1 Tab fillet radius value

Controls the default fillet radius of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.1

21.141 SMDEFAULTTABHEIGHTTYPE system variable

21.141.1 Tab height type

Controls if the SMDEFAULTTABHEIGHTVALUE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.142 SMDEFAULTTABHEIGHTVALUE system variable

21.142.1 Tab height value

Controls the default height of sheet metal tab slots.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	1

21.143 SMDEFAULTTABLENGTHTYPE system variable

21.143.1 Tab length type

Controls if the SMDEFAULTTABLENGTHTYPE system variable is a ratio to the thickness or an absolute value.

Type:	Short
Saved in:	Drawing
Range:	0 to 1

Default value:	0
Possible values:	0: Thickness ratio 1: Absolute value

21.144 SMDEFAULTTABLENGTHVALUE system variable

21.144.1 Tab length value

Controls the default length of sheet metal tabs.

Values between 0.0001 and 1,000,000.0 are accepted.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	4

21.145 SMDEFAULTTABSLOTNUMBER system variable

21.145.1 Tab slot number

Controls the default number of sheet metal tab slots.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	2

21.146 SMDEFAULTTHICKNESS system variable

21.146.1 Thickness value

Controls the default sheet metal thickness, in drawing units.

BricsCAD only

Type:	Real
Saved in:	Drawing

Default value:	2.0 for INSUNITS=4 0.07874 for INSUNITS=1

21.147 SMEXPORTOSMAPPROXIMATIONACCURACY system variable

21.147.1 Accuracy of the approximation

Controls absolute deviation between the smooth edge geometry of 3D part and its .osm representation with lines and arcs, during the SMEXPORTOSM command, in drawing units. The lower the value, the better the precision.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.01 - If MEASUREMENT=1 and INSUNITS=4 0.000393701 - If MEASUREMENT=0 and INSUNITS=1

21.148 SMEXPORTOSMMINIMALEDGELENGTH system variable

21.148.1 Minimal edge length

Controls the minimal edge length for the SMEXPORTOSM command, in drawing units.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.05 - If MEASUREMENT=1 and INSUNITS=4 0.001968505 - If MEASUREMENT=0 and INSUNITS=1

21.149 SMFORMFEATURESDOWNCOLOR system variable

21.149.1 Color of the form features down layer

Controls the color of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short

Saved in:	Registry
Range:	1 to 255
Default value:	6

21.150 SMFORMFEATURESDOWNLAYERLINETYPE system variable

21.150.1 Linetype of the form features down layer

Controls the linetype of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	CONTINUOUS

21.151 SMFORMFEATURESDOWNLAYERLINEWEIGHT system variable

21.151.1 Lineweight of the form features down layer

Controls the lineweight of the 'Form Features Down' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-3 to 211
Default value:	-3

21.152 SMFORMFEATURESUPCOLOR system variable

21.152.1 Color of the form features up layer

Controls the color of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	6

21.153 SMFORMFEATURESUPLAYERLINETYPE system variable

21.153.1 Linetype of the form features up layer

Controls the linetype of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	CONTINUOUS

21.154 SMFORMFEATURESUPLAYERLINEWEIGHT system variable

21.154.1 Lineweight of the form features up layer

Controls the lineweight of the 'Form Features Up' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-3 to 211
Default value:	-3

21.155 SMJUNCTIONCREATEHEALCOINCIDENT system variable

21.155.1 Heal coincident junction faces

Controls how junctions with coincident faces are recognized and converted to regular junctions, during the SMJUNCTIONCREATE command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off

21.156 SMOOTHMESHCONVERT system variable

21.156.1 Mesh conversion mode

Controls the conversion mode of meshes to 3D solids or surfaces, with the CONVTOSOLID or CONVTOSURFACE commands.

Type:	Short
Saved in:	Not saved
Range:	1 to 3
Default value:	2
Possible values:	1: Conversion result is smooth and not optimized 2: Conversion result is faceted and optimized 3: Conversion result is faceted and not optimized

21.157 SMOVERALLANNOTATIONSLAYERCOLOR system variable

21.157.1 Color of the overall dimensions annotations layer

Controls the color of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	1 to 255
Default value:	3

21.158 SMOVERALLANNOTATIONSLAYERLINETYPE system variable

21.158.1 Linetype of the overall annotation layer

Controls the linetype of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	CONTINUOUS

21.159 SMOVERALLANNOTATIONSLAYERLINEWEIGHT system variable

21.159.1 Lineweight of the overall annotation layer

Controls the lineweight of the 'Overall Dimensions' layer, created by the SMUNFOLD and SMEXPORT2D commands.

Values between -3 and 211 are accepted.

- -1=ByLayer
- -2=ByBlock
- -3=Default

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-3 to 211
Default value:	-3

21.160 SMPARAMETRIZEHOLESPARAMETRIZATION system variable

21.160.1 Hole parametrization

Controls how straight holes are converted, during the SMPARAMETRIZE command.

If **Convert holes to array** is on, holes on flanges are converted into parametric, rectangular arrays. If **Parametrize holes** is on, holes, not already included in arrays, are constrained.

BricsCAD only

Type:	Short
Saved in:	Drawing
	0 to 3
Default value:	3
Possible values:	0: Does not parametrize holes 1: Parametrize holes 2: Convert holes to array

21.161 SMREPAIRLOFTEDBENDMERGE system variable

21.161.1 Merge lofted bends

Merges lofted bends that touch into a single lofted bend, during the SMREPAIR command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off

21.162 SMSMARTFEATURES system variable

21.162.1 Automatic update features after sheet metal commands

Controls how sheet metal features are rebuilt after sheet metal commands.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 7
Default value:	3
Possible options:	1: Allow the rebuild of sheet metal features 2: Allow automatic edges to imprint after rebuild 4: Allow the automatic creation of junctions after bends are created

21.163 SMSPLITAMBIGUOUSINPUT system variable

21.163.1 Ambiguous input behavior

Controls how the SMSPLIT command resolves issues when it can not detect a face, entity, point or 2D curve that it relates to.

BricsCAD only

Type:	Short
Saved in:	Drawing
	0 to 1
Default value:	0
Possible values:	0: Prompt user 1: Command fail

21.164 SMSPLITCONVERTBENDTOJUNCTION system variable

21.164.1 Convert bend to junction

Controls how a split that passes through a bend is solved with the SMSPLIT command.

If on, the shortest side of the bend is automatically converted to a junction. If off, a split through a bend will retain the bend geometry on both sides of the split.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	On

21.165 SMSPLITHEALCOINCIDENT system variable

21.165.1 Heal coincident miter faces

Enables the **Heal coincident miter faces** option for the SMSPLIT command.

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off

21.166 SMSPLITORTHOGONALBENDSPLIT system variable

21.166.1 Orthogonal bend split

Controls how a split that touches a bend is solved with the SMSPLIT command.

If on, the split direction for a bend is orthogonal to the bend axis (changes to a 90° angle as it passes through the bend). If off, the split direction is tangential to the split curve (does not change direction as it passes through the bend).

BricsCAD only

Type:	Boolean
Saved in:	Drawing
Default value:	Off

21.167 SMTARGETCAM system variable

21.167.1 Target CAM

Controls the target CAM system, for sheet metal parts unfolded with SMUNFOLD command.

BricsCAD only

Type:	String
Saved in:	Registry

21.168 SMUNFOLDAPPEARANCE system variable

21.168.1 Unfold appearance

Controls the text height for the SMUNFOLD command.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	1: Text height for annotations is managed by current text, dimension and mleader styles

21.169 SNAPANG system variable

21.169.1 Snap angle

Controls the rotation of snap, the grid, and the crosshair, for the current viewport, relative to the current UCS.

Type:	Real
Saved in:	Drawing
Default value:	0.0

21.170 SNAPBASE system variable

21.170.1 Snap base

Controls the origin point of snap and the grid, in the current viewport, relative to the current UCS.

Type:	2D point
Saved in:	Drawing
Default value:	0,0

21.171 SNAPCOLOR system variable

21.171.1 Snap color (Obsolete)

Replaced by SNAPMARKERCOLOR.

BricsCAD only

Type:	Short
Saved in:	Registry

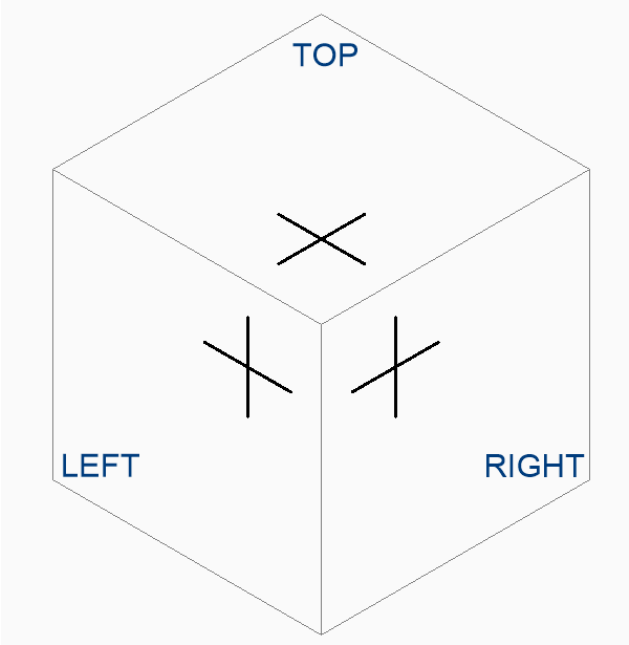
21.172 SNAPISOPAIR system variable

21.172.1 Snap isometric pair

Controls the current viewport's isometric plane (left, top or right), if the SNAPSTYL system variable is set to **isometric**.

