

Bonjour,

Suite au TMC CARTO, voici quelques informations et documentations qui j'espère en satisferont plus d'un.

Bonne lecture.

Pascal. CHAMBERLIN
Email: Chamberlin.Pascal@sade-cgth.fr
Tel: 01 53 75 99 11 poste 3684

Information MicroStation en ligne mais en anglais.

http://selectservices.bentley.com/technotes/readme/found/readme_microstation.htm

Les Nouveautés et évolutions des versions accessibles à partir du readme ci-dessus.

<http://selectservices.bentley.com/technotes/readme/found/html/microstation/new.htm>

Quelques trucs de configuration:

Pour travailler en mode V7 (lecture / écriture) avec MicroStation V8, Utiliser la variable **MS_OPENV7=3**

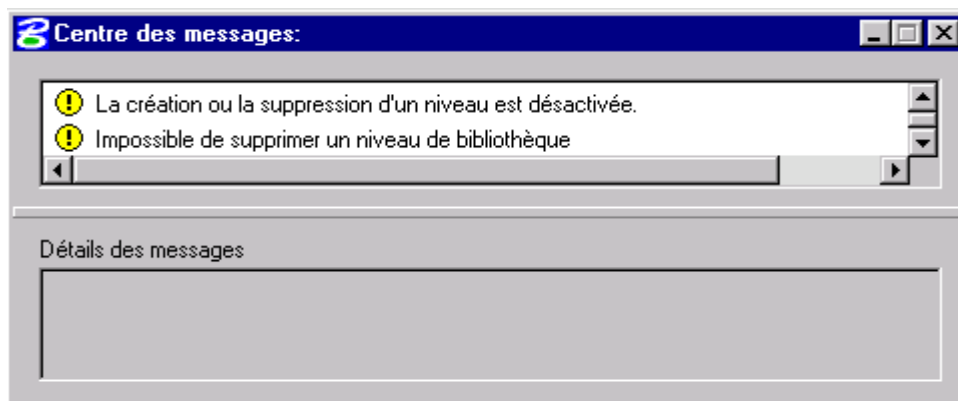
Pour supprimer le préfixe des noms de niveau, utiliser la variable **MS_V7_LEVEL_NAME_PREFIX=** (*ne pas donner de valeurs*)

Pour forcer les noms de niveaux dans tous les fichiers en mode V8, interdire la suppression et l'ajout de niveau.

- Créer un fichier MicroStation et définir tous les niveaux,

on peut reprendre les niveaux d'un fichier V7, il suffit de donner comme nom, le numéro réel,
ou
convertir un fichier V7 en V8 sans préfixe de niveau, variable **MS_V7_LEVEL_NAME_PREFIX**

- sauvegarder le fichier avec l'extension **dgnlib**
- déclarer la variable **MS_DGNLIBLIST= "le fichier dgnlib"**
ainsi tous les fichiers utilisent les niveaux définis dans le fichier dgnlib
- pour interdire la création de nouveau niveaux déclarer la variable
_USTN_CAPABILITY = -CAPABILITY_LEVELS_CREATE



*Attention si vous utilisez une bibliothèque de cellules dont les niveaux sont différents de ceux du fichier graphique,
les niveaux de la cellule seront créés et ne pourront pas être supprimés.*

CAPABILITY MASK (très peu documenté)

USTN_CAPABILITY = [-]*Capability mask*

Le signe moins (-) désactive la fonction,

- CAPABILITY_TEXT_FONTS_TRUETYPE
- CAPABILITY_LEVELS_CREATE
- CAPABILITY_LEVEL_GLOBALDISPLAY
- CAPABILITY_LEVEL_GLOBALFREEZE
- CAPABILITY_LEVELS_NUMBERS

Variables d'environnement:

Accessibles sur la documentation en ligne (<http://docs.bentley.com/en/MicroStation/>)

