



UWP



Create, edit, and remove



WINDOWS > GUIDES > ANNOTATIONS > CREATE, EDIT, AND REMOVE

Create, edit, or remove PDF annotations in UWP

After Nutrient UWP SDK loads annotations from a PDF, you can access them through the `Document` API.

- ✧ The API returns a `List` of `IAnnotation` objects.
- ✧ Each `IAnnotation` provides access to shared properties and methods, including:
 - ✧ `AnnotationType`
 - ✧ `BoundingBox`
 - ✧ `Id`
 - ✧ `PageIndex`
 - ✧ `ToJson()`

Understanding the annotation bounding box

The `BoundingBox` defines the annotation's location and size on the page. It's represented by a `Rect` with:

- ✧ `x` and `y` describing the top-left coordinate of the annotation on the page.
- ✧ `Width` and `Height` describing the size of the annotation.

Coordinate system



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Nutrient UWP SDK and Nutrient Web SDK use the Instant JSON coordinate system:

- ✦ The origin of the page, “0,0,” is at the top left.
- ✦ The Y axis value increases as you move down the page.

To convert between the coordinate system above and the PDF coordinate system (where origin, “0,0,” is at the bottom left, with the Y axis value increasing as you move up the page), refer to the conversion utility methods guide.

Working with specific annotation types

Use the `AnnotationType` property to cast to a specific annotation type to work with its APIs:

```
1  if (annotation.AnnotationType == AnnotationType.Ink)
2  {
3      var ink = annotation as AnnotationType.Ink;
4      return ink.IsSignature;
5  }
```

Creating an annotation

To create an annotation on a page:

- 1 Instantiate the desired annotation type, as demonstrated in the code snippet below:

```
1  var textAnnot = new Text
2  {
3      Contents = "A new text annotation",
4      HorizontalAlign = HorizontalAlign.Right,
5      VerticalAlign = VerticalAlign.Center,
6      BoundingBox = new Rect(10, 10, 300, 300),
7      FontSize = 48,
8      Bold = true,
9      Italic = true,
10     FontColor = Colors.Cyan
11 };
```

- 2 Add the annotation to a page, as demonstrated in the code snippet below:

```
var createdTextAnnotation = await pdfView.Document.CreateAnnotationAsync(text
```



3 Once added, the annotation will have a unique `Id`.

Updating an annotation

To update an existing annotation, use the code snippet below:

```
1 createdTextAnnotation.VerticalAlign = VerticalAlign.Top;  
2 createdTextAnnotation.Opacity = 0.5f;  
3 await pdfView.Document.UpdateAnnotationAsync(createdTextAnnotation);
```



Deleting an annotation

To delete an annotation, use the annotation's `Id` to remove it, as demonstrated in the code snippet below:

```
await pdfView.Document.DeleteAnnotationAsync(createdTextAnnotation.Id);
```



Was this helpful?

✓ YES

✗ NO

Questions? [Contact us](#)