Press **F5** function key to set the appropriate drawing plane: **Left**, **Top** or **Right**.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	0
Possible values:	0: Left 1: Top 2: Right



21.173 SNAPMARKERCOLOR system variable

21.173.1 Snap marker color

Controls the color of snap markers.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	1 to 255
Default value:	122

21.174 SNAPMARKERSIZE system variable

21.174.1 Snap marker size

Controls the size of snap markers.

BricsCAD only

Type:	Short
Saved in:	Preference

Default value:	8

21.175 SNAPMARKERTHICKNESS system variable

21.175.1 Snap marker thickness

Controls the thickness of the snap marker.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	2

21.176 SNAPMODE system variable

21.176.1 Snap mode

Toggles snap On or Off for the current viewport.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Snap off (for current viewport) On (1): Snap on (for current viewport)

21.177 SNAPSIZE system variable

21.177.1 Snap size (Obsolete)

Replaced by SNAPMARKERSIZE.

BricsCAD only

Type:	Short
Saved in:	Registry

21.178 SNAPSTYL system variable

21.178.1 Snap style

Controls the snap style for the current viewport - rectangular or isometric.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	0: Rectangular snap 1: Isometric snap

21.179 SNAPTHICKNESS system variable

21.179.1 Snap thickness (Obsolete)

Replaced by SNAPMARKERTHICKNESS.

BricsCAD only

Type:	Short
Saved in:	Registry

21.180 SNAPTYPE system variable

21.180.1 Snap type

Controls the snap type for the current viewport.

For **Adaptive Grid Snap**, see also the ADAPTIVEGRIDSTEPSIZE system variable.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2

Possible values:	0: Grid snap 1: Polar snap 2: Adaptive Grid Snap

21.181 SNAPUNIT system variable

21.181.1 Snap unit

Controls the current viewport's snap spacing. Adjusts itself automatically to reflect the isometric snap, if SNAPSTYL is set to **Isometric snap** (1).

Note: There is no snap in the Z direction.

Type:	2D point
Saved in:	Drawing
Default value:	0.5,0.5 - If MEASUREMENT=0 and INSUNITS=inches 10.0,10.0 - If MEASUREMENT=1 and INSUNITS=millimeters

21.182 SOLIDCHECK system variable

21.182.1 Solid check

Toggles the 3D solid validation for the current application session.

Type:	Boolean
Saved in:	Not saved
Default value:	On
Possible values:	Off (0): Solid validation off On (1): Solid validation on

21.183 SORTENTS system variable

21.183.1 Sort entities

Controls the entity display sort order.

Type:	Short
Saved in:	Drawing

Range:	0 to 127
Default value:	127
Possible options:	0: Off 1: Entity selection 2: Entity snap 4: Redraws 8: Mslide slide creation 16: Regens 32: Plotting 64: PostScript output

21.184 SPAADJUSTMODE system variable

21.184.1 Adjust mode

Controls the adjustment mode used for triangle smoothing. Ignored if FACETRES is used.

Adjust mode identifies which facet nodes are to be adjusted (smoothed) to other than their initial grid positions.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	0
Possible values:	0: None - No changes 1: Non-grid - Move nodes in the center of surrounding nodes to adjust points surrounded by triangles 2: All - Also adjust grid nodes

21.185 SPACHECKLEVEL system variable

21.185.1 Check level

Check level used in AUDIT and SOLIDEDIT for checking ACIS entities.

Audit is used to repair drawings that are open. The SOLIDEDIT command edits the faces, edges and bodies of 3D solids and 2D regions.

Value 10 is the lowest, used for fast checking. Value 70 is the maximum, used for comprehensive time consuming check.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 70
Default value:	10
Possible values:	0: Basic transformation consistency - basic pointer and fatal topology check 10: Basic geometry check - cellular topology check 20: Data sharing check, face area and loop orientation check, medium check of curved geometry 30: General surface check - check for sliver faces 40: Degenerate spline surface check, compatibility check between surface and pcurve surface, and check that a COEDGE has a partner on a single-sided face 50: Body containment check - compatibility check between pcurve location and (non-tolerant) coedge location 60: Convexity points check 70: Lump and shell containment check - face-face intersection check, and curve parametrization check

21.186 SPAGRIDASPECTRATIO system variable

21.186.1 Grid aspect ratio

Controls the aspect ratio of each cell in a grid. Ignored if the FACETRES system variable is in use.

A value of 1 is square.

This does not guarantee the aspect ratio of the facet, which may consist of only a part of a cell.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.187 SPAGRIDMODE system variable

21.187.1 Grid mode

Controls how grids are used in the mesh process. This variable is ignored if FACETRES is used.

The grid mode specifies whether a grid is used and whether the points where the grid cuts the edges should be inserted into the edge discretization.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 3
Default value:	1
Possible values:	0: Do not subdivide faces with a grid 1: Use a grid but do not add model edge intersection points 2: Allow grid to divide model edges 3: Grid only in one direction, u or v

21.188 SPAMAXFACETEDGELENGTH system variable

21.188.1 Maximum facet edge length

Controls the maximum length of a facet side. Ignored if the FACETRES system variable is used.

A value of zero means uses defaults (recommend).

CAUTION: Lengths that are too small cause high memory consumption and poor performance.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.189 SPAMAXNUMGRIDLINES system variable

21.189.1 Maximum number of grid lines

Controls the maximum number of grid subdivisions, this limits the face facet data size. Does not apply if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Long
Saved in:	Preference
Default value:	3000

21.190 SPAMINUGRIDLINES system variable

21.190.1 Minimum number of U grid lines

ontrols the minimum number of U grid lines - the minimum number of grid lines generated in the U direction. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Long
Saved in:	Preference
Default value:	0

21.191 SPAMINVGRIDLINES system variable

21.191.1 Minimum number of V grid lines

Controls the minimum number of V grid lines - the minimum number of grid lines generated in the V direction. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Long
Saved in:	Preference

Default value:	0

21.192 SPANORMALTOL system variable

21.192.1 Normal tolerance

Controls the maximum deviation allowed between two normals on two adjacent facet nodes, in degrees.

This value is independent of the model size. This variable is ignored if the FACETRES system variable is on (1).

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	15.0

21.193 SPASURFACETOL system variable

21.193.1 Surface tolerance

Controls the maximum distance between a facet edge and the true surface. The value is dependent on the model size.

This variable is ignored for output to STL and PDF if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	-1.0

21.194 SPATRIANGMODE system variable

21.194.1 Triangulation mode

Identifies what portion of a mesh is triangulated. Ignored if the FACETRES system variable is in use.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 5
Default value:	1
Possible values:	0: No triangulation 1: Triangulate everywhere 2: Triangulate against the boundary 3: Also triangulate first grid level 4: Triangulate to 3 levels of fringe 5: Triangulate to 4 levels of fringe

21.195 SPAUSEFACETRES system variable

21.195.1 Use FACETRES system variable

Use the FACETRES system variable in place of normal tolerances.

Note: Spa is short for Spatial, the maker of ACIS.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On

21.196 SPLFRAME system variable

21.196.1 Spline frame

Displays control polygons for splines and spline-fit polylines.

Type:	Boolean
Saved in:	Drawing
Default value:	Off

Possible values:	Off (0): Don't display control polygon for splines and spline-fit polylines On (1): Display control polygon for splines and spline-fit polylines

21.197 SPLINESEGS system variable

21.197.1 Spline segments

Controls how many line segments are generated when a spline is converted to a polyline with the PEDIT command.

Values between -32768 and 32767 are accepted.

For negative values, a fit-type curve is applied, composed of arc-segments, yields a smoother curve, but it takes longer to generate.

Type:	Short
Saved in:	Drawing
Range:	-32768 to 32767
Default value:	8

21.198 SPLINETYPE system variable

21.198.1 Spline type

Controls the curve type generated by the **Spline** option of the PEDIT command: Quadratic B-spline or Cubic B-spline.

Type:	Short
Saved in:	Drawing
Range:	5 to 6
Default value:	6
Possible values:	5: Quadratic B-spline 6: Cubic B-spline

21.199 SRCHPATH system variable

21.199.1 Support file search path

The file path for text fonts, customization files, plug-ins, drawings to insert, linetypes, and hatch patterns, not in the current folder.

