

eViewer(ASP.NET)

SDK Guide

A MS Technology Product

Digital Imaging and Document Management Solution

Version 1.1

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Preface

This guide is an introduction to comprehensive eViewer Toolkit APIs that will serve as a reference tool to the developers in building a standard based application.

What is in this Guide?

This guide contains description of methods meant to assist developers with ASP.NET application development efforts using eViewer ASP .NET SDK.

Intended Audience

This guide is intended for use by web developers to enable new or existing applications using ASP.NET platform.

Controls

The ASP.NET toolkit is a robust, easy-to-use toolkit for .NET developers who need to incorporate image rendering, processing, manipulations, and conversions into their web based applications. No software installation is needed on the client's workstation machine. The toolkit provides a number of capabilities including: document and image viewing, file conversion, manipulation, annotation, printing, scanning, saving, and much more. The controls include:

- ❖ Web Viewer Control
- ❖ Thumbnail Control
- ❖ Annotation Control

When the viewer is installed, all the controls will be available in the Visual Studio toolbox from where the user can select and drag the control to the web form

Web Viewer Control

This control renders images provided by the user on the web form. Provides certain set of APIs that will help in viewing/manipulating/navigating/zooming/rotating and other operations on the pages or between the pages of the documents/files. The methods and properties defined under this control are explained below:

❖ Properties

height

Summary:

Set or get the height (in pixels) of the viewer.

width

Summary:

Set or get the width (in pixels) of the viewer.

TileSize

Summary:

Set or get the size of the tile of the document view area in the viewer.

ImageDisplayOrder

Summary:

Set or get the order of the images displayed when the image is loaded in the view area in tiles in the viewer. It has two values – Sequential and On Demand. If Sequential is set, the image is loaded in a sequential manner in the viewer and if On Demand is set, the image is loaded randomly in the viewer.

BrowserFormat

Summary:

Set or get the format of the document/image that will be displayed in the browser. The format can be in JPEG, BMP, TIFF, etc.

caption

Summary:

Set or get the caption of the image viewer.

TitleBar

Summary:

Set or get the title of the title bar.

TitleBarFormat

Summary:

Set or get the formatting properties such as background color, font, font size, etc. of the title bar.

Visibility

Summary:

To show/hide the viewer. It has two values – show or hide.

AntialiasDisplay

Summary:

Increase the spatial resolution of the images opened in the viewer. It has values – None, bilinear, bicubic, and no enhancement.

ScrollPosition

Summary:

The ScrollPosition property controls the scroll position of the page. By using it, you can specify the position of the scroll when the page is loaded and save the scroll position between page submissions.

MouseTool

Summary:

Set the behavior of the mouse when interacting with the view area. The behavior of both the mouse buttons, left mouse button and right mouse button, can be set. The buttons can have one of the value – None, ZoomIn, ZoomOut, ZoomArea, Pan, Redact, etc.

AutoZoom

Summary:

Set or get the value indicating how large the document will appear. It can have one of the value – Best Fit, Fit to Height, Fit to Width.

Sample Code to use properties in the code

```
<ccl:WebImageViewer ID="WebImageViewer1" runat="server" Width="950"
Height="545" BorderColor="GrayText" BorderWidth="0px"
TileSize="512,512" ImageDisplayOrder="OnDemand" BrowserFormat="Jpeg"
Centered="false" MouseTool-LeftButton="ZoomIn" MouseTool-
RightButton="ZoomOut" AutoZoom="None" TitleBar="WebImageViewer"
TitleBarFormat="font:11px arial bold;background:gray;color:white" />
```

❖ **Methods**

Open (Stream)

Summary:

Open /view the stream of documents/files in the viewer.

Syntax:

```
public void Open (Stream stream);
```

Parameters:

stream: Stream of files.

Open (String[], String)

Summary:

Open/view the multiple documents/files in the viewer.

Syntax:

```
public void Open (String [] FilesToOpen, String SessionID);
```

Parameters:

FilesToOpen: Array of documents/files to open.