Category	Variable	"Short name"	Description
Archive	MS_ARCHIVE	"Archive Search Path"	Search path for archive
	MS_ARCHIVECLASS	"Archive Class Search Path"	Search path for archive files.
	MS_KEYPAIRLIST	"KeyPair File List"	Digital signature KeyPair file list.
Cells	MS_CELL	"Cell Library Directories"	Search path(s) for cell libraries.
	MS_CELLLIST	"Cell Library List"	List of cell libraries to be searched for cells not found in the current library.
	MS_CELLSELECTORDIR	"Cell Selector Directory"	Directory for Cell Selector button configuration (.csf) files.
	MS_CELLSELECTOR	"Cell Selector File"	Default Cell Selector button configuration file.
	MS_CELLOUT	"Output Cell Libraries"	Default directory for newly created cell libraries.
	MS_MENU	"Menu Cells"	Cell library file containing menu cells.
Colors	MS_DEFCTBL	"Default Color Table"	Default color table if DGN file has none.
	MS_RMENCTBL	"Right Menu Color Table"	Default menu colors (dialog boxes, borders, etc.) for screen — specifies a color table (.tbl) file.
	MS_LMENCTBL	"Left Menu Color Table"	Default menu colors (dialog boxes, borders, etc.) for left screen — specifies a color table (.tbl) file.
Database	MS_DBASE	"Database Files"	Search path(s) for database files.
	MS_SERVER	"Server Loader"	MDL application to load the database interface software.
	MS_DBEXT	"Database Server"	The database interface "server" application.
	MS_LINKTYPE	"Database Linkages"	User data linkage types recognized by the database interface software. See MS_LINKTYPE.
	MS_CUSTOMUNITDEF	"Unit Definitions for Upgrading"	Directory containing unit definition file used when upgrading pre -V8 files to

			DGN files.
Data Files	MS_HTMLDGNDIR	"HTML Template Directory"	Directory containing template DGN files used to generate cell images for HTML documents.
	MS_SETTINGS	"Settings Resource"	Current settings resource file.
	MS_SETTINGSOUTDIR	"Settings Output Directory"	Directory for newly created settings files.
MS_SETTINGSDIR	"Settings Directory"	Directory containing settings resource files.	
DWG/DXF	MS_DWGDATA	"DWG Data Directory"	Local directory to store DWG settings file.
	MS_DWGPATFILE	"AutoCAD Patterns File"	Filename containing AutoCAD Pattern Definitions.
	MS_BLOCKLIST	"AutoCAD Block List"	List of DWG/DXF files to be searched for AutoCAD blocks.
	MS_DWGFONTPATH	"AutoCAD SHX Font Directory"	Path(s) that contain AutoCAD SHX fonts.
	MS_ACADDIR	"AutoCAD Program Director"y	Directory containing AutoCAD. This is used to find the DWG support files such as fonts.
	MS_DWGNOUNITSALERT		Turns off display of DWG/DXF Units alert a DWG file is opened, attached as a reference, or placed as a cell, and units are not known.
Design Applications	MS_DGNAPPS	N/A	List of MDL applications to load automatically when a DGN file is opened.
Engineering Links	MS_WEBLIB_HISTORY	"Weblib history"	History file for the Weblib shared library.
	MS_BOOKMARKS_IMAGE	"Image bookmarks"	Bookmark file for remote images.
	MS_BOOKMARKS_RSC	"Resource bookmarks"	Bookmark file for remote resource files.
	MS_BOOKMARKS_ARCHIVE	"Archive bookmarks"	Bookmark file for remote archives.
	MS_BOOKMARKS_CELL	"Cell library bookmarks"	Bookmark file for remote cell libraries.
	MS_BOOKMARKS_DGN	"DGN bookmarks"	Bookmark file for remote DGN files.
	MS_REFAGENTDATA	"RefAgent data file"	File containing URL information for the Reference Agent.
	MS_WEBKIOSKMODE	"Kiosk mode"	Set to 1 to turn on kiosk mode.
	MS_WEBTYPESFILE	"Special filetype handling"	Specifies a file that contains special handling instructions for various file types.
	MS_WEBFILES_DIR	"Weblib local storage"	Directory in which copies of remote files are stored.
	MS_WEBDOWNLOADDIR	"Download directory"	Sets the directory in which WWW downloads are stored.