Separate file paths with semicolons (;).

BricsCAD only

Type:	String Standard
Saved in:	Registry

21.200 SSFOUND system variable

21.200.1 Sheet Set found (Read Only)

Displays the sheet set file name and path that is associated with the current drawing file.

Type:	String
Saved in:	Not saved

21.201 SSLOCATE system variable

21.201.1 Sheet Set locate

Opens any associated sheets sets when a drawing is opened.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don’t open a drawing's Sheet Set with the drawing On (1): Open a drawing's Sheet Set with the drawing

21.202 SSMAUTOOPEN system variable

21.202.1 Sheet Set manager auto open

Opens **Sheet Set** panel automatically when a drawing is opened that is associated with a Sheet Set. The SSMAUTOOPEN and SSLOCATE system variables must both be switched on to display the Sheet Set automatically.

Type:	Boolean
Saved in:	Workspace
Default value:	On
Possible values:	Off (0): Don't open Sheet Set panel automatically On (1): Open Sheet Set panel automatically

21.203 SSMPOLLTIME system variable

21.203.1 Sheet Set manager poll time

Controls the time interval between automatic refreshes of the status data in a Sheet Set. The SSMSHEETSTATUS system variable must be set to 2 for the timer to operate.

Values between 10 and 600 are accepted.

Type:	Short
Saved in:	Registry
Range:	10 to 600
Default value:	15

21.204 SSMSHEETSTATUS system variable

21.204.1 Sheet Set manager status

Controls how the status data in a Sheet Set is refreshed.

Type:	Short
Saved in:	Registry
Range:	0 to 2

Default value:	2
Possible values:	0: Don't automatically refresh status 1: Refresh status when Sheet Set is loaded or updated 2: Refresh status when Sheet Set is loaded or updated, and at time interval by SSMPOLLTIME

21.205 SSMSTATE system variable

21.205.1 Sheet Set manager state (Read Only)

Controls if the Sheet Set Manager is active or not.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: Sheet Set Manager is not active 1: Sheet Set Manager is active

21.206 STACKPANELTYPE system variable

21.206.1 Stack panel type

The style of stacked docking panel containers.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	2
Possible values:	0: Tabbed - horizontal textual tabs, resizes drawing space 1: Flyout - vertical icon tab buttons, does not resize drawing space 2: Collapsible - vertical icon tab buttons, resizes drawing space

21.207 STAMPFONTSIZE system variable

21.207.1 Font Size

Controls the font size for the plot stamp. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.2

21.208 STAMPFONTSTYLE system variable

21.208.1 Font Style

Controls the font size for the plot stamp. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	Arial

21.209 STAMPFOOTER system variable

21.209.1 Footer

Controls the footer for the plot stamp.

BricsCAD only

Type:	String
Saved in:	Preference

21.210 STAMPFOOTEROFFSETX system variable

21.210.1 Stamp footer X offset

Controls the offset of the plot stamp footer from the bottom of the printable area. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.211 STAMPFOOTEROFFSETY system variable

21.211.1 Stamp footer Y offset

Controls the offset of the plot stamp footer from the bottom of the printable area. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.212 STAMPHEADER system variable

21.212.1 Header

Controls the header for the plot stamp.

BricsCAD only

Type:	String
Saved in:	Preference

21.213 STAMPHEADEROFFSETX system variable

21.213.1 Stamp header X offset

Controls the offset of the plot stamp header from the top of the printable area. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Real
Saved in:	Preference

Default value:	0.0

21.214 STAMPHEADEROFFSETY system variable

21.214.1 Stamp header Y offset

Controls the offset of the plot stamp header from the top of the printable area. See also the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.215 STAMPUNITS system variable

21.215.1 Units

Controls the units for the font size of the plot stamp.

See the INCLUDEPLOTSTAMP system variable.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 1
Default value:	0
Possible values:	0: Inches 1: Millimeters

21.216 STANDARDSOPTIONS system variable

21.216.1 Standards validation options

Options to control the standards check procedure.

Type:	Short

Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible options:	1: Fix non-standard entity properties automatically 2: Show ignored problems

21.217 STANDARDSVIOLATION system variable

21.217.1 Standards Violation Notification

Controls how a user is notified of standards violations.

BricsCAD only

Type:	Short
Saved in:	Registry
Default value:	2
Possible options:	0: Notification is off 1: An alert dialog is displayed 2: An icon is displayed in the Status bar

21.218 STARTUP system variable

21.218.1 Startup

Controls the display of the **Create New Drawing** and **Startup** dialog boxes.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	3

Possible values:	0: Display the Select Template dialog box, or use a default drawing template file. See also the BASEFILE system variable 1: Display the Startup and the Create New Drawing dialog boxes 2: Display the Start page 3: Display the Start page (with the Ribbon preloaded but not displayed)

21.219 STARTUPTODAY system variable

21.219.1 Startup today (Obsolete)

Controls if the Today window is used.

Type:	Boolean
Saved in:	Registry
Possible values:	Off (0): Display Traditional startup dialog box On (1): Display Today window

21.220 STATUSBAR system variable

21.220.1 Window Status bar

Controls the display of the Status bar.

Note: The only reason to turn off the status bar is to gain a bit more drawing area. It is far more useful to leave it on

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't show Status bar On (1): Show Status bar

21.221 STEPSIZE system variable

21.221.1 Step size

Controls the size of each step, in drawing units, when in walk or fly mode.

Type:	Real

Saved in:	Drawing
Range:	1e-6 to 1e+6
Default value:	2.0

21.222 STEPSPERSEC system variable

21.222.1 Steps per second

Controls the number of steps per second, when in walk or fly mode.

Values between 1.0 and 30.0 are accepted.

Type:	Real
Saved in:	Drawing
Range:	1.0 to 30.0
Default value:	24.0

21.223 STLPOSITIVEQUADRANT system variable

21.223.1 STL export coordinates adjustment

Moves coordinates to all-positive values during an STL export.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	1
Possible values:	0: Off 1: On

21.224 STORYBAR system variable

21.224.1 Display Story Bar

Controls the visibility and position of the **Story Bar**.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	Off
Possible values:	0: Off - turns off the Story bar 1: Right - turns the story bar visible on the right side of the model space 2: Left - turns the story bar visible on the left side of the model space

21.225 STRUCTURETREECONFIG system variable

21.225.1 Structure Tree Configuration

Name of the active Structure Tree configuration file. Use the SRCHPATH command to find the file.

Loading a different CST file than the default file changes the way that the STRUCTUREPANEL command presents drawing data.

BricsCAD only

Type:	String
Saved in:	Workspace
Default value:	default.cst

21.226 SURFTAB1 system variable

21.226.1 Surface tabulation 1

Controls the number of tabulations to be created for RULESURF and TABSURF commands. Also controls the mesh density in the M direction for REVSURF and EDGESURF commands.

When extruding entities with arc segments: the SURFTAB1 system variable divides them in a number of equal length intervals.

When revolving entities: the SURFTAB1 variable controls the number of segments of the revolution surface.

Type:	Short
Saved in:	Drawing
Default value:	6

21.227 SURFTAB2 system variable

21.227.1 Surface tabulation 2

Controls the mesh density in the N direction for REVSURF and EDGESURF commands.

The SURFTAB2 variable controls the number of segments of each arc segment in the revolved entity.

Type:	Short
Saved in:	Drawing
Default value:	6

21.228 SURFTYPE system variable

21.228.1 Surface-fitting type

Controls the surface-fitting type used with the **Desmooth** option of the PEDIT command.

Type:	Short
Saved in:	Drawing
Range:	5 to 8
Default value:	6
Possible values:	5: Quadratic B-spline surface 6: Cubic B-spline surface 8: Bezier surface

21.229 SURFU system variable

21.229.1 Surface U

Controls the surface density in the M direction and the U isolines density on surface entities for the **Smooth** option of the PEDIT command.

Type:	Short
Saved in:	Drawing
Default value:	6

21.230 SURFV system variable

21.230.1 Surface V

Controls the surface density in the N direction and the V isolines density on surface entities for the **Smooth** option of the PEDIT command.

Type:	Short
Saved in:	Drawing
Default value:	6

21.231 SVGBLENDEDGRADIENTS system variable

21.231.1 SVG Blended Gradients

Toggles the use of blended gradients for complex gradient fills for SVG export.

The use of complex gradient fills makes the file size larger.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0
Possible values:	0: Yes 1: No

21.232 SVGCOLORPOLICY system variable

21.232.1 SVG Color Policy

Color policy for an SVG export.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	1

Possible values:	0: Colorful 1: Monochrome 2: Grayscale

21.233 SVGDEFAULTIMAGEEXTENSION system variable

21.233.1 SVG Default Image Extension

Controls the default image extension type.

BricsCAD only

Type:	String
Saved in:	Preference
Default value:	.png

21.234 SVGGENERICFONTFAMILY system variable

21.234.1 SVG Generic Font Family

Substitute font to use if the font is missing for SVG export.