SessionID: ID corresponding to which, documents are uploaded on the server.

OpenUrl (String)

Summary:

Open/view the document/file through url in the viewer.

Syntax:

```
public void OpenUrl (String urlImagePath);
```

Parameters:

urlImagePath: URL of the document/file to view it in the viewer.

SetZoom Mode (AutoZoom Mode)

Summary:

Set the value indicating how large the document will appear when the document/file is opened in the viewer.

Syntax:

```
public void SetZoomMode (AutoZoom Mode ZoomType);
```

Parameters:

ZoomType: It can have one of the values – Best Fit, Fit to Height, Fit to Width.

Thumbnail Viewer Control

The thumbnail control allows you to quickly view the thumbnail image of the page of the document faster. Annotations can also be viewed on the thumbnail images of the document. This control works in sync with the viewer control. The methods and properties of the control are described below:

❖ Properties

Height

Summary:

Set or get the height (in pixels) of the thumbnail.

Width

Summary:

Set or get the width (in pixels) of the thumbnail.

ImageDisplayOrder

Summary:

Set or get the order of the images of the thumbnail displayed when the document is loaded in the thumbnail window. It has two values – Sequential and On Demand. If Sequential is set, the images of the thumbnail are loaded in a sequential manner in the thumbnail window and if On Demand is set, the images of the thumbnail are loaded randomly in the thumbnail window.

BrowserFormat

Summary:

Set or get the format of the thumbnail images in the browser. The format can be in JPEG, BMP, TIFF, etc.

Caption

Summary:

Set or get the caption of the thumbnail.

CaptionFormat

Summary:

Set or get the formatting properties such as background color, font, font size, etc. of the caption of the thumbnail.

TitleBar

Summary:

Set or get the title of the title bar.

TitleBarFormat

Summary:

Set or get the formatting properties such as background color, font, font size, etc. of the title bar.

Visibility

Summary:

Show/hide the thumbnail window. It has two values – show or hide.

AntialiasDisplay

Summary:

Increase the spatial resolution of the thumbnail images. It has one of the values – None, bilinear, bicubic, and no enhancement.

ScrollPosition

Summary:

The ScrollPosition property controls the scroll position of the thumbnail window. By using it, you can specify the position of the scroll when the document in the window is loaded and save the scroll position between the page submissions.

MouseTool

Summary:

Set or get the behavior of the mouse when interacting with the thumbnail window. The behavior of both the mouse buttons, left mouse button and right mouse button, can be set. The buttons can have one of the value – None, ZoomIn, ZoomOut, ZoomArea, Pan, Redact, etc.

ScrollBarVisibility

Summary:

Show/hide the scroll bars of the thumbnail window. It has two values – show or hide.

ShowAnnotations

Summary:

Show the annotations in the thumbnail images.

MultiDoc

Summary:

Set or get the value to open multiple documents in the thumbnail window. It has two values – Yes or No.

ThumbCaption

Summary:

Set or get the caption of the thumbnail window.

ThumbCaptionFormat

Summary:

Set or get the formatting properties such as background color, font, font size, etc. of the caption of the thumbnail window.

ThumbPadding

Summary:

Set or get the space inside the border of the thumbnail.

Cols

Summary:

Set or get the number of columns in the thumbnail window.

Rows

Summary:

Set or get the number of rows in the thumbnail window.

ThumbSize

Summary:

Set or get the size (height and width) of the thumbnail image in the thumbnail window.

ThumbStyle

Summary:

Set or get the formatting properties such as foreground color, background color, font color, border color, etc. of the thumbnail.

ThumbStyleHover

Summary:

Set or get the color and style of the thumbnail when the mouse hovers over it.

ThumbStyleSelected

Summary:

Set or get the formatting properties such as border, color, etc. of the thumbnail when the thumbnail is selected.

FlowDirection

Summary:

Set or get the directional flow of the thumbnails. Consecutive thumbnails will be laid out according to this property. It can have one of the values – top to bottom or left to right.