	MS_BROWSERMAKECHILDWINDOW	"Reparent browser"	of the MicroStation main window, allowing the viewer to always be seen.
	MS_USEEXTERNALBROWSER	"External browser name"	Sets an external browser.
Extensions	MS_CUSTOMUNITDEF		Sets custom unit definitions.
	MS_PLTDATE		Date that last print was generated.
	MS_PLTDGNDIR		Directory containing the last DGN file printed.
	MS_PLTDGNFILE_ABBREV		Last DGN file printed (shortened version).
	MS_PLTDGNFILE_LONG		Last DGN file printed (full path).
	MS_PLTDGNFILE_SHORT		Last DGN file printed (without path).
	MS_PLTDRVFILE_ABBREV		Print driver file used during last print (shortened version).
	MS_PLTDRVFILE_LONG		Print driver file used during last print (full path).
	MS_PLTDRVFILE_SHORT		Print driver file used during last print (without path).
	MS_PLTOUT		Name of last generated print output file.
	MS_PLTPENTBL_ABBREV		Pentable used during last print (shortened version).
	MS_PLTPENTBL_LONG		Pentable used during last print (full path).
	MS_PLTPENTBL_SHORT		Pen table used during last print (without path).
	MS_PLTSCALE		Scale used for last print (as character string). For example, 70.0739 m:cm / IN.
	MS_PLTSHEETNAME		Name of sheet size used. example, ISO A3.
	MS_PLTSHEETSIZE		Size of sheet printed. For example, 11x17 (in).
	MS_PLTSTATE		Set to "PREVIEW" or "REALPLOT". Used to distinguish a paper print from a preview (so previews aren't logged to the accounting log).
	MS_PLTTIME		Time that last print file was generated.
	MS_ACIS	"ACIS Directory"	Directory containing the ACIS subsystem.
		MS_LEVEL_LIB_DIR	"Level Library Path"
	MS_V7_LEVEL_NAME_PREFIX	"V7 to V8 Level Name Prefix"	Defines the prefix to apply to unnamed levels when a V7 design file is upgraded a V8 DGN file.
	MS_V7TOV8_CSVNAME	"V7 to V8 Level CSV File"	Defines the .csv file, which controls how levels are mapped when a V7 design file is upgraded to a V8

Levels

		DGN file.
MS_V7TOV8_DELETE_UNUSED_LEVELS	"V7 to V8 Delete Unused Level"s	If set to 1, then all unused levels are deleted when a design file is upgraded to a V8 DGN file. This variable is ignored if the "V7 to V8 Level CSV File "variable is set.
MS_LEVEL_EDIT_ATTRIBUTE_LIST	"Control Level Attributes Edit"	Controls which level attributes can be edited or overridden (instead of using operating system privileges for the entire level library). The attributes to be edited can be one or more of the following as a comma separated list: OverrideSymbology, OverrideColor, OverrideStyle, OverrideWeight, ByLevelSymbology, ByLevelColor, ByLevelStyle, ByLevelWeight, GlobalDisplay, GlobalFreeze, Lock and Plot. OverrideSymbology encompasses OverrideStyle and OverrideWeight. ByLevelSymbology encompasses ByLevelColor, ByLevelStyle and ByLevelWeight. Each attribute accepts a "Library" or "Reference" prefix. Without the prefix, the attribute will be editable for both references and library levels.
MS_LEVEL_SYNC_ATTRIBUTE_LIST	"Control Level Attributes Sync"	Affects the dgnlib update levels custom and reference synchronize levels default key-ins. This variable controls the list of level attributes that will sync when any of the above key-ins is executed. The attributes can be one or of the following as a comma separated list: OverrideSymbology, OverrideColor, OverrideStyle, OverrideWeight, ByLevelSymbology, ByLevelColor, ByLevelStyle, ByLevelWeight, GlobalDisplay, GlobalFreeze, Lock, Plot.
MS_RDE_SYSINC	"Runtime resource compiler"	Text to be inserted at the beginning of the command line by the resource compiler DLM. Generally used to specify the location of include files.