The following generic font families are supported in SVG: **serif**, **sans-serif**, **cursive**, **fantasy**, **monospace**.

- Sans-serif - fonts without serifs, like Arial
- Serif - fonts with serifs, like Times Roman
- Cursive - fonts that look handwritten
- Fantasy - unusual fonts
- Monospace - fonts where each character takes up the same space (non-proportional spacing), such as Courier

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	0

Possible values:	0: Sans-serif 1: Serif 2: Cursive 3: Fantasy 4: Monospace

21.235 SVGIMAGEBASE system variable

21.235.1 SVG Image base path

The image file path for SVG export.

If not set, absolute file paths are written to the SVG.

BricsCAD only

Type:	String Standard
Saved in:	Preference

21.236 SVGIMAGEURL system variable

21.236.1 SVG Image Url

The file path for images for SVG export.

BricsCAD only

Type:	String Standard
Saved in:	Preference

21.237 SVGLINEWEIGHTSCALE system variable

21.237.1 SVG Line Weight Scale

Scales lineweights for an SVG export.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	1.0

21.238 SVGOUTPUTHEIGHT system variable

21.238.1 SVG Output Height

Page height, in pixels, for SVG export.

Valid only if SVGSCALEFACTOR system variable is set to zero.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	768

21.239 SVGOUTPUTWIDTH system variable

21.239.1 SVG Output Width

Page width, in pixels, for SVG export.

Valid only if SVGSCALEFACTOR system variable is set to zero.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	1024

21.240 SVGPRECISION system variable

21.240.1 SVG Floating Point Precision

Number of decimal digits (as in printf("%.9g",...) - 9 digits) for an SVG export.

BricsCAD only

Type:	Short
Saved in:	Preference
Default value:	6

21.241 SVGSCALEFACTOR system variable

21.241.1 SVG Scale Factor

Scales the SVG during an export. Dependent files need to be converted separately.

1 Drawing unit = X SVG pixel.

- If set to zero, scales the current view to fit within the page size set with the SVGOUTPUTWIDTH and SVGOUTPUTHEIGHT variables.
- If set to a positive value, SVG page size is calculated automatically to correspond to required scale.

For example, 96dpi / 25.4 = 3.7795 - the corresponding scale factor for the conversion of 1 DWG unit into 1 mm SVG.

BricsCAD only

Type:	Real
Saved in:	Preference
Default value:	0.0

21.242 SYSCODEPAGE system variable

21.242.1 System code page (Read Only)

Displays the system code page, determined by the operating system.

Type:	String
Saved in:	Not saved

22. T

22.1 TABCONTROLHEIGHT system variable

22.1.1 Tab control height in pixels (Mac & Linux)

Controls the height of the document control tab, in pixels.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 or greater
Default value:	25

22.2 TABMODE system variable

22.2.1 Tablet mode

Allows the use of a tablet. Use the TABLET command to configure the tablet.

Type:	Boolean
Saved in:	Not saved
Range:	0
Possible values:	0: Command selection mode 1: Digitize mode

22.3 TABSFIXEDWIDTH system variable

22.3.1 Tabs fixed width (Mac & Linux)

Applies the same width to all tabs, in the documents tab.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

Possible values:	Off (0): All tabs have fixed width off On (1): All tabs have fixed width on

22.4 TANGENTLENGTHTYPE system variable

22.4.1 Tangent Length Type

Sets default flow fitting tangent length type.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	(0): Profile Width Ratio (1): Absolute Value

22.5 TANGENTLENGTHVALUE system variable

22.5.1 Tangent Length Value

Sets default flow fitting tangent length value.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0

22.6 TARGET system variable

22.6.1 Target (Read Only)

The coordinates for perspective projection of the current viewport.

Type:	3D point
Saved in:	Drawing

22.7 TDCREATE system variable

22.7.1 Time/Date create (Read only)

The time and date the drawing was created, in Julian Day format.

Type:	Real
Saved in:	Drawing

22.8 TDINDWG system variable

22.8.1 Time/Date in drawing (Read Only)

The total current drawing edit time, in days.

Format: >number of days<.>decimal fraction of a day<

Type:	Real
Saved in:	Drawing

22.9 TDUCREATE system variable

22.9.1 Time/Date universal create (Read Only)

The universal time and date the drawing was created, Julian Day format.

Type:	Real
Saved in:	Drawing

22.10 TDUPDATE system variable

22.10.1 Time/Date update (Read Only)

The local time and date, the drawing was last saved or updated, in Julian Day format.

Type:	Real
Saved in:	Drawing

22.11 TDUSRTIMER system variable

22.11.1 Time/Date user timer (Read Only)

The user-elapsed timer value.

Start, stop and reset the timer with the TIME command.

Type:	Real
Saved in:	Drawing

22.12 TDUUPDATE system variable

22.12.1 Time/Date universal update (Read Only)

The universal time and date the drawing was last saved or updated - in Julian Day format.

Type:	Real
Saved in:	Drawing

22.13 TEETANGENTLENGTHTYPE system variable

22.13.1 Tee Length Type

Sets default tee tangent length type.

BricsCAD only

Type:	Short
Saved in:	Drawing
Default value:	0
Possible values:	(0): Profile Width Ratio (1): Absolute Value

22.14 TEETANGENTLENGTHVALUE system variable

22.14.1 Tee Length Value

Sets default tee tangent length value.

BricsCAD only

Type:	Real
Saved in:	Drawing
Default value:	0.5

22.15 TEMPLATEPATH system variable

22.15.1 Template path

Specifies the file path used for the Templates folder.

BricsCAD only

Type:	String Standard
Saved in:	Preference

22.16 TEMPPREFIX system variable

22.16.1 Temporary prefix

The folder name for temporary files.

Type:	String Standard
Saved in:	Registry

22.17 TEXTANGLE system variable

22.17.1 Text angle

The angle of the last added text entity.

BricsCAD only

Type:	Real
Saved in:	Not saved

22.18 TEXTED system variable

22.18.1 Text editor for single line text entities

Controls the editor type used for single line text entities.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2
Possible values:	0: Edit in-place editor 1: Edit in pop up dialog 2: Edit in-place editor with repeated input

22.19 TEXTEDITMODE system variable

22.19.1 Text edit mode

Controls if DDEDIT command automatically repeats entity selections or not.

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	0
Possible values:	0: Multiple edit mode (command repeats until canceled) 1: Single edit mode (command ends after editing a text entity) 2: Automatic edit mode (single if to edit preselected text, otherwise multiple)

22.20 TEXTEVAL system variable

22.20.1 Text evaluation

Controls the interpretation of Command line text strings.

When the TEXTEVAL system variable is set to 1, this command evaluates LISP expressions:

Text: (* pi 2)

The result of the equation (pi x 2) is placed as text: 6.283185

Type:	Short

Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: All responses to prompts for text strings and attribute values are taken literally 1: Text starting with '(' or '!' is evaluated as an LISP expression, as for non-textual input

22.21 TEXTFILL system variable

22.21.1 Text fill

Controls if TrueType fonts are filled or outlined for renders and the PSOUT command.

Type:	Short
Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Display text as outlines 1: Display text as filled images

22.22 TEXTQLTY system variable

22.22.1 Text quality (Mac & Linux)

Controls the smoothness of TrueType fonts for plot and render.

Values between 0 and 100 are accepted.

- A value of zero means no smoothing.
- A value of 100 is maximum smoothing.

Type:	Short
Saved in:	Not saved
Range:	0 to 100
Default value:	50
Possible values:	0: No smoothing 100: Maximum smoothing

22.23 TEXTSIZE system variable

22.23.1 Text size

The default height for new text entities, has no effect if the current text style has a fixed height.

Type:	Real
Saved in:	Drawing
Default value:	2.5

22.24 TEXTSTYLE system variable

22.24.1 Text style

The current text style.

Type:	String
Saved in:	Drawing
Default value:	Standard

22.25 TEXTUREMAPPATH system variable

22.25.1 Texture map path

The file paths for texture maps.

BricsCAD only

Type:	String Standard

Saved in:	Preference

22.26 THICKNESS system variable

22.26.1 Thickness

The default thickness for 2D entities.

Type:	Real
Saved in:	Drawing
Default value:	0.0

22.27 THREADDISPLAY system variable

22.27.1 Thread representation

Controls the thread display for part created, during the -BMHARDWARE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): Turn off Thread Display On (1): Thread Display

22.28 THUMBSIZE system variable

22.28.1 Thumbnail preview image size

Controls the maximum generated size for thumbnail previews, in pixels.

Type:	Short
Saved in:	Registry
Range:	0 to 8
Default value:	3

Possible values:	0: 64x64 1: 128x128 2: 256x256 3: 512x512 4: 1024x1024 5: 1440x1440 6: 1600x1600 7: 1920x1920 8: 2560x2560

22.29 TILEMODE system variable

22.29.1 Tile mode

Switches the active tab, model or paper space.