Sample Code to use properties in the code

```
<cc2:WebThumbnailViewer ID="WebThumbnailViewer1" runat="server" Width="200"
Height="500" BorderWidth="0px" Cols="1" Font-Names="Verdana" Font-Size="XX-
Small" BackColor="#D9D9D9" BorderColor="Gray" ThumbPadding="30"
ThumbSpacing="20" ViewerID="WebImageViewer1" BrowserFormat="Png"
ImageDisplayOrder="OnDemand" ThumbSize="120,120" ThumbStyle-Border="5px solid
#79AFB5" ThumbStyle-BackColor="" ThumbStyle-Cursor="crosshair" ThumbStyle-
Font="12px,bold,arial,sans-serif,bold" ThumbStyle-ForeColor="gray"
ThumbStyleHover-BackColor="#45858C" ThumbStyleHover-Border="5px solid
#45858C" ThumbStyleSelected-BackColor="orange" ThumbStyleSelected-Border="5px
solid orange" IsDragDrop="true" FlowDirection="TopToBottom" Multidoc="true"
TitleBar="Thumbs" Caption="ThumbCaption" CaptionFormat="font:11px arial
bold;background:gray;color:white" TitleBarFormat="font:11px arial
bold;background:gray;color:white" ThumbCaption="Thumb"
ThumbCaptionFormat="font:10px arial;" MouseTool-RightButton="Pan" MouseTool-
LeftButton="Pan" />
```

❖ Methods

Open (Stream)

Summary:

Open /view the stream of documents/files in the thumbnail window.

Syntax:

```
public void Open (Stream stream);
```

Parameters:

stream: Stream of files.

Open (String[], String)

Summary:

Open/view the multiple documents/files in the thumbnail window.

Syntax:

```
public void Open (String [] FilesToOpen, String SessionID);
```

Parameters:

FilesToOpen: Array of documents/files to open.

SessionID: ID corresponding to which, documents are uploaded on the server.

OpenUrl (String)

Summary:

Open/view the document/file through url in the thumbnail window.

Syntax:

```
public void OpenUrl (String urlImagePath);
```

Parameters:

urlImagePath: URL of the document/file to view it in the thumbnail window.

SetZoom Mode (AutoZoom Mode)

Summary:

Set the value indicating how large the document will appear when the document/file is opened in the thumbnail window.

Syntax:

```
public void SetZoomMode (AutoZoom Mode ZoomType);
```


Parameters:

ZoomType: It can have one of the values – Best Fit, Fit to Height, and Fit to Width.

Annotation Control

The annotation control provides a number of annotation tools to the developers to markup documents and images. A number of these annotations include line, ruler, arrow, circle, rectangle, stamp (text and image), underline, strikeout, and highlighter. These annotations can be adjusted in size and color. The properties of each of the annotations are described below:

Annotation Line

❖ **Properties**

LineWidth

Summary:

Set or get the width of the line.

LineColor

Summary:

Set or get the color of the line.

LineTransparency

Summary:

Set or get the transparency of the line.

Enable

Summary:

Show/hide the line. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the line.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the line icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<line linewidth="6" linecolor="Red" linetransparency="100" />

</cc2:WebAnnotationViewer>
```

Annotation Rectangle

❖ Properties

BorderWidth

Summary:

Set or get the border width of the rectangle.

BorderColor

Summary:

Set or get the border color of the rectangle.

BorderTransparency

Summary:

Set or get the border transparency of the rectangle.

Enable

Summary:

Show/hide the rectangle. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the rectangle.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the rectangle icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<rectangle borderwidth="6" bordercolor="Orange"
bordertransparency="100"></rectangle>

</cc2:WebAnnotationViewer>
```

Annotation Filled Rectangle

❖ Properties

BorderWidth

Summary:

Set or get the border width of the rectangle.

BorderColor

Summary:

Set the border color of the rectangle.