MDL Development	MS_DBGSOURCE	"MDL Source"	Location of source code for MDL applications (used by MDL debugger).
	MS_MDLTRACE	"MDL Trace"	If set, additional debugging print statements are when debugging MDL applications.
	MS_ASSERT_MESSAGE	"Assertion Failure Message"	Format of assertion messages. The default is "Assertion Failure %s %s(%d)".
	MS_ASSERT_HANDLING	"Assertion Failure Handling"	Specifies handling of assertion failure: <ul style="list-style-type: none"> • 0 (default) — error message • 1 — log error message • 2 — stop in debugger
	MS_DEBUGFAULT	"Debug Fault"	If set, automatically invoke the debugger when a fault is detected while an MDL application is active.
	MS_DEBUG	"Time Out"	If set to an integer with bit 1 on, do not time out.
	MS_TRAP	"Exception Handling"	Exception handling flag — "ALL" (default), "MDL," or "NONE."
OLE	MS_OLESERVE_EMBED_REFFILES	"Embed References"	If set, references are embedded along with the master DGN file.
Operation	MS_DGNAUTOSAVE	Design File Auto-Save	Determines the frequency, seconds, of the auto-save timer.
	MS_AUTORESTORESTATUSBAR	"Auto-restore Status Bar"	If set to 1, the status bar is restored to its default appearance whenever the pointer is moved within.
	MS_FKEYMNU	"Function Key Menu"	Open function key menu file.
	MS_ACCUDRAWKEYS	"AccuDraw Shortcuts"	Text file listing AccuDraw shortcut keys.
	MS_GRAPHICSACCELERATOR	"Graphics Accelerator"	Sets the name of the graphics accelerator application.
	MS_SAVEMENU	"Attached Menus"	File containing information about attached menus.
	MS_APPMEN	"Application Menus"	Location of application and sidebar menus.
	MS_WORKSPACEOPTS	"Workspace Options"	Sets how MicroStation Manager displays options: 0 or not set = workspace remains same; 1 = workspace options visible but disabled; 2 = workspace options hidden, MM resized.
	MS_USECOMMANDWINDOW	"Use Command Window"	If set, 0 sets the status bar interface, and 1 sets the Command Window interface. If not set, the

			setting in MicroStation Manager determines the interface style.
	MS_FILEHISTORY	"File History"	If set, MicroStation saves the last four files and directories for each file
	MS_READONLY	"Read Only"	If set, the active DGN file is read-only.
	MS_WORKMODE	"Work Mode"	Workmode activates/disables certain functions in order to a more compatible design at the end. Setting this variable to DWG Restriction will disable some creation tools that may result in elements that are incompatible with the DWG file format. Setting it to DGN Capacity (default) will gain full functional capacity in creating elements. You must restart MicroStation to see the effect of a changed value.
	MS_DISALLOWFULLREFPATH	"Disallow Full Ref Path"	If set, you cannot save a reference attachment with a full path specification.
Printing	MS_BATCHPLT_SPECS	"Batch Print Specifications"	Name of the file that contains the batch printing specifications.
	MS_PLTFILES	"Output Directory"	Directory for printing files (plotfiles).
	MS_PLOTINI	"Plot Configuration Files"	Directory for plot configuration files.
	MS_PLTR	"Printer Driver File"	Name of printer driver file.
	MS_PENTABLE	"Pen Tables"	Search path for pen table files.
Primary Search Paths	MS_DEF	"Design Files"	Search path(s) for DGN files.
	MS_RFDIR	"References"	Search path(s) for references.
	MS_MDLAPPS	"Visible MDL Applications"	Search path(s) for MDL applications displayed in the MDL dialog box.
	MS_MDL	"MDL Applications"	Search path(s) for MDL applications or external programs loaded by MDL applications.
	MS_MACRO	"Macros"	Search path for macros.
	MS_RSRCPATH	"Resource Files"	Search path(s) for resource files loaded by MDL applications.
	MS_LIBRARY_PATH	"Library Path"	Search path for dynamic libraries.
	MS_LEVEL_LIB_DIR	"Level Library Path"	Directory containing level library data files.
	MS_M_TBL	"Material Tables"	Search path(s) for material tables.
	MS_MATERIAL	"Material Palettes"	Search path(s) for material palettes.
	MS_PATTERN	"Pattern Maps"	Search path(s) for pattern