Type:	Short
Saved in:	Drawing
Default value:	1
Possible values:	0: Last active layout tab (paper space) 1: Model tab

22.30 TILEMODELIGHTSYNCH system variable

22.30.1 Tile mode light synch

Synchronizes lighting in all model space viewports (Internal use only).

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't synchronize lighting On (1): Synchronize lighting

22.31 TIMEZONE system variable

22.31.1 Timezone

Controls the time zone for the sun.

Note: Setting a geographic location also controls the time zone.

Type:	Short
Saved in:	Drawing
Range:	-12000 to 13000
Default value:	-8000

Possible values:	-12000: (GMT-12:00) International Date Line West -11000: (GMT-11:00) Midway Island, Samoa -10000: (GMT-10:00) Hawaii -9000: (GMT-09:00) Alaska -8000: (GMT-08:00) Pacific Time (US & Canada); Tijuana -7000: (GMT-07:00) Mountain Time (US & Canada) -7001: (GMT-07:00) Arizona -7002: (GMT-07:00) Chihuahua, La Paz, Mazatlan -6000: (GMT-06:00) Central Time (US & Canada) -6001: (GMT-06:00) Central America -6002: (GMT-06:00) Guadalajara, Mexico City, Monterrey -6003: (GMT-06:00) Saskatchewan -5000: (GMT-05:00) Eastern Time (US & Canada) -5001: (GMT-05:00) Indiana (East) -5002: (GMT-05:00) Bogota, Lima, Quito -4000: (GMT-04:00) Atlantic Time (Canada) -4001: (GMT-04:00) Caracas, La Paz -4002: (GMT-04:00) Santiago -3300: (GMT-03:30) Newfoundland -3000: (GMT-03:00) Brasilia -3001: (GMT-03:00) Buenos Aires, Georgetown -3002: (GMT-03:00) Greenland -2000: (GMT-02:00) Mid-Atlantic -1000: (GMT-01:00) Azores -1001: (GMT-01:00) Cape Verde Is. 0: (UTC) Universal Coordinated Time 1: (GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London 2: (GMT) Casablanca, Monrovia 1000: (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna 1001: (GMT+01:00) Brussels, Copenhagen, Madrid, Paris 1002: (GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague 1003: (GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb 1004: (GMT+01:00) West Central Africa 2000: (GMT+02:00) Athens, Beirut, Istanbul, Minsk 2001: (GMT+02:00) Bucharest 2002: (GMT+02:00) Cairo 2003: (GMT+02:00) Harare, Pretoria 2004: (GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius 2005: (GMT+02:00) Jerusalem 3000: (GMT+03:00) Moscow, St. Petersburg, Volgograd 3001: (GMT+03:00) Kuwait, Riyadh 3002: (GMT+03:00) Baghdad 3003: (GMT+03:00) Nairobi 3300: (GMT+03:30) Tehran 4000: (GMT+04:00) Abu Dhabi, Muscat 4001: (GMT+04:00) Baku, Tbilisi, Yerevan 4300: (GMT+04:30) Kabul 5000: (GMT+05:00) Ekaterinburg 5001: (GMT+05:00) Islamabad, Karachi, Tashkent 5300: (GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi 5450: (GMT+05:45) Kathmandu 6000: (GMT+06:00) Almaty, Novosibirsk 6001: (GMT+06:00) Astana, Dhaka 6002: (GMT+06:00) Sri Jayawardenepura 6300: (GMT+06:30) Rangoon

22.32 TOOLBARMARGIN system variable

22.32.1 Toolbar margin

Controls the toolbar row margin size, in pixels.

Values between 0 and 63 are accepted.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 63
Default value:	0

22.33 TOOLBUTTONSIZE system variable

22.33.1 Tool button size

Controls size of Toolbar buttons and icons.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 2
Default value:	0
Possible values:	0: Small buttons 1: Large buttons 2: Extra-large buttons

Small:

Large:

Extra Large:

22.34 TOOLICONPADDING system variable

22.34.1 Tool icon padding

Controls the size of toolbar buttons. Changes the spacing, in pixels, does not change the size of the icons.

Values between 0 and 15 are accepted.

BricsCAD only

Type:	Short
Saved in:	Workspace
Range:	0 to 15
Default value:	0

22.35 TOOLPALETTEPATH system variable

22.35.1 Tool palettes path

Specify the path(s) to the Tool Palettes.

Type:	String Standard
Saved in:	Registry

22.36 TOOLTIPDELAY system variable

22.36.1 Tooltip delay

Controls the delay for tooltips (hover tips) to appear, in milliseconds. Applies only if tooltips are enabled in the TOOLTIPS system variable.

Values between 0 and 500 are accepted.

BricsCAD only

Type:	Short
Saved in:	Registry

Range:	0 or greater
Default value:	500

22.37 TOOLTIPS system variable

22.37.1 Tooltips

Toggles the display of tooltips for toolbars, the Ribbon, the Quad and the Properties.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display tooltips On (1): Display tooltips

22.38 TPSTATE system variable

22.38.1 Tool Palettes Panel state (Read Only)

The status of the Tool Palettes panel.

Type:	Short
Saved in:	Not saved
Range:	0 to 1
Default value:	0
Possible values:	0: Tool Palettes bar is invisible 1: Tool Palettes bar is visible

22.39 TRACEWID system variable

22.39.1 Trace width

Controls the default width for new traces, for the TRACE command.

Type:	Real

Saved in:	Drawing
Default value:	1.0

22.40 TRACKPATH system variable

22.40.1 Track path

Controls the display of polar and entity snap tracking paths.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible values:	0: Display full-screen entity snap tracking path 1: Display entity snap tracking path only between the alignment point and the From point to the cursor location 2: Do not display polar tracking path 3: Do not display polar or entity snap tracking paths

22.41 TRANSPARENCYDISPLAY system variable

22.41.1 Transparency display

Displays transparencies.

Type:	Boolean
Saved in:	Registry
Default value:	On

22.42 TRAYICONS system variable

22.42.1 Tray icons

Toggles the display of notification icons in the Status bar.

Type:	Boolean

Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display tray On (1): Display tray

22.43 TRAYNOTIFY system variable

22.43.1 Tray notify

Toggles the display of notification balloons.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't display notifications On (1): Display notifications

22.44 TRAYTIMEOUT system variable

22.44.1 Tray timeout

Controls the display time for service notifications, in seconds. Applies only if the TRAYNOTIFY system variable is on.

Values between 0 and 60 are accepted.

Type:	Short
Saved in:	Registry
Range:	0 to 60
Default value:	0

22.45 TREEDEPTH system variable

22.45.1 Tree depth

Controls the maximum number of times an index can be divided into branches.

A value of zero suppresses the spatial index entirely, entities are always processed in database order. Positive numbers turn on spatial indexing, an integer, five digits maximum, the first three digits refer to model space, the remaining digits refer to paper space. For negative numbers Z coordinate is ignored in model space, recommended for 2D drawings.

Type:	Short
Saved in:	Drawing
Default value:	3020
Possible values:	0: Suppress spatial indexing >0: Apply spatial indexing <0: Ignore Z coordinates

22.46 TREEMAX system variable

22.46.1 Tree maximum

Limits the use of memory, limits the number of nodes in the spatial index (oct-tree) when a drawing is regenerated.

By imposing a fixed limit with TREEMAX, you can load drawings created on systems with more memory than your system and with a larger TREEDEPTH than your system can handle. These drawings, if left unchecked, have an oct-tree large enough to eventually consume more memory than is available to your computer. TREEMAX also provides a safeguard against experimentation with inappropriately high TREEDEPTH values.

Type:	Long
Saved in:	Registry
Default value:	10000000

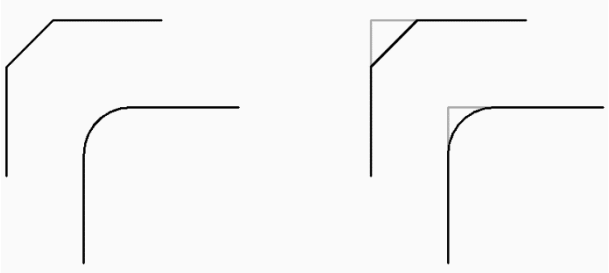
22.47 TRIMMODE system variable

22.47.1 Trim mode

Controls if the length of selected entities or polyline segments for chamfers and fillets are adjusted (trimmed or lengthened).

Type:	Boolean

Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't trim selected edges to the endpoints of chamfer lines and fillet arcs On (1): Trim selected edges to the endpoints of chamfer lines and fillet arcs



22.48 TRUSTEDPATHS system variable

22.48.1 Trusted executable file locations (Read Only)

File path(s) to use to load executable files.

Separate file paths with semicolons (;)

Type:	String
Saved in:	Not saved

22.49 TSPACEFAC system variable

22.49.1 Text space factor

Controls the line spacing distance of multiline text, measured as a multiplier of text height.

