

CADZoneOCX Technical Notes

Last Updated: 5/8/2007

The CAD Zone OCX is created to allow developers to view CAD Zone files in applications developed in VB, VB.NET, C#.NET, Delphi, Access, or any Microsoft OCX supported language. In addition, once a diagram is loaded into the OCX, it can then be transferred and edited in the CAD Zone diagram editing program (CrashZone.Exe, CrimeZone.Exe, or Izone.Exe). If the editing program is exited or saved, the OCX is alerted via events and the application programmer can use that information to track the diagram in their application.

The CAD Zone Ocx file must physically reside in the same folder as the main CAD Zone executable program (Izone.Exe, CrashZone.Exe, or CrimeZone.Exe).

In order for the OCX to operate, it must be registered: >regsvr32.exe CADZoneOcx.Ocx to register it with Windows.

NOTE: The following methods are intentionally not documented and are not supported – they are for internal use and/or testing purposes only. In addition, it may be removed at any version – so use at your own risk!

SetFLPAccessKey
IsFLPLicensed
IsFLP3Licensed
SetFLP3AccessKey
SetFLPAccessKey
GetCustomerID
DrawVectorsToDC

CADZoneOCX Methods

CloseCADZoneProgram

DESCRIPTION:	CloseCADZoneProgram
CLASS:	Method
SYNTAX:	<i>[form.]control.CloseCADZoneProgram()</i>
TYPE:	Void
SEE ALSO:	LaunchCADZoneProgram

REMARKS:

This method will close the program that was launched with the method LaunchCADZoneProgram.

CloseDrawing

DESCRIPTION:	CloseDrawing
CLASS:	Method
SYNTAX:	<i>[form.]control.CloseDrawing()</i>
TYPE:	Void
SEE ALSO:	LoadDrawing

REMARKS:

This method will flush the drawing out of memory space and free up resources. The OCX will also automatically close the drawing and flush memory space if the object loses scope.

ComputeOptimalImageSize

DESCRIPTION:	Based on the extents of the drawing, this function will either compute a new width or height based on the non-zero parameter.
CLASS:	Method
SYNTAX:	<i>BOOL CCADZoneOCXCtrl::ComputeOptimalImageSize(long* Width, long* Height)</i>
TYPE:	Bool
SEE ALSO:	

REMARKS:

For example:

Long Width = 0

Long Height = 300

ComputeOptimalImageSize(Width, Height)

The above will compute Width based on the aspect ratio of the extents of the drawing. So if the extents of drawing are twice as wide as high – the width will be returned a 600.)

CreateCZDFFromImageFile

DESCRIPTION:	A new CZD file is created with an image object containing the specified image file. The image entity will be placed according to the world coordinates llx,lly (lower left) and urx,ury (upper right)
CLASS:	Method
SYNTAX:	<i>[form.]control.CreateCZDFromImageFile</i> (BSTR ImageFile, double llx, double lly, double urx, double ury)
TYPE:	Void
SEE ALSO:	

REMARKS:

The resulting .CZD file will be named the same as the specified image file with a .CZD extension.

CreateImageFile

DESCRIPTION:	Outputs a BMP (Bit Map) to the supplied path and file name.
CLASS:	Method
SYNTAX:	CreateImageFile(fileName As String)
TYPE:	Void
SEE ALSO:	GetImagePicture

CreateMetaFile

DESCRIPTION:	Outputs a WMF (Windows Meta File) to the supplied path and file name.
CLASS:	Method
SYNTAX:	CreateMetaFile(fileName As String)
TYPE:	Void
SEE ALSO:	GetMetaPicture

DrawToPictureBox

DESCRIPTION:	Draws the current view to a picture box specified by the hDC and hWnd specified.
CLASS:	Method
SYNTAX:	<i>[form.]control.DrawToPictureBox</i> (long hWnd, long hDC)

TYPE:	Void
SEE ALSO:	DrawToPictureBoxZoomAll

DrawToPictureBoxZoomAll

DESCRIPTION:	Draws the current view to a picture box specified by the hDC and hWnd specified.
CLASS:	Method
SYNTAX:	<i>[form.]control.DrawToPictureBoxZoomAll(long hWnd, long hDC)</i>
TYPE:	Void
SEE ALSO:	DrawToPictureBoxZoom