			maps.
Rendering/Images	MS_BUMP	"Bump Maps"	Search path(s) for bump maps.
	MS_IMAGE	"Images"	Search path(s) for images.
	MS_IMAGEOUT	"Image Output"	Directory in which created image files are stored.
	MS_SHADOWMAP	"Shadow Maps"	Directory where shadow maps will be read from and written to.
	MS_LIGHTING	"Lighting Files"	Directory where IES data will be stored.
	MS_RENDERLOG	"Rendering statistics log"	File in which rendering statistics are logged.
	MS_PTDIR	"Particle Tracing Work Dir"	Working directory for temporary Particle Tracing files.
Seed Files	MS_SEEDFILES	"Seed File Location"	Search path(s) for all seed files.
	MS_DESIGNSEED	"Default Design File Seed"	Default seed file.
	MS_TRANSEED	"Default Translation Seed"	Default seed file for DWG, CGM, and IGES translations.
	MS_SHEETSEED	"Drawing Sheet Seed File"	Seed file used when drawing sheets.
	MS_USERPREFSEED	"User Preference Seed"	Name of seed file used to create user preference resource file.
Symbology	MS_SYMBRSRC	"Symbology Resources"	List of symbology resource files — last one in list has highest priority.
System Env (ironment)	MS_CONFIG	"Main Configuration File"	Main MicroStation configuration file — sets up all configuration variables.
	RSC_COMP	"Resource Compiler Command"	Text string to be inserted at the beginning of the command line by the resource compiler (used to specify where to search for include files).
	MDL_COMP	"MDL Compiler Command Line"	Text string to be inserted at the beginning of the command line by the MDL compiler (used to specify where to search for include files).
	BMAKE_OPT	"BMAKE Options"	Command line options for BMAKE. Used to search for bmake include (.mki) files.
	MS_DEBUGMDLHEAP	"Extended Malloc"	If set (to the base name of MDL application or "ALL"), use extended malloc for debugging.
Tags	MS_TAGOUTPUT	"Tag Output"	Output directory for tag data.
	MS_TAGREPORTS	"Tag Reports"	Output directory for tag reports.
	MS_TAGTEMPLATES	"Tag Templates"	Directory containing tag report templates.
Temp and Backup	MS_BACKUP	"Backup Files"	Default directory for backup files.
			Directory for temporary

Files	MS_TMP	"Temporary Files"	created and deleted by MicroStation.
	MS_SCR	"Scratch Files"	Directory for scratch files created by MicroStation.
Translation — CGM	MS_CGMIN	"CGM Input Directory"	Input directory for CGM translations.
	MS_CGMOUT	"CGM Output Directory"	Output directory for CGM translations.
	MS_CGMLOG	"CGM Log Files"	Output directory for CGM log files.
	MS_CGMTABLES	"CGM Configuration Tables"	Directory containing the CGM translation tables.
	MS_CGMINSET	"CGMIN Settings File"	Settings file for the CGMIN application.
	MS_CGMOUTSET	"CGMOUT Settings File"	Settings file for the CGMOUT application.
Translation — IGES	MS_IGESIN	"IGES Input Directory"	Input directory for IGES translations.
	MS_IGESOUT	"IGES Output Directory"	Output directory for IGES translations.
	MS_IGESLOG	"IGES Log Files"	Output directory for IGES log files.
	MS_IGESINSET	"IGESIN Settings File"	Settings file for IGES import.
	MS_IGESOUTSET	"IGESOUT Settings File"	Settings file for IGES export.
Translation — Step	MS_STEPOUT	"Step Output Directory."	Output directory for Step translations.
	MS_STEPLOG	"Step Log Files."	Output directory for Step files.
	MS_ROSEDB	"Rose database directory."	Rose database directory.
MS_APP	"Apps from "TSK" statements"	Search path(s) of applications started from "TSK" statements.	
Visual Basic for Applications	MS_VBAAUTOLOADPROJECTS	"Names of standard projects"	Names of the projects that are opened when the VBA dialog box is opened.
	MS_VBASEARCHDIRECTORIES	"Directories to search for VBA projects"	Directories that are searched when opening an existing VBA project.
	MS_VBANEWPROJECTDIRECTORY	"Directory for new projects"	Directory that is used when a new project is created.

This table lists uncategorized configuration variables:

Variable	Description
CLASSPATH	Path to Java/JMDL classes.
HISTORY_MAX_MINOR_VERSIONS	The number of minor versions for the Limit History command to preserve in history file.
MSDIR	MicroStation root installation directory.
MSLOCAL	Specifies the base directory path for where the required writable portions (that local for a network installation) of MicroStation are installed.
MS_BASICEXT_LOAD	List of MDL applications that implement extensions to the BASIC language (MS_BASIC_LOAD).
MS_CMDTABLE_LOAD	List of MDL applications that will have their key-in tables auto-loaded.
MS_CMDWINDRSC	Command Window resource file. Default is used if undefined.
MS_CODESET	MDL application for handling multi-byte character sets.
MS_DATA	Directory for data files created or used by MicroStation.

