

AutoVue Desktop Deployment

ActiveX API Documentation

Certified Environments

The Desktop Deployment ActiveX is intended to be hosted in a 32-bit application. It is certified with Visual Studio 2008: Visual C++/VB.NET/C#(.NET).

Initialization

- [setValue \(method\)](#)
- [initActiveX \(method\)](#)
- [doneInit \(Event\)](#)

Document Management

- [setFile \(method\)](#)
- [getFile \(method\)](#)
- [closeDocument \(method\)](#)
- [setCompareFile \(method\)](#)
- [addOverlay \(method\)](#)
- [removeOverlays \(method\)](#)
- [onFileEvent \(Event\)](#)

Document Viewing

- [setPage \(method\)](#)
- [getPage \(method\)](#)
- [getPagesNumber \(method\)](#)
- [getPageSizeMinX \(method\)](#)
- [getPageSizeMinY \(method\)](#)

- [getPageSizeMaxX \(method\)](#)
- [getPageSizeMaxY \(method\)](#)
- [setViewExtents \(method\)](#)
- [getViewExtentsMinX \(method\)](#)
- [getViewExtentsMinY \(method\)](#)
- [getViewExtentsMaxX \(method\)](#)
- [getViewExtentsMaxY \(method\)](#)
- [setZoom \(method\)](#)
- [getImageEx \(method\)](#)
- [onViewEvent \(method\)](#)

Output

- [setPrintOptions \(method\)](#)
- [printIt \(method\)](#)
- [setConvertOptions \(method\)](#)
- [convertIt \(method\)](#)
- [exportEdaBom \(method\)](#)
- [export3DBom \(method\)](#)

Markups

- [isMarkupModeEnabled \(method\)](#)
- [openMarkup \(method\)](#)
- [saveActiveMarkup \(method\)](#)
- [saveModifiedMarkups \(method\)](#)
- [importMarkup \(method\)](#)
- [exportMarkup \(method\)](#)
- [onMarkupEvent \(Event\)](#)

General

- [invokeAction \(method\)](#)
- [invokeSubAction \(method\)](#)
- [onStateEvent \(Event\)](#)

Methods

addOverlay

Add an overlay.

void addOverlay(*BSTR* fileName)

Parameters:

fileName – File to be added as an overlay

closeDocument

Close the current document.

void closeDocument()

convertIt

Perform file conversion with options specified by *setConvertOptions*.

void convertIt(*boolean* is2DConvert)

Parameters:

Is2DConvert – Whether performing 2D conversion or 3D conversion

export3DBom

Export 3D BOM to a file.

void export3DBom(*BSTR* fileName)

Parameters:

fileName – Filename for the exported BOM result. Specify full path to the output file name. Path and name must satisfy the following:

- Path should point to either current directory, user home directory or a temporary directory
- File extension should be .csv
- File should not already exist

exportEdaBom

Export EDA BOM to a file.

void exportEdaBom(*BSTR* fileName, *BSTR* format, *BSTR* attributes, *boolean* entireDesign)

Parameters:

fileName – Filename for the exported BOM result. Specify full path to the output file name. Path and name must satisfy the following:

- Path should point to either current directory, user home directory or a temporary directory
- File extension should be .csv or .pdx
- File should not already exist

format – The export format, could be “csv” and “pdx”

attributes – The attributes used for generating BOM

entireDesign – Whether the exporting is for all pages. If false, only the current page will be used for generating BOM

exportMarkup

Export a markup to the specified path and filename.

void exportMarkup(*BSTR* filename)

Parameters:

filename – full path (path and filename) of markup file. Path and name must satisfy the following:

- Path should point to either current directory, user home directory or a temporary directory
- File should not already exist

importMarkup

Import a markup from the specified path and filename.

```
void importMarkup(BSTR filename)
```

Parameters:

filename – full path (path and filename) of markup file

initActiveX

Initialize AutoVue Desktop Deployment ActiveX and make it visible.

```
void initActiveX()
```

invokeAction

Directly invoke an action that has no sub-actions (child actions).

```
void invokeAction(BSTR actionClassStr)
```

Parameters:

actionClassStr – The name of the action class to invoke, e.g. “VueActionViewAntiAlias”

Refer to the Desktop Deployment *Installation and Configuration Guide*, section *Customizing the GUI* for a list of VueAction control names.

invokeSubAction

Directly invoke a sub-action (child action) of the specified action.

```
Void invokeSubAction(BSTR actionClassStr, BSTR subActionStr)
```

Parameters:

actionClassStr – The name of the action class, e.g. “VueActionViewZoom”

subActionStr – The name of its sub-action to be invoked, e.g. “FitBoth”

isMarkupModeEnabled

Determines whether the ActiveX is currently in markup mode.

```
boolean isMarkupModeEnabled()
```

Return Value:

True if currently in markup mode

getFile

Get the full path filename of document currently opened

BSTR getFile()

Return Value:

Full path filename of document currently opened

getImageEx

Gets the raster image display attribute.

long getImageEx(*int* flag)

Parameters:

flag – Display attribute to query, it could be one of the following:

0 – Image contrast

1 – Image anti-alias

2 – Image invert

Return Value:

Depends on the given flag value, it could return the following:

0 – Image contrast: -50 – Light, 0 – Normal, 66 – Dark, 100 - Darkest

1 – Image anti-alias: 0 – Off, 1 – On

2 – Image invert: 0 – Off, 1 – On

getPage

Gets the current page index of the currently opened document.

int getPage()

Return Value:

Page index of current page

getPageSizeMaxX

Gets maximum X extents of the current page of the currently opened document.

double getPageSizeMinX()

Return Value:

Maximum X of the extents

getPageSizeMaxY

Gets maximum Y extents of the current page of the currently opened document.

double getPageSizeMinX()

Return Value:

Maximum Y of the extents

getPageSizeMinX

Gets minimum X extents of the current page of the currently opened document.

double getPageSizeMinX()

Return Value:

Minimum X of the extents

getPageSizeMinY

Gets minimum Y extents of the current page of the current open document.

double getPageSizeMinX()

Return Value:

Minimum Y of the extents

getPagesNumber

Gets total number of pages of the currently opened document.

int getPagesNumber()

Return Value:

Total number of pages

getViewExtentsMaxX

Gets current rectangular extents of the portion of the document being displayed.

double getViewExtentsMaxX()

Return Value:

Maximum X of the extents

getViewExtentsMaxY

Gets current rectangular extents of the portion of the document being displayed.

double getViewExtentsMaxY()

Return Value:

Maximum Y of the extents

getViewExtentsMinX

Gets current rectangular extents of the portion of the document being displayed.

double getViewExtentsMinX()

Return Value:

Minimum X of the extents

getViewExtentsMinY

Gets current rectangular extents of the portion of the document being displayed.

double getViewExtentsMinY()

Return Value:

Minimum Y of the extents

openMarkup

Open a markup given its property.

void openMarkup(*BSTR* markup)

Parameters:

markup – A property string separated by semicolons specifying all the markup attributes (name1=value1;name2=value2).

NOTE:

- To open a markup specify the markup property as "CSI_DocName=markupName". markupName must follow the convention *<base file name without extension>.<custom name>*. For example, if base file name is acad12.dwg, markup file name would be acad12.*<custom name>*.
openMarkup("CSI_DocName=acad12.review");
- To open markup in read-only mode add markup property "CSI_DocReadOnly=true".
- To open all markups associated with the currently loaded document specify the markup property as "*".

printIt

Perform printing with options specified by *setPrintOptions*.

void printIt()

removeOverlays

Remove all overlays.

void removeOverlays()

saveActiveMarkup

Save current active markup with the given property.

void saveActiveMarkup(BSTR markup)

Parameters:

markup – A property string separated by semicolons specifying all the markup attributes (name1=value1;name2=value2). To save a local markup specify the markup property as "CSI_DocName=markupName". markupName must follow the convention *<base file name without extension>.<custom name>*.

For example, if base file name is acad12.dwg, markup file name would be acad12.*<custom name>*.

```
saveActiveMarkup("CSI_DocName=acad12.review");
```

saveModifiedMarkups

Save all modified markups.

```
void saveModifiedMarkups()
```

setCompareFile

Sets the file to compare against the currently opened document. This initiates compare mode with the currently opened document in the first window and the file specified by *fileName* in the second window.

```
void setCompareFile(BSTR fileName)
```

Parameters:

fileName – Full path filename of document to be compared against

setConvertOptions

Specify options for file conversion.

```
void setConvertOptions(BSTR key, BSTR value)
```

Parameters:

key – Option key, it could be one of the following:

“FORMAT” – Required option that specify output file format, *value* could be one of the following:

“PCRS_BMP” – Windows Bitmap

“PCRS_TIF” – TIFF

“PCVC_PDF” – PDF

“PC3D_STL” – Stereolithography

“SUBFORMAT” – Specify sub-format of the output file format, *value* is an integer.

“PCRS_TIF” sub-formats:

“0” – Uncompressed

“1” – Packbits compressed

“2” – Group III compressed

“3” – Group IV compressed

“PC3D_STL” sub-formats:

“0” – ASCII STL

“1” – BINARY STL

“OUTPUT” – Required option that specify filename of the output file. Specify full path to the output file name. Path and name must satisfy the following:

- Path should point to either current directory, user home directory or a temporary directory
- File should not already exist

“AREA” – Print area type, *value* could be “DISPLAY”, “EXTENTS” (Default) or “SELECTED” (3D only)

“SIZEX” – Specify raster output’s x dimension; required to specify either SIZEX and SIZEY or SCALE for all output formats except PDF

“SIZEY” – Specify raster output’s y dimension

“SCALE” – Specify scale factor, *value* is an integer specifying scale factor

“COLORDEPTH” – Specify raster output’s color depth, *value* could be “ORIGINAL” (Default) for obtaining color depth from base document or an integer specifying color depth e.g. Value “8” for 256 color.

“PAGERANGE” – Specify page range, *value* could be “ALL”, “CURRENT” (Default) or a string “<fromPage>-<toPage>” e.g. “1-3”

“STL_POSITIVE_TRIANGLES” – Specify positive triangulation is on for STL output, *value* could be “ON” and “OFF” (Default)

value – Depends on value of *key* parameter. See above descriptions.

setFile

Open a document in the ActiveX.

void setFile(*BSTR* fileName)

Parameters:

fileName – Full path (path and filename) of document to be opened; Prefix the full path with “upload://”.

For example: setFile(“upload://C:\files\autocad.dwg”);

setPage

Sets the specified page on the currently opened document.

void setPage(*int* page)

Parameters:

page – The page index

setPrintOptions

Specify options for printing.

void setPrintOptions(*BSTR* key, *BSTR* value)

Parameters:

key, – Option key, it could be one of the following:

“ORIENTATION” – Page orientation, *value* could be “LANDSCAPE”, “PORTRAIT” or “AUTO” (Default)

“AREA” – Print area type, *value* could be “DISPLAY” or “EXTENTS” (Default)

“SCALE” – Scaling type, *value* could be “FIT” (Default), a string “<percentage>%” indicates a scale or a string “<factor>” indicates scaling to a factor

“UNITS” – Set scaling factor units, *value* could be “INCH” (Default) or “MM”

“FORCETOBLACK” – Set force to black value, *value* could be “TRUE” or “FALSE” (Default)

“ALIGNMENT” – Set print alignment, *value* could be “CUSTOM”, “TOPLEFT” (Default), “TOPCENTER”, “TOPRIGHT”, “MIDDLELEFT”, “CENTER”, “MIDDLERIGHT”, “BOTTOMLEFT”, “BOTTOMCENTER” or “BOTTOMRIGHT”

“PRINTOFFSETX” – Set x-offset for custom print alignment (i.e. “ALIGNMENT=CUSTOM”)

“PRINTOFFSETY” – Set y-offset for custom print alignment (i.e. “ALIGNMENT=CUSTOM”)

“PRINTROWHEADERS” – Print row header for spreadsheet documents, *value* could be “TRUE” or “FALSE” (Default)

“PRINTCOLHEADERS” – Print column header for spreadsheet documents, *value* could be “TRUE” or “FALSE” (Default)

“LH” – Specify left header text

“CH” – Specify center header text

“RH” – Specify right header text

“LF” – Specify left footer text

“CF” – Specify center footer text

“RF” – Specify right footer text

“PRINTDRIVER” – Specify printer name (Default: Last used printer)

“PAPERSIZE” – Specify paper size (Default: “1” - Letter)

“PAGERANGE” – Specify page range, *value* could be “ALL”, “CURRENT” (default) or a string “<fromPage>-<toPage>” e.g. “1-3”

value – Depends on value of *key* parameter. See above descriptions.

setValue

Specify client parameters. This should be done before *initActiveX* method is called.

void setValue(*BSTR* key, *BSTR* value)

Parameters:

key – Key of parameter

value – Value of parameter

Refer to the Desktop *Deployment Installation and Configuration Guide*, section *Command-Line Parameters* for a list of client parameters that can be set using the setValue method.

setViewExtents

Sets the rectangular extents of the portion of the document to be displayed.

void setViewExtents(*double* minX, *double* minY, *double* maxX, *double* maxY)

Parameters:

minX – Minimum X of extents

minY – Minimum Y of extents

maxX – Maximum X of extents

maxY – Maximum Y of extents

setZoom

Sets zoom factor.

```
void setZoom(double zoom)
```

Parameters:

zoom – Zoom factor in percentage

Events

doneInit

This event is fired when the ActiveX is initialized.

```
void doneInit(JVueAXEvent e)
```

Parameters:

e – Event object, not being used in this event.

onFileEvent

A file event is fired when some file operation is performed.

```
void onFileEvent(JVueAXEvent e)
```

Parameters:

e – Event object that holds the event ID and any parameters. Could invoke its *getEventID* method to obtain the ID (e.g. 4 – ONSETFILE) and invoke its *getEventParameter* method to obtain string representation of the event parameters if there's any. For more information on possible value for Event ID and its parameters, please refer to JavaDoc of the *com.cimmetry.vuebean.event.VueEvent* class in the AutoVue JavaBean API documentation.

onMarkupEvent

A file event is fired when some markup operation is performed.

```
void onMarkupEvent(JVueAXEvent e)
```

Parameters:

e – Event object that holds the event ID and any parameters. Could invoke its *getEventID* method to obtain the ID (e.g. 4 – ONSETFILE) and invoke its *getEventParameter* method to obtain string representation of the event parameters if there's any. For more information on possible value for Event ID and its parameters, please refer to JavaDoc of the *com.cimmetry.vuebean.event.VueEvent* class in the AutoVue JavaBean API documentation.

onStateEvent

A file event is fired when the state of the VueBean inside the ActiveX is changing. This includes server reconnection, file recovery, etc.

void onStateEvent(JVueAXEvent e)

Parameters:

e – Event object that holds the event ID and any parameters. Could invoke its *getEventID* method to obtain the ID (e.g. 4 – ONSETFILE) and invoke its *getEventParameter* method to obtain string representation of the event parameters if there's any. For more information on possible value for Event ID and its parameters, please refer to JavaDoc of the *com.cimmetry.vuebean.event.VueEvent* class in the AutoVue JavaBean API documentation.

onViewEvent

A file event is fired when some view operation is performed.

void onViewEvent(JVueAXEvent e)

Parameters:

e – Event object that holds the event ID and any parameters. Could invoke its *getEventID* method to obtain the ID (e.g. 4 – ONSETFILE) and invoke its *getEventParameter* method to obtain string representation of the event parameters if there's any. For more information on possible value for Event ID and its parameters, please refer to JavaDoc of the *com.cimmetry.vuebean.event.VueEvent* class in the AutoVue JavaBean API documentation.

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