Values between 0.25 and 4.0 are accepted.

Type:	Real
Saved in:	Not saved
Range:	0.25 to 4.0
Default value:	1.0

22.50 TSPACETYPE system variable

22.50.1 Text space type

Controls the type of line spacing used for multiline text.

- At least: adjusts line spacing based on the tallest character(s) in a line
- Exactly: uses the specified line spacing, regardless of individual character sizes

Note: The mtexts created with the MLEADER command are also influenced by this system variable's value.

Type:	Short
Saved in:	Registry
Range:	1 to 2
Default value:	1
Possible values:	1: At least 2: Exactly

22.51 TSTACKALIGN system variable

22.51.1 Text stack align

Controls the vertical alignment of stacked text.

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Align bottom 1: Align center 2: Align top

22.52 TSTACKSIZE system variable

22.52.1 Text stack size

Controls the stacked text height, as a percentage, relative to the height of the selected text.

Values between 25 and 125 are accepted.

Type:	Short
Saved in:	Drawing
Range:	25 to 125
Default value:	70

22.53 TTFASTEXT system variable

22.53.1 TrueType Text displaying mode

Controls if TrueType text is drawn as vectorized graphics or as text.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Displays text as vectorized graphics On (1): Displays text as text

22.54 TUTORIALSONSTARTPAGE system variable

22.54.1 Tutorials on start page

Switch to control whether tutorials can be accessed from the start page.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Does not display the **Discover hands-on tutorials** button on the start page On (1): Displays the **Discover hands-on tutorials** button on the start page

23. U

23.1 UCSAXISANG system variable

23.1.1 UCS axis angle

Controls the default rotation angle around the X, Y, or Z axis, for the UCS command.

Values between 5 and 180 are accepted.

Type:	Real
Saved in:	Registry
Range:	5 to 180
Default value:	90

23.2 UCSBASE system variable

23.2.1 UCS base

The name of the UCS that defines the orthographic UCS.

Type:	String
Saved in:	Drawing
Default value:	WORLD

23.3 UCSDETECT system variable

23.3.1 UCS detect

Controls the dynamic UCS behavior. Dynamic UCS is a temporary UCS that activates automatically when the cursor hovers over a face, region or 2D entity.

A negative value is the same as 0, but helps in storing the earlier value.

Type:	Short
Saved in:	Registry
Range:	-3 to 3

Default value:	1
Possible options:	negative: Disable dynamic UCS 1: Enable for faces of 3D solid and regions 2: Enable for 2D entities

23.4 UCSFOLLOW system variable

23.4.1 UCS follow

Controls if a plan view (a top view zoomed to extents) is generated automatically whenever the UCS changes.

If on, turn off the UCSDETECT system variable.

Type:	Boolean
Saved in:	Drawing
Default value:	Off
Possible values:	Off (0): Don't show plan view when UCS is changed On (1): Show plan view when UCS is changed

23.5 UCSICON system variable

23.5.1 UCS icon

Controls the display and position of the UCS icon for the current viewport.

Type:	Short
Saved in:	Drawing
Default value:	3
Possible options:	0: No icon 1: Show icon 2: At origin

23.6 UCSICONPOS system variable

23.6.1 UCS icon position

Controls the location of the UCS icon when the origin point is not visible.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	1
Possible values:	0: Lower right 1: Lower left 2: Upper right 3: Upper left

23.7 UCSNAME system variable

23.7.1 UCS name (Read Only)

The name of the UCS for the current viewport, in the current workspace.

Type:	String
Saved in:	Drawing

23.8 UCSORG system variable

23.8.1 UCS origin (Read Only)

The current coordinate system's origin point for the current viewport.

Type:	3D point
Saved in:	Drawing
Default value:	0,0,0

23.9 UCSORTHO system variable

23.9.1 UCS orthographic

Sets the UCS to follow the current view, automatically switches the drawing plane to match the current view plane.

Only works if an orthographic view is selected with the -VIEW command or the LookFrom widget.

Does not work if the NAVVCUBEORIENT system variable is set to UCS.

Type:	Boolean
Saved in:	Registry
Default value:	Off
Possible values:	Off (0): When an orthographic view is selected, don't automatically activate the related orthographic UCS On (1): When an orthographic view is selected, automatically activate the related orthographic UCS

23.10 UCSVIEW system variable

23.10.1 UCS view

Controls if the current UCS is saved with a named view.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't save current UCS with named view On (1): Save current UCS with named view

23.11 UCSVP system variable

23.11.1 UCS viewports

Controls if the UCS in all viewports is fixed, or changes to reflect the currently active viewport's UCS.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Not locked (UCS not stored in viewport) On (1): Locked (UCS stored in viewport)

23.12 UCSXDIR system variable

23.12.1 UCS X direction (Read Only)

The X direction for the current viewport.

Type:	3D point
Saved in:	Drawing
Default value:	1,0,0

23.13 UCSYDIR system variable

23.13.1 UCS Y direction (Read Only)

The Y direction for the current viewport.

Type:	3D point
Saved in:	Drawing
Default value:	0,1,0

23.14 UNDOCTL system variable

23.14.1 Undo control (Read Only)

Controls the behavior of the UNDO command.

Type:	Short
Saved in:	Not saved
Default value:	5
Possible options:	0: Undo off 1: Undo on 2: Only one command can be undone 4: Auto is turned on 8: A group is currently active

23.15 UNDOMARKS system variable

23.15.1 Undo marks (Read Only)

Shows the current number of marks placed in the Undo control using the MARK option.

The MARK and BACK options are not available if a group is currently active.

Type:	Short
Saved in:	Not saved

23.16 UNITESURFACES system variable

Unite adjacent surfaces.

23.16.1 Unite adjacent surfaces

Unites extruded/revolved surfaces that touch.

The UNITESURFACES system variable is one of the four system variables found under the **Extrude mode** group.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Default value:	0
Possible options:	Off (0): Unite adjacent surfaces On (1): Do not unite adjacent surfaces

23.17 UNITMODE system variable

23.17.1 Unit mode

Controls how Imperial units are displayed.

Type:	Boolean
Saved in:	Drawing
Default value:	Off

Possible values:	Off (0): Don't remove spaces when distances or angles are converted to text On (1): Remove spaces when distances or angles are converted to text

23.18 USECOMMUNICATOR system variable

23.18.1 Use Communicator

Shows if the Communicator is in use. If active, also shows the license type.

- 0: no license, Communicator import and export formats are not available.
- 1: trial, runs Communicator in trial mode, expiring after 30 days.
- 2: full, runs the full communicator import-export set.

If the license is changed, the new level comes into effect after restarting the program.

BricsCAD only

Type:	Short
Saved in:	Preference
Range:	0 to 2
Default value:	1
Possible values:	0: Not using Communicator 1: Communicator in use - on trial 2: Communicator in use - fully licensed

23.19 USENEWRIBBON system variable

23.19.1 Use the new Ribbon

Uses the new Ribbon.

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable the new Ribbon On (1): Enable the new Ribbon, a restart may be required

23.20 USERI1 system variable

23.20.1 User integer 1

First of 5 variables that can be used to store integer values.

Type:	Short
Saved in:	Drawing
Default value:	0

23.21 USERI2 system variable

23.21.1 User integer 2

Second of 5 variables that can be used to store integer values.

Type:	Short
Saved in:	Drawing
Default value:	0

23.22 USERI3 system variable

23.22.1 User integer 3

Third of 5 variables that can be used to store integer values.

Type:	Short
Saved in:	Drawing
Default value:	0

23.23 USERI4 system variable

23.23.1 User integer 4

Fourth of 5 variables that can be used to store integer values.

Type:	Short

Saved in:	Drawing
Default value:	0

23.24 USERI5 system variable

23.24.1 User integer 5

Fifth of 5 variables that can be used to store integer values.

Type:	Short
Saved in:	Drawing
Default value:	0

23.25 USERR1 system variable

23.25.1 User real 1

First of 5 variables that can be used to store real numerical values.

Type:	Real
Saved in:	Drawing
Default value:	0.0

23.26 USERR2 system variable

23.26.1 User real 2

Second of 5 variables that can be used to store real numerical values.

Type:	Real
Saved in:	Drawing
Default value:	0.0

23.27 USERR3 system variable

23.27.1 User real 3

Third of 5 variables that can be used to store real numerical values.

Type:	Real
Saved in:	Drawing
Default value:	0.0

23.28 USERR4 system variable

23.28.1 User real 4

Fourth of 5 variables that can be used to store real numerical values.

Type:	Real
Saved in:	Drawing
Default value:	0.0

23.29 USERR5 system variable

23.29.1 User real 5

Fifth of 5 variables that can be used to store real numerical values.

Type:	Real
Saved in:	Drawing
Default value:	0.0

23.30 USERS1 system variable

23.30.1 User string 1

First of 5 variables that can be used to store string values.

Type:	String
Saved in:	Not saved

23.31 USERS2 system variable

23.31.1 User string 2

Second of 5 variables that can be used to store string values.