MS_DEFCHARTRAN	Default character translation table.
MS_DEFAULTSHEETRGB	Allows you to specify a different background color, which is used when you create the first sheet model. Expects an RGB triplet separated by commas.
MS_DGNOUT	Directory containing DGN files created as a result of "on the fly" translation from other file formats.
MS_DWGOMITUNIQUEEXTENSION	If more than one file with the same name is present in the same directory, appends the extension to the output filename when saving the file. For example, if the directory contains both sample.s01 and sample.s02, then the extension is included in the output filenames (sample_s01.dgn and sample_s02.dgn). If the directory does not include any files with duplicate names, then the extensions are be included in the output names. For example, if the directory contains only file sample.s02, this file is saved to sample.dwg.
MS_GUIHAND	Identifies auxiliary handlers.
MS_HELLOAD_APPLICATION	Determines which application help is based on. Current options are HTMLHelp (default), or StaticWeb. StaticWeb refers to static HTML pages on a website.
MS_HELLOAD_SERVER	Specifies the root location of the help content. Defaults to \$(USTN_DOCUMENTATIONROOT), but can be set to a file server or URL. This variable does not determine if you are using uncompiled HTMLHelp content. If you set this variable, the value of MS_HELLOAD_SERVER be the location containing the product directory (i.e., MicroStation)
MS_HELPPATH	Path to help files.
MS_INITAPPS	List of initial start-up MDL applications.
MS_OLDUSERLICENSE	File that contains old user license information. Required for when installing a product upgrade.
MS_OPENDESIGNFILEFILTER	Initial file filter for the MicroStation Manager and Open dialog boxes.
MS_OPENREFFILEFILTER	Initial file filter for the Attach Reference File dialog box.
MSPLOTBORDER_TIME_FORMAT	Changes the date and time format for printed outputs from Windows Regional Settings to another format. Set to v7.0 to use the v7.0 format. For a detailed list of formatting strings for date and time, see Data and Time Format .
MS_PLTDLG_AUTOORIENTATION	Controls whether the default plot dialog paper orientation is automatically determined based on the plot area (X > Y= landscape, otherwise portrait). If variable is set to 1 or TRUE, the orientation is detected automatically. If the variable is 0, FALSE, or undefined, the default orientation is obtained from the plotter driver configuration file.
MS_PLTDLG_UNLOADONCLOSE	Controls whether the plot dialog is unloaded when its window is closed. If set 1, TRUE, or undefined, the plot dialog application unloads itself when its is closed, and all settings revert to their defaults when the dialog is reopened. If this variable is set to 0 or FALSE, the application remains loaded after the window is closed, and certain settings are retained when the plot dialog is reopened. For consistent behavior of the plot dialog, this variable should be undefined. Note that selecting File > Exit from the plot dialog menu always unloads the application.
MS_PLTMODELNAME	Displays the name of the model from which the print is produced.
MS_REFCOLORTABLE	If defined and set to 1, MicroStation always uses the reference's color table. If defined and set to any value other than 1, MicroStation never uses the color table. If not defined, MicroStation uses the the user preference to whether or not to use the reference's color table.
MS_RIGHTLOGICKB	If set to 1, keyboard input is right to left.
MS_RSRC	Main MicroStation resource file. Typically set to "ustation.rsc."
MS_SELECTSERVICESHOME	URL of Bentley SELECTservices homepage.
MS_SPELLINGDICTIONARYPATH	Specifies the directory to search for core dictionaries.
MS_SPELLINGLANGUAGE	Specifies the language. Valid languages are: AmericanEnglish, BritishEnglish, Brazilian (Brazilian Portuguese), Danish, Dutch, Finnish, French, German, Italian, Norwegian, Spanish.
MS_SPELLINGUSERDICTIONARY	Specifies the user dictionary.
MS_SPELLINGUSERDICTIONARY	Specifies the user dictionary.
	Stores a thumbnail image in each DGN file that can be seen in the MicroStation

MS_THUMBNAIL	file open dialog boxes, as well as Windows Explorer. Can be used to control behavior of thumbnail generation.
MS_USERPREF	User preference resource file.
MS_USERPREF_APPS	Set by application configuration files to add user preferences to standard
MS_VBAV8TOV7DIALOG	Specifies the name of a VBA macro that opens a dialog to collect information be used in translating a DGN file from V8 to V7 format.
MS_VBAV8TOV7FILTER	Specifies the name of a VBA macro that sets up a translation filter.
PZIP_OUT	Specifies default directory for creation of Packager files.