XDoc.PDF Developer Guide – Annotation Module

Table of Contents

Add Annotation

Strikethrough the selected text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

//  create the annotation
PDFAnnotDeleteLine annot = new PDFAnnotDeleteLine();

annot.StartPoint = new PointF(100F, 200F);
annot.EndPoint = new PointF(300F, 400F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_1.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 2nd page
Dim page As PDFPage = doc.GetPage(1)

' create the annotation
Dim annot As PDFAnnotDeleteLine = New PDFAnnotDeleteLine()

With annot
   .StartPoint = New PointF(100.0F, 200.0F)
   .EndPoint = New PointF(300.0F, 400.0F)
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Underline the selected text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_2.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

//  create the annotation
PDFAnnotUnderLine annot = new PDFAnnotUnderLine();

annot.StartPoint = new PointF(100F, 200F);
annot.EndPoint = new PointF(300F, 400F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_2.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 2nd page
Dim page As PDFPage = doc.GetPage(1)

' create the annotation
Dim annot As PDFAnnotUnderLine = New PDFAnnotUnderLine()

With annot
   .StartPoint = New PointF(100.0F, 200.0F)
   .EndPoint = New PointF(300.0F, 400.0F)
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Highlight the selected text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_3.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

//  create the annotation
PDFAnnotHighlight annot = new PDFAnnotHighlight();

annot.StartPoint = new PointF(100F, 200F);
annot.EndPoint = new PointF(300F, 400F);

//  add annotation to the page
page.AddPDFAnnot(annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_3.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 2nd page
Dim page As PDFPage = doc.GetPage(1)

' create the annotation
Dim annot As PDFAnnotHighlight = New PDFAnnotHighlight()

annot.StartPoint = New PointF(100.0F, 200.0F)
annot.EndPoint = New PointF(300.0F, 400.0F)

' add annotation to the page
page.AddPDFAnnot(annot)

' save to a new file
doc.Save(outputFilePath)
```

Insert text at cursor

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_4.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

//  create the annotation
PDFAnnotTextInsert annot = new PDFAnnotTextInsert();

annot.Position = new PointF(300F, 500F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_3.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 2nd page
Dim page As PDFPage = doc.GetPage(1)

' create the annotation
Dim annot As PDFAnnotHighlight = New PDFAnnotHighlight()

annot.StartPoint = New PointF(100.0F, 200.0F)
annot.EndPoint = New PointF(300.0F, 400.0F)

' add annotation to the page
page.AddPDFAnnot(annot)

' save to a new file
doc.Save(outputFilePath)
```

Add note to replace text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_5.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

//  create the annotation
PDFAnnotTextReplace annot = new PDFAnnotTextReplace();

annot.StartPoint = new PointF(100F, 200F);
annot.EndPoint = new PointF(300F, 400F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_5.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 2nd page
Dim page As PDFPage = doc.GetPage(1)

' create the annotation
Dim annot As PDFAnnotTextReplace = New PDFAnnotTextReplace()

With annot
   .StartPoint = New PointF(100.0F, 200.0F)
   .EndPoint = New PointF(300.0F, 400.0F)
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Draw paths and shapes

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_6.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

{
   //  create the annotation
   PDFAnnotLine annot = new PDFAnnotLine();

   annot.Start = new PointF(100F, 100F);
   annot.End = new PointF(200F, 200F);

   //  add annotation to the page
   PDFAnnotHandler.AddAnnotation(page, annot);
}
{
   //  create the annotation
   PDFAnnotArrow annot = new PDFAnnotArrow();

   annot.Start = new PointF(300F, 100F);
   annot.End = new PointF(400F, 150F);

   //  add annotation to the page
   PDFAnnotHandler.AddAnnotation(page, annot);
}
{
   //  create the annotation
   PDFAnnotEllipse annot = new PDFAnnotEllipse();

   annot.Location = new PointF(300, 300);
   annot.Width = 50F;
   annot.Height = 50F;

   //  add annotation to the page
   PDFAnnotHandler.AddAnnotation(page, annot);
}
{
   //  create the annotation
   PDFAnnotRectangle annot = new PDFAnnotRectangle();

   annot.Location = new PointF(400, 400);
   annot.Width = 50F;
   annot.Height = 50F;

   //  add annotation to the page
```

```
    PDFAnnotHandler.AddAnnotation(page, annot);
}
{
    // create the annotation
    PDFAnnotPolygon annot = new PDFAnnotPolygon();

    annot.Points = new PointF[5] {
        new PointF(50F, 450F),
        new PointF(100F, 450F),
        new PointF(120F, 480F),
        new PointF(100F, 500F),
        new PointF(50F, 500F)
    };

    // add annotation to the page
    PDFAnnotHandler.AddAnnotation(page, annot);
}
{
    // create the annotation
    PDFAnnotPolyline annot = new PDFAnnotPolyline();

    annot.Points = new PointF[] {
        new PointF(250F, 450F),
        new PointF(300F, 450F),
        new PointF(320F, 480F),
        new PointF(300F, 500F),
        new PointF(250F, 500F)
    };

    // add annotation to the page
    PDFAnnotHandler.AddAnnotation(page, annot);
}

// save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_6.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot0 As PDFAnnotLine = New PDFAnnotLine()

annot0.Start = New PointF(100.0F, 100.0F)
annot0.End = New PointF(200.0F, 200.0F)

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot0)
```

```
' create the annotation
Dim annot1 As PDFAnnotArrow = New PDFAnnotArrow()

annot1.Start = New PointF(300.0F, 100.0F)
annot1.End = New PointF(400.0F, 150.0F)

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot1)

' create the annotation
Dim annot2 As PDFAnnotEllipse = New PDFAnnotEllipse()

With annot2
   .Location = New PointF(300, 300)
   .Width = 50.0F
   .Height = 50.0F
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot2)

' create the annotation
Dim annot3 As PDFAnnotRectangle = New PDFAnnotRectangle()

With annot3
   .Location = New PointF(400, 400)
   .Width = 50.0F
   .Height = 50.0F
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot3)

' create the annotation
Dim annot4 As PDFAnnotPolygon = New PDFAnnotPolygon()

Dim elem0(4) As PointF
annot4.Points = elem0
With annot4
   .Points(0) = New PointF(50.0F, 450.0F)
   .Points(1) = New PointF(100.0F, 450.0F)
   .Points(2) = New PointF(120.0F, 480.0F)
   .Points(3) = New PointF(100.0F, 500.0F)
   .Points(4) = New PointF(50.0F, 500.0F)
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot4)

' create the annotation
Dim annot5 As PDFAnnotPolyline = New PDFAnnotPolyline()
```

```
Dim elem1(4) As PointF
annot5.Points = elem1
With annot5
   .Points(0) = New PointF(250.0F, 450.0F)
   .Points(1) = New PointF(300.0F, 450.0F)
   .Points(2) = New PointF(320.0F, 480.0F)
   .Points(3) = New PointF(300.0F, 500.0F)
   .Points(4) = New PointF(250.0F, 500.0F)
End With

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot5)

' save to a new file
doc.Save(outputFilePath)
```

Attach file

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_7.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

{
   //  create the annotation
   PDFAnnotFileAttach annot = new PDFAnnotFileAttach();

   annot.Position = new PointF(100F, 100F);
   annot.FilePath = @"C:\AttachmentFile.txt";

   //  add annotation to the page
   PDFAnnotHandler.AddAnnotation(page, annot);
}

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_7.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot As PDFAnnotFileAttach = New PDFAnnotFileAttach()

annot.Position = New PointF(100.0F, 100.0F)
annot.FilePath = "C:\AttachmentFile.txt"

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Sticky note

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_8.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

//  create the annotation
PDFAnnotStickyNote annot = new PDFAnnotStickyNote();

annot.Position = new PointF(100F, 100F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_8.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot As PDFAnnotStickyNote = New PDFAnnotStickyNote()

annot.Position = New PointF(100.0F, 100.0F)

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Textbox

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_9.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

//  create the annotation
PDFAnnotTextBox annot = new PDFAnnotTextBox();

annot.Boundary = new RectangleF(100F, 100F, 400F, 300F);

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_9.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot As PDFAnnotTextBox = New PDFAnnotTextBox()

annot.Boundary = New RectangleF(100.0F, 100.0F, 400.0F, 300.0F)

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Text callout

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_10.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

//  create the annotation
PDFAnnotTextCallout annot = new PDFAnnotTextCallout();

annot.StartPoint = new PointF(100F, 100F);
annot.Boundary = new RectangleF(400F, 500F, 300F, 80F);

annot.Content = @"This is a text callout annotation";

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_10.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot As PDFAnnotTextCallout = New PDFAnnotTextCallout()

annot.StartPoint = New PointF(100.0F, 100.0F)
annot.Boundary = New RectangleF(400.0F, 500.0F, 300.0F, 80.0F)

annot.Content = "This is a text callout annotation"

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Text annotation

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_11.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

//  create the annotation
PDFAnnotText annot = new PDFAnnotText();

annot.Boundary = new RectangleF(400F, 500F, 300F, 80F);

annot.Content = @"This is a text annotation";

//  add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "2.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Annot_11.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' create the annotation
Dim annot As PDFAnnotText = New PDFAnnotText()

annot.Boundary = New RectangleF(400.0F, 500.0F, 300.0F, 80.0F)

annot.Content = "This is a text annotation"

' add annotation to the page
PDFAnnotHandler.AddAnnotation(page, annot)

' save to a new file
doc.Save(outputFilePath)
```

Link annotation

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "Output.pdf";

//  open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
//  get the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);

//  set a rectangle area start from Point (0, 0) with width 400, height 200 pixels (in 96 dpi)
RectangleF linkAnnotBoundary = new RectangleF(0, 0, 400, 200);
//  set URL value
String uri = @"http://www.google.com";

//  create the annotation
PDFAnnotLink annot = new PDFAnnotLink();
annot.SetBoundary(linkAnnotBoundary);
annot.Uri = uri;

//  add annotation to the page
page.AddPDFAnnot(annot);

//  save to a new file
doc.Save(outputFilePath);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "1.pdf"
Dim outputFilePath As String = Program.RootPath + "\\" + "Output.pdf"

' open a PDF file
Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get the 1st page
Dim page As PDFPage = doc.GetPage(0)

' set a rectangle area start from Point (0, 0) with width 400, height 200 pixels (in 96 dpi)
Dim linkAnnotBoundary As RectangleF = New RectangleF(0, 0, 400, 200)
' set URL value
Dim uri As String = "http://www.google.com"

' create the annotation
Dim annot As PDFAnnotLink = New PDFAnnotLink()
annot.SetBoundary(linkAnnotBoundary)
annot.Uri = uri

' add annotation to the page
page.AddPDFAnnot(annot)

' save to a new file
doc.Save(outputFilePath)
```

Retrieve Annotation Information

Retrieve all annotations information from a PDFDocument

C#

```
String inputFilePath = Program.RootPath + "\\" + "1_Annots.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);

Console.WriteLine("Number of Annotations: " + annots.Count);
if (annots.Count > 0)
{
   foreach (IPDFAnnot annot in annots)
   {
      Console.WriteLine("Annotation");
      Console.WriteLine("  Page:     " + annot.PageIndex);
      Console.WriteLine("  Aritst:   " + annot.Artist);
      Console.WriteLine("  Subject:  " + annot.Subject);
      Console.WriteLine("  Content:  " + annot.Content);
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "1_Annots.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)

Console.WriteLine("Number of Annotations: " + annots.Count)
If annots.Count > 0 Then
   For Each annot As IPDFAnnot In annots
      Console.WriteLine("Annotation")
      Console.WriteLine("  Page:     " + annot.PageIndex)
      Console.WriteLine("  Aritst:   " + annot.Artist)
      Console.WriteLine("  Subject:  " + annot.Subject)
      Console.WriteLine("  Content:  " + annot.Content)
   Next
End If
```

Retrieve all annotations information from a PDF page

C#

```
String inputFilePath = Program.RootPath + "\\" + "1_Annots.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
PDFPage page = (PDFPage)doc.GetPage(0);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(page);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "1_Annots.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim page As PDFPage = doc.GetPage(0)
Dim annots = PDFAnnotHandler.GetAllAnnotations(page)
```

Delete text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotDeleteLine)
   {
      PDFAnnotDeleteLine obj = (PDFAnnotDeleteLine)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
      Console.WriteLine("Line Boundaries: ");
      foreach (RectangleF line in obj.GetLineBoundaries())
      {
         Console.WriteLine("  " + line.ToString());
      }
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_1.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotDeleteLine Then
      Dim obj As PDFAnnotDeleteLine = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
      Console.WriteLine("Line Boundaries: ")
      For Each line As RectangleF In obj.GetLineBoundaries()
         Console.WriteLine("  " + line.ToString())
      Next
   End If
Next
```

Underline text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_2.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotUnderLine)
   {
      PDFAnnotUnderLine obj = (PDFAnnotUnderLine)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
      Console.WriteLine("Line Boundaries: ");
      foreach (RectangleF line in obj.GetLineBoundaries())
      {
         Console.WriteLine("  " + line.ToString());
      }
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_2.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotUnderLine Then
      Dim obj As PDFAnnotUnderLine = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
      Console.WriteLine("Line Boundaries: ")
      For Each line As RectangleF In obj.GetLineBoundaries()
         Console.WriteLine("  " + line.ToString())
      Next
   End If
Next
```

Highlight text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_3.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotHighlight)
   {
      PDFAnnotHighlight obj = (PDFAnnotHighlight)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
      Console.WriteLine("Line Boundaries: ");
      foreach (RectangleF line in obj.GetLineBoundaries())
      {
         Console.WriteLine("  " + line.ToString());
      }
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_3.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotHighlight Then
      Dim obj As PDFAnnotHighlight = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
      Console.WriteLine("Line Boundaries: ")
      For Each line As RectangleF In obj.GetLineBoundaries()
         Console.WriteLine("  " + line.ToString())
      Next
   End If
Next
```

Insert text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_4.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotTextInsert)
   {
      PDFAnnotTextInsert obj = (PDFAnnotTextInsert)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
      Console.WriteLine("Insert Position: " + obj.Position.ToString());
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_4.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotTextInsert Then
      Dim obj As PDFAnnotTextInsert = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
      Console.WriteLine("Insert Position: " + obj.Position.ToString())
   End If
Next
```

Update text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_5.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotTextReplace)
   {
      PDFAnnotTextReplace obj = (PDFAnnotTextReplace)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
      Console.WriteLine("Line Boundaries: ");
      foreach (RectangleF line in obj.GetLineBoundaries())
      {
         Console.WriteLine("  " + line.ToString());
      }
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_5.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotTextReplace Then
      Dim obj As PDFAnnotTextReplace = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
      Console.WriteLine("Line Boundaries: ")
      For Each line As RectangleF In obj.GetLineBoundaries()
         Console.WriteLine("  " + line.ToString())
      Next
   End If
Next
```

Shapes

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_6.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotLine)
   {
      PDFAnnotLine obj = (PDFAnnotLine)annot;
      Console.WriteLine("Line Annotation: ");
      Console.WriteLine("Start Point: " + obj.Start.ToString());
      Console.WriteLine("End Point: " + obj.End.ToString());
      Console.WriteLine("Line Color: " + obj.LineColor.ToString());
      Console.WriteLine("Line Width: " + obj.LineWidth);
   }
   else if (annot is PDFAnnotArrow)
   {
      PDFAnnotArrow obj = (PDFAnnotArrow)annot;
      Console.WriteLine("Arrow Annotation: ");
      Console.WriteLine("Start Point: " + obj.Start.ToString());
      Console.WriteLine("End Point: " + obj.End.ToString());
      Console.WriteLine("Line Color: " + obj.LineColor.ToString());
      Console.WriteLine("Line Width: " + obj.LineWidth);
   }
   else if (annot is PDFAnnotEllipse)
   {
      PDFAnnotEllipse obj = (PDFAnnotEllipse)annot;
      Console.WriteLine("Ellipse Annotation: ");
      Console.WriteLine("Location: " + obj.Location.ToString());
      Console.WriteLine("Width: " + obj.Width);
      Console.WriteLine("Height: " + obj.Height);
      Console.WriteLine("Line Color: " + obj.LineColor.ToString());
      Console.WriteLine("Line Width: " + obj.LineWidth);
      Console.WriteLine("Fill Color: " + obj.FillColor.ToString());
   }
   else if (annot is PDFAnnotRectangle)
   {
      PDFAnnotRectangle obj = (PDFAnnotRectangle)annot;
      Console.WriteLine("Rectangle Annotation: ");
      Console.WriteLine("Location: " + obj.Location.ToString());
      Console.WriteLine("Width: " + obj.Width);
      Console.WriteLine("Height: " + obj.Height);
      Console.WriteLine("Line Color: " + obj.LineColor.ToString());
      Console.WriteLine("Line Width: " + obj.LineWidth);
      Console.WriteLine("Fill Color: " + obj.FillColor.ToString());
   }
   else if (annot is PDFAnnotPolygon)
   {
```

```
        PDFAnnotPolygon obj = (PDFAnnotPolygon)annot;
        Console.WriteLine("Polygon Annotation: ");
        Console.WriteLine("End Points: ");
        foreach (PointF pt in obj.Points)
        {
            Console.WriteLine("  " + pt.ToString());
        }
        Console.WriteLine("Line Color: " + obj.LineColor.ToString());
        Console.WriteLine("Line Width: " + obj.LineWidth);
        Console.WriteLine("Fill Color: " + obj.FillColor.ToString());
    }
    else if (annot is PDFAnnotPolyline)
    {
        PDFAnnotPolyline obj = (PDFAnnotPolyline)annot;
        Console.WriteLine("Polyline Annotation: ");
        Console.WriteLine("End Points: ");
        foreach (PointF pt in obj.Points)
        {
            Console.WriteLine("  " + pt.ToString());
        }
        Console.WriteLine("Line Color: " + obj.LineColor.ToString());
        Console.WriteLine("Line Width: " + obj.LineWidth);
        Console.WriteLine("Fill Color: " + obj.FillColor.ToString());
    }
    else if (annot is PDFAnnotPen)
    {
        PDFAnnotPen obj = (PDFAnnotPen)annot;
        Console.WriteLine("Pen Annotation: ");
        Console.WriteLine("Points: ");
        foreach (PointF pt in obj.Points)
        {
            Console.WriteLine("  " + pt.ToString());
        }
        Console.WriteLine("Line Color: " + obj.LineColor.ToString());
        Console.WriteLine("Line Width: " + obj.LineWidth);
        Console.WriteLine("Path: " + obj.Path.ToString());
    }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_6.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
    If TypeOf annot Is PDFAnnotLine Then
        Dim obj As PDFAnnotLine = annot
        Console.WriteLine("Line Annotation: ")
        Console.WriteLine("Start Point: " + obj.Start.ToString())
        Console.WriteLine("End Point: " + obj.End.ToString())
        Console.WriteLine("Line Color: " + obj.LineColor.ToString())
        Console.WriteLine("Line Width: {0}", obj.LineWidth)
    ElseIf TypeOf annot Is PDFAnnotArrow Then
```

```
    Dim obj As PDFAnnotArrow = annot
    Console.WriteLine("Arrow Annotation: ")
    Console.WriteLine("Start Point: " + obj.Start.ToString())
    Console.WriteLine("End Point: " + obj.End.ToString())
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
  ElseIf TypeOf annot Is PDFAnnotEllipse Then
    Dim obj As PDFAnnotEllipse = annot
    Console.WriteLine("Ellipse Annotation: ")
    Console.WriteLine("Location: " + obj.Location.ToString())
    Console.WriteLine("Width: {0}", obj.Width)
    Console.WriteLine("Height: {0}", obj.Height)
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
    Console.WriteLine("Fill Color: " + obj.FillColor.ToString())
  ElseIf TypeOf annot Is PDFAnnotRectangle Then
    Dim obj As PDFAnnotRectangle = annot
    Console.WriteLine("Rectangle Annotation: ")
    Console.WriteLine("Location: " + obj.Location.ToString())
    Console.WriteLine("Width: {0}", obj.Width)
    Console.WriteLine("Height: {0}", obj.Height)
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
    Console.WriteLine("Fill Color: " + obj.FillColor.ToString())
  ElseIf TypeOf annot Is PDFAnnotPolygon Then
    Dim obj As PDFAnnotPolygon = annot
    Console.WriteLine("Polygon Annotation: ")
    Console.WriteLine("End Points: ")
    For Each pt As PointF In obj.Points
      Console.WriteLine("  " + pt.ToString())
    Next
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
    Console.WriteLine("Fill Color: " + obj.FillColor.ToString())
  ElseIf TypeOf annot Is PDFAnnotPolyline Then
    Dim obj As PDFAnnotPolyline = annot
    Console.WriteLine("Polyline Annotation: ")
    Console.WriteLine("End Points: ")
    For Each pt As PointF In obj.Points
      Console.WriteLine("  " + pt.ToString())
    Next
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
    Console.WriteLine("Fill Color: " + obj.FillColor.ToString())
  ElseIf TypeOf annot Is PDFAnnotPen Then
    Dim obj As PDFAnnotPen = annot
    Console.WriteLine("Pen Annotation: ")
    Console.WriteLine("Points: ")
    For Each pt As PointF In obj.Points
      Console.WriteLine("  " + pt.ToString())
    Next
    Console.WriteLine("Line Color: " + obj.LineColor.ToString())
    Console.WriteLine("Line Width: {0}", obj.LineWidth)
```

```
        Console.WriteLine("Path: " + obj.Path.ToString())
    End If
Next
```

Attachment file

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_7.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotFileAttach)
   {
      PDFAnnotFileAttach obj = (PDFAnnotFileAttach)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_7.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotFileAttach Then
      Dim obj As PDFAnnotFileAttach = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
   End If
Next
```

Sticky notes

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_8.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotStickyNote)
   {
      PDFAnnotStickyNote obj = (PDFAnnotStickyNote)annot;
      Console.WriteLine("Color: " + obj.Color.ToString());
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_8.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotStickyNote Then
      Dim obj As PDFAnnotStickyNote = annot
      Console.WriteLine("Color: " + obj.Color.ToString())
   End If
Next
```

Textbox

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_9.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotTextBox)
   {
      PDFAnnotTextBox obj = (PDFAnnotTextBox)annot;
      Console.WriteLine("Textbox Boundary: " + obj.Boundary.ToString());
      Console.WriteLine("Textbox Border Color: " + obj.LineColor.ToString());
      Console.WriteLine("Textbox Border Width: " + obj.LineWidth);
      Console.WriteLine("Textbox Fill Color: " + obj.FillColor.ToString());
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_9.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotTextBox Then
      Dim obj As PDFAnnotTextBox = annot
      Console.WriteLine("Textbox Boundary: " + obj.Boundary.ToString())
      Console.WriteLine("Textbox Border Color: " + obj.LineColor.ToString())
      Console.WriteLine("Textbox Border Width: {0}", obj.LineWidth)
      Console.WriteLine("Textbox Fill Color: " + obj.FillColor.ToString())
   End If
Next
```

Text callout

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_10.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotTextCallout)
   {
      PDFAnnotTextCallout obj = (PDFAnnotTextCallout)annot;
      Console.WriteLine("Textbox Boundary: " + obj.GetTextBoxBoundary().ToString());
      Console.WriteLine("Textbox Border Color: " + obj.LineColor.ToString());
      Console.WriteLine("Textbox Border Width: " + obj.LineWidth);
      Console.WriteLine("Textbox Fill Color: " + obj.FillColor.ToString());
      Console.WriteLine("Callout Line: ");
      foreach (PointF pt in obj.GetEndPoints())
      {
         Console.WriteLine("  " + pt.ToString());
      }
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_10.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotTextCallout Then
      Dim obj As PDFAnnotTextCallout = annot
      Console.WriteLine("Textbox Boundary: " + obj.GetTextBoxBoundary().ToString())
      Console.WriteLine("Textbox Border Color: " + obj.LineColor.ToString())
      Console.WriteLine("Textbox Border Width: {0}", obj.LineWidth)
      Console.WriteLine("Textbox Fill Color: " + obj.FillColor.ToString())
      Console.WriteLine("Callout Line: ")
      For Each pt As PointF In obj.GetEndPoints()
         Console.WriteLine("  " + pt.ToString())
      Next
   End If
Next
```

Text

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_11.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is PDFAnnotText)
   {
      PDFAnnotText obj = (PDFAnnotText)annot;
      Console.WriteLine("Text Color: " + obj.TextColor.ToString());
      Console.WriteLine("Text Boundary: " + obj.Boundary.ToString());
   }
}
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "Annot_11.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
Dim annots = PDFAnnotHandler.GetAllAnnotations(doc)
For Each annot As IPDFAnnot In annots
   If TypeOf annot Is PDFAnnotText Then
      Dim obj As PDFAnnotText = annot
      Console.WriteLine("Text Color: " + obj.TextColor.ToString())
      Console.WriteLine("Text Boundary: " + obj.Boundary.ToString())
   End If
Next
```

Retrieve popup window's properties

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   if (annot is IPDFPopupAnnot)
   {
      Console.WriteLine("Annotation has popup window");

      IPDFPopupAnnot obj = (IPDFPopupAnnot)annot;
      Console.WriteLine("Is open in the begin:  " + obj.Popup.IsOpen);
      Console.WriteLine("Popup window boundary: " + obj.Popup.Boundary.ToString());
   }
   else
   {
      Console.WriteLine("Annotation has no popup window");
   }
}
```

VB

Delete Annotation

Delete all annotation in a page

C#

```
String inputFilePath = Program.RootPath + "\\" + "1_Annots.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
//  get all annotations in the 1st page
PDFPage page = (PDFPage)doc.GetPage(0);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(page);
//  remove all annotations in the 1st page
PDFAnnotHandler.DeleteAnnotation(doc, annots);
```

VB

```
Dim inputFilePath As String = Program.RootPath + "\\" + "1_Annots.pdf"

Dim doc As PDFDocument = New PDFDocument(inputFilePath)
' get all annotations in the 1st page
Dim page As PDFPage = doc.GetPage(0)
Dim annots = PDFAnnotHandler.GetAllAnnotations(page)
' remove all annotations in the 1st page
PDFAnnotHandler.DeleteAnnotation(doc, annots)
```

Annotation Flags

Retrieve annotation flags

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   Console.WriteLine("Annotation Flags");
   Console.WriteLine("  Invisible:      " + annot.IsInvisible);
   Console.WriteLine("  Hidden:         " + annot.IsHidden);
   Console.WriteLine("  Print:          " + annot.IsPrint);
   Console.WriteLine("  No Zoom:        " + annot.NoZoom);
   Console.WriteLine("  No Rotate:      " + annot.NoRotate);
   Console.WriteLine("  No View:        " + annot.NoView);
   Console.WriteLine("  Read Only:      " + annot.IsReadOnly);
   Console.WriteLine("  Locked:         " + annot.IsLocked);
   Console.WriteLine("  Toggle No View:  " + annot.IsToggleNoView);
   Console.WriteLine("  Locked Contents: " + annot.IsLockedContents);
}
```

VB

Set annotation flags

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

//  create the annotation
PDFAnnotDeleteLine annot = new PDFAnnotDeleteLine();
annot.StartPoint = new PointF(100F, 200F);
annot.EndPoint = new PointF(300F, 400F);

//  set annotation flags
annot.IsInvisible = false;
annot.IsPrint = true;
annot.NoRotate = true;
annot.NoZoom = true;

//  add annotation
PDFAnnotHandler.AddAnnotation(inputFilePath, 1, annot, outputFilePath);
```

VB

Stamp Annotation

Prepare a stamp source file (PDF file)

C#

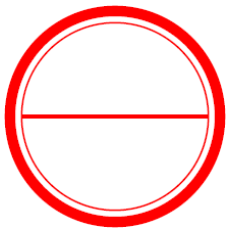
```
String outputFilePath = Program.RootPath + "\\" + "StampTemplateBg1.pdf";

//  initial a region (1 inch in both width and height) in the context for designing a template background
//  Region Boundary: [0, 0, 96, 96] (in 96 dpi)
PDFContext ctx = new PDFContext();
ctx.SetWidth(new RELength(1, Units.IN));
ctx.SetHeight(new RELength(1, Units.IN));

//  draw the outer circle
ctx.DrawEllipse(new REPen(Color.Red, 6F), 3, 3, 90, 90);
//  draw the inner circle
ctx.DrawEllipse(new REPen(Color.Red, 1F), 8, 8, 80, 80);
//  draw the seperater line
ctx.DrawLine(new REPen(Color.Red, 1F), 8, 48, 88, 48);

//  output to a file
ctx.SaveToFile(outputFilePath);
```

VB



C#

```
String outputFilePath = Program.RootPath + "\\" + "StampTemplateBg2.pdf";

//  initial a region in the context for designing a template background
//  Region Boundary: [0, 0, 192, 96] (in 96 dpi)
PDFContext ctx = new PDFContext();
ctx.SetWidth(new RELength(2, Units.IN));
ctx.SetHeight(new RELength(1, Units.IN));

//  draw an outer rectangle
ctx.DrawRectangle(new REPen(Color.Red, 6F), 3, 3, 186, 90);
//  draw an inner rectangle
ctx.DrawRectangle(new REPen(Color.Red, 1F), 8, 8, 176, 80);

//  output to a file
ctx.SaveToFile(outputFilePath);
```

VB

Create a new stamp annotation template from an exist PDF file

C#

```
String sourceFilePath = Program.RootPath + "\\" + "StampTemplateBg1.pdf";
int pageIndex = 0;

//  create template by the specified page
PDFStampTemplate template = PDFStampTemplate.Create(sourceFilePath, pageIndex);

//  to add optional dynamic fields for the template ...
```

VB

```

```

Create a new stamp annotation template by using PDF Context

C#

```
PDFContext ctx = new PDFContext();
ctx.SetWidth(new RELength(1F, Units.IN));
ctx.SetHeight(new RELength(1F, Units.IN));

//  draw shapes to context
ctx.DrawEllipse(new REPen(Color.Red, 6F), 3, 3, 90, 90);
ctx.DrawEllipse(new REPen(Color.Red, 1F), 8, 8, 80, 80);
ctx.DrawLine(new REPen(Color.Red, 1F), 8, 48, 88, 48);

//  create template by context
PDFStampTemplate template = PDFStampTemplate.Create(ctx);

//  to add optional dynamic fields for the template ...
```

VB

```

```

Create a stamp annotation template with dynamic fields

C#

```
PDFContext ctx = new PDFContext();
ctx.SetWidth(new RELength(1F, Units.IN));
ctx.SetHeight(new RELength(1F, Units.IN));

//  draw shapes to context
ctx.DrawEllipse(new REPen(Color.Red, 6F), 3, 3, 90, 90);
ctx.DrawEllipse(new REPen(Color.Red, 1F), 8, 8, 80, 80);
ctx.DrawLine(new REPen(Color.Red, 1F), 8, 48, 88, 48);

//  create template by context
PDFStampTemplate template = PDFStampTemplate.Create(ctx);

//  define a dynamic text field for User Info - Name
PDFStampTemplateField field0 = new PDFStampTemplateField();
//  dynamic text field region in the context
field0.Boundary = new RectangleF(0, 18, 100, 20);
field0.FieldType = PDFStampTemplateFieldType.Name;
field0.TextColor = Color.FromArgb(255, 0, 0);
field0.TextFont = new Font("Times New Roman", 10, FontStyle.Regular);
//  add the filed
template.AddField(field0);

//  define a dynamic text field for User Info - Company
PDFStampTemplateField field1 = new PDFStampTemplateField();
field1.Boundary = new RectangleF(0, 62, 100, 20);
field1.FieldType = PDFStampTemplateFieldType.Company;
field1.TextColor = Color.FromArgb(255, 0, 0);
field1.TextFont = new Font("Times New Roman", 8, FontStyle.Regular);
template.AddField(field1);

//  define a dynamic text field for User Info - Current Date Time
PDFStampTemplateField field2 = new PDFStampTemplateField();
field2.Boundary = new RectangleF(0, 40, 100, 20);
field2.FieldType = PDFStampTemplateFieldType.CurrertDateTime;
field2.TextColor = Color.FromArgb(255, 0, 0);
field2.TextFont = new Font("Times New Roman", 6, FontStyle.Regular);
template.AddField(field2);
```

VB

Add a new stamp annotation template

C#

```
// …create a stamp annotation template …
PDFStampTemplate template = PDFStampTemplate.Create("", 0);

// template ID must be unique in the SDK
String templateID = "Template 1";
// add new template to the SDK
PDFStampTemplateMgr.AddTemplate(templateID, template, false);

if (PDFStampTemplateMgr.IsTemplateExist(templateID))
{
   Console.WriteLine("Template Exist");
   // get preview of a template with a given size
   Bitmap preview = PDFStampTemplateMgr.GetTemplatePreview(templateID, new Size(300, 300));
}
else
{
   Console.WriteLine("Template Dost Not Exist");
}
```

VB

Add a stamp annotation to page

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1_Annots.pdf";

//  Create a stamp annotation
PDFAnnotStamp annot = new PDFAnnotStamp();
//  select stamp template by the template ID
String templateID = @"Template 1";
annot.StampTemplateID = templateID;
//  set annotation position and size
annot.Boundary = new RectangleF(300, 300, 50, 50);

//  set user info
annot.UserInfo.Company = "XYZ Ltd.";
annot.UserInfo.FamilyName = "Kitty";
annot.UserInfo.GivenName = "Hello";

//  other annotation properties
annot.Opacity = 1.0;
annot.PageIndex = 0;

//  add annotation
PDFAnnotHandler.AddAnnotation(inputFilePath, annot, outputFilePath);
```

VB

Get all embedded stamp template names in the SDK

C#

```
String[] templateIDs = PDFStampTemplateMgr.GetAllEmbeddedStampNames();
Console.WriteLine("Embedded Stamp Template Names:");
foreach (String templateID in templateIDs)
{
   Console.WriteLine(" - " + templateID);
}
```

VB

Remark

Do not use these stamp template name for custom stamp template, otherwise, the new stamp template created by user would be override by the embedded template with the same name

Get preview (Btimap) of an embedded stamp template

Standard Business Stamp Template – Completed

C#

```
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample37a.png";

// get an embedded stamp template name (Standard Business Stamp - Completed)
// valid enumerations
// STDStamp - for standard stamps
// SBStamp - for standard business stamps
// DStamp - for dynamic stamps
// SHStamp - for sign-here stamps
String templateID = PDFStampDef.GetStampName(SBStamp.Completed);
// get preview image of the template with its actual size.
Bitmap bitmap = PDFStampTemplateMgr.GetEmbeddedStampTemplatePreview(templateID,
SizeF.Empty);
// output the image
bitmap.Save(outputFilePath);
```

VB

Dynamic Stamp Template – Approved

C#

```
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample37b.png";

// get an embedded stamp template name (Dynamic Stamp - Approved)
String templateID = PDFStampDef.GetStampName(DStamp.Approved);
// get preview image of the template with its actual size.
Bitmap bitmap = PDFStampTemplateMgr.GetEmbeddedStampTemplatePreview(templateID,
SizeF.Empty);
// output the image
bitmap.Save(outputFilePath);
```

VB

Add a stamp annotation by using embedded stamp template

Standard Business Stamp Template – Not For Public Release

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample38a.pdf";

//  get an embedded stamp template name (Standard Business Stamp - Not For Public Release)
String templateID = PDFStampDef.GetStampName(SBStamp.NotForPublicRelease);
//  get actual size of the stamp template
SizeF stampActualSize = PDFStampTemplateMgr.GetEmbeddedStampTemplateActualSize(templateID);
//  location of the stamp annotation
PointF location = new PointF(50F, 200F);

PDFAnnotStampUserInfo userInfo = new PDFAnnotStampUserInfo();
userInfo.GivenName = "Hello";
userInfo.FamilyName = "Kitty";
userInfo.Company = "Raster Edge";

//  create the stamp annotation
PDFAnnotStamp annot = new PDFAnnotStamp();
//  assign the stamp template ID
annot.StampTemplateID = templateID;
//  set the location and size of the annotation
annot.Boundary = new RectangleF(location, stampActualSize);
//  set user info
annot.UserInfo = userInfo;

//  add stamp annotation to the file
PDFAnnotHandler.AddAnnotation(inputFilePath, annot, outputFilePath);
```

VB

Dynamic Stamp Template – Reviewed

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample38b.pdf";

//  get an embedded stamp template name (Dynamic Stamp - Reviewed)
String templateID = PDFStampDef.GetStampName(DStamp.Reviewed);
//  get actual size of the stamp template
SizeF stampActualSize = PDFStampTemplateMgr.GetEmbeddedStampTemplateActualSize(templateID);
//  location of the stamp annotation
PointF location = new PointF(50F, 200F);

PDFAnnotStampUserInfo userInfo = new PDFAnnotStampUserInfo();
userInfo.GivenName = "Hello";
userInfo.FamilyName = "Kitty";
userInfo.Company = "Raster Edge";

//  create the stamp annotation
PDFAnnotStamp annot = new PDFAnnotStamp();
//  assign the stamp template ID
annot.StampTemplateID = templateID;
//  set the location and size of the annotation
annot.Boundary = new RectangleF(location, stampActualSize);
//  set user info
annot.UserInfo = userInfo;

//  add stamp annotation to the file
PDFAnnotHandler.AddAnnotation(inputFilePath, annot, outputFilePath);
```

VB

Annotation Data File (.fdf, .xfdf) Import & Export

Export annotations from a PDF document to an FDF file

Export FDF file from a PDF file:

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.fdf";

PDFDocument.ExportFDFDocument(inputFilePath, outputFilePath);
```

VB

```

```

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.fdf";

using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ExportFDFDocument(inputStream, outputStream);
   }
}
```

VB

```

```

Export FDF data bytes from a PDF file:

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";

byte[] dataBytes = null;
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   dataBytes = PDFDocument.ExportFDFDocument(inputStream);
}

String outputFilePath = Program.RootPath + "\\" + "1.fdf";
File.WriteAllBytes(outputFilePath, dataBytes);
```

VB

```

```

Export annotations from a specified page to an FDF file

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.fdf";

//  export all annotations in the 1st page
int[] selectedPageIndexes = new int[] { 0 };
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ExportFDFDocument(inputStream, selectedPageIndexes, outputStream);
   }
}
```

VB

Import an FDF file to a PDF document

From file stream:

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String srcFDFFilePath = Program.RootPath + "\\" + "1.fdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample44.pdf";

using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream fdfStream = File.Open(srcFDFFilePath, FileMode.Open, FileAccess.ReadWrite))
   {
      using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
      {
         PDFDocument.ImportFDFDocument(inputStream, fdfStream, outputStream);
      }
   }
}
```

VB

From data bytes:

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String srcFDFFilePath = Program.RootPath + "\\" + "1.fdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample44.pdf";

byte[] fdfDataBytes = File.ReadAllBytes(srcFDFFilePath);
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ImportFDFDocument(inputStream, fdfDataBytes, outputStream);
   }
}
```

VB

Export annotations from a PDF document to an XFDF file

Export XFDF file from a PDF file:

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.xfdf";

PDFDocument.ExportXFDFDocument(inputFilePath, outputFilePath);
```

VB

```
```

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.xfdf";

using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ExportXFDFDocument(inputStream, outputStream);
   }
}
```

VB

```
```

Export XFDF data bytes from a PDF file:

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";

byte[] dataBytes = null;
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   dataBytes = PDFDocument.ExportXFDFDocument(inputStream);
}

String outputFilePath = Program.RootPath + "\\" + "1.xfdf";
File.WriteAllBytes(outputFilePath, dataBytes);
```

VB

```
```

Export annotations from a specified page to an XFDF file

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.xfdf";

//  export all annotations in the 1st page
int[] selectedPageIndexes = new int[] { 0 };
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ExportXFDFDocument(inputStream, selectedPageIndexes, outputStream);
   }
}
```

VB

Import an XFDF file to a PDF document

From file stream:

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String srcXFDFFilePath = Program.RootPath + "\\" + "1.xfdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample47.pdf";

using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream xfdfStream = File.Open(srcXFDFFilePath, FileMode.Open, FileAccess.ReadWrite))
   {
      using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
      {
         PDFDocument.ImportXFDFDocument(inputStream, xfdfStream, outputStream);
      }
   }
}
```

VB

From data bytes:

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String srcFDFFilePath = Program.RootPath + "\\" + "1.xfdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample47.pdf";

byte[] xfdfDataBytes = File.ReadAllBytes(srcFDFFilePath);
using (FileStream inputStream = File.Open(inputFilePath, FileMode.Open, FileAccess.ReadWrite))
{
   using (FileStream outputStream = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ImportXFDFDocument(inputStream, xfdfDataBytes, outputStream);
   }
}
```

VB

Export a single IPDFAnnot object

Export as byte array

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   // export an IPDFAnnot to data bytes
   byte[] dataBytes = annot.ExportRawContent(doc);
   // get value in String form
   String strContent = Encoding.UTF8.GetString(dataBytes);
   // ...
}
```

Export as file stream

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   // export an IPDFAnnot to a stream
   using (MemoryStream ms = new MemoryStream())
   {
      annot.FlushRawContent(doc, ms);
      // ...
   }
}
```

Export as file

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   // export an IPDFAnnot to a file by the specified file path
   String outputFilePath = "...";
   annot.FlushRawContent(doc, outputFilePath);
   // ...
}
```

Import an annotation from the output from previous example

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.annot.pdf";

//  this String MUST be the output of the ExportRawContent method of an IPDFAnnot
String strContent = "...";
byte[] dataBytes = Encoding.UTF8.GetBytes(strContent);
//  create an annotation source object
AnnotSourceXFDF[] xfdfSources = new AnnotSourceXFDF[1] {
   new AnnotSourceXFDF(dataBytes)
};

//  import annotation to a PDF file or file stream
using (FileStream fs = File.Open(inputFilePath, FileMode.Open, FileAccess.Read))
{
   using (FileStream outFS = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ImportXFDFDocuments(fs, xfdfSources, outFS);
   }
}
```

Export annotations as XFDF with options

Export annotations with selected artist names

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
//  Create export option
//  Export annotations to XFDF
ExportAnnotOptions ops = new ExportAnnotOptions(ExportAnnotOptions.XFDF);
//  export annotations only with artist name "ArtistA" and "ArtistC"
ops.Creators = new String[] { "ArtistA", "ArtistC" };

//  export to byte array
byte[] xfdfDataBytes = PDFDocument.ExportAnnotation(inputFilePath, ops);

//  export to file
String xfdfFilePath = Program.RootPath + "\\" + "1.xfdf";
File.WriteAllBytes(xfdfFilePath, xfdfDataBytes);

//  export to String (MUST be UTF-8)
String strContent = Encoding.UTF8.GetString(xfdfDataBytes);

//  ...
```

Export annotations with selected pages

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
//  Create export option
//  Export annotations to XFDF
ExportAnnotOptions ops = new ExportAnnotOptions(ExportAnnotOptions.XFDF);
//  only page index 0 and 2 (that is, page number 1 and 3)
ops.PageIndexes = new int[] { 0, 2 };

//  export to byte array
byte[] xfdfDataBytes = PDFDocument.ExportAnnotation(inputFilePath, ops);

//  export to file
String xfdfFilePath = Program.RootPath + "\\" + "1.xfdf";
File.WriteAllBytes(xfdfFilePath, xfdfDataBytes);

//  export to String (MUST be UTF-8)
String strContent = Encoding.UTF8.GetString(xfdfDataBytes);

//  ...
```

Export annotations as FDF with options

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
//  Create export option
//  Export annotations to XFDF
ExportAnnotOptions ops = new ExportAnnotOptions(ExportAnnotOptions.FDF);
//  export annotations only with artist name "ArtistA" and "ArtistC"
ops.Creators = new String[] { "ArtistA", "ArtistC" };
//  only page index 0 and 2 (that is, page number 1 and 3)
ops.PageIndexes = new int[] { 0, 2 };

//  export to byte array
byte[] xfdfDataBytes = PDFDocument.ExportAnnotation(inputFilePath, ops);

//  export to file
String xfdfFilePath = Program.RootPath + "\\" + "1.fdf";
File.WriteAllBytes(xfdfFilePath, xfdfDataBytes);

//  export to String (MUST be UTF-8)
String strContent = Encoding.UTF8.GetString(xfdfDataBytes);

//  ...
```

Import an annotation from the output from previous example

C#

```
String inputFilePath = Program.RootPath + "\\" + "1.pdf";
String outputFilePath = Program.RootPath + "\\" + "1.annot.pdf";

//  this String MUST be a valid FDF file
String strContent = "...";
byte[] dataBytes = Encoding.UTF8.GetBytes(strContent);
//  create an annotation source object
AnnotSourceFDF[] xfdfSources = new AnnotSourceFDF[1] {
   new AnnotSourceFDF(dataBytes)
};

//  import annotation to a PDF file or file stream
using (FileStream fs = File.Open(inputFilePath, FileMode.Open, FileAccess.Read))
{
   using (FileStream outFS = File.Open(outputFilePath, FileMode.Create, FileAccess.ReadWrite,
FileShare.ReadWrite))
   {
      PDFDocument.ImportFDFDocuments(fs, xfdfSources, outFS);
   }
}
```

Redact Annotation

Add redact annotation

Without overlay text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

// open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
// get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

// create the annotation
PDFAnnotRedact redactAnnot = new PDFAnnotRedact();

// set Redact region (in 96 dpi)
redactAnnot.Boundary = new RectangleF(10, 10, 100, 200);
// set background color of the redact area to red
redactAnnot.FillColor = Color.Red;
// set border color of the redact area to green
redactAnnot.BorderColor = Color.Green;
// set Redact options
// Set area fill color (while mouse enter)
redactAnnot.Options.AreaFillColor = Color.Yellow;
// disable overlay text
redactAnnot.Options.EnableOverlayText = false;

// add annotation to the page
PDFAnnotHandler.AddAnnotation(page, redactAnnot);

// save to a new file
doc.Save(outputFilePath);
```

VB

With overlay text

C#

```
String inputFilePath = Program.RootPath + "\\" + "2.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

// open a PDF file
PDFDocument doc = new PDFDocument(inputFilePath);
// get the 2nd page
PDFPage page = (PDFPage)doc.GetPage(1);

// create the annotation
PDFAnnotRedact redactAnnot = new PDFAnnotRedact();

// set Redact region (in 96 dpi)
redactAnnot.Boundary = new RectangleF(10, 10, 100, 200);
// set background color of the redact area to red
redactAnnot.FillColor = Color.Red;
// set border color of the redact area to green
redactAnnot.BorderColor = Color.Green;
// set Redact options
// Set area fill color (while mouse enter)
redactAnnot.Options.AreaFillColor = Color.Yellow;

// enable overlay text
redactAnnot.Options.EnableOverlayText = true;
// set overlay text content
redactAnnot.Options.OverlayText = "Confidential";
// set color and font of the overlay text
redactAnnot.Options.OverlayTextColor = Color.Blue;
redactAnnot.Options.OverlayTextFont = new Font("Arial", 8F, FontStyle.Italic);
redactAnnot.Options.OverlayTextAlignment = OverlayTextAlignment.Center;
// set Auto Size flag to false (use font size defined in the Font)
redactAnnot.Options.IsAutoSize = false;
// set Repeat flag to true
redactAnnot.Options.IsRepeat = true;

// add annotation to the page
PDFAnnotHandler.AddAnnotation(page, redactAnnot);

// save to a new file
doc.Save(outputFilePath);
```

VB

Retreive redact annotation

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);

if (annots.Count > 0)
{
   foreach (IPDFAnnot annot in annots)
   {
      if (annot is PDFAnnotRedact)
      {
         PDFAnnotRedact redact = (PDFAnnotRedact)annot;

         Console.WriteLine("Redact");
         Console.WriteLine("Common properties");
         Console.WriteLine("  Page:     " + redact.PageIndex);
         Console.WriteLine("  Aritst:   " + redact.Artist);
         Console.WriteLine("  Subject:  " + redact.Subject);
         Console.WriteLine("  Content:  " + redact.Content);

         Console.WriteLine("Redect settings");
         Console.WriteLine("  Boundary: " + redact.Boundary.ToString());
         Console.WriteLine("  Color:    " + redact.FillColor.ToString());
         Console.WriteLine("  Border Color:   " + redact.BorderColor.ToString());

         Console.WriteLine("Redect options");
         Console.WriteLine("  Fill Color: " + redact.Options.AreaFillColor.ToString());

         if (redact.Options.EnableOverlayText)
         {
            Console.WriteLine("  Overlay Text: Enable");

            Console.WriteLine("  Content:   " + redact.Options.OverlayText);
            Console.WriteLine("  Color:     " + redact.Options.OverlayTextColor);
            Console.WriteLine("  Font:      " + redact.Options.OverlayTextFont.ToString());
            Console.WriteLine("  Alignment: " + redact.Options.OverlayTextAlignment.ToString());
            Console.WriteLine("  Auto Size: " + redact.Options.IsAutoSize);
            Console.WriteLine("  Repeat:    " + redact.Options.IsRepeat);
         }
         else
         {
            Console.WriteLine("  Overlay Text: Disable");
         }
      }
   }
}
```

VB

```

```

Flatten Annotations

Flatten all annotations in the document

C#
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf"; String outputFilePath = Program.RootPath + "\\" + "Output.pdf"; PDFAnnotHandler.FlattenAnnotations(inputFilePath, outputFilePath);
VB

Flatten annotations in the document with options

C#

```
String inputFilePath = Program.RootPath + "\\" + "Annot_1.pdf";
String outputFilePath = Program.RootPath + "\\" + "Output.pdf";

PDFAnnotFlattenOption ops = new PDFAnnotFlattenOption();
//  set a list of page indexes to apply annotation flatten.
//  null for all pages and empty array for none page.
ops.PageIndexes = new int[] { 0 };
//  add type of annotation would be flatten.
ops.Add(PDFAnnotFlattenOption.Type.Stamp);
ops.Add(PDFAnnotFlattenOption.Type.Line);

PDFAnnotHandler.FlattenAnnotations(inputFilePath, outputFilePath, ops);
```

VB

Remarks

PDFAnnotFlattenOption.Type	Description
Text	For sticky notes
FreeText	For text, textbox, textbox with callout
Line	For line and arrow
Square	For square
Circle	For circle and ellipse
Polygon	For filled and non-filled polygon
Polyline	For polyline
Highlight	For text highlight
Underline	For text underline
Squiggly	For text squiggly line
Strikeout	For text strikeout line
Stamp	For stamp
Ink	For free lines
FileAttachment	For file attachement icon
Sound	For sound attachement icon
All	For all annotation types

Others

Move all annotations in a document without update other properties

C#

```
String inputFilePath = Program.RootPath + "\\" + "11.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample39.pdf";

//  open the document
PDFDocument doc = new PDFDocument(inputFilePath);

//  get all annotations in the document
List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
//  move all annoations
foreach (IPDFAnnot annot in annots)
{   //  move the annoation to 100 pixels right and 100 pixels down.
    PDFAnnotHandler.MoveTo(annot, doc, 100F, 100F);
}

//  save the new document
doc.Save(outputFilePath);
```

VB

Remarks:

Some types of annotations **CANNOT BE** moved, such as:

- PDFAnnotUnderLine
- PDFAnnotDeleteLine
- PDFAnnotTextInsert
- PDFAnnotTextReplace

Update subject, content, artist and modified datetime values of an annotation

C#

```
String inputFilePath = Program.RootPath + "\\" + "11.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample40.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);

List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
foreach (IPDFAnnot annot in annots)
{
   //  new subject value
   String subject = "Subject";
   //  null means this property would not be changed
   String content = null;
   //  new artist value
   String artist = "DT";
   //  new modified datetime
   DateTime modifiedDatetime = DateTime.Now;
   //  update annotation by the new values
   PDFAnnotHandler.Update(annot, doc, 4, subject, content, artist, modifiedDatetime);
}

doc.Save(outputFilePath);
```

VB

Update popup windows of an annotation

C#

```
String inputFilePath = Program.RootPath + "\\" + "11.pdf";
String outputFilePath = Program.RootPath + "\\" + "Annot_Sample41.pdf";

PDFDocument doc = new PDFDocument(inputFilePath);

List<IPDFAnnot> annots = PDFAnnotHandler.GetAllAnnotations(doc);
int y = 0;
foreach (IPDFAnnot annot in annots)
{
   //  define popup window's boundary
   RectangleF popupWindowsBoundary = new RectangleF(600, y, 200, 80);
   //  set open popup windows flag to true
   bool isOpenPopupWindow = true;
   PDFAnnotHandler.UpdatePopup(annot, doc, -1, popupWindowsBoundary, isOpenPopupWindow);
   y += 90;
}

doc.Save(outputFilePath);
```

VB

Remarks:

Types of annotation **WITHOUT** popup window:

- PDFAnnotFileAttach
- PDFAnnotMovie
- PDFAnnotSound
- PDFAnnotText
- PDFAnnotTextBox
- PDFAnnotTextCallout
- PDFAnnotLink