Type:	String
Saved in:	Not saved

23.32 USERS3 system variable

23.32.1 User string 3

Third of 5 variables that can be used to store string values.

Type:	String
Saved in:	Not saved

23.33 USERS4 system variable

23.33.1 User string 4

Fourth of 5 variables that can be used to store string values.

Type:	String
Saved in:	Not saved

23.34 USERS5 system variable

23.34.1 User string 5

Fifth of 5 variables that can be used to store string values.

Type:	String
Saved in:	Not saved

23.35 USESTANDARDOPENFILEDIALOG system variable

23.35.1 Use standard open file dialog (Windows)

Uses a standard (non-customizable) dialog for the OPEN, SAVEAS and INSERT commands (Windows only). See also the DRAWINGPATH, BLOCKSPATH and PLACESBARFOLDER system variables.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	Off

24. V

24.1 VBAMACROS system variable

24.1.1 Enable macros

Enables macros when a VBA-project is loaded.

BricsCAD only

Type:	Boolean
Saved in:	Preference
Default value:	On
Possible values:	Off (0): Disable macros on loading VBA-project On (1): Enable macros on loading VBA-project

24.2 VENDORNAME system variable

24.2.1 Vendor name (obsolete)

Shows the vendor name.

BricsCAD only

Read-only

Type:	String
Saved in:	Not saved
Default value:	Bricsys

24.3 VERBOSEBIMSECTIONUPDATE system variable

24.3.1 Additional diagnostics while section update

Displays additional diagnostics for the BIMSECTIONUPDATE command.

BricsCAD only

Type:	Boolean
Saved in:	Registry

Default value:	On

24.4 VERSIONCONTROLCONFIGPATH system variable

24.4.1 Version Control config path

The file path used to store version control settings.

BricsCAD only

Type:	String
Saved in:	Registry

24.5 VERSIONCONTROLDOWNLOADPATH system variable

24.5.1 Version Control download path

The file path used to store version control projects.

BricsCAD only

Type:	String
Saved in:	Registry

24.6 VERSIONCUSTOMIZABLEFILES system variable

24.6.1 Version customizable files (Read Only)

Shows the current version of the CUI and PGP files.

Type:	String
Saved in:	Preference

24.7 VIEWCTR system variable

24.7.1 View center (Read Only)

The coordinates for the center point of the current viewport.

Type:	3D point
Saved in:	Drawing

24.8 VIEWDIR system variable

24.8.1 View direction (Read Only)

Displays the view direction of the current viewport.

Type:	3D point
Saved in:	Drawing

24.9 VIEWMODE system variable

24.9.1 View mode (Read Only)

The current viewport's View mode.

- If off, the front clipping plane passes through the camera point (vectors behind the camera are not displayed) unless front-clipping is off.
- If **Front clip not at eye** is on, the FRONTZ system variable controls the front clipping plane.

Type:	Short
Saved in:	Drawing
Range:	0 to 31
Possible options:	0: Turned off 1: Perspective view active 2: Front clipping on 4: Back clipping on 8: UCS Follow mode on 16: Front clip not at eye

24.10 VIEWSIZE system variable

24.10.1 View size (Read Only)

The height of the current viewport.

Type:	Real
Saved in:	Drawing
Default value:	0.0

24.11 VIEWTWIST system variable

24.11.1 View twist (Read Only)

The view twist angle relative to the WCS for the current viewport.

Type:	Real
Saved in:	Drawing

24.12 VIEWUPDATEAUTO system variable

24.12.1 Automatically update drawing views

Turns on automatic updates to drawing views (in paper space) when the source model changes.

When turned off, the VIEWUPDATE command manually updates the drawing views created by VIEWBASE and VIEWSECTION commands. This only works in paper space.

Type:	Boolean
Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Don't update drawing views automatically On (1): Update drawing views automatically

24.13 VISRETAIN system variable

24.13.1 Visibility retain

Controls the visibility, color, linetype and lineweight of an XRef, and if path changes to nested XRefs are saved. If the PSTYLEPOLICY system variable is off (0), also controls the plotstyles of XRef-dependent layers.

- If Off (0): Changes made to XRefs-dependent layers in the current drawing are valid in the current session only and are not saved with the drawing. When the current drawing is reopened, the layer table is reloaded from the reference drawing and the current drawing reflects those settings. The layer settings affected are On, Off, Freeze, Thaw, Color, Ltype, LWeight, and PStyle (if PSTYLEPOLICY is set to 0).
- If On (1): Layer settings are saved with the current drawing's layer table and persist from session to session.

Type:	Short

Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: Off, the layer table, as stored in the XRef takes precedence 1: On, XRef-dependent layer changes made in the current drawing take precedence

24.14 VOLUMEPREC system variable

24.14.1 Volume precision

Controls the number of decimal places displayed for volumes, if volume properties are formatted with the PROPUNITS system variable.

If negative, LUPREC (Linear Unit Precision) is used.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	-1 to 8
Default value:	-1
Possible values:	-1: Use the LUPREC system variable 0 1: 0.0 2: 0.00 3: 0.000 4: 0.0000 5: 0.00000 6: 0.000000 7: 0.0000000 8: 0.00000000

24.15 VOLUMEUNITS system variable

24.15.1 Volume units

Controls a list of units used to display volume, if volume properties are formatted with the PROPUNITS system variable.

If empty, all volumes match the drawing.

Note: The string contains a space-separated list of unit abbreviations.

BricsCAD only

Type:	String
Saved in:	Registry
Default value:	in ft mi µm mm cm m km

24.16 VPMAXIMIZEDSTATE system variable

24.16.1 Viewport maximized (Read Only)

Displays a value to indicate if the viewport is maximized.

Note: You cannot plot or publish when the viewport is maximized.

This system variable is available only at the Command line.

Type:	Boolean
Saved in:	Not saved
Default value:	Off
Possible values:	Off (0): Viewport is not maximized On (1): Viewport is maximized

24.17 VPROTATEASSOC system variable

24.17.1 Rotate view

Rotates a view with the viewport, in paper space.

Type:	Boolean
Saved in:	Registry

Default value:	On
Possible values:	Off (0): Rotate view off On (1): Rotate view on

24.18 VSMAX system variable

24.18.1 Virtual screen maximum (Read Only)

The current viewport's upper-right corner coordinates.

Type:	3D point
Saved in:	Drawing

24.19 VSMIN system variable

24.19.1 Virtual screen minimum (Read Only)

The current viewport's lower-left corner coordinates.

Type:	3D point
Saved in:	Drawing

24.20 VTDURATION system variable

24.20.1 View transition duration

Controls the duration of animated view transitions in milliseconds.

Values between 0 and 5000 are accepted.

Type:	Short
Saved in:	Registry
Range:	0 to 5000
Default value:	750

24.21 VTENABLE system variable

24.21.1 Enable view transitions

Enables animation transitions during pan, zoom and rotation view actions in model space. See also, the VTFPS system variable.

Type:	Short
Saved in:	Registry
Range:	0 to 7
Default value:	3
Possible options:	1: For zoom/pan 2: For rotation 4: For unattended mode

24.22 VTFPS system variable

24.22.1 View transition minimum FPS

Controls the minimum FPS required to enable animated view transitions.

Values between 1 and 30 are accepted.

The default value is 7, which means that the redraw time should take less than 143 (=1000/7) milliseconds. If the computer is not capable to redraw the view fast enough, no animation will be available.

Type:	Short
Saved in:	Registry
Range:	1 to 30
Default value:	7

25. W

25.1 WARNINGMESSAGES system variable

25.1.1 Warning messages

Controls which warning messages are displayed.

BricsCAD only

Type:	Long
Saved in:	Preference
Default value:	1048575
Possible options:	1: When 3D context with hardware rendering switched off is selected 2: When tool property are modified in the Customize dialog box 4: When sheet custom properties are deleted 8: When entities are moved to frozen or off layer 16: When saving to previous version that does not support certain entities 32: When a drawing is opened and modified attachments are detected 64: When a new layer, that does not match the current layer filter, is created 128: Render: Tile sizes between 4 and 127 are processed as 128 256: When a category mass is expanded in the Properties panel 512: When an item in the Customize dialog box is deleted 1024: On publish: Save sheet list 2048: When layouts in Page Setup Explorer are deleted 4096: When mass property calculations will take a long time 8192: When entering the Array Edit mode 16384: When there are incompatible units 32768:When a block definition modification will cause all related block references to update 65536: When a Data Link has changed - tables that use this link may need to be updated 131072:When VIEWBASE is used for architectural drawings 262144: When a closed category in the Properties panel is expanded 524288: When an empty category in the Properties panel is removed

25.2 WHIPARC system variable

25.2.1 Whip arcs

Controls if circles and circular arcs display as true (smooth) circles or as a series of angular lines.

Type:	Short

Saved in:	Registry
Range:	0 to 1
Default value:	1
Possible values:	0: Display circles and arcs as a series of angular lines 1: Display as true circles and arcs

25.3 WHIPTHREAD system variable

25.3.1 Whip thread

Controls if the REGEN and REDRAW commands use multithreading, if the machine has multiple processors (Not yet supported).

When multithreaded processing is used for redraw operations (value 2 or 3), the order of entities specified with the DRAWORDER command is not guaranteed to be preserved for display but is preserved for plotting.

Type:	Short
Saved in:	Registry
Range:	0 to 3
Default value:	0
Possible options:	0: No multithreading 1: Regenerative multithreading 2: Redraw multithreading

25.4 WINDOWAREACOLOR system variable

25.4.1 Window area color

Controls the color for window selection areas (left-right).

It has effect only when SELECTIONAREA system variable is on.

Type:	Short
Saved in:	Registry
Range:	1 to 255

Default value:	150

25.5 WIPEOUTFRAME system variable

25.5.1 Wipeout frame

Controls the display of frames for wipeout entities, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	1
Possible values:	0: Hide wipeout frames 1: Display and plot wipeout frames 2: Display but do not plot wipeout frames

25.6 WMFBKGND system variable

25.6.1 Windows Meta File background

Controls how the background of a WMF (Windows Meta File) or Copy Clip is created and displayed in other applications.

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Transparent background; foreground set with the WMFFOREGND system variable On (1): Current background color; foreground remains unchanged

25.7 WMFFOREGND system variable

25.7.1 Windows Meta File foreground

Controls how the foreground of a WMF (Windows Meta File) or Copy Clip is created and displayed in other applications.

WMFFOREGND applies only when WMFBKGND is set to 0.

Type:	Boolean
Saved in:	Registry
Default value:	0
Possible values:	Off (0): Ensure foreground color is darker than background color On (1): Ensure foreground color is lighter than background color

25.8 WMFTTFASTEXT system variable

25.8.1 TrueType Text mode for Windows Meta File

Controls if TrueType text is exported as vectorized graphics or as text to a WMF (Windows Meta File).

BricsCAD only

Type:	Boolean
Saved in:	Registry
Default value:	1
Possible values:	Off (0): Export TrueType text as vectorized graphics On (1): Export TrueType text as text

25.9 WNDLMAIN system variable

25.9.1 Main window state

The state of the main graphics window.

BricsCAD only

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	2

Possible values:	0: Normal 1: Minimized 2: Maximized

25.10 WNDLSCRL system variable

25.10.1 Window scrollbars (Windows)

Controls the display of scrollbars on the main graphics window.

BricsCAD only

Type:	Boolean
Saved in:	Workspace
Default value:	Off
Possible values:	Off (0): Don't show scrollbars On (1): Show scrollbars

25.11 WNDLTEXT system variable

25.11.1 Text window state

The text window status.

BricsCAD only

Type:	Short
Saved in:	Registry
Possible values:	0: Hidden 1: Normal 2: Minimized 3: Maximized

25.12 WNDPMAIN system variable

25.12.1 Main window top-left

The top-left position of the main graphics window.

BricsCAD only

Type:	2D point
Saved in:	Registry

25.13 WNDPTEXT system variable

25.13.1 Text window top left

The top-left position of the text window.

BricsCAD only

Type:	2D point
Saved in:	Registry

25.14 WNDSMAIN system variable

25.14.1 Main window size

The size of the main graphics window.

BricsCAD only

Type:	2D point
Saved in:	Registry

25.15 WNDSTEXT system variable

25.15.1 Text window size

The size of the text window.

BricsCAD only

Type:	2D point
Saved in:	Registry

25.16 WORLDUCS system variable

25.16.1 World UCS (Read Only)

Displays if the UCS matches the WCS or not.

Type:	Boolean
Saved in:	Not saved
Possible values:	Off (0): UCS doesn't match the WCS On (1): UCS matches the WCS

25.17 WORLDVIEW system variable

25.17.1 World view

Controls if the DVIEW or VPOINT commands change the current UCS to the WCS.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	1
Possible values:	0: UCS remains unchanged 1: UCS changes to the WCS for the duration of the command; the command input is relative to the current UCS

25.18 WRITESTAT system variable

25.18.1 Write status (Read Only)

The state of the open drawing - read-only or writable.

Used in LISP to determine the write status of drawing.

Type:	Boolean
Saved in:	Not saved
Default value:	On
Possible values:	Off (0): Can't write to the drawing On (1): Can write to the drawing

25.19 WSAUTOSAVE system variable

25.19.1 Workspace autosave

Automatically saves workspace changes.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Don't save automatically On (1): Save automatically

25.20 WSCURRENT system variable

25.20.1 Current workspace

The name of the current workspace.

Type:	String
Saved in:	Registry

26. X

26.1 XCLIPFRAME system variable

26.1.1 Xref clipping frame

Controls the display of XRef clipping boundaries, if the FRAME system variable is set to **Use individual system variables** (3).

Type:	Short
Saved in:	Drawing
Range:	0 to 2
Default value:	2
Possible values:	0: Hide clipping boundaries 1: Display and plot clipping boundaries 2: Display but do not plot clipping boundaries

26.2 XDWGFADECTL system variable

26.2.1 XRef database fade control

Controls the transparency for XRefs.

Values between -90 and 90 are accepted. Negative values disable fading.

Type:	Short
Saved in:	Registry
Range:	-90 to 90
Default value:	70

26.3 XEDIT system variable

26.3.1 XRef editable

Allows in-place editing on the current drawing, if it is referenced in another drawing.

Type:	Boolean

Saved in:	Drawing
Default value:	On
Possible values:	Off (0): Can't use in-place reference editing On (1): Can use in-place reference editing

26.4 XFADECTL system variable

26.4.1 Reference editing fade control

Controls the transparency for XRefs during edit mode.

This system variable affects only the entities that are not being edited in the reference.

Values between 0 and 90 are accepted.

- A value of zero means fully opaque.
- A value of 90 means maximum transparency.

Type:	Short
Saved in:	Registry
Range:	0 to 90
Default value:	50

26.5 XLOADCTL system variable

26.5.1 XRef load control

Controls XRef demand loading and if a copy or the original drawing is opened (Not yet supported).

Type:	Short
Saved in:	Registry
Range:	0 to 2
Default value:	1

Possible values:	0: Turn off demand-loading; the entire drawing is loaded 1: Turn on demand-loading; referenced drawings are kept open and locked 2: Turn on demand-loading; copies of referenced drawings are opened and locked; referenced drawings are not locked

26.6 XLOADPATH system variable

26.6.1 XRef load path

Controls a path to store temporary copies of demand-loaded XRefs. See also the XREFCTL system variable.

Type:	String Standard
Saved in:	Registry

26.7 XNOTIFYTIME system variable

26.7.1 Xnotify time

Controls how often the program checks for modified XRefs, images and PDF documents, in minutes.

This is if XREFNOTIFY, IMAGENOTIFY and/or PDFNOTIFY is ON.

Values between 0 and 10,080 are accepted.

Type:	Short
Saved in:	Registry
Range:	0 to 10080
Default value:	5

26.8 XREFCTL system variable

26.8.1 XRef control

Creates XRef log files (XLG).

Type:	Boolean
Saved in:	Registry
Range:	Off

Possible values:	Off (0): Don't write log files On (1): Write log files

26.9 XREFNOTIFY system variable

26.9.1 XRef notify

Displays a warning, when a drawing is opened, if there are missing XRefs.

Type:	Boolean
Saved in:	Registry
Default value:	On
Possible values:	Off (0): Disable Xref notification On (1): Enable Xref notification

26.10 XREFOVERRIDE system variable

26.10.1 XRef override

Controls the display of entity visual properties (such as color, linetype, lineweight, transparency, or plot style) on referenced layers.

- If 0: When the properties of the entities on the XREF drawing are set to ByLayer, any changes to the xref layer properties are displayed in the current drawing.
- If 1: When the properties of the entities on the XREF drawing are not set to ByLayer, entities on xref layers are treated as if their properties are set to ByLayer. And every external reference layer can have its own set of layer overrides.

Type:	Short
Saved in:	Drawing
Range:	0 to 1
Default value:	0
Possible values:	(0): Off, only ByLayer properties of the entities in the XREF drawing can be changed (1): On, all properties of entities in the XREF drawing can be changed by its original layer property

27. Z

27.1 ZOOMFACTOR system variable

27.1.1 Zoom factor

Controls the incremental zoom change with respect to the mouse-wheel.

When zooming in, the incremental step decreases gradually allowing to focus on a particularly detail easily.

Values between 3 and 100 are accepted.

Type:	Short
Saved in:	Registry
Range:	3 to 100
Default value:	40

27.2 ZOOMWHEEL system variable

27.2.1 Mouse wheel zoom direction

Toggles the mouse wheel zoom direction.

Type:	Short
Saved in:	Registry
Default value:	0
Possible values:	0: Forward zooms in, backward zooms out 1: Forward zooms out, backward zooms in