BorderTransparency ()

Summary:

Set or get the border transparency of the rectangle.

FillColor

Summary:

Fill the color inside the rectangle.

Enable

Summary:

Show/hide the rectangle. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the rectangle.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the filled rectangle icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<filledrectangle borderwidth="6" bordercolor="Blue" bordertransparency="100"
fillcolor="Gray"></filledrectangle>

</cc2:WebAnnotationViewer>
```

Annotation Circle

❖ Properties

BorderWidth

Summary:

Set or get the border width of the circle.

BorderColor

Summary:

Set or get the border color of the circle.

BorderTransparency

Summary:

Set or get the border transparency of the circle.

CustomIcon

Summary:

Set or get the custom made icon for the circle.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the circle icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<circle borderwidth="6" bordercolor="Blue" bordertransparency="100"></circle>

</cc2:WebAnnotationViewer>
```

Annotation Filled Circle

❖ Properties

BorderWidth

Summary:

Set or get the border width of the filled circle.

BorderColor

Summary:

Set the border color of the filled circle.

BorderTransparency

Summary:

Set or get the border transparency of the filled circle.

FillColor

Summary:

Fill the color inside the circle.

Enable

Summary:

Show/hide the filled circle. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the filled circle.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the filled circle icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<filledcircle borderwidth="6" bordercolor="Red" bordertransparency="100"
fillcolor="black"></filledcircle>

</cc2:WebannotationViewer>
```

Annotation Arrow

❖ Properties

LineWidth

Summary:

Set or get the width of the arrow.

LineColor

Summary:

Set or get the color of the arrow.

LineTransparency

Summary:

Set or get the transparency of the arrow.

Enable

Summary:

Show/hide the arrow. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the arrow.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the arrow icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"  
BorderStyle="Solid" ViewerId="WebImageViewer1">  
  
<arrow linewidth="6" linecolor="Orange" linetransparency="100"></arrow>  
  
</cc2:WebAnnotationViewer>
```

Annotation Highlighter

❖ Properties

BackgroundColor

Summary:

Set or get the background color of the highlighter.

BackgroundTransparency

Summary:

Set or get the background transparency of the highlighter.

Enable

Summary:

Show/hide the highlighter. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the highlighter.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the highlighter icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<highlighter backgroundcolor="gray" backgroundtransparency="50" />

</cc2:WebAnnotationViewer>
```

Annotation Text

❖ Properties

BorderWidth

Summary:

Set or get the border width of the text box.

BackgroundColor

Summary:

Set or get the background color of the text box.

Transparency

Summary:

Set or get the background transparency of the text box.

Enable

Summary:

Show/hide the text box. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the text annotation.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the text icon displayed in the toolbar.

TextColor

Summary:

Set or get the text color of the text.

TextFontSize

Summary:

Set or get the font size of the text.

Text

Summary:

Set or get the default text of the text box.

TextFontFace

Summary:

Set or get the font family such as Arial, Times New Roman, etc. of the text.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<text borderwidth="6" backgroundcolor="pink" transparency="100"
textfontface="Test" textcolor="black" textfontsize="30" />

</cc2:WebAnnotationViewer>
```

Annotation Note

❖ Properties

BorderWidth

Summary:

Set or get the border width of the note box.

BackgroundColor

Summary:

Set or get the background color of the note box.

Transparency

Summary:

Set or get the background transparency of the note box.

Enable

Summary:

Show/hide the note box. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the note annotation.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the note icon displayed in the toolbar.

TextColor

Summary:

Set or get the text color of the text written in the note box.

TextFontSize

Summary:

Set or get the font size of the text written in the note box.

Text

Summary:

Set or get the default text of the note box.

