



TCAD for WEB Manual

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TCAD for WEB

Special thanks to:

All the customers who using TCAD product, you give us very useful opinions. we hope TCAD can help you to create your drawing applications quickly, simply and efficiently.

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1 Introduction

1.1 What is TCAD for WEB

"TCAD for WEB" is a Windows Form Control that works under .NET frameworks. it can be used from customers to create their own application with the graphics functionality provided. Customers can easily create, edit, manage and save 2D vector drawings. The file format is based XML is not depended from control's version.

This TCAD version is written from the scratch and is completely new. The whole component is in managed Visual Studio 2005 & C# code. it can be used under Windows Form Applications and HTML inside Internet Explorer, they all need .NET 2.0(or later version) installed.

Key Features

Shape Types

- Line
- FreeLine
- WaveLine
- RuleLine
- LinkLine
- Polyline
- Polygon
- Rectangle
- RoundRectangle
- Image
- Ellipse
- LinkPoint
- PolyBezier
- EllliArc

Save/Load file

Link shapes

Group/Ungroup shapes

Create/Move/Rotate shapes by code

Multi-Layers

Shape library supporting

Support 4 mode coordinates

Detailed Information

Drawing shapes on the designer canvas by mouse actions or code.

Modifying the drawn shapes.

Support multi-layers, printing/deleting/visible invisible layer(s).

Using all colors possible.

Supporting link line shape.

Using different style of pens, different style of brushes if you need.

Creating text objects with any font installed in the system.

Necessarily shape action related events published.

Using page formats like (A0,A1,A2,A3,A4,letter, etc.) or custom sizes.

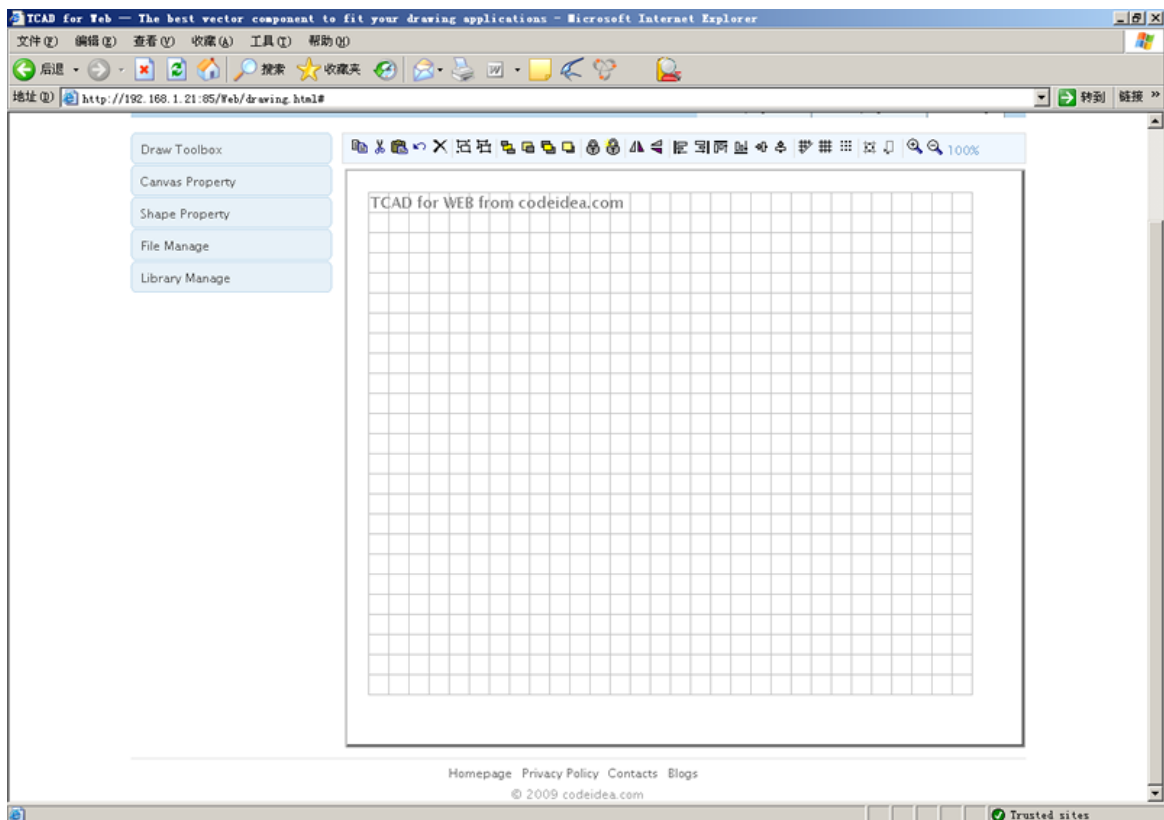
Can Undo and set undo step size
Cutting, copying, pasting and deleting the shapes.
Ordering the shapes(SendToBack, BringToFront, etc.)
Rotating, Dragging and Scaling the shapes by mouse or code.
Aligning the shape in any style.
Easy to create user-define combine shape
Snapping the mouse point to grids,set grid width or height.

Locking/Unlocking Shape
Showing HotSpot of a shape or hiding.
Grouping and ungrouping the shapes.
Zooming and panning, viewing the drawing in any scale.
Showing hints when mouse enter a shape.

Saving the drawing as disk file.
Printing the drawing to the printer and/or plotter.

Inserting bitmaps to the drawing.
Scaling, rotating,dragging bitmaps like a shape.
Exporting the drawing as image file.

1.2 Application Screenshots



2 Defines

```
public enum MyAlignment
{
    Left, Right, Center
}
```

```
public enum MyArcMode
{
    Circle, Ellipse
}
```

```
public enum MyArcStyle
{
    Arc, Chord, Sector
}
```

```
public enum MyArrowStyle
{
    None, Left, Right, Double
}
```

```
public enum MyBackgroundBitmapMode
{
    Tiled, Stretch, Center, LeftTop
}
```

```
public enum MyBlockMode
{
    Merge, Import
}
```

```
public enum MyDragMode
{
    Horizontal, Vertical, Both
}
```

```
public enum MyDrawType
{
    Close, Selecting, RotateSelecting,
    Line, FreeLine, WaveLine, RuleLine, LinkLine, PolyLine, Polygon, PolylinePolygonPointRemoving,
    PolylinePolygonPointAdding,
    Rectangle, RoundRectangle, Image, Ellipse, Text, LinkPoint, LineLinkLine,
    PolyBezier,
    ElliArc
}
```

```
public enum MyGridType
{
    Pixel, Line, None
}
```

```
public enum MyLinklineDrawStyle
{
    HorizontalVertical, Free
}
```

```
public enum MyLinklineEndPoint
{
    Start, End
}

public enum MyLinklineStyle
{
    Free, Horizontal, Vertical
}

public enum MyPageOrientation
{
    Portrait, Landscape
}

public enum MyPageStyle
{
    A0, A1, A2, A3, A4, A5, B3, B4, B5, Custom
}

public enum MyTickStyle
{
    Line, None
}

public enum MyUnitType
{
    Pixel, Millimeter, Centimeter, Decimeter, Meter, Inch
}

public enum MyVAlignment
{
    Top, Middle, Bottom
}

public enum MyXYMode
{
    Mode0, Mode1, Mode2, Mode3
}
```

3 MyCAD

MyCAD is a class of the designer canvas, you can set canvas style, size, color etc.

3.1 Properties

3.1.1 Alpha

```
public Byte Alpha { get; set; }
```

Description:

Set the shape's transparency, value is 0 to 255.

Example:**Windows form application code:**

```
myCAD1.Alpha = 100;
```

Html & javascript code:

```
<script type="text/javascript">
    function Alpha_Onclick(){
        MyCAD1.Alpha = 100;
    }
</script>

<p>
    <input type="button" value="Set Alpha" name="Alpha" onclick="javascript: Alpha_Onclick
();">
</p>
```

3.1.2 ArrowAngle

```
public Int32 ArrowAngle { get; set; }
```

Description:

Set the line's arrow angle. value is between: 0 - 359.

Example:**Windows form application code:**

```
myCAD1.ArrowAngle = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowAngle_Onclick(){
        MyCAD1.ArrowAngle = 50;
    }
</script>

<p>
    <input type="button" value="Set ArrowAngle" name="ArrowAngle" onclick="javascript:
ArrowAngle_Onclick();">
</p>
```

3.1.3 ArrowLength

```
public Byte ArrowLength { get; set; }
```

Description:

Set the line's arrow length. value is between: 10-50.

Example:**Windows form application code:**

```
myCAD1.ArrowLength = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowLength_Onclick(){
        MyCAD1.ArrowLength = 30;
    }
</script>

<p>
    <input type="button" value="Set ArrowLength" name="ArrowLength" onclick="javascript:
ArrowLength_Onclick();">
</p>
```

3.1.4 ArrowOffset

```
public Byte ArrowOffset { get; set; }
```

Description:

When a line shape is drawn with an arrow, the ArrowOffset specifies how many pixels from the end of the line the arrow is drawn. Value is between: 0 - 255, default is 0.

Example:**Windows form application code:**

```
myCAD1.ArrowOffset = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowOffset_Onclick(){
        MyCAD1.ArrowOffset = 30;
    }
</script>

<p>
    <input type="button" value="Set ArrowOffset" name="ArrowOffset" onclick="javascript:
ArrowOffset_Onclick();">
</p>
```

3.1.5 ArrowStyle

```
public MyArrowStyle ArrowStyle { get; set; }
```

Description:

When a line shape is drawn with an arrow, the ArrowOffset specifies how many pixels from the end of the line the arrow is drawn. Value is between: 0 - 255, default is 0.

Example:

Windows form application code:

```
myCAD1.ArrowStyle = MyArrowStyle.Left;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowStyle_Onclick(){
        MyCAD1.ArrowStyle = 1;
    }
</script>

<p>
    <input type="button" value="Set ArrowStyle" name="ArrowStyle" onclick="javascript:
ArrowStyle_Onclick();">
</p>
```

NOTE: In javascript, you should set ArrowStyle property value as index of enumerate, it starts from 0.

3.1.6 BackgroundBitmap

```
public Bitmap BackgroundBitmap { get; set; }
```

Description:

Set the background bitmap for canvas, and clear it, set the BackgroundBitmap as null.

Example:

Windows form application code:

```
openFileDialog1.InitialDirectory = Application.ExecutablePath;
openFileDialog1.Filter = "BMP(*.bmp)|*.bmp|JPEG(*.jpg;*.jpe;*.jpeg)|*.jpg;*.jpe;*.jpeg|Allfiles(*.*)|*.*";

if (openFileDialog1.ShowDialog() == DialogResult.OK)
{
    Bitmap myBitmap = new Bitmap(openFileDialog1.FileName);
    myCAD1.BackgroundBitmap = myBitmap;
}
```

Html & javascript code:

```
<script type="text/javascript">
    function BackgroundBitmap_Onclick(){
        MyCAD1.SetBackgroundBitmap(fileName);
    }
```



```
</script>

<p>
    <input type="button" value="Set BackgroundBitmap" name="BackgroundBitmap"
onclick="javascript: BackgroundBitmap_Onclick();">
</p>
```

3.1.7 BackgroundBitmapMode

```
public MyBackgroundBitmapMode BackgroundBitmapMode { get; set; }
```

Description:

Set the show style of background bitmap.

Example:

Windows form application code:

```
myCAD1.BackgroundBitmapMode = MyBackgroundBitmapMode.Center;
```

Html & javascript code:

```
<script type="text/javascript">
    function BackgroundBitmapMode_Onclick(){
        MyCAD1.BackgroundBitmapMode = 2;
    }
</script>

<p>
    <input type="button" value="Set BackgroundBitmapMode"
name="BackgroundBitmapMode" onclick="javascript: BackgroundBitmapMode_Onclick();">
</p>
```

NOTE: In javascript, you should set BackgroundBitmapMode property value as index of enumerate, it starts from 0.

3.1.8 BackgroundColor

Please see procedure of SetBackgroundColor / GetBackgroundColor.

3.1.9 BrushColor

Please see procedure of SetBrushColor / GetBrushColor.

3.1.10 BrushShow

```
public Boolean BrushShow { get; set; }
```

Description:

Show the brush of the shape.

Example:

Windows form application code:

```
myCAD1.Brush = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function BrushShow_Onclick(){
        MyCAD1.BrushShow = true;
    }
</script>

<p>
    <input type="button" value="Set BrushShow" name="BrushShow" onclick="javascript:
BrushShow_Onclick();">
</p>
```

3.1.11 CrossLine

```
public Boolean CrossLine { get; set; }
```

Description:

It is used for MyLinkLine drawing feature. When it is true, the drawing speed lower than false.

Example:**Windows form application code:**

```
myCAD1.CrossLine = false;
```

Html & javascript code:

```
<script type="text/javascript">
    function CrossLine_Onclick(){
        MyCAD1.CrossLine = false;
    }
</script>

<p>
    <input type="button" value="Set CrossLine" name="CrossLine" onclick="javascript:
CrossLine_Onclick();">
</p>
```

3.1.12 CurrentLayerId

```
public Int32 CurrentLayerId { get; set; }
```

Description:

Set the current layer id for the canvas.

Example:**Windows form application code:**

```
myCAD1.CurrentLayerId = 1;
```

Html & javascript code:

```
<script type="text/javascript">
    function CurrentLayerId_Onclick(){
        MyCAD1.CurrentLayerId = 1;
    }
</script>

<p>
    <input type="button" value="Set CurrentLayerId" name="CurrentLayerId"
onclick="javascript: CurrentLayerId_Onclick();">
</p>
```

3.1.13 DragMode

```
public MyDragMode DragMode { get; set; }
```

Description:

It can help you drag shape, when value is Horizontal then the shape drag in horizontal; when value is Vertical then the shape drag in vertical.

Example:**Windows form application code:**

```
myCAD1.DragMode = MyDragMode.Horizontal;
```

Html & javascript code:

```
<script type="text/javascript">
    function DragMode_Onclick(){
        MyCAD1.DragMode = 1;
    }
</script>

<p>
    <input type="button" value="Set DragMode" name="DragMode" onclick="javascript:
DragMode_Onclick();">
</p>
```

NOTE: In javascript, you should set DragMode property value as index of enumerate, it starts from 0.

3.1.14 DrawType

```
public MyDrawType DrawType { get; set; }
```

Description:

Set the draw type of mouse drawing.

Example:**Windows form application code:**

```
myCAD1.DrawType = MyDrawType.Rectangle;
```

Html & javascript code:

```
<script type="text/javascript">
    function DrawType_Onclick(){
        MyCAD1.DrawType = 1;
    }
</script>

<p>
    <input type="button" value="Set DrawType" name="DrawType" onclick="javascript:
DrawType_Onclick();">
</p>
```

NOTE: In javascript, you should set DrawType property value as index of enumerate, it starts from 0.

3.1.15 FontName

Please see procedures of SetFontName / GetFontName / GetFontFamily.

3.1.16 FontSize

Please see procedures of SetFontSize / GetFontSize.

3.1.17 FontStyle

Please see procedures of SetFontStyle / GetFontStyle.

3.1.18 FontStrikeout

Please see procedures of SetFontStrikeout / GetFontStrikeout.

3.1.19 FontUnderline

Please see procedures of SetFontUnderline / GetFontUnderline.

3.1.20 GridColor

Please see procedures of SetGridColor / GetGridColor.

3.1.21 GridHeight

```
public Int32 GridHeight { get; set; }
```

Description:

Set the grid height.

Example:

Windows form application code:

```
myCAD1.GridHeight = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function GridHeight_Onclick(){
        MyCAD1.GridHeight = 30;
    }
</script>

<p>
    <input type="button" value="Set GridHeight " name="GridHeight " onclick="javascript:
GridHeight_Onclick();">
</p>
```

3.1.22 GridPenSize

```
public Int32 GridPenSize { get; set; }
```

Description:

Set the grid pen size.

Example:**Windows form application code:**

```
myCAD1.GridPenSize = 2;
```

Html & javascript code:

```
<script type="text/javascript">
    function GridPenSize_Onclick(){
        MyCAD1.GridPenSize = 2;
    }
</script>

<p>
    <input type="button" value="Set GridPenSize " name="GridPenSize " onclick="javascript:
GridPenSize_Onclick();">
</p>
```

3.1.23 GridShow

```
public Boolean GridShow { get; set; }
```

Description:

Show or not show the grid.

Example:**Windows form application code:**

```
myCAD1.GridShow = false;
```

Html & javascript code:

```

<script type="text/javascript">
    function GridShow_Onclick(){
        MyCAD1.GridShow = false;
    }
</script>

<p>
    <input type="button" value="Set GridShow" name="GridShow" onclick="javascript:
GridShow_Onclick();">
</p>

```

3.1.24 GridType

```
public MyGridType GridType { get; set; }
```

Description:

Set the grid type.

Example:**Windows form application code:**

```
myCAD1.GridType = MyGridType.Pixel;
```

Html & javascript code:

```

<script type="text/javascript">
    function GridType_Onclick(){
        MyCAD1.GridType = 1;
    }
</script>

<p>
    <input type="button" value="Set GridType" name="GridType" onclick="javascript:
GridType_Onclick();">
</p>

```

NOTE: In javascript, you should set GridType property value as index of enumerate, it starts from 0.

3.1.25 GridWidth

```
public Int32 GridWidth { get; set; }
```

Description:

Set the grid width.

Example:**Windows form application code:**

```
myCAD1.GridWidth = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function GridWidth_Onclick(){
        MyCAD1.GridWidth = 2;
    }
</script>

<p>
    <input type="button" value="Set GridWidth " name="GridWidth " onclick="javascript:
GridWidth_Onclick();">
</p>
```

3.1.26 HotColor

Please see procedures of SetHotColor / GetHotColor.

3.1.27 HotShow

```
public Boolean HotShow { get; set; }
```

Description:

Show or not show the hot square.

Example:**Windows form application code:**

```
myCAD1.HotShow = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function HotShow_Onclick(){
        MyCAD1.HotShow = true;
    }
</script>

<p>
    <input type="button" value="Set HotShow" name="HotShow" onclick="javascript:
HotShow_Onclick();">
</p>
```

3.1.28 LinklineAroundShape

```
public Boolean LinklineAroundShape { get; set; }
```

Description:

Move around a shape or not when drawing a link line to cross a shape.

Example:**Windows form application code:**

```
myCAD1.LinklineAroundShape = false;
```

Html & javascript code:

```

<script type="text/javascript">
    function LinklineAroundShape_Onclick(){
        MyCAD1.LinklineAroundShape = false;
    }
</script>

<p>
    <input type="button" value="Set LinklineAroundShape" name="LinklineAroundShape"
onclick="javascript: LinklineAroundShape_Onclick();">
</p>

```

3.1.29 LinklineDrawStyle

```
public MyLinklineDrawStyle LinklineDrawStyle { get; set; }
```

Description:

Define the link line style.

Example:**Windows form application code:**

```
myCAD1.LinklineDrawStyle = MyLinklineDrawStyle.Free;
```

Html & javascript code:

```

<script type="text/javascript">
    function LinklineDrawStyle_Onclick(){
        MyCAD1.LinklineDrawStyle = 0;
    }
</script>

<p>
    <input type="button" value="Set LinklineDrawStyle" name="LinklineDrawStyle"
onclick="javascript: LinklineDrawStyle_Onclick();">
</p>

```

NOTE: In javascript, you should set LinklineDrawStyle property value as index of enumerate, it starts from 0.

3.1.30 OperateAllLayer

```
public Boolean OperateAllLayer { get; set; }
```

Description:

Specifies the operate object is the all layers or not.

Example:**Windows form application code:**

```
myCAD1.OperateAllLayer = false;
```


Html & javascript code:

```
<script type="text/javascript">
    function OperateAllLayer_Onclick(){
        MyCAD1.OperateAllLayer = false;
    }
</script>

<p>
    <input type="button" value="Set OperateAllLayer" name="OperateAllLayer"
onclick="javascript: OperateAllLayer_Onclick();">
</p>
```

3.1.31 PageFoot

```
public string PageFoot { get; set; }
```

Description:

Specifies the foot text of the page.

Example:**Windows form application code:**

```
myCAD1.PageFoot = "TCAD for .NET";
```

Html & javascript code:

```
<script type="text/javascript">
    function PageFoot_Onclick(){
        MyCAD1.PageFoot = "TCAD for .NET";
    }
</script>

<p>
    <input type="button" value="Set PageFoot " name="PageFoot " onclick="javascript:
PageFoot_Onclick();">
</p>
```

3.1.32 PageFootAlignment

```
public MyAlignment PageFootAlignment { get; set; }
```

Description:

Specifies the position of page foot.

Example:**Windows form application code:**

```
myCAD1.PageFootAlignment = MyAlignment.Center
```

Html & javascript code:

```
<script type="text/javascript">
```

```

        function PageFootAlignment_Onclick(){
            MyCAD1.PageFootAlignment = 0;
        }
    </script>

    <p>
        <input type="button" value="Set PageFootAlignment" name="PageFootAlignment"
        onclick="javascript: PageFootAlignment_Onclick();">
    </p>

```

NOTE: In javascript, you should set PageFootAlignment property value as index of enumerate, it starts from 0.

3.1.33 PageFootToBottom

```
public Byte PageFootToBottom { get; set; }
```

Description:

Specifies the margin of page foot to bottom.

Example:

Windows form application code:

```
myCAD1.PageFootToBottom = 10;
```

Html & javascript code:

```

<script type="text/javascript">
    function PageFootToBottom_Onclick(){
        MyCAD1.PageFootToBottom = 10;
    }
</script>

<p>
    <input type="button" value="Set PageFootToBottom " name="PageFootToBottom "
    onclick="javascript: PageFootToBottom_Onclick();">
</p>

```

3.1.34 PageHead

```
public string PageHead { get; set; }
```

Description:

Specifies the head text of the page.

Example:

Windows form application code:

```
myCAD1.PageHead = "TCAD for .NET";
```

Html & javascript code:

```
<script type="text/javascript">
```

```
function PageFoot_Onclick(){
    MyCAD1.PageHead = "TCAD for .NET";
}
</script>

<p>
    <input type="button" value="Set PageHead " name="PageHead " onclick="javascript:
PageHead_Onclick();">
</p>
```

3.1.35 PageHeadAlignment

```
public MyAlignment PageHeadAlignment { get; set; }
```

Description:

Specifies the position of page head.

Example:

Windows form application code:

```
myCAD1.PageHeadAlignment = MyAlignment.Center
```

Html & javascript code:

```
<script type="text/javascript">
    function PageHeadAlignment_Onclick(){
        MyCAD1.PageHeadAlignment = 0;
    }
</script>

<p>
    <input type="button" value="Set PageHeadAlignment" name="PageHeadAlignment"
onclick="javascript: PageHeadAlignment_Onclick();">
</p>
```

NOTE: In javascript, you should set PageHeadAlignment property value as index of enumerate, it starts from 0.

3.1.36 PageHeadToTop

```
public Byte PageHeadToTop { get; set; }
```

Description:

Specifies the margin of page head to top.

Example:

Windows form application code:

```
myCAD1.PageHeadToTop = 10;
```

Html & javascript code:

```
<script type="text/javascript">
```

```

        function PageHeadToTop_Onclick(){
            MyCAD1.PageHeadToTop = 10;
        }
    </script>

    <p>
        <input type="button" value="Set PageHeadToTop " name="PageHeadToTop "
        onclick="javascript: PageHeadToTop_Onclick();">
    </p>

```

3.1.37 PageHeight

```
public Int32 PageHeight { get; set; }
```

Description:

Specifies the height of page.

Example:

Windows form application code:

```
myCAD1.PageHeight = 200;
```

Html & javascript code:

```

<script type="text/javascript">
    function PageHeight_Onclick(){
        MyCAD1.PageHeight = 200;
    }
</script>

<p>
    <input type="button" value="Set PageHeight " name="PageHeight " onclick="javascript:
    PageHeight_Onclick();">
</p>

```

3.1.38 PageOrientation

```
public MyPageOrientation PageOrientation { get; set; }
```

Description:

Specifies the orientation of page.

Example:

Windows form application code:

```
myCAD1.PageOrientation = MyPageOrientation.Landscape;
```

Html & javascript code:

```

<script type="text/javascript">
    function PageOrientation_Onclick(){
        MyCAD1.PageOrientation = 0;
    }

```

```
</script>

<p>
    <input type="button" value="Set PageOrientation" name="PageOrientation"
onclick="javascript: PageOrientation_Onclick();">
</p>
```

NOTE: In javascript, you should set PageOrientation property value as index of enumerate, it starts from 0.

3.1.39 PageStyle

```
public MyPageStyle PageStyle { get; set; }
```

Description:

Specifies the style of page.

Example:

Windows form application code:

```
myCAD1.PageStyle = MyPageStyle.A4;
```

Html & javascript code:

```
<script type="text/javascript">
    function PageStyle_Onclick(){
        MyCAD1.PageStyle = 0;
    }
</script>

<p>
    <input type="button" value="Set PageStyle" name="PageStyle" onclick="javascript:
PageStyle_Onclick();">
</p>
```

NOTE: In javascript, you should set PageStyle property value as index of enumerate, it starts from 0.

3.1.40 PageWidth

```
public Int32 PageWidth { get; set; }
```

Description:

Specifies the width of page.

Example:

Windows form application code:

```
myCAD1.PageWidth = 200;
```

Html & javascript code:

```
<script type="text/javascript">
```

```

        function PageWidth_Onclick(){
            MyCAD1.PageWidth = 200;
        }
    </script>

    <p>
        <input type="button" value="Set PageWidth " name="PageWidth " onclick="javascript:
        PageWidth_Onclick();">
    </p>

```

3.1.41 PenColor

Please see procedures of SetPenColor / GetPenColor.

3.1.42 PenStyle

Please see procedures of SetPenStyle / GetPenStyle.

3.1.43 PenWidth

Please see procedures of SetPenWidth / GetPenWidth.

3.1.44 PrintBackground

```
public Boolean PrintBackground { get; set; }
```

Description:

Specifies the background print or not.

Example:

Windows form application code:

```
myCAD1.PrintBackground = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function PrintBackground_Onclick(){
        MyCAD1.PrintBackground = false;
    }
</script>

<p>
    <input type="button" value="Set PrintBackground" name="PrintBackground"
    onclick="javascript: PrintBackground_Onclick();">
</p>

```

3.1.45 PrintBorder

```
public Boolean PrintBorder { get; set; }
```

Description:

Specifies the border print or not.

Example:

Windows form application code:

```
myCAD1.PrintBorder = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function PrintBorder_Onclick(){
        MyCAD1.PrintBorder = true;
    }
</script>

<p>
    <input type="button" value="Set PrintBorder" name="PrintBorder" onclick="javascript:
PrintBorder_Onclick();">
</p>
```

3.1.46 PrintBorderToBottom

```
public Byte PrintBorderToBottom { get; set; }
```

Description:

Specifies the margin of border to bottom.

Example:

Windows form application code:

```
myCAD1.PrintBorderToBottom = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function PrintBorderToBottom_Onclick(){
        MyCAD1.PrintBorderToBottom = 50;
    }
</script>

<p>
    <input type="button" value="Set PrintBorderToBottom " name="PrintBorderToBottom "
onclick="javascript: PrintBorderToBottom _OnClick();">
</p>
```

3.1.47 PrintBorderToLeft

```
public Byte PrintBorderToLeft { get; set; }
```

Description:

Specifies the margin of border to left.

Example:

Windows form application code:

```
myCAD1.PrintBorderToLeft = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function PrintBorderToLeft_Onclick(){
        MyCAD1.PrintBorderToBottom = 50;
    }
</script>

<p>
    <input type="button" value="Set PrintBorderToLeft " name="PrintBorderToLeft "
onclick="javascript: PrintBorderToLeft_Onclick();">
</p>
```

3.1.48 PrintBorderToRight

```
public Byte PrintBorderToRight{ get; set; }
```

Description:

Specifies the margin of border to right.

Example:**Windows form application code:**

```
myCAD1.PrintBorderToRight = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function PrintBorderToRight_Onclick(){
        MyCAD1.PrintBorderToRight = 50;
    }
</script>

<p>
    <input type="button" value="Set PrintBorderToRight " name="PrintBorderToRight "
onclick="javascript: PrintBorderToRight_Onclick();">
</p>
```

3.1.49 PrintBorderToTop

```
public Byte PrintBorderToRight{ get; set; }
```

Description:

Specifies the margin of border to right.

Example:**Windows form application code:**

```
myCAD1.PrintBorderToRight = 50;
```


Html & javascript code:

```
<script type="text/javascript">
    function PrintBorderToRight_Onclick(){
        MyCAD1.PrintBorderToRight = 50;
    }
</script>

<p>
    <input type="button" value="Set PrintBorderToRight " name="PrintBorderToRight "
onclick="javascript: PrintBorderToRight_Onclick();">
</p>
```

3.1.50 PreZoom

```
public Double PreZoom { get; set; }
```

Description:

Specifies the previous zoom of canvas.

Example:**Windows form application code:**

```
myCAD1.PreZoom = 1.5;
```

Html & javascript code:

```
<script type="text/javascript">
    function PreZoom_Onclick(){
        MyCAD1.PreZoom = 1.5;
    }
</script>

<p>
    <input type="button" value="Set PreZoom " name="PreZoom " onclick="javascript:
PreZoom_Onclick();">
</p>
```

3.1.51 Ratio

```
public Double Ratio { get; set; }
```

Description:

Specifies the ratio of page.

Example:**Windows form application code:**

```
myCAD1.Ratio = 2;
```

Html & javascript code:

```
<script type="text/javascript">
```

```

        function Ratio_Onclick(){
            MyCAD1.Ratio = 2;
        }
    </script>

    <p>
        <input type="button" value="Set Ratio " name="Ratio " onclick="javascript: Ratio_Onclick
    ();">
    </p>

```

3.1.52 ResizeEnable

```
public Boolean ResizeEnable { get; set; }
```

Description:

Specifies the shape can resize or not.

Example:

Windows form application code:

```
myCAD1.ResizeEnable = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function ResizeEnable_Onclick(){
        MyCAD1.ResizeEnable = true;
    }
</script>

<p>
    <input type="button" value="Set ResizeEnable" name="ResizeEnable"
onclick="javascript: ResizeEnable_Onclick();">
</p>

```

3.1.53 ReturnToSelecting

```
public Boolean ReturnToSelecting { get; set; }
```

Description:

Specifies the shape can resize or not.

Example:

Windows form application code:

```
myCAD1.ReturnToSelecting = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function ReturnToSelecting_Onclick(){
        MyCAD1.ReturnToSelecting = true;
    }

```

```
</script>

<p>
    <input type="button" value="Set ReturnToSelecting" name="ReturnToSelecting"
onclick="javascript: ReturnToSelecting_Onclick();">
</p>
```

3.1.54 RotateConstraintDegree

```
public Int32 RotateConstraintDegree { get; set; }
```

Description:

Set the constraint degree when rotating, if value is zero, it can rotate freely.

Example:

Windows form application code:

```
myCAD1.RotateConstraintDegree = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function RotateConstraintDegree_Onclick(){
        MyCAD1.RotateConstraintDegree = 30;
    }
</script>

<p>
    <input type="button" value="Set RotateConstraintDegree "
name="RotateConstraintDegree " onclick="javascript: RotateConstraintDegree_Onclick();">
</p>
```

3.1.55 RotateEnable

```
public Boolean RotateEnable { get; set; }
```

Description:

Specifies the shape can rotate or not.

Example:

Windows form application code:

```
myCAD1.RotateEnable = false;
```

Html & javascript code:

```
<script type="text/javascript">
    function RotateEnable_Onclick(){
        MyCAD1.RotateEnable = true;
    }
</script>

<p>
```

```

        <input type="button" value="Set RotateEnable" name="RotateEnable" onclick="javascript:
RotateEnable_Onclick();">
    </p>

```

3.1.56 ShowHotLink

```
public Boolean ShowHotLink { get; set; }
```

Description:

Whether show the MyCAD displays hot link point for a shape.

Example:

Windows form application code:

```
myCAD1.ShowHotLink = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function ShowHotLink_Onclick(){
        MyCAD1.ShowHotLink = true;
    }
</script>

<p>
    <input type="button" value="Set ShowHotLink" name="ShowHotLink" onclick="javascript:
ShowHotLink_Onclick();">
</p>

```

3.1.57 Snap

```
public Boolean Snap { get; set; }
```

Description:

Snap mouse to grid or not, help you drawing.

Example:

Windows form application code:

```
myCAD1.Snap = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function Snap_Onclick(){
        MyCAD1.Snap = true;
    }
</script>

<p>
    <input type="button" value="Set Snap" name="Snap" onclick="javascript: Snap_Onclick
();">
</p>

```

3.1.58 SnapPixel

```
public Byte SnapPixel { get; set; }
```

Description:

The mouse point will be capture to the grid when the pixels low than this value between mouse point and nearest grid. It can not big than grid width or grid height.

Example:**Windows form application code:**

```
myCAD1.SnapPixel = 10;
```

Html & javascript code:

```
<script type="text/javascript">
    function SnapPixel_Onclick(){
        MyCAD1.SnapPixel = 10;
    }
</script>

<p>
    <input type="button" value="Set SnapPixel " name="SnapPixel " onclick="javascript:
SnapPixel_Onclick();">
</p>
```

3.1.59 SnapShape

```
public Boolean SnapShape { get; set; }
```

Description:

When drag or resize shape, whether snap mouse to other shape, it can help you drawing.

Example:**Windows form application code:**

```
myCAD1.SnapShape = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function SnapShape_Onclick(){
        MyCAD1.SnapShape = true;
    }
</script>

<p>
    <input type="button" value="Set SnapShape" name="SnapShape" onclick="javascript:
SnapShape_Onclick();">
</p>
```

3.1.60 UndoRedoSize

```
public Byte UndoRedoSize { get; set; }
```

Description:

Set the size (steps) of undo action saving. It costs system resource.

Example:**Windows form application code:**

```
myCAD1.UndoRedoSize = 8;
```

Html & javascript code:

```
<script type="text/javascript">
    function UndoRedoSize_Onclick(){
        MyCAD1.UndoRedoSize = 10;
    }
</script>

<p>
    <input type="button" value="Set UndoRedoSize " name="UndoRedoSize "
onclick="javascript: UndoRedoSize_Onclick();">
</p>
```

3.1.61 UnitType

```
public MyUnitType UnitType { get; set; }
```

Description:

Specifies the unit of type.

Example:**Windows form application code:**

```
myCAD1.UnitType = MyUnitType.Millimeter;
```

Html & javascript code:

```
<script type="text/javascript">
    function UnitType_Onclick(){
        MyCAD1.UnitType = 0;
    }
</script>

<p>
    <input type="button" value="Set UnitType" name="UnitType" onclick="javascript:
UnitType_Onclick();">
</p>
```

NOTE: In javascript, you should set UnitType property value as index of enumerate, it starts from 0.

3.1.62 DiskFileVersion

```
public string DiskFileVersion { get; set; }
```

Description:

Show the disk file version.

Example:**Windows form application code:**

```
MessageBox.Show(myCAD1.DiskFileVersion());
```

Html & javascript code:

```
<script type="text/javascript">
    function DiskFileVersion_Onclick(){
        alert(MyCAD1.DiskFileVersion());
    }
</script>

<p>
    <input type="button" value="Set DiskFileVersion " name="DiskFileVersion "
onclick="javascript: DiskFileVersion_Onclick();">
</p>
```

3.1.63 XYMode

```
public MyXYMode XYMode { get; set; }
```

Description:

There four mode to choose, to fit your need.

Example:**Windows form application code:**

```
myCAD1.XYMode = MyXYMode.Mode0;
```

Html & javascript code:

```
<script type="text/javascript">
    function XYMode_Onclick(){
        MyCAD1.XYMode = 0;
    }
</script>

<p>
    <input type="button" value="Set XYMode" name="XYMode" onclick="javascript:
XYMode_Onclick();">
</p>
```

NOTE: In javascript, you should set XYMode property value as index of enumerate, it starts from 0.

3.1.64 Zoom

```
public Double Zoom { get; set; }
```

Description:

Set the zoom value, the width, height, shape and background will resize automatically. When Zoom is 1, TMyCAD is showed in 100%.

Example:**Windows form application code:**

```
myCAD1.Zoom = 0.5;
```

Html & javascript code:

```
<script type="text/javascript">
    function Zoom_Onclick(){
        MyCAD1.Zoom = 1.5;
    }
</script>

<p>
    <input type="button" value="Set Zoom " name="Zoom " onclick="javascript:
Zoom_Onclick();">
</p>
```

3.2 Methods

3.2.1 AddUserDefineShapeFromLib

```
public Int32 AddUserDefineShapeFromLib(string myLibraryFile, String udShapeName, Int32 centerX, Int32 centerY);
```

Description:

Get from library by user-defined shape's name. and add user-defined shape into MyCAD instance.

Parameter:

myLibraryFile: Library file path.
udShapeName: User-defined shape's name.
centerX: The x position of the center point.
centerY: The y position of the center point.

Return value:

Return value = -1, add shape failed.
Return value >= 0, add shape successfully, the value is the ShapeId of the new shape.

Example:

Windows form application code:

```
private void button2_Click(object sender, System.EventArgs e)
{
    myCAD1.AddUserDefineShapeFromLib("C:\\UltraGraphics\\NoNameLibrary.xml",
    "NoNameShape", 200, 200);
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AddLibraryShape_Onclick(){
        var fileName = "C:\\UltraGraphics\\NoNameLibrary.xml";
        MyCAD1.AddUserDefineShapeFromLib
(fileName,"NoNameShape",200,200);
        alert ("success!");
    }
</script>

<p>
    <input type="button" value="Add library shape" name="AddLibraryShape"
onclick="javascript: AddLibraryShape_Onclick();">
</p>
```

3.2.2 AlignBottom

```
public void AlignBottom();
```

Description:

When you select more than one shape, this procedure can align them bottom.

Example:**Windows form application code:**

```
private void menuAlignBottom_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignBottom();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AlignBottom_Onclick(){
        MyCAD1.AlignBottom();
    }
</script>

<p>
    <input type="button" value="AlignBottom shapes" name="AlignBottom"
onclick="javascript: AlignBottom_Onclick();">
</p>
```

3.2.3 AlignHorizontalCenter

```
public void AlignHorizontalCenter();
```

Description:

When you select more than one shape, this procedure can align them horizontal center.

Example:**Windows form application code:**

```
private void menuAlignHorizontalCenter_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignHorizontalCenter();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AlignHorizontalCenter_Onclick(){
        MyCAD1.AlignHorizontalCenter();
    }
</script>

<p>
    <input type="button" value="AlignHorizontalCenter shapes"
name="AlignHorizontalCenter" onclick="javascript: AlignHorizontalCenter_Onclick();">
</p>
```

3.2.4 AlignLeft

```
public void AlignLeft();
```

Description:

When you select more than one shape, this procedure can align them left.

Example:**Windows form application code:**

```
private void menuAlignLeft_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignLeft();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AlignLeft_Onclick(){
        MyCAD1.AlignLeft();
    }
</script>

<p>
    <input type="button" value="AlignLeft shapes" name="AlignLeft" onclick="javascript:
```

```
AlignLeft_Onclick();">
</p>
```

3.2.5 AlignRight

```
public void AlignRight();
```

Description:

When you select more than one shape, this procedure can align them right.

Example:

Windows form application code:

```
private void menuAlignRight_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignRight();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AlignRight_Onclick(){
        MyCAD1.AlignRight();
    }
</script>

<p>
    <input type="button" value="AlignRight shapes" name="AlignRight" onclick="javascript:
AlignRight_Onclick();">
</p>
```

3.2.6 AlignTop

```
public void AlignTop();
```

Description:

When you select more than one shape, this procedure can align them top.

Example:

Windows form application code:

```
private void menuAlignTop_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignTop();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function AlignTop_Onclick(){
        MyCAD1.AlignTop();
    }
</script>
```

```

        <p>
            <input type="button" value="AlignTop shapes" name="AlignTop" onclick="javascript:
AlignTop_Onclick();">
        </p>

```

3.2.7 AlignVerticalCenter

```
public void AlignVerticalCenter();
```

Description:

When you select more than one shape, this procedure can align them vertical center.

Example:

Windows form application code:

```
private void menuAlignVerticalCenter_Click(object sender, System.EventArgs e)
{
    myCAD1.AlignVerticalCenter();
}
```

Html & javascript code:

```

<script type="text/javascript">
    function AlignVerticalCenter_Onclick(){
        MyCAD1.AlignVerticalCenter();
    }
</script>

<p>
    <input type="button" value="AlignVerticalCenter shapes" name="AlignVerticalCenter"
onclick="javascript: AlignVerticalCenter_Onclick();">
</p>

```

3.2.8 BringToFront

```
public void BringToFront(MyShape tmpShape, Boolean needSaved);
```

Description:

Sent the selected shape to front.

Parameter:

tmpShape: The shape that you will change

needSaved: Weather save this operation to undo list

Example:

Windows form application code:

```
private void menuEditBringToFront_Click(object sender, System.EventArgs e)
{
    myCAD1.BringToFront(myCAD1.GetSelectedShape(),true);
}
```

```
}
```

Html & javascript code:

```
<script type="text/javascript">
    function BringToFront_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.BringToFront(MyCAD1.GetSelectedShape(),true);
        }
    }
</script>

<p>
    <input type="button" value="BringToFront shapes" name="BringToFront"
onclick="javascript: BringToFront_Onclick();">
</p>
```

3.2.9 BringToFrontByStep

```
public void BringToFrontByStep(MyShape tmpShape, Boolean needSaved);
```

Description:

Sent the selected shape to front by a step

Parameter:

tmpShape: The shape that you will change

needSaved: Weather save this operation to undo list

Example:

Windows form application code:

```
private void menuEditBringToFrontByStep_Click(object sender, System.EventArgs e)
{
    myCAD1.BringToFrontByStep(myCAD1.GetSelectedShape(),true);
}
```

Html & javascript code:

```
<script type="text/javascript">
    function BringToFrontByStep_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.BringToFront(MyCAD1.GetSelectedShape(),true);
        }
    }
</script>

<p>
    <input type="button" value="BringToFrontByStep shapes" name="BringToFrontByStep"
onclick="javascript: BringToFrontByStep_Onclick();">
</p>
```

3.2.10 Copy

```
public void Copy();
```

Description:

Save selected shape to memory, and they also be saved in bitmap format in clipboard.

Example:

Windows form application code:

```
myCAD1.Copy();
```

Html & javascript code:

```
<script type="text/javascript">
    function Copy_Onclick(){
        MyCAD1.Copy();
    }
</script>

<p>
    <input type="button" value="Copy shapes" name="Copy" onclick="javascript:
Copy_Onclick();">
</p>
```

3.2.11 Cut

```
public void Cut();
```

Description:

Save selected shape to memory, delete selected shape, and they also saved in bitmap format in clipboard.

Example:

Windows form application code:

```
private void menuEditCut_Click(object sender, System.EventArgs e)
{
    myCAD1.Cut();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function Cut_Onclick(){
        MyCAD1.Cut();
    }
</script>

<p>
    <input type="button" value="Cut shapes" name="Cut" onclick="javascript: Cut_Onclick
();">
```

</p>

3.2.12 Delete

```
public void Delete();
```

Description:

Delete the selected shape.

Example:

Windows form application code:

```
private void menuEditDelete_Click(object sender, System.EventArgs e)
{
    myCAD1.Delete();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function Delete_Onclick(){
        MyCAD1.Delete();
    }
</script>
```

```
<p>
    <input type="button" value="Delete shapes" name="Delete" onclick="javascript:
Delete_Onclick();">
</p>
```

3.2.13 DeSelectedAllShapesByCode

```
public void DeSelectedAllShapesByCode();
```

Description:

After execute this command, no shape will be in selected state.

Example:

Windows form application code:

```
private void menuItem7_Click(object sender, System.EventArgs e)
{
    myCAD1.DeSelectedAllShapesByCode();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function DeSelectedAllShapesByCode_Onclick(){
        MyCAD1.DeSelectedAllShapesByCode();
    }
</script>
```

```

        <p>
            <input type="button" value="DeSelectedAllShapesByCode shapes"
name="DeSelectedAllShapesByCode" onclick="javascript:DeSelectedAllShapesByCode_Onclick();">
        </p>

```

3.2.14 FlipHorizontal

```
public void FlipHorizontal(MyShape aShape);
```

Description:

Flip a shape horizontal.

Parameter:

aShape: The shape you want to flip

Example:

Windows form application code:

```

private void menuEditFlipHorizontal_Click(object sender, System.EventArgs e)
{
    myCAD1.FlipHorizontal(myCAD1.GetSelectedShape());
}

```

Html & javascript code:

```

<script type="text/javascript">
    function FlipHorizontal_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.FlipHorizontal(MyCAD1.GetSelectedShape());
        }
    }
</script>

<p>
    <input type="button" value="FlipHorizontal shapes" name="FlipHorizontal"
onclick="javascript:FlipHorizontal_Onclick();">
</p>

```

3.2.15 FlipVertical

```
public void FlipVertical(MyShape aShape);
```

Description:

Flip a shape vertical.

Parameter:

aShape: The shape you want to flip

Example:

Windows form application code:

```
private void menuEditFlipVertical_Click(object sender, System.EventArgs e)
{
    myCAD1.FlipVertical(myCAD1.GetSelectedShape());
}
```

Html & javascript code:

```
<script type="text/javascript">
    function FlipVertical_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.FlipVertical(MyCAD1.GetSelectedShape());
        }
    }
</script>

<p>
    <input type="button" value="FlipVertical shapes" name="FlipVertical" onclick="javascript:
FlipVertical_Onclick();">
</p>
```

3.2.16 GetBackgroundColor

```
public string GetBackgroundColor();
```

Description:

Get background color.

Return Value:

It returns the string of color.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetBackgroundColor_Onclick(){
        var color = MyCAD1.GetBackgroundColor();
        alert (color);
    }
</script>

<p>
    <input type="button" value="Get background color" name="GetBackgroundColor"
onclick="javascript:GetBackgroundColor_Onclick();">
</p>
```

3.2.17 GetBrushColor

```
public string GetBrushColor();
```

Description:

Get brush color.

Return Value:

It returns the string of color.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetBrushColor_Onclick(){
        var color = MyCAD1.GetBrushColor();
        alert (color);
    }
</script>

<p>
    <input type="button" value="Get brush color" name="GetBrushColor" onclick="javascript:
GetBrushColor_Onclick();">
</p>
```

3.2.18 GetBrushType

```
public string GetBrushType();
```

Description:

Get brush type.

Return Value:

It returns the string of brush type.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetBrushType_Onclick(){
        var type = MyCAD1.GetBrushType();
        alert (type);
    }
</script>

<p>
    <input type="button" value="Get brush type" name="GetBrushType" onclick="javascript:
GetBrushType_Onclick();">
</p>
```

3.2.19 GetFontFamily

```
public string GetFontFamily();
```

Description:

Get names of all fonts.

Return Value:

It returns the string of all font names, it will be partition by comma.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontFamily_Onclick(){
        var fontFamily = MyCAD1.GetFontFamily();
        alert (fontFamily);
    }
</script>

<p>
    <input type="button" value="Get font family" name="GetFontFamily" onclick="javascript:
GetFontFamily_Onclick();">
</p>
```

3.2.20 GetFontName

```
public string GetFontName();
```

Description:

Get name of the current font.

Return Value:

It returns the string of font name.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontName_Onclick(){
        var fontName = MyCAD1.GetFontName();
        alert (fontName);
    }
</script>

<p>
    <input type="button" value="Get font name" name="GetFontName" onclick="javascript:
GetFontName_Onclick();">
</p>
```

3.2.21 GetFontSize

```
public Single GetFontSize();
```

Description:

Get size of the current font.

Return Value:

It returns font size.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontSize_Onclick(){
        var fontSize = MyCAD1.GetFontSize();
        alert (fontSize);
    }
</script>

<p>
    <input type="button" value="Get font size" name="GetFontSize" onclick="javascript:
GetFontSize_Onclick();">
</p>
```

3.2.22 GetFontStrikeout

```
public Boolean GetFontStrikeout();
```

Description:

Get font strikeout.

Return Value:

If it is strikeout, it returns true, else false.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontStrikeout_Onclick(){
        var strikeout = MyCAD1.GetFontStrikeout();
        alert (strikeout);
    }
</script>

<p>
    <input type="button" value="Get font strikeout" name="GetFontStrikeout"
onclick="javascript:GetFontStrikeout_Onclick();">
</p>
```

3.2.23 GetFontStyle

```
public byte GetFontStyle();
```

Description:

Get style of the current font.

Return Value:

It returns font style index.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontStyle_Onclick(){
        var fontStyle = MyCAD1.GetFontStyle();
        alert (fontStyle);
    }
</script>

<p>
    <input type="button" value="Get font style" name="GetFontStyle" onclick="javascript:
GetFontStyle_Onclick();">
</p>
```

3.2.24 GetFontUnderline

```
public Boolean GetFontUnderline();
```

Description:

Get font underline.

Return Value:

If it is underline, it returns true, else false.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetFontUnderline_Onclick(){
        var underline = MyCAD1.GetFontUnderline();
        alert (underline);
    }
</script>

<p>
    <input type="button" value="Get font underline" name="GetFontUnderline"
onclick="javascript:GetFontUnderline_Onclick();">
</p>
```

3.2.25 GetGridColor

```
public string GetGridColor();
```

Description:

Get grid color.

Return Value:

It returns the string of the grid color.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetGridColor_Onclick(){
        var color = MyCAD1.GetGridColor();
        alert (color);
    }
</script>

<p>
    <input type="button" value="Get grid color" name="GetGridColor" onclick="javascript:
GetGridColor_Onclick();">
</p>
```

3.2.26 GetHotColor

```
public string GetHotColor();
```

Description:

Get hot color.

Return Value:

It returns the string of the hot color.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetHotColor_Onclick(){
        var color = MyCAD1.GetHotColor();
        alert (color);
    }
</script>

<p>
    <input type="button" value="Get hot color" name="GetHotColor" onclick="javascript:
GetHotColor_Onclick();">
</p>
```

3.2.27 GetPageFootFontName

```
public string GetPageFootFontName();
```

Description:

Get font name of the page foot.

Return Value:

It returns the string of font name.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageFootFontName_Onclick(){
        var fontName = MyCAD1.GetPageFootFontName();
        alert (fontName);
    }
</script>

<p>
    <input type="button" value="Get font name" name="GetPageFootFontName"
onclick="javascript:GetPageFootFontName_Onclick();">
</p>
```

3.2.28 GetPageFootFontSize

```
public Single GetPageFootFontSize();
```

Description:

Get size of the page foot font.

Return Value:

It returns font size.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageFootFontSize_Onclick(){
        var fontSize = MyCAD1.GetPageFootFontSize();
        alert (fontSize);
    }
</script>

<p>
    <input type="button" value="Get font size" name="GetPageFootFontSize"
onclick="javascript:GetPageFootFontSize_Onclick();">
</p>
```

3.2.29 GetPageFootFontStrikeout

```
public Boolean GetPageFootFontStrikeout();
```

Description:

Get font strikeout of the page foot.

Return Value:

If it is strikeout, it returns true, else false.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageFootFontStrikeout_Onclick(){
        var strikeout = MyCAD1.GetPageFootFontStrikeout();
        alert (strikeout);
    }
</script>

<p>
    <input type="button" value="Get font strikeout" name="GetPageFootFontStrikeout"
onclick="javascript:GetPageFootFontStrikeout_Onclick();">
</p>
```

3.2.30 GetPageFootFontStyle

```
public byte GetPageFootFontStyle();
```

Description:

Get style of the page foot font.

Return Value:

It returns font style index.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageFootFontStyle_Onclick(){
        var fontStyle = MyCAD1.GetPageFootFontStyle();
        alert (fontStyle);
    }
</script>

<p>
    <input type="button" value="Get font style" name="GetPageFootFontStyle"
onclick="javascript:GetPageFootFontStyle_Onclick();">
</p>
```


3.2.31 GetPageFootFontUnderline

```
public Boolean GetPageFootFontUnderline();
```

Description:

Get underline of the page foot font.

Return Value:

If it is underline, it returns true, else false.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageFootFontUnderline_Onclick(){
        var underline = MyCAD1.GetPageFootFontUnderline();
        alert (underline);
    }
</script>

<p>
    <input type="button" value="Get font underline" name="GetPageFootFontUnderline"
onclick="javascript:GetPageFootFontUnderline_Onclick();">
</p>
```

3.2.32 GetPageHeadFontName

```
public string GetPageHeadFontName();
```

Description:

Get font name of the page head.

Return Value:

It returns the string of font name.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageHeadFontName_Onclick(){
        var fontName = MyCAD1.GetPageHeadFontName();
        alert (fontName);
    }
</script>

<p>
    <input type="button" value="Get font name" name="GetPageHeadFontName"
onclick="javascript:GetPageHeadFontName_Onclick();">
</p>
```

3.2.33 GetPageHeadFontSize

```
public Single GetPageHeadFontSize();
```

Description:

Get size of the page foot head.

Return Value:

It returns font size.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageHeadFontSize_Onclick(){
        var fontSize = MyCAD1.GetPageHeadFontSize();
        alert (fontSize);
    }
</script>

<p>
    <input type="button" value="Get font size" name="GetPageHeadFontSize"
onclick="javascript:GetPageHeadFontSize_Onclick();">
</p>
```

3.2.34 GetPageHeadFontStrikeout

```
public Boolean GetPageHeadFontStrikeout();
```

Description:

Get font strikeout of the page head.

Return Value:

If it is strikeout, it returns true, else false.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function GetPageHeadFontStrikeout_Onclick(){
        var strikeout = MyCAD1.GetPageHeadFontStrikeout();
        alert (strikeout);
    }
</script>

<p>
    <input type="button" value="Get font strikeout" name="GetPageHeadFontStrikeout"
onclick="javascript:GetPageHeadFontStrikeout_Onclick();">
</p>.
```

3.2.35 GetPageHeadFontStyle

```
public byte GetPageHeadFontStyle();
```

Description:

Get style of the page head font.

Return Value:

It returns font style index.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function GetPageHeadFontStyle_Onclick(){
        var fontStyle = MyCAD1.GetPageHeadFontStyle();
        alert (fontStyle);
    }
</script>

<p>
    <input type="button" value="Get font style" name="GetPageHeadFontStyle"
onclick="javascript:GetPageHeadFontStyle_Onclick();">
</p>
```

3.2.36 GetPageHeadFontUnderline

```
public Boolean GetPageHeadFontUnderline();
```

Description:

Get underline of the page foot font.

Return Value:

If it is underline, it returns true, else false.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function GetPageHeadFontUnderline_Onclick(){
        var underline = MyCAD1.GetPageHeadFontUnderline();
        alert (underline);
    }
</script>

<p>
    <input type="button" value="Get font underline" name="GetPageHeadFontUnderline"
onclick="javascript:GetPageHeadFontUnderline_Onclick();">
</p>
```

3.2.37 GetPenColor

Enter topic text here.

3.2.38 GetPenStyle

```
public byte GetPenStyle();
```

Description:

Get pen style.

Return Value:

It returns the index of pen type.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function GetPenStyle_Onclick(){
        var style = MyCAD1.GetPenStyle();
        alert (style);
    }
</script>

<p>
    <input type="button" value="Get pen style" name="GetPenStyle" onclick="javascript:
GetPenStyle_Onclick();">
</p>
```

3.2.39 GetPenWidth

```
public Single GetPenWidth();
```

Description:

Get width of the pen.

Return Value:

It returns pen width.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function GetPenWidth_Onclick(){
        var penWidth = MyCAD1.GetPenWidth();
        alert (penWidth);
    }
</script>
```

```

        <p>
            <input type="button" value="Get font size" name="GetPenWidth" onclick="javascript:
GetPenWidth_Onclick();">
        </p>

```

3.2.40 GetSelectedShape

```
public MyShape GetSelectedShape();
```

Description:

Get current selected shape.

Return value:

Return shape instance, else return null.

Example:

Windows form application code:

```
private void button1_Click(object sender, System.EventArgs e)
{
    MyShape aShape = myCAD1.GetSelectedShape();
}

```

Html & javascript code:

```

<script type="text/javascript">
    function GetSelectedShape_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            ...
            ...
        }
    }
</script>

<p>
    <input type="button" value="Get selected shape" name="GetSelectedShape"
onclick="javascript: GetSelectedShape_Onclick();">
</p>

```

3.2.41 GetSelectedShapesIds

```
public string GetSelectedShapesIds();
```

Description:

Get Ids of the current selected shapes.

Return value:

Return string of shape Ids.

Example:**Html & javascript code:**

```

<script type="text/javascript">
    function GetSelectedShapesIds_Onclick(){

        var ids = MyCAD1.GetSelectedShapesIds();

        if (ids!=undefined){
            var arr = ids.split("#");
            for(i=0;i<arr.length-1;i++){
                //alert(MyCAD1.GetShapeById(arr[i]).Caption());
                MyCAD1.LockUnlockforShapes2(MyCAD1.GetShapeById
(arr[i]),true);
            }
        }
    }
</script>

<p>
    <input type="button" value="Get selected shapes ids" name="GetSelectedShapesIds"
onclick="javascript: GetSelectedShapesIds_Onclick();">
</p>

```

3.2.42 GetShapeById

```
public MyShape GetShapeById(Int32 aShapeId);
```

Description:

Get shape by id.

Parameter:

aShapeId: The shape id.

Return value:

Return shape instance, else return null.

Example:**Windows form application code:**

```

private void button1_Click(object sender, System.EventArgs e)
{
    MyShape tmpShape = myCAD1.GetShapeById(0);
}

```

Html & javascript code:

```

<script type="text/javascript">
    function GetShapeById_Onclick(){
        alert(MyCAD1.GetShapeById(0).Caption());
    }

```

```

    }
</script>

<p>
    <input type="button" value="Get Shape by id" name="GetShapeByld" onclick="javascript:
GetShapeByld_Onclick();">
</p>

```

3.2.43 GroupWorkingShapes

```
public Int32 GroupWorkingShapes();
```

Description:

Group the current selected shapes as a group shape.

Return value:

Return shape id of group shape.

Example:

Windows form application code:

```
private void menuEditGroup_Click(object sender, System.EventArgs e)
{
    myCAD1.GroupWorkingShapes();
}
```

Html & javascript code:

```

<script type="text/javascript">
    function GroupWorkingShapes_Onclick(){
        MyCAD1.GroupWorkingShapes();
    }
</script>

<p>
    <input type="button" value="GroupWorkingShapes" name="GroupWorkingShapes"
onclick="javascript: GroupWorkingShapes_Onclick();">
</p>

```

3.2.44 LoadFile

```
public Boolean LoadFile(string fileName);
```

Description:

load a tcad file.

Parameter:

fileName: The tcad file name.

Return value:

true: Load file successfully.
false: Load file failed.

Example:

Windows form application code:

```
private void button2_Click(object sender, System.EventArgs e)
{
    myCAD1.LoadFile("test.xml");
}
```

Html & javascript code:

```
<script type="text/javascript">
    function LoadFile_Onclick(){
        var fileName = $("#fileName").attr("value");
        MyCAD1.LoadFile(fileName);
        alert ("Open file success!");
    }
</script>

<p>
    <input type="button" value="LoadFile" name="LoadFile" onclick="javascript:
LoadFile_Onclick();">
</p>
```

3.2.45 LockUnlockforShapes2

```
public void LockUnlockforShapes2(MyShape tmpShape, Boolean lockFlag);
```

Description:

Lock or unlock a shape.

Parameter:

tmpShape: The shape.
lockFlag: The lock flag, true or false.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function LockUnlockforShapes2_Onclick(){
        MyCAD1.LockUnlockforShapes2(MyCAD1.GetShapeById(0),true);
    }
</script>

<p>
    <input type="button" value="LockUnlockforShapes2" name="LockUnlockforShapes2"
onclick="javascript: LockUnlockforShapes2_Onclick();">
</p>
```


3.2.46 Paste

```
public void Paste();
```

Description:

Paste saved shapes to MyCAD, they have 4 pixels offset.

Example:**Windows form application code:**

```
private void menuEditPaste_Click(object sender, System.EventArgs e)
{
    myCAD1.Paste();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function Paste_Onclick(){
        MyCAD1.Paste();
    }
</script>

<p>
    <input type="button" value="Paste shapes" name="Paste" onclick="javascript:
Paste_Onclick();">
</p>
```

3.2.47 PopfromUndoRedoShapeList

```
public Int32 PopfromUndoRedoShapeList();
```

Description:

Undo one step.

Return value:

Return the step number.

Example:**Windows form application code:**

```
private void menuEditUndo_Click(object sender, System.EventArgs e)
{
    myCAD1.PopfromUndoRedoShapeList();
}
```

Html & javascript code:

```
<script type="text/javascript">
    function GroupWorkingShapes_Onclick(){
        MyCAD1.GroupWorkingShapes();
    }
</script>
```

```

</script>

<p>
    <input type="button" value="GroupWorkingShapes" name="GroupWorkingShapes"
onclick="javascript: GroupWorkingShapes_Onclick();">
</p>

```

3.2.48 SaveFile

```
public Boolean SaveFile(string fileName);
```

Description:

save drawing to a tcad file.

Parameter:

fileName: The tcad file name.

Return value:

true: Save file successfully.
false: Save file failed.

Example:

Windows form application code:

```
private void button2_Click(object sender, System.EventArgs e)
{
    myCAD1.SaveFile("test.xml");
}
```

Html & javascript code:

```

<script type="text/javascript">
    function SaveFile_Onclick(){
        var fileName = $("#fileName").attr("value");
        MyCAD1.SaveFile(fileName);
        alert ("Save file success!");
    }
</script>

<p>
    <input type="button" value="SaveFile" name="SaveFile" onclick="javascript:
SaveFile_Onclick();">
</p>

```

3.2.49 SendToBack

```
public void SendToBack(MyShape tmpShape, Boolean needSaved);
```

Description:

Send the selected shape to back.

Parameter:

tmpShape: The shape.

needSaved: Weather save this operation to undo list.

Example:**Windows form application code:**

```
private void menuEditSendToBack_Click(object sender, System.EventArgs e)
{
    myCAD1.SendToBack(myCAD1.GetSelectedShape(),true);
}
```

Html & javascript code:

```
<script type="text/javascript">
    function SendToBack_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.SendToBack(MyCAD1.GetSelectedShape(),true);
        }
    }
</script>

<p>
    <input type="button" value="SendToBack" name="SendToBack" onclick="javascript:
SendToBack_Onclick();">
</p>
```

3.2.50 SendToBackByStep

```
public void SendToBackByStep(MyShape tmpShape, Boolean needSaved);
```

Description:

Send the selected shape to back by a step.

Parameter:

tmpShape: The shape.

needSaved: Weather save this operation to undo list.

Example:**Windows form application code:**

```
private void menuEditSendToBack_Click(object sender, System.EventArgs e)
{
    myCAD1.SendToBackByStep(myCAD1.GetSelectedShape(),true);
}
```

Html & javascript code:

```
<script type="text/javascript">
    function SendToBack_Onclick(){
```

```

        var shape = MyCAD1.GetSelectedShape();
        if (shape != null){
            MyCAD1.SendToBackByStep(MyCAD1.GetSelectedShape(),true);
        }
    }
</script>

<p>
    <input type="button" value="SendToBackByStep" name="SendToBackByStep"
onclick="javascript: SendToBackByStep_Onclick();">
</p>

```

3.2.51 SetBackgroundColor

```
public void SetBackgroundColor(string backgroundColor);
```

Description:

Set backaground color.

Parameter:

backgroundColor: The string of color,like #000000.

Example:

Html & javascript code:

```

<script type="text/javascript">
    function SetBackgroundColor_Onclick(){
        MyCAD1.SetBackgroundColor("#000000");
    }
</script>

<p>
    <input type="button" value="Set background color" name="SetBackgroundColor"
onclick="javascript:SetBackgroundColor_Onclick();">
</p>

```

3.2.52 SetBackgroundBitmap

```
public Boolean SetBackgroundBitmap(string fileName);
```

Description:

Set backaground bitmap.

Parameter:

fileName: The file name of bitmap.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetBackgroundBitmap_Onclick(){
        var fileName = $("#backgroundBitmap").attr("value");
        MyCAD1.SetBackgroundBitmap(fileName);
        alert ("Set background bitmap success!");
    }
</script>

<p>
    <input type="button" value="Set background bitmap" name="SetBackgroundBitmap"
onclick="javascript:SetBackgroundBitmap_Onclick();">
</p>
```

3.2.53 SetBrushColor

```
public void SetBrushColor(string brushColor);
```

Description:

Set brush color.

Parameter:

brushColor: The string of color, like #000000.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetBrushColor_Onclick(){
        MyCAD1.SetBrushColor("#000000");
    }
</script>

<p>
    <input type="button" value="Set brush color" name="SetBrushColor" onclick="javascript:
SetBrushColor_Onclick();">
</p>
```

3.2.54 SetFontName

```
public void SetFontName(string name);
```

Description:

Set font name.

Parameter:

name: Font name.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetFontName_Onclick(){
        MyCAD1.SetFontName("Arial");
    }
</script>

<p>
    <input type="button" value="Set font name" name="SetFontName" onclick="javascript:
SetFontName_Onclick();">
</p>
```

3.2.55 SetFontSize

```
public void SetFontSize(Single fontSize);
```

Description:

Set font size.

Parameter:

fontSize: Font size.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function SetFontSize_Onclick(){
        MyCAD1.SetFontSize(14);
    }
</script>

<p>
    <input type="button" value="Set font size" name="SetFontSize" onclick="javascript:
SetFontSize_Onclick();">
</p>
```

3.2.56 SetFontStrikeout

```
public void SetFontStrikeout(Boolean strikeout);
```

Description:

Set font strikeout.

Parameter:

strikeout: Font strikeout.

Example:**Html & javascript code:**

```
<script type="text/javascript">
    function SetFontStrikeout_Onclick(){
        MyCAD1.SetFontStrikeout(false);
    }
</script>

<p>
    <input type="button" value="Set font strikeout" name="SetFontStrikeout"
onclick="javascript:SetFontStrikeout_Onclick();">
</p>
```

3.2.57 SetFontStyle

```
public void SetFontStyle(byte fontStyle);
```

Description:

Set font style.

Parameter:

fontStyle: Font style index.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetFontStyle_Onclick(){
        MyCAD1.SetFontStyle(1);
    }
</script>

<p>
    <input type="button" value="Set font style" name="SetFontStyle" onclick="javascript:
SetFontStyle_Onclick();">
</p>
```

3.2.58 SetFontUnderline

```
public void SetFontUnderline(Boolean underline);
```

Description:

Set font underline.

Parameter:

underline: Font underline.

Example:

Html & javascript code:

```
<script type="text/javascript">
```

```

        function SetFontUnderline_Onclick(){
            MyCAD1.SetFontUnderline(false);
        }
    </script>

    <p>
        <input type="button" value="Set font underline" name="SetFontUnderline"
        onclick="javascript:SetFontUnderline_Onclick();">
    </p>

```

3.2.59 SetGridColor

```
public void SetGridColor(string gridColor);
```

Description:

Set grid color.

Parameter:

gridColor: The string of color, like #000000.

Example:

Html & javascript code:

```

<script type="text/javascript">
    function SetGridColor_Onclick(){
        MyCAD1.SetGridColor("#000000");
    }
</script>

<p>
    <input type="button" value="Set grid color" name="SetGridColor" onclick="javascript:
SetGridColor_Onclick();">
</p>

```

3.2.60 SetHotColor

```
public void SetHotColor(string hotColor);
```

Description:

Set hot color.

Parameter:

hotColor: The string of color, like #000000.

Example:

Html & javascript code:

```

<script type="text/javascript">
    function SetHotColor_Onclick(){

```



```
        MyCAD1.SetHotColor("#000000");
    }
</script>

<p>
    <input type="button" value="Set hot color" name="SetHotColor" onclick="javascript:
SetHotColor_Onclick();">
</p>
```

3.2.61 SetPageFootFontName

```
public void SetPageFootFontName(string name);
```

Description:

Set page foot font name.

Parameter:

name: Page foot font name.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageFootFontName_Onclick(){
        MyCAD1.SetPageFootFontName("Arial");
    }
</script>

<p>
    <input type="button" value="Set page foot font name" name="SetPageFootFontName"
onclick="javascript:SetPageFootFontName_Onclick();">
</p>
```

3.2.62 SetPageFootFontSize

```
public void SetPageFootFontSize(Single fontSize);
```

Description:

Set page foot font size.

Parameter:

fontSize: Page foot font size.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageFootFontSize_Onclick(){
        MyCAD1.SetPageFootFontSize(14);
    }
</script>
```

```

    }
</script>

<p>
    <input type="button" value="Set page foot font size" name="SetPageFootFontSize"
onclick="javascript:SetPageFootFontSize_Onclick();">
</p>

```

3.2.63 SetPageFootFontStrikeout

```
public void SetPageFootFontStrikeout(Boolean strikeout);
```

Description:

Set page foot font strikeout.

Parameter:

strikeout: Page foot font strikeout.

Example:

Html & javascript code:

```

<script type="text/javascript">
    function SetPageFootFontStrikeout_Onclick(){
        MyCAD1.SetPageFootFontStrikeout(false);
    }
</script>

<p>
    <input type="button" value="Set page foot font strikeout"
name="SetPageFootFontStrikeout" onclick="javascript:SetPageFootFontStrikeout_Onclick();">
</p>

```

3.2.64 SetPageFootFontStyle

```
public void SetPageFootFontStyle(byte fontStyle);
```

Description:

Set page foot font style.

Parameter:

fontStyle: Page foot font style index.

Example:

Html & javascript code:

```

<script type="text/javascript">
    function SetPageFootFontStyle_Onclick(){
        MyCAD1.SetPageFootFontStyle(1);
    }

```

```
</script>

<p>
    <input type="button" value="Set page foot font style" name="SetPageFootFontStyle"
onclick="javascript:SetPageFootFontStyle_Onclick();">
</p>
```

3.2.65 SetPageFootFontUnderline

```
public void SetPageFootFontUnderline(Boolean underline);
```

Description:

Set page foot font underline.

Parameter:

underline: Page foot font underline.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageFootFontUnderline_Onclick(){
        MyCAD1.SetPageFootFontUnderline(false);
    }
</script>

<p>
    <input type="button" value="Set page foot font underline"
name="SetPageFootFontUnderline" onclick="javascript:SetPageFootFontUnderline_Onclick();">
</p>
```

3.2.66 SetPageHeadFontName

```
public void SetPageHeadFontName(string name);
```

Description:

Set page head font name.

Parameter:

name: Page head font name.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageFontHeadName_Onclick(){
        MyCAD1.SetPageHeadFontName("Arial");
    }
</script>
```

```
<p>
    <input type="button" value="Set page head font name" name="SetPageHeadFontName"
onclick="javascript:SetPageHeadFontName_Onclick();">
</p>
```

3.2.67 SetPageHeadFontSize

```
public void SetPageHeadFontSize(Single fontSize);
```

Description:

Set page head font size.

Parameter:

fontSize: Page head font size.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageHeadFontSize_Onclick(){
        MyCAD1.SetPageHeadFontSize(14);
    }
</script>

<p>
    <input type="button" value="Set page head font size" name="SetPageHeadFontSize"
onclick="javascript:SetPageHeadFontSize_Onclick();">
</p>
```

3.2.68 SetPageHeadFontStrikeout

```
public void SetPageHeadFontStrikeout(Boolean strikeout);
```

Description:

Set page head font strikeout.

Parameter:

strikeout: Page head font strikeout.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageHeadFontStrikeout_Onclick(){
        MyCAD1.SetPageHeadFontStrikeout(false);
    }
</script>
```

```
<p>
    <input type="button" value="Set page head font strikeouts"
name="SetPageHeadFontStrikeout" onclick="javascript:SetPageHeadFontStrikeout_Onclick();">
</p>
```

3.2.69 SetPageHeadFontStyle

```
public void SetPageHeadFontStyle(byte fontStyle);
```

Description:

Set page head font style.

Parameter:

fontStyle: Page head font style index.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageHeadFontStyle_Onclick(){
        MyCAD1.SetPageHeadFontStyle(1);
    }
</script>

<p>
    <input type="button" value="Set page head font style" name="SetPageHeadFontStyle"
onclick="javascript:SetPageHeadFontStyle_Onclick();">
</p>.
```

3.2.70 SetPageHeadFontUnderline

```
public void SetPageHeadFontUnderline(Boolean underline);
```

Description:

Set page head font underline.

Parameter:

underline: Page head font underline.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPageHeadFontUnderline_Onclick(){
        MyCAD1.SetPageHeadFontUnderline(false);
    }
</script>

<p>
```

```
<input type="button" value="Set page head font underline"
name="SetPageHeadFontUnderline" onclick="javascript:SetPageHeadFontUnderline_Onclick();">
</p>
```

3.2.71 SetPenColor

```
public void SetPenColor(string penColor);
```

Description:

Set pen color.

Parameter:

penColor: The string of color, like #000000.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPenColor_Onclick(){
        MyCAD1.SetPenColor("#000000");
    }
</script>

<p>
    <input type="button" value="Set pen color" name="SetPenColor" onclick="javascript:
SetPenColor_Onclick();">
</p>
```

3.2.72 SetPenStyle

```
public void SetPenStyle(byte penStyle);
```

Description:

Set pen style.

Parameter:

penStyle: Pen style index.

Example:

Html & javascript code:

```
<script type="text/javascript">
    function SetPenStyle_Onclick(){
        MyCAD1.SetPenStyle(1);
    }
</script>

<p>
    <input type="button" value="Set pen style" name="SetPenStyle" onclick="javascript:
```

```
SetPenStyle_Onclick();">
</p>
```

3.2.73 SetPenWidth

Enter topic text here.

3.2.74 UngroupShape

```
public void UngroupShape(MyShape tmpShape, Boolean needSaved);
```

Description:

Ungroup the shape.

Parameter:

tmpShape: The ungroup shape.

needSaved: Weather save step to undo list.

Example:

Windows form application code:

```
private void menuEditUngroup_Click(object sender, System.EventArgs e)
{
    if (myCAD1.GetSelectedShapesCount() == 1)
    {
        myCAD1.UngroupShape(myCAD1.GetSelectedShape(),true);
    }
    else
    {
        MessageBox.Show("No shape selected or more shapes selected.");
    }
}
```

Html & javascript code:

```
<script type="text/javascript">
    function UngroupShape_Onclick(){
        var shape = MyCAD1.GetSelectedShape();
        if (shape != null)
        {
            MyCAD1.UngroupShape(MyCAD1.GetSelectedShape(),true);
        }
    }
</script>

<p>
    <input type="button" value="UngroupShape" name="UngroupShape" onclick="javascript:
UngroupShape_Onclick();">
</p>
```

3.3 Events

3.3.1 Click

```
public void Click(object sender, System.EventArgs e);
```

Description:

When use click the canvas, this event trigger.

Example:

Windows form application code:

```
private void myCAD1_Click_1(object sender, EventArgs e)
{
    MessageBox.Show("Click");
}
```

Html & javascript code:

```
<script FOR="MyCAD1" EVENT="Click(sender,e)">
    //单击画布时的事件
    if (MyCAD1.GetSelectedShape == null){
        $('#MyShapeProperty').hide();
        $('#MyLineProperty').hide();
        $('#MyRuleLineProperty').hide();
        $('#MyLinkLineProperty').hide();
        $('#MyWaveLineProperty').hide();
        $('#MyImageProperty').hide();
        $('#MyTextProperty').hide();
        $('#MyLineLinkLineProperty').hide();
        $('#MyElliArcProperty').hide();
    }
</script>
```

3.3.2 DrawTypeToSelecting

```
public event DrawTypeToSelectingEventHandler DrawTypeToSelecting;
```

```
public void DrawTypeToSelecting(object sender);
```

Description:

Use DrawTypeToSelecting to handle when the DrawType return to Selecting status.

Example:

Windows form application code:

```
private void myCAD1_DrawTypeToSelecting(object sender)
{
    lastButton.BackColor = Color.Transparent;
    btnSelecting.BackColor = Color.Gray;
    lastButton = btnSelecting;
}
```



```
}
```

Html & javascript code:

```
<script FOR="MyCAD1" EVENT="DrawTypeToSelecting(sender)">
    //画好图返回画图类型时触发的事件
    var drawType = MyCAD1.DrawType();
    switch (drawType)
    {
        case 0:drawType="Close";break;
        case 1:drawType="Selecting";break;
        case 2:drawType="RotateSelecting";break;
        case 3:drawType="Line";break;
        case 4:drawType="FreeLine";break;
        case 5:drawType="WaveLine";break;
        case 6:drawType="RuleLine";break;
        case 7:drawType="LinkLine";break;
        case 8:drawType="PolyLine";break;
        case 9:drawType="Polygon";break;
        case 10:drawType="PolylinePolygonPointRemoving";break;
        case 11:drawType="PolylinePolygonPointAdding";break;
        case 12:drawType="Rectangle";break;
        case 13:drawType="RoundRectangle";break;
        case 14:drawType="Image";break;
        case 15:drawType="Ellipse";break;
        case 16:drawType="Text";break;
        //case 17:drawType="LinkPoint";break;
        case 18:drawType="LineLinkLine";break;
        case 19:drawType="PolyBezier";break;
        case 20:drawType="ElliArc";break;
    }
    $('#DrawType').html('<span class="redspan">'+drawType+'</span>');
</script>
```

3.3.3 ShapeAdded

```
public event ShapeAddedEventHandler ShapeAdded;
```

```
public void ShapeAdded(object sender, ShapeAddedEventArgs e);
```

Description:

When add a shape, this event trigger.

Example:

Windows form application code:

```
private void myCAD1_ShapeAdded(object sender, Codeidea.UltraGraphics.
ShapeAddedEventArgs e)
{
    //Add a image shape
    if (e.WorkingShape is MyImage == true)
    {
        openFileDialog1.InitialDirectory = Application.ExecutablePath;
```

```

        openFileDialog1.Filter = "BMP(*.bmp)|*.bmp|JPEG(*.jpg;*.jpe;*.jpeg)|*.jpg;*.jpe;*.jpeg|All files(*.*)|*.*";
        if (openFileDialog1.ShowDialog() == DialogResult.OK)
        {
            Bitmap myBitmap = new Bitmap(openFileDialog1.FileName);
            (e.WorkingShape as MyImage).Bitmap = myBitmap;
        }
    }
}

```

Html & javascript code:

```

<script FOR="MyCAD1" EVENT="ShapeAdded(sender,e)">
    if (e.WorkingShape != null){
        alert (e.WorkingShape.Caption());
        alert (e.ShapesCount());
    }
</script>

```

3.3.4 ShapeSelected

```

public event ShapeSelectedEventHandler ShapeSelected;

public void ShapeSelected(object sender, ShapeSelectedEventArgs e);

```

Description:

When select a shape, this event trigger.

Example:

Windows form application code:

```

private void myCAD1_ShapeSelected(object sender, Codeidea.UltraGraphics.
ShapeSelectedEventArgs e)
{
    //Pen and brush property
    btnPenColor.BackColor = e.SelectedShape.Pen.Color;
    numericPenWidth.Value = Convert.ToDecimal(e.SelectedShape.Pen.Width);
    comboPenDash.SelectedIndex = Convert.ToInt32(e.SelectedShape.Pen.DashStyle);
    checkBrushShow.Checked = e.SelectedShape.BrushShow;
    if (e.SelectedShape.Brush is SolidBrush == true)
        btnBrushColor.BackColor = (e.SelectedShape.Brush as SolidBrush).Color;
}

```

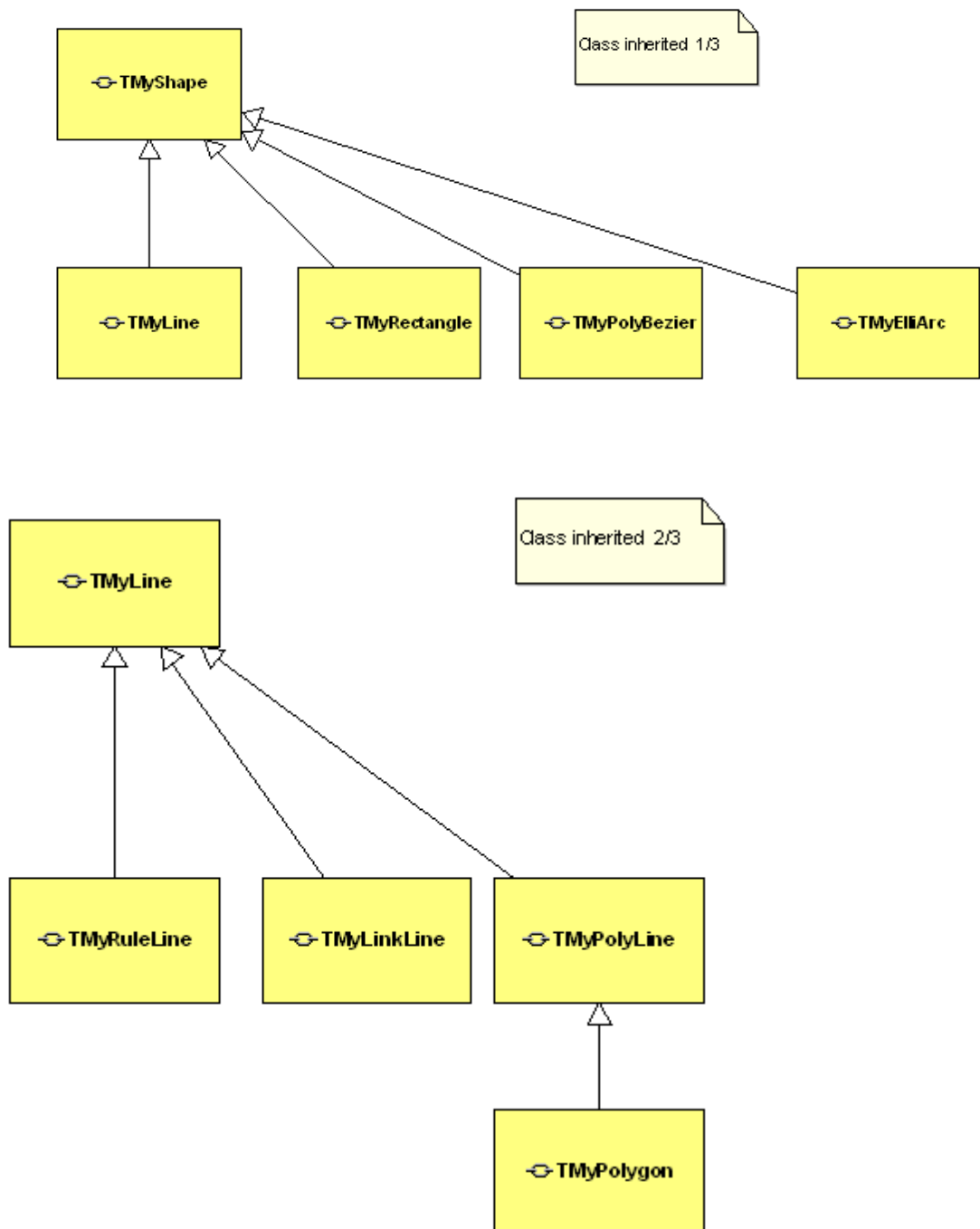
Html & javascript code:

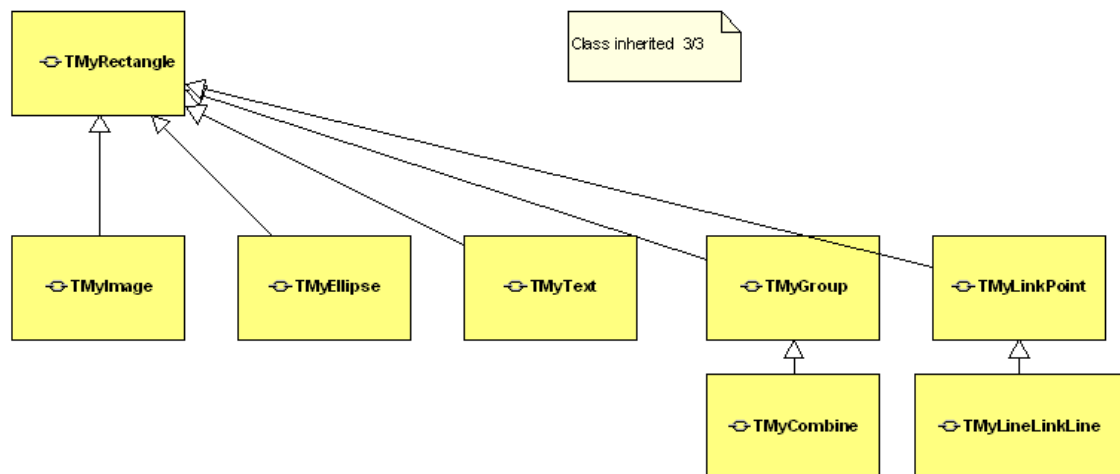
```

<script FOR="MyCAD1" EVENT="ShapeSelected(sender,e)">
    if (e.SelectedShape != null){
        alert (e.SelectedShape.Caption());
    }
</script>

```

4 Shape class inherited diagram





5 MyShape

Enter topic text here.

5.1 Fields

Enter topic text here.

5.1.1 CenterPoint

```
public PointF CenterPoint;
```

Description:

It is the center point of a shape.

NOTE: This field not support in html & javascrip code.

5.1.2 ChildShapesNo

```
public Int64 [] ChildShapesNo;
```

Description:

If the shape is a single shape, this field is empty; if it is a grouped or combined shape, this field will store the child shapes no.

NOTE: This field not support in html & javascrip code.

5.1.3 LayerId

```
public Int32 LayerId;
```

Description:

It indicate the shape belonged which layer, one shape must belonged one layer.

5.1.4 LinkPoints

```
public PointF[] LinkPoints;
```

Description:

This field will store link points if it has link points.

NOTE: This field not support in html & javascrip code.

5.1.5 LinkSahpesNo

```
public Int64[] LinkShapesNo;
```

Description:

If a shape has link shpaes,it will store these link shapes no.

NOTE: This field not support in html & javascrip code.

5.1.6 ParentShapeNo

```
public Int64 ParentShapeNo = -1;
```

Description:

This field store a parent shape no,the default value is -1,as no parent shape.

5.1.7 Shapeld

```
public Int64 Shapeld;
```

Description:

It is the shape's id, delete or add a shape, it is not changed, it is a auto-increment field.it is maintaced by MyCAD and readonly for you.

5.1.8 ShapeNo

```
public Int64 ShapeNo;
```

Description:

It is the order of MyShapes.

5.1.9 TextoutPoint

```
public PointF TextoutPoint;
```

Description:

It is the text out point of a shape.

NOTE: This field not support in html & javascrip code.

5.1.10 ThePoints

```
public PointF[] ThePoints;
```

Description:

It is the points of a shape, different shape has different points count.it is not related with XYMode.

NOTE: This field not support in html & javascrip code.

5.2 Properties

Enter topic text here.

5.2.1 Alpha

```
public Byte Alpha {get; set;}
```

Description:

Set the shape's transparency, value is 0 to 255.

Example:***Windows form application code:***

```
myShape.Alpha = 100;
```

Html & javascript code:

```
<script type="text/javascript">
    function Alpha_Onclick(){
        MyCAD1.GetSelectedShape.Alpha = 100;
    }
</script>

<p>
    <input type="button" value="Set Alpha" name="Alpha" onclick="javascript: Alpha_Onclick
());">
</p>
```

5.2.2 Angle

```
public Single Angle {get; set;}
```

Description:

Set the shape's angle.

Example:**Windows form application code:**

```
myShape.Angle = Convert.ToSingle(30 * Math.PI / 180);
```

Html & javascript code:

```
<script type="text/javascript">
    function Angle_Onclick(){
        MyCAD1.GetSelectedShape.Angle = 100;
    }
</script>

<p>
    <input type="button" value="Set Angle" name="Angle" onclick="javascript: Angle_Onclick
();">
</p>
```

5.2.3 Brush

```
public Brush Brush {get; set;}
```

Description:

Set the brush of shape that you need.

Example:**Windows form application code:**

If you want to know more property about Brush, please check the example named **StartBrush** and read the code.

NOTE: This property not support in html & javascript code.

5.2.4 BrushShow

```
public Boolean BrushShow {get; set;}
```

Description:

Show/not show the fill style of Brush.

Example:**Windows form application code:**

```
myShape.BrushShow = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function BrushShow_Onclick(){
        MyCAD1.GetSelectedShape.BrushShow = true;
    }
</script>

<p>
    <input type="button" value="Set BrushShow" name="BrushShow" onclick="javascript:
BrushShow_Onclick();">
</p>

```

5.2.5 Caption

```
public String Caption {get; set;}
```

Description:

Set the shape's caption.

Example:**Windows form application code:**

```
myShape.Caption = "TCAD";
```

Html & javascript code:

```

<script type="text/javascript">
    function Caption_Onclick(){
        MyCAD1.GetSelectedShape.Caption = "TCAD";
    }
</script>

<p>
    <input type="button" value="Set Caption" name="Caption" onclick="javascript:
Caption_Onclick();">
</p>

```

5.2.6 CaptionShow

```
public Boolean CaptionShow {get; set;}
```

Description:

Show/not show the caption of shape.

Example:**Windows form application code:**

```
myShape.Caption = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function CaptionShow_Onclick(){

```



```

        MyCAD1.GetSelectedShape.CaptionShow = true;
    }
</script>

<p>
    <input type="button" value="Set CaptionShow" name="CaptionShow" onclick="javascript:
CaptionShow_Onclick();">
</p>

```

5.2.7 Font

```
public Font Font {get; set;}
```

Description:

Set the shape's font.

Example:

Windows form application code:

```
myShape.Font = myCAD1.Font;
```

NOTE: This property not support in html & javascript code.

5.2.8 IsFlipHorizontal

```
public Boolean IsFlipHorizontal {get; set;}
```

Description:

Set the shape's horizontal turn.

Example:

Windows form application code:

```
myShape.IsFlipHorizontal = true;
```

Html & javascript code:

```

<script type="text/javascript">
    function IsFlipHorizontal_Onclick(){
        MyCAD1.GetSelectedShape.IsFlipHorizontal = true;
    }
</script>

<p>
    <input type="button" value="Set IsFlipHorizontal" name="IsFlipHorizontal"
onclick="javascript: IsFlipHorizontal_Onclick();">
</p>

```

5.2.9 IsFlipVertical

`public Boolean IsFlipVertical {get; set;}`

Description:

Set the shape's vertical turn.

Example:

Windows form application code:

```
myShape.IsFlipVertical = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function IsFlipVertical_Onclick(){
        MyCAD1.GetSelectedShape.IsFlipVertical = true;
    }
</script>

<p>
    <input type="button" value="Set IsFlipVertical" name="IsFlipVertical" onclick="javascript:
IsFlipVertical_Onclick();">
</p>
```

5.2.10 Info

`public String Info {get; set;}`

Description:

Set the shape's info.

Example:

Windows form application code:

```
myShape.Info = "I like TCAD";
```

Html & javascript code:

```
<script type="text/javascript">
    function Info_Onclick(){
        MyCAD1.GetSelectedShape.Info ="I like TCAD";
    }
</script>

<p>
    <input type="button" value="Set Info" name="Info" onclick="javascript: Info_Onclick();">
</p>
```

5.2.11 Lock

```
public Boolean Lock {get; set;}
```

Description:

Set the shape's lock/unlock state.

Example:**Windows form application code:**

```
myShape.Lock = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function Lock_Onclick(){
        MyCAD1.GetSelectedShape.Lock = true;
    }
</script>

<p>
    <input type="button" value="Set Lock" name="Lock" onclick="javascript: Lock_Onclick();">
</p>
```

5.2.12 Name

```
public String Name {get; set;}
```

Description:

Set the shape's name.

Example:**Windows form application code:**

```
myShape.Name = "Shape0";
```

Html & javascript code:

```
<script type="text/javascript">
    function Name_Onclick(){
        MyCAD1.GetSelectedShape.Name = "Shape0";
    }
</script>

<p>
    <input type="button" value="Set Name" name="Name" onclick="javascript:
Name_Onclick();">
</p>
```

5.2.13 Owner

```
public MyCAD Owner {get; set;}
```

Description:

The shape's owner.

NOTE: This property not support in html & javascript code.

5.2.14 Pen

```
public Pen Pen {get; set;}
```

value:

Set the pen of s shape that you need.

Example:**Windows form application code:**

```
myShape.Pen.Width = 2;  
myShape.Pen.Color = Color.Green;
```

NOTE: This property not support in html & javascript code.

5.2.15 ShowUnit

```
public Boolean ShowUnit {get; set;}
```

Description:

Show/not show the length's unit.

Example:**Windows form application code:**

```
myShape.ShowUnit = true;
```

Html & javascript code:

```
<script type="text/javascript">  
    function ShowUnit_Onclick(){  
        MyCAD1.GetSelectedShape.ShowUnit = true;  
    }  
</script>  
  
<p>  
    <input type="button" value="Set ShowUnit" name="ShowUnit" onclick="javascript:  
ShowUnit_Onclick();">  
</p>
```

5.2.16 Tag

```
public Int32 Tag {get; set;}
```

Description:

Set the shape's tag.

Example:**Windows form application code:**

```
myShape.Tag = 32;
```

Html & javascript code:

```
<script type="text/javascript">
    function Tag_Onclick(){
        MyCAD1.GetSelectedShape.Tag = 100;
    }
</script>

<p>
    <input type="button" value="Set Tag" name="Tag" onclick="javascript: Tag_Onclick();">
</p>
```

5.2.17 UserData

```
public MyUserData UserData {get; set;}
```

Description:

Set the shape's user-defined property.

Example:**Windows form application code:**

Please read the demo code.

NOTE: This property not support in html & javascript code.

5.2.18 Visible

```
public Boolean Visible {get; set;}
```

Description:

Set the shape's visible/invisible state.

Example:**Windows form application code:**

```
myShape.Visible = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function Visible_Onclick(){
        MyCAD1.GetSelectedShape.Visible = true;
    }
</script>

<p>
    <input type="button" value="Set Visible" name="Visible" onclick="javascript:
Visible_Onclick();">
</p>
```

5.3 Methods

Enter topic text here.

5.3.1 Assign

```
public virtual void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

5.3.2 ComputeCenterPoint

```
public PointF ComputeCenterPoint()
```

Description:

Computer the center point.

Return value:

Return the center point.

NOTE: This procedure is not supported in html & javascrip code.

5.3.3 Dispose

```
public virtual void Dispose()
```

Description:

First all owned fields be released, finally inherited dispose is called.

5.3.4 Draw

```
public virtual void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

5.3.5 GetCenterPoint

```
public virtual PointF GetCenterPoint()
```

Description:

Get the center point.

Return value:

Return the center point.

NOTE: This procedure is not supported in html & javascript code.

5.3.6 GetCenterPointInZoom

```
public virtual PointF GetCenterPointInZoom()
```

Description:

Get the center point in zoom.

Return value:

Return the center point in zoom.

NOTE: This procedure is not supported in html & javascript code.

5.3.7 GetHeight

```
public Single GetHeight()
```

Description:

Get the shape height.

Return value:

return shape height.

5.3.8 GetLeftBottom

```
public PointF GetLeftBottom()
```

Description:

Get the shape's left-bottom point.

Return value:

return the left-bottom point.

NOTE: This procedure is not supported in html & javascript code.

5.3.9 GetLeftTop

```
public PointF GetLeftTop()
```

Description:

Get the shape's left-top point.

Return value:

return the left-top point.

NOTE: This procedure is not supported in html & javascript code.

5.3.10 GetLinkPointInZoom

```
public PointF GetLinkPointInZoom(Int32 iPoint)
```

Description:

Get the link point in zoom.

Return value:

Return link point in zoom.

NOTE: This procedure is not supported in html & javascript code.

5.3.11 GetLinkPointsCount

```
public Int32 GetLinkPointsCount()
```

Description:

Get the link points' count.

5.3.12 GetMyHeight

```
public Single GetMyHeight()
```

Description:

Get the shape's actual height.

Return value:

return shape's actual height.

5.3.13 GetMyWidth

```
public Single GetMyWidth()
```

Description:

Get the shape's actual width.

Return value:

return shape's actual width.

5.3.14 GetPoint

```
public PointF GetPoint(Int32 iPoint)
```

Description:

Get the point.

Parameter:

iPoint: The point's order that you want

Return value:

return the point

NOTE: This procedure is not supported in html & javascript code.

5.3.15 GetPointInZoom

```
public PointF GetPointInZoom(Int32 iPoint)
```

Description:

Get the point in zoom.

Parameter:

iPoint: The point's order that you want

Return value:

return the point in zoom.

NOTE: This procedure is not supported in html & javascript code.

5.3.16 GetPointsCount

`public` Int32 GetPointsCount()

Description:

Get the points' count.

5.3.17 GetRightBottom

`public` PointF GetRightBottom()

Description:

Get the shape's right-bottom point.

Return value:

return the right-bottom point.

NOTE: This procedure is not supported in html & javascript code.

5.3.18 GetRightTop

`public` PointF GetRightBottom()

Description:

Get the shape's right-bottom point.

Return value:

return the right-bottom point.

NOTE: This procedure is not supported in html & javascript code.

5.3.19 GetShapeld

`public` Int64 GetShapeld()

Description:

Get the shape id.

Return value:

Shape id.

5.3.20 GetWidth

`public` Single GetHeight()

Description:

Get the shape height.

Return value:

return shape height.

5.3.21 HasChildShapes

`public` Boolean HasChildShapes()

Description:

A shape has child shapes or not .

Return value:

true: Has child shapes.

false: Do not have child shapes.

5.3.22 HasLinkShapes

`public` Boolean HasLinkShapes()

Description:

A shape has link shapes or not .

Return value:

true: Has link shapes.

false: Do not have link shapes.

5.3.23 HasParentShpae

`public` Boolean HasParentShape()

Description:

A shape has a par ent shape or not .

Return value:

true: Has a parent shape.

false: Do not have a parent shape.

6 MyLine

Enter topic text here.

6.1 Properties

Enter topic text here.

6.1.1 ArrowAngle

```
public Int32 ArrowAngle { get; set; }
```

Description:

Set the line's arrow angle. value is between: 0 - 359.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArrowAngle = 50;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowAngle_Onclick(){
        MyCAD1.GetSelectedShape.ArrowAngle = 50;
    }
</script>

<p>
    <input type="button" value="Set ArrowAngle" name="ArrowAngle" onclick="javascript:
ArrowAngle_Onclick();">
</p>
```

6.1.2 ArrowLength

```
public Byte ArrowLength { get; set; }
```

Description:

Set the line's arrow length. value is between: 10-50.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArrowLength = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowLength_Onclick(){
        MyCAD1.GetSelectedShape.ArrowLength = 30;
    }
</script>
```

```
<p>
    <input type="button" value="Set ArrowLength" name="ArrowLength" onclick="javascript:
ArrowLength_Onclick();">
</p>
```

6.1.3 ArrowOffset

```
public Byte ArrowOffset { get; set; }
```

Description:

When a line shape is drawn with an arrow, the ArrowOffset specifies how many pixels from the end of the line the arrow is drawn. Value is between: 0 - 255, default is 0.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArrowOffset = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowOffset_Onclick(){
        MyCAD1.GetSelectedShape.ArrowOffset = 30;
    }
</script>

<p>
    <input type="button" value="Set ArrowOffset" name="ArrowOffset" onclick="javascript:
ArrowOffset_Onclick();">
</p>
```

6.1.4 ArrowStyle

```
public MyArrowStyle ArrowStyle { get; set; }
```

Description:

When a line shape is drawn with an arrow, the ArrowOffset specifies how many pixels from the end of the line the arrow is drawn. Value is between: 0 - 255, default is 0.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArrowStyle = MyArrowStyle.Left;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArrowStyle_Onclick(){
        MyCAD1.GetSelectedShape.ArrowStyle = 1;
    }
</script>

<p>
```

```
<input type="button" value="Set ArrowStyle" name="ArrowStyle" onclick="javascript:
ArrowStyle_Onclick();">
</p>
```

NOTE: In javascript, you should set ArrowStyle property value as index of enumerate, it starts from 0.

6.2 Methods

Enter topic text here.

6.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

6.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

6.2.3 GetInfo

```
public override String GetInfo(Graphics grp)
```

Description:

Get the line's info.

Parameter:

grp: The canvas instance.

Return value:

The info.

6.2.4 MyLine

```
public MyLine(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyLine.

Parameter:

AOwner: The MyCAD Instance.

7 MyLinkLine

Enter topic text here.

7.1 Properties

Enter topic text here.

7.1.1 LinklineDrawStyle

```
public MyLinklineDrawStyle LinklineDrawStyle { get; set; }
```

Description:

Define the link line style.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.LinklineDrawStyle = MyLinklineDrawStyle.Free;
```

Html & javascript code:

```
<script type="text/javascript">  
    function LinklineDrawStyle_Onclick(){  
        MyCAD1.GetSelectedShape.LinklineDrawStyle = 0;  
    }  
</script>
```

```
<p>  
    <input type="button" value="Set LinklineDrawStyle" name="LinklineDrawStyle"  
    onclick="javascript: LinklineDrawStyle_Onclick();">  
</p>
```

NOTE: In javascript, you should set LinklineDrawStyle property value as index of enumerate, it starts from 0.

7.1.2 EndSpNo

```
public Int32 EndSpNo { get; set; }
```

Description:

It is a pointer of end shape, -1 mean no end shape linked.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.EndSpNo = 1;
```

Html & javascript code:

```
<script type="text/javascript">
    function EndSpNo_Onclick(){
        MyCAD1.GetSelectedShape.EndSpNo = 1;
    }
</script>

<p>
    <input type="button" value="Set EndSpNo" name="EndSpNo" onclick="javascript:
EndSpNo_Onclick();">
</p>
```

7.1.3 EndSpPtId

```
public Int32 EndSpPtId { get; set; }
```

Description:

it is read / write, at run time only. The link point id of the end shape. if EndSpNo is -1, it is must -1.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.EndSpPtId = 1;
```

Html & javascript code:

```
<script type="text/javascript">
    function EndSpPtId_Onclick(){
        MyCAD1.GetSelectedShape.EndSpPtId = 1;
    }
</script>

<p>
    <input type="button" value="Set EndSpPtId" name="EndSpPtId" onclick="javascript:
EndSpPtId_Onclick();">
</p>
```


7.1.4 StartSpNo

```
public Int32 StartSpNo { get; set; }
```

Description:

It is a pointer of st ar t shape. -1: mean no start shape linked.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.StartSpNo = 1;
```

Html & javascript code:

```
<script type="text/javascript">
    function StartSpNo_Onclick(){
        MyCAD1.GetSelectedShape.StartSpNo = 1;
    }
</script>

<p>
    <input type="button" value="Set StartSpNo" name="StartSpNo" onclick="javascript:
StartSpNo_Onclick();">
</p>
```

7.1.5 StartSpPtId

```
public Int32 StartSpPtId { get; set; }
```

Description:

it is read / write, at run time only. The link point id of the st ar t shape. if StartSpNo is -1, it is must -1.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.StartSpPtId = 1;
```

Html & javascript code:

```
<script type="text/javascript">
    function StartSpPtId_Onclick(){
        MyCAD1.GetSelectedShape.StartSpPtId = 1;
    }
</script>

<p>
    <input type="button" value="Set StartSpPtId" name="StartSpPtId" onclick="javascript:
StartSpPtId_Onclick();">
</p>
```

7.2 Methods

Enter topic text here.

7.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

7.2.2 CreateDestLink

```
public Boolean CreateDestLink(Int64 aShapeId,Int32 aShapeLinkId)
```

Description:

If can link two shapes, and the path is vertical or horizontal. it is used for flow drawing, electric drawing and more.

Parameter:

aShapeId: the end shape id;

aShapeLinkId: the link id of the shape,the shape'id is AShapeid.

Return value:

true: Created success.

false: Created failed.

7.2.3 CreateSrcLink

```
public Boolean CreateSrcLink(Int64 aShapeId,Int32 aShapeLinkId)
```

Description:

it can build a (start) relation ship with exist shape.

Parameter:

aShapeId: the end shape id;

aShapeLinkId: the link id of the shape,the shape'id is AShapeid.

Return value:

true: Created success.

false: Created failed.

7.2.4 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

7.2.5 GetEndPoint

```
public PointF GetEndPoint()
```

Description:

Get the link point in end link shape.

Return value:

If there is no end shape linked, it returns the last point of self; else it returns the Link point id of the linked shape.

7.2.6 GetEndShape

```
public MyShape GetEndShape()
```

Description:

Get the end link shape.

Return value:

null: There is no end link shape;
else: The instance of the link shape.

7.2.7 GetStartPoint

```
public PointF GetStartPoint()
```

Description:

Get the link point in start link shape.

Return value:

If there is no start shape linked, it returns the last point of self; else it returns the Link point id of the linked shape.

7.2.8 GetStartShape

```
public MyShape GetStartShape()
```

Description:

Get the start link shape.

Return value:

null: There is no start link shape;
else: The instance of the link shape.

7.2.9 MyLinkLine

```
public MyLinkLine(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyLinkLine.

Parameter:

AOwner: The MyCAD Instance

7.2.10 RemoveDestLink

```
public void RemoveDestLink()
```

Description:

Remove the target linked shape.

7.2.11 RemoveSrcLink

```
public void RemoveSrcLink()
```

Description:

Remove the source linked shape.

8 MyPolyLine

Enter topic text here.

8.1 Methods

Enter topic text here.

8.1.1 MyPolyLine

```
public MyPolyLine(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyPolyLine.

Parameter:

AOwner: The MyCAD Instance

9 MyFreeLine

Enter topic text here.

9.1 Methods

Enter topic text here.

9.1.1 MyFreeLine

```
public MyFreeLine(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyFreeLine.

Parameter:

AOwner: The MyCAD Instance

10 MyPolygon

Enter topic text here.

10.1 Methods

Enter topic text here.

10.1.1 MyPolygon

```
public MyPolygon(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyPolygon.

Parameter:

AOwner: The MyCAD Instance

11 MyRuleLine

Enter topic text here.

11.1 Properties

Enter topic text here.

11.1.1 ShowUserInfo

```
public Boolean ShowUserInfo {get; set;}
```

Description:

When it is true, UserInfo showed on the rule line, else show the length string computed by MyRuleline.

Example:

Windows form application code:

```
myShape.ShowUserInfo = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function ShowUserInfo_Onclick(){
        MyCAD1.GetSelectedShape.ShowUserInfo = true;
    }
</script>

<p>
    <input type="button" value="Set ShowUserInfo" name="ShowUserInfo"
onclick="javascript: ShowUserInfo_Onclick();">
</p>
```

11.1.2 TickStyle

```
public MyTickStyle TickStyle { get; set; }
```

Description:

Set the rule line's style.

Example:

Windows form application code:

```
myShape.TickStyle = MyTickStyle.Line;
```

Html & javascript code:

```
<script type="text/javascript">
    function TickStyle_Onclick(){
        MyCAD1.TickStyle = 0;
    }
</script>
```

```
<p>  
    <input type="button" value="Set TickStyle" name="TickStyle" onclick="javascript:  
TickStyle_Onclick();">  
</p>
```

NOTE: In javascript, you should set TickStyle property value as index of enumerate, it starts from 0.

11.2 Methods

Enter topic text here.

11.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

11.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

11.2.3 MyRuleLine

```
public MyRuleLine(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyRuleLine.

Parameter:

AOwner: The MyCAD Instance

12 MyWaveLine

Enter topic text here.

12.1 Properties

Enter topic text here.

12.1.1 WaveHeight

```
public Byte WaveHeight { get; set; }
```

Description:

Set the wave line's height.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.WaveHeight = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function WaveHeight_Onclick(){
        MyCAD1.GetSelectedShape.WaveHeight = 30;
    }
</script>

<p>
    <input type="button" value="Set WaveHeight" name="WaveHeight" onclick="javascript:
WaveHeight_Onclick();">
</p>
```

12.1.2 WaveWidth

```
public Byte WaveWidth { get; set; }
```

Description:

Set the wave line's width.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.WaveWidth = 30;
```

Html & javascript code:

```
<script type="text/javascript">
    function WaveWidth_Onclick(){
        MyCAD1.GetSelectedShape.WaveWidth = 30;
    }
</script>
```



```
<p>  
    <input type="button" value="Set WaveWidth" name="WaveWidth" onclick="javascript:  
WaveWidth_Onclick();">  
</p>
```

12.2 Methods

Enter topic text here.

12.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

12.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

12.2.3 MyWaveLine

```
public MyWaveLine(MyCAD AOwner )
```

Description:

The create function of MyWaveLine.

Parameter:

AOwner: The MyCAD Instance

13 MyRectangle

Enter topic text here.

13.1 Methods

Enter topic text here.

13.1.1 Draw

`public override void Draw(Graphics grp)`

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

13.1.2 GetCenterPoint

`public override PointF GetCenterPoint()`

Description:

Get the center point of the rectangle.

Return value:

Return the center point.

13.1.3 GetCenterPointInZoom

`public override PointF GetCenterPointInZoom()`

Description:

Get the center point of the rectangle in zoom.

Return value:

Return the center point in zoom.

13.1.4 GetInfo

`public override String GetInfo(Graphics grp)`

Description:

Get the line's info.

Parameter:

grp: The canvas instance.

Return value:

The info

14 MyEllipse

Enter topic text here.

14.1 Methods

Enter topic text here.

14.1.1 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

14.1.2 GetCenterPoint

```
public override PointF GetCenterPoint()
```

Description:

Get the center point of the rectangle.

Return value:

Return the center point.

14.1.3 GetCenterPointInZoom

```
public override PointF GetCenterPointInZoom()
```

Description:

Get the center point of the rectangle in zoom.

Return value:

Return the center point in zoom.

15 MyLinkPoint

Enter topic text here.

15.1 Properties

Enter topic text here.

15.1.1 Size

```
public Byte Size { get; set; }
```

Description:

Set the size of the link point.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.Size = 2;
```

Html & javascript code:

```
<script type="text/javascript">
    function Size_Onclick(){
        MyCAD1.GetSelectedShape.Size = 2;
    }
</script>

<p>
    <input type="button" value="Set Size" name="Size" onclick="javascript: Size_Onclick();">
</p>
```

16 MyLineLinkLine

Enter topic text here.

16.1 Methods

Enter topic text here.

16.1.1 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

17 MyImage

Enter topic text here.

17.1 Properties

Enter topic text here.

17.1.1 Bitmap

```
public Bitmap Bitmap { get; set; }
```

Description:

Set this shape's bitmap.

Example:

Windows form application code:

```
openFileDialog1.InitialDirectory = Application.ExecutablePath;
openFileDialog1.Filter = "BMP(*.bmp)|*.bmp|JPEG(*.jpg;*.jpe;*.jpeg)|*.jpg;*.jpe;*.jpeg|Allfiles(*.*)|*.*";

if (openFileDialog1.ShowDialog() == DialogResult.OK)
{
    Bitmap myBitmap = new Bitmap(openFileDialog1.FileName);
    myCAD1.GetSelectedShape.Bitmap = myBitmap;
}
```

Html & javascript code:

```
<script type="text/javascript">
    function Bitmap_Onclick(){
        MyCAD1.GetSelectedShape.SetBitmap(fileName);
    }
</script>

<p>
    <input type="button" value="Set Bitmap" name="Bitmap" onclick="javascript:
Bitmap_Onclick();">
</p>
```

17.1.2 Border

```
public Boolean Border { get; set; }
```

Description:

Whether show a border around the shape or not.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.GridShow = false;
```

Html & javascript code:

```

<script type="text/javascript">
    function Border_Onclick(){
        MyCAD1.GetSelectedShape.Border = false;
    }
</script>

<p>
    <input type="button" value="Set Border" name="Border" onclick="javascript:
Border_Onclick();">
</p>

```

17.1.3 OriginSize

```
public Boolean OriginSize { get; set; }
```

Description:

Whether show real size of image or not.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.OriginSize = false;
```

Html & javascript code:

```

<script type="text/javascript">
    function OriginSize_Onclick(){
        MyCAD1.GetSelectedShape.OriginSize = false;
    }
</script>

<p>
    <input type="button" value="Set OriginSize" name="OriginSize" onclick="javascript:
OriginSize_Onclick();">
</p>

```

17.1.4 Transparent

```
public Boolean Transparent { get; set; }
```

Description:

Set the image transparent or not.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.Transparent = false;
```

Html & javascript code:

```

<script type="text/javascript">
    function OriginSize_Onclick(){

```

```
        MyCAD1.GetSelectedShape.Transparent = false;
    }
</script>

<p>
    <input type="button" value="Set Transparent" name="Transparent" onclick="javascript:
Transparent_Onclick();">
</p>
```

17.2 Methods

Enter topic text here.

17.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

Parameter:

aShape: The source shape.

17.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

17.2.3 MyImage

```
public MyImage(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyImage.

Parameter:

AOwner: The MyCAD Instance

18 MyRoundRectangle

Enter topic text here.

18.1 Methods

Enter topic text here.

18.1.1 MyRoundRectangle

```
public MyRoundRectangle(MyCAD AOwner )
```

Description:

The create function of MyRoundRectangle.

Parameter:

AOwner: The MyCAD Instance

19 MyText

Enter topic text here.

19.1 Properties

Enter topic text here.

19.1.1 Border

```
public Boolean Border { get; set; }
```

Description:

Whether show a border around the shape or not.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.GridShow = false;
```

Html & javascript code:

```
<script type="text/javascript">
    function Border_Onclick(){
        MyCAD1.GetSelectedShape.Border = false;
    }
</script>

<p>
    <input type="button" value="Set Border" name="Border" onclick="javascript:
Border_Onclick();">
</p>
```


19.1.2 HAlignment

```
public MyAlignment HAlignment{ get; set; }
```

Description:

Set the horizontal alignment of the text.

Example:**Windows form application code:**

```
myCAD1.GetSelectedShape.HAlignment = MyAlignment.Center;
```

Html & javascript code:

```
<script type="text/javascript">
    function HAlignment_Onclick(){
        MyCAD1.GetSelectedShape.HAlignment = 1;
    }
</script>

<p>
    <input type="button" value="Set HAlignment" name="HAlignment" onclick="javascript:
HAlignment_Onclick();">
</p>
```

NOTE: In javascript, you should set HAlignment property value as index of enumerate, it starts from 0.

19.1.3 Lines

```
public String[] Lines
```

Description:

Set the text of the shape.

Example:**Windows form application code:****Html & javascript code:**

```
<script type="text/javascript">
    function Lines_Onclick(){
        MyCAD1.GetSelectedShape.SetLineText(infoVal);
    }
</script>

<p>
    <input type="button" value="Set Lines" name="Lines" onclick="javascript:Lines_Onclick
();">
</p>
```

19.1.4 VAlignment

```
public MyAlignment VAlignment{ get; set; }
```

Description:

Set the vertical alignment of the text.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.VAlignment = MyVAl i gnment . Mi ddl e;
```

Html & javascript code:

```
<script type="text/javascript">
    function VAlignment_Onclick(){
        MyCAD1.GetSelectedShape.VAlignment = 1;
    }
</script>

<p>
    <input type="button" value="Set VAlignment" name="VAlignment" onclick="javascript:
VAlignment_Onclick();">
</p>
```

NOTE: In javascript, you should set VAlignment property value as index of enumerate, it starts from 0.

19.1.5 WordWrap

```
public Boolean WordWrap { get; set; }
```

Description:

Set WordWrap to true to allow the text to display multiple line of text. When WordWrap is true, text that is too wide for the outer rectanger control wraps at the right margin and continues in additional lines. Set WordWrap to false to limit the label to a single line. When WordWrap is false, text that is too wide for the outer rectanger appears outside.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.WordWrap = true;
```

Html & javascript code:

```
<script type="text/javascript">
    function WordWrap_Onclick(){
        MyCAD1.GetSelectedShape.WordWrap = true;
    }
</script>

<p>
    <input type="button" value="Set WordWrap" name="WordWrap" onclick="javascript:
WordWrap_Onclick();">
```

</p>

19.2 Methods

Enter topic text here.

19.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

19.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

19.2.3 MyText

```
public MyText (MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyText.

Parameter:

AOwner: The MyCAD Instance

20 MyElliArc

Enter topic text here.

20.1 Properties

Enter topic text here.

20.1.1 ArcMode

```
public MyArcMode ArcMode{ get; set; }
```

Description:

Set the mode of Arc.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArcMode = MyArcMode.Circle;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArcMode_Onclick(){
        MyCAD1.GetSelectedShape.ArcMode= 1;
    }
</script>

<p>
    <input type="button" value="Set ArcMode" name="ArcMode" onclick="javascript:
ArcMode_Onclick();">
</p>
```

NOTE: In javascript, you should set ArcMode property value as index of enumerate, it starts from 0.

20.1.2 ArcStyle

```
public MyArcStyle ArcStyle{ get; set; }
```

Description:

Set the style of Arc.

Example:

Windows form application code:

```
myCAD1.GetSelectedShape.ArcStyle = MyArcStyle.Arc;
```

Html & javascript code:

```
<script type="text/javascript">
    function ArcStyle_Onclick(){
        MyCAD1.GetSelectedShape.ArcStyle= 1;
    }
</script>

<p>
    <input type="button" value="Set ArcStyle" name="ArcStyle" onclick="javascript:
ArcStyle_Onclick();">
</p>
```

NOTE: In javascript, you should set ArcStyle property value as index of enumerate, it starts from 0.

20.2 Methods

Enter topic text here.

20.2.1 Assign

```
public override void Assign(MyShape aShape)
```

Description:

Copy a source shape's properties.

20.2.2 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

20.2.3 GetCenterPoint

```
public override PointF GetCenterPoint()
```

Description:

Get the center point of the elli arc.

Return value:

Return the center point.

20.2.4 GetCenterPointInZoom

```
public override PointF GetCenterPointInZoom()
```

Description:

Get the center point of the elli arc in zoom.

Return value:

Return the center point in zoom.

20.2.5 MyElliArc

```
public MyElliArc(MyCAD AOwner) : base(AOwner)
```

Description:

The create function of MyElliArc.

Parameter:

AOwner: The MyCAD Instance

21 MyPolyBezier

Enter topic text here.

21.1 Methods

Enter topic text here.

21.1.1 Draw

```
public override void Draw(Graphics grp)
```

Description:

Draw the shape.

Parameter:

grp: The canvas instance.

22 MyUserData

Enter topic text here.

22.1 Methods

Enter topic text here.

22.1.1 MyUserData

```
public MyUserData()
```

Description:

Initialize the inner data.

22.1.2 AddKeyAndValue

```
public Boolean AddKeyAndValue(String newKey,String newValue)
```

Description:

Append a new user define property.

Parameter:

newKey: The new key you set.

newValue: The new value you set.

Return:

true: Append successfully.

false: Append unsuccessfully.

22.1.3 Assign

```
public void Assign(MyUserData source)
```

Description:

Copy a source.

Parameter:

source: The origin source.

22.1.4 ChangeValueByKey

```
public Boolean ChangeValueByKey(String originKey, String newValue)
```

Description:

Change value by key,if not match the key, change unsuccessfully.

Parameter:

originKey: The record's key that you want to change.

newValue: The new value.

Return:

true: Delete successfully.

false: Delete unsuccessfully.

22.1.5 ClearAll

```
public Boolean ChangeValueByKey(String originKey,String newValue)
```

Description:

Clear all data.

Return:

true: Clear successfully.
false: Clear unsuccessfully.

22.1.6 DeleteRecordByKey

`public` Boolean DeleteRecordByKey(String originKey)

Description:

Delete a record by key,if not match the key,delete unsuccessfully.

Parameter:

originKey: The record's key that you want to delete.

Return:

true: Delete successfully.
false: Delete unsuccessfully.

22.1.7 GetCount

`public` Int32 GetCount()

Description:

Get the count of the user record.

Return:

Return the count.

22.1.8 GetKeyByNo

`public` String GetKeyByNo(Int32 n)

Description:

Get key by order of number.

Parameter:

n: The order of number.

Return:

Return the key.

22.1.9 GetValueByKey

```
public String GetValueByKey(String originKey)
```

Description:

Get value by key.

Parameter:

originKey: The key you set.

Return:

Return the value.

22.1.10 InsertKeyAndValue

```
public Boolean InsertKeyAndValue(String newKey,String newValue,Int32 index,Boolean before)
```

Description:

Insert a record by located index.

Parameter:

newKey: The new key you set.

newValue: The new value you set.

index: the order

before: insert record before or after,if this parameter is false,the record will insert after the order number.

Return:

true: Insert successfully.

false: Insert unsuccessfully.

22.1.11 RenameKey

```
public Boolean RenameKey(String oldKey,String newKey)
```

Description:

Rename a key.

Parameter:

oldKey: The record's key that you want to rename.

newKey: The new key you want to set.

Return:

true: Delete successfully.

false: Delete unsuccessfully.

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