GetBlackBackground

DESCRIPTION:	Returns True if the OCX background is set to Black for “Night Mode”
CLASS:	Method
SYNTAX:	GetBlackBackground() As Boolean
TYPE:	Bool
SEE ALSO:	SetBlackBackground

GetCADSystemPath

DESCRIPTION:	Returns the system path from the main CAD program.
CLASS:	Method
SYNTAX:	<i>BSTR path = [form.]control.GetCADSystemPath()</i>
TYPE:	BSTR
SEE ALSO:	SetCADSystemPath

GetDisplayHiddenLayersMessage

DESCRIPTION:	Returns if Hidden Layers Message will be displayed
CLASS:	Method
SYNTAX:	<i>BOOL b = [form.]control.GetDisplayHiddenLayersMessage()</i>
TYPE:	BOOL
SEE ALSO:	SetDisplayHiddenLayersMessage

GetImagePicture

DESCRIPTION:	Returns a StdPicture Object in BMP Format
CLASS:	Method
SYNTAX:	<i>GetImagePicture()</i> As <i>StdPicture</i>
TYPE:	<i>StdPicture</i>
SEE ALSO:	CreateImageFile, GetImagePictureSize, SetImagePictureSize

GetImagePictureSize

DESCRIPTION:	Gets the size of the picture
CLASS:	Method
SYNTAX:	GetImagePictureSize(long FAR* width, long FAR* height)
TYPE:	<i>void</i>
SEE ALSO:	ImagePictureSize

GetMetaPicture

DESCRIPTION:	Returns a StdPicture Object in WMF format
CLASS:	Method
SYNTAX:	<i>GetMetaPicture()</i> As <i>StdPicture</i>
TYPE:	<i>StdPicture</i>
SEE ALSO:	CreateMetaFile, GetImagePictureSize, SetImagePictureSize

GetNative

DESCRIPTION:	Returns a Bit array of the Diagram Data.
CLASS:	Method
SYNTAX:	<i>GetNative()</i>
TYPE:	<i>String Bit array</i>
SEE ALSO:	SetNative

GetNativeSize

DESCRIPTION:	Gets the Bytes size of the drawing. Use before calling GetNative
---------------------	--

CLASS:	Method
SYNTAX:	<i>GetNativeSize() As Long</i>
TYPE:	<i>Long</i>
SEE ALSO:	GetNative

GetPrintTTRotateAdjust

DESCRIPTION:	Gets the CZD option True Type Rotate Adjust – see print set up documentation for the CAD Zone Editor. “Text Rotate Adjust” in print dialog.
CLASS:	Method
SYNTAX:	<i>BOOL b = [form.]control.GetPrintTTRotateAdjust()</i>
TYPE:	BOOL
SEE ALSO:	SetPrintTTRotateAdjust

LaunchCADZoneProgram

DESCRIPTION:	Launches the CAD Zone diagram editing program and loads in the drawing that is currently active in the CADZone OCX.
CLASS:	Method
SYNTAX:	<i>[form.]control.LaunchCADZoneProgram(BSTR pathCADZoneExe)</i>
TYPE:	Void
SEE ALSO:	EVENT CADZoneExitDrawingNotChanged, EVENT CADZoneExitDrawingChanged, EVENT CADZoneFileSaved

REMARKS:

Where:

pathCADZoneExe = directory and Exe name of the diagram editing program. This parameter can be “”.

If this parameter = “” the Ocx tries to locate the diagram editing program on its own by querying the Windows registry.

This method creates a link and executes CAD Zone diagram editing program (ICAD.Exe, CrimeZone.Exe, or CrashZone.Exe). The events: CADZoneExitDrawingNotChanged, CADZoneExitDrawingChanged, and CADZoneFileSaved are called depending on the users actions inside the diagram editing program.

LaunchCADZoneProgramMinimized

DESCRIPTION:	Launches the CAD Zone diagram editing program in a minimized window state and loads in the drawing that is currently active in the CADZone OCX.
CLASS:	Method
SYNTAX:	<i>[form.]control</i> .LaunchCADZoneProgramMinimized(BSTR pathCADZoneExe)
TYPE:	void
SEE ALSO:	EVENT CADZoneExitDrawingNotChanged, EVENT CADZoneExitDrawingChanged, EVENT CADZoneFileSaved

LoadDrawing

DESCRIPTION:	Brings up a dialog box and asks the user for a specific diagram to be loaded into the OCX's view window.
CLASS:	Method
SYNTAX:	<i>[form.]control</i> .LoadDrawing()
TYPE:	void
SEE ALSO:	LoadDrawingDirect

LoadDrawingShow

DESCRIPTION:	Brings up a dialog box and asks the user for a specific diagram to be loaded into the OCX's view window. Drawing is automatically redrawn upon execution.
CLASS:	Method
SYNTAX:	<i>[form.]control</i> .LoadDrawingShow()
TYPE:	Void
SEE ALSO:	LoadDrawingDirect, LoadDrawing

LoadDrawingDirect

DESCRIPTION:	Similar to load drawing except that the drawing name to be loaded is passed in as a parameter.
---------------------	--

CLASS:	Method
SYNTAX:	<i>BSTR path = [form.]control.LoadDrawing(BSTR drawingName)</i>
TYPE:	Void
SEE ALSO:	LoadDrawing

REMARKS:

Where:

DrawingName = complete path, name and extension of file to be loaded

LoadDrawingOkayCancel

DESCRIPTION:	Similar to LoadDrawing - except that if the user cancels during the load dialog box, a false is returned.
CLASS:	Method
SYNTAX:	<i>[form.]control.LoadDrawingOkayCancel()</i>
TYPE	Boolean
SEE ALSO:	LoadDrawing, LoadDrawingDirect

LoadDrawingOkayCancel2

DESCRIPTION:	Similar to LoadDrawingOkayCancel - except that if the user cancels during the load dialog box, a false is returned – also the dialog path of the dialog starts with StartPath.
CLASS:	Method
SYNTAX:	<i>[form.]control.LoadDrawingOkayCancel2(BSTR StartPath)</i>
TYPE	Boolean
SEE ALSO:	LoadDrawing, LoadDrawingDirect

Pan

DESCRIPTION:	Tools that center the current view of the drawing window to a new user defined point.
CLASS:	Method
SYNTAX:	<i>[form.]control.Pan()</i>

TYPE	Void
SEE ALSO:	ZoomAll, ZoomIn, ZoomOut

REMARKS:

After invoked the tool expects a mouse point to be clicked in the OCX view window to set the new center of the view.

PrintCurrentView

DESCRIPTION:	
CLASS:	Method
SYNTAX:	<i>[form.]control.PrintCurrentView()</i>
TYPE	Void
SEE ALSO:	

REMARKS:

Where:

hdcin = HDC

x = top left x coordinate

y = top left y coordinate

Width – width of drawing on page

Height – height of drawing on page

Page Width – Size of paper width

Page Height – Size of paper height

ReDraw

DESCRIPTION:	Refreshes the view of the drawing window at the current zoom.
CLASS:	Method
SYNTAX:	<i>[form.]control.ReDraw()</i>
TYPE	Void

SEE ALSO:	ZoomIn, ZoomOut, Pan

SaveDrawing

DESCRIPTION:	Saves the drawing to the specified file name.
CLASS:	Method
SYNTAX:	<i>[form.]control.SaveDrawing(BSTR SaveDrawing)</i>
TYPE	Void
SEE ALSO:	LoadDrawing

SavePDF

DESCRIPTION:	Saves the drawing as a PDF
CLASS:	Method
SYNTAX:	<i>[form.]control.SavePDF(BSTR SavePDF)</i>
TYPE	Void
SEE ALSO:	SaveDrawing

REMARKS:

Must have the Cad Zone pdf installed for this method to work.

SetBlackBackground

DESCRIPTION:	Value of true sets the ocx to “Night Mode”
CLASS:	Method
SYNTAX:	<i>SetBlackBackground(b As Boolean)</i>
TYPE	Void
SEE ALSO:	GetBlackBackground

SetCADSystemPath

DESCRIPTION:	Returns the diagram editing program’s system path.
CLASS:	Method
SYNTAX:	<i>BSTR path = [form.]control.GetCADSystemPath()</i>
TYPE	BSTR

SEE ALSO:	GetCADSystemPath
------------------	------------------

SetImagePictureSize

DESCRIPTION:	Sets the picture size
CLASS:	Method
SYNTAX:	SetImagePictureSize(long width, long height)
TYPE	Void
SEE ALSO:	GetImagePictureSize

SetDisplayHiddenLayersMessage

DESCRIPTION:	Sets if the Hidden Layers Message will be displayed
CLASS:	Method
SYNTAX:	<i>BSTR path = [form.]control. SetDisplayHiddenLayersMessage ()</i>
TYPE	BOOL
SEE ALSO:	GetDisplayHiddenLayersMessage

SetNative

DESCRIPTION:	Inputs a data string of drawing data
CLASS:	Method
SYNTAX:	SetNative(Data)
TYPE	Void
SEE ALSO:	GetNative

SetPrintTTRotateAdjust

DESCRIPTION:	Sets the CZD option True Type Rotate Adjust – see print set up documentation for the CAD Zone Editor. “Text Rotate Adjust” in print dialog.
CLASS:	Method
SYNTAX:	<i>[form.]control.SetPrintTTRotateAdjust(BOOL b)</i>
TYPE	Void
SEE ALSO:	GetPrintTTRotateAdjust

ZoomAll

DESCRIPTION:	Displays the diagram zoomed to its full extent.
CLASS:	Method
SYNTAX:	<i>[form.]control.ZoomAll()</i>
TYPE	Void
SEE ALSO:	ZoomOut, ZoomIn, Pan

ZoomIn

DESCRIPTION:	Enlarges the current view.
CLASS:	Method
SYNTAX:	<i>[form.]control.ZoomIn()</i>
TYPE	Void
SEE ALSO:	ZoomOut, ZoomAll

ZoomOut

DESCRIPTION:	Shrinks the current view.
CLASS:	Method
SYNTAX:	<i>[form.]control.ZoomOut</i>
TYPE	Void
SEE ALSO:	ZoomIn, ZoomAll

ZoomWindow

DESCRIPTION:	Displays the area defined by two user defined points (mouse clicks).
CLASS:	Method
SYNTAX:	<i>[form.]control.ZoomWindow()</i>
TYPE	Void
SEE ALSO:	ZoomOut, ZoomIn

REMARKS:

After being invoked, the tool expects two mouse points to be clicked in the OCX view window to determine the window to be viewed.

CADZoneOCX Properties

DrawingName

DESCRIPTION:	Sets/Gets the name of the drawing currently loaded in the OCX.
CLASS:	Property
SYNTAX:	<i>BSTR name = [form.]contro.DrawingName</i>
TYPE:	BSTR
SEE ALSO:	LoadDrawing, LoadDrawingDirect, LoadDrawingOkayCancel

REMARKS:

This function returns back the name of the current active drawing. Currently, the OCX only contains one active drawing.

CADZoneOCX Events

CADZoneFileSaved

DESCRIPTION:	Called when the diagram editing program saved a file using Save or Save As.
CLASS:	Event
SYNTAX:	
TYPE:	
SEE ALSO:	

REMARKS:

This event is only called if the diagram editing program is launched with:
LaunchCADZoneProgram.

CADZoneExitDrawingNotChanged

DESCRIPTION:	Called when the diagram editing program has been exited, but the drawing passed along by the OCX was not saved.
CLASS:	Event
SYNTAX:	
TYPE:	
SEE ALSO:	EVENT CADZoneExitDrawingNotChanged

REMARKS:

This event is only called if the diagram editing program is launched with:
LaunchCADZoneProgram.

CADZoneExitDrawingChanged

DESCRIPTION:	Called when the diagram editing program has been exited and the drawing passed along by the OCX was saved.
CLASS:	Event
SYNTAX:	
TYPE:	
SEE ALSO:	EVENT CADZoneExitDrawingChanged

REMARKS:

This event is only called if the diagram editing program is launched with:
LaunchCADZoneProgram.