TextFontFace

Summary:

Set or get the font family such as Arial, Times New Roman, etc. of the text

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"
BorderStyle="Solid" ViewerId="WebImageViewer1">

<note borderwidth="6" backgroundcolor="" transparency="" textfortface=""
textcolor="" textfontsize=""></note>

</cc2:WebAnnotationViewer>
```

Annotation Pen

❖ Properties

BorderWidth

Summary:

Set or get the border width of the drawing.

Transparency

Summary:

Set or get the transparency of the drawing.

Enable

Summary:

Show/hide the drawing. It has one of the values – Yes or No.

CustomIcon

Summary:

Set or get the custom made icon for the pen annotation.

IconStyle

Summary:

Set or get the style properties such as border, color, etc. of the pen icon displayed in the toolbar.

Sample code to use property in the code

```
<cc2:WebAnnotationViewer runat="Server" PropertyTest="asdf"  
BorderStyle="Solid" ViewerId="WebImageViewer1">  
  
<pen borderwidth="6" transparency="100" />  
  
</cc2:WebAnnotationViewer>
```

JavaScript APIs for Image Operations

The toolkit provides methods to perform image processing operations on all supported documents and images. The image processing APIs will enable developers to enhance document or image quality, flip it horizontally and/or vertically, crop it, adjust the brightness and contrast, deskew the document, invert the colors of the document, and provides many other image operations for the developers. The benefit of using APIs is that page will not be loaded again.

SetMouseTool (ImageOperation, Value, Boolean)

Summary:

Set the behavior of the mouse when interacting with the operation.

Syntax:

WebViewer.setMouseTool (ImageOperation.Brighten, ui.value, true)

Parameters:

ImageOperation: It can have one of the values –
ImageOperation.Brighten
ImageOperation.Contrast
ImageOperation.Intensity
ImageOperation.None
ImageOperation.Invert
ImageOperation.sharpen
ImageOperation.smoothness
ImageOperation.Rotation
ImageOperation.VerticalFlip
ImageOperation.HorizontalFlip
ImageOperation.gfilter
ImageOperation.edfiler
ImageOperation.Zoom
AutoZoomMode.FitToWidth
AutoZoomMode.BestFit
AutoZoomMode.FitToHeight

value: Value with which the image operation is to be performed. For instance, if parameter ImageOpeartion.Zoom is passed with value 100, then this function will zoom the document with 100% magnification.

Boolean: A Boolean values that specifies whether the image operation is performed horizontally or vertically i.e. in positive direction or in negative direction. It can have one of

the values – true or false. If true, image operation is performed in positive direction, otherwise negative.

JavaScript APIs for Thumbnail Style

The toolkit provides methods to perform style operations on the thumbnail image on all the supported documents and images. The APIs will enable developers to navigate between pages of the document or across document, customize thumb styling, flow between the pages of the document.

ApplySkin (style)

Summary:

Set the styling properties of the thumbnail window.

Syntax:

```
WebViewer.ApplySkin (style);
```

Parameters:

style: CSS file that is to be applied.

ApplyThumbsSkin (style)

Summary:

Set the styling properties of the thumbnail.

Syntax:

```
WebViewer.ApplyThumbsSkin (style);
```

Parameters:

style: CSS file that is to be applied.

ApplyThumbsHoverSkin (style)

Summary:

Set the styling properties of the thumbnail when the mouse is hovered on the thumbnail.

Syntax:

WebViewer.ApplyThumbsHoverSkin (style);

Parameters:

style: CSS file that is to be applied.

ApplyThumbsSelectionSkin (style)

Summary:

Set the styling property of the thumbnail when the thumbnail is selected.

Syntax:

WebViewer.ApplyThumbsSelectionSkin (style);

Parameters:

style: CSS file that is to be applied.

ApplyThumbsPadding (style)

Summary:

Set the space inside the border of the thumbnail.

Syntax:

WebViewer.ApplyThumbsPadding (style);

Parameters:

style: CSS file that is to be applied.

ApplyThumbsFontSkin (style)

Summary:

Set the styling property of the font of the thumbnail.

Syntax:

WebViewer.ApplyThumbsFontSkin (style);

Parameters:

style: CSS file that